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SECTION EXL

EXTERIOR LIGHTING SYSTEM

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[XENON TYPE]

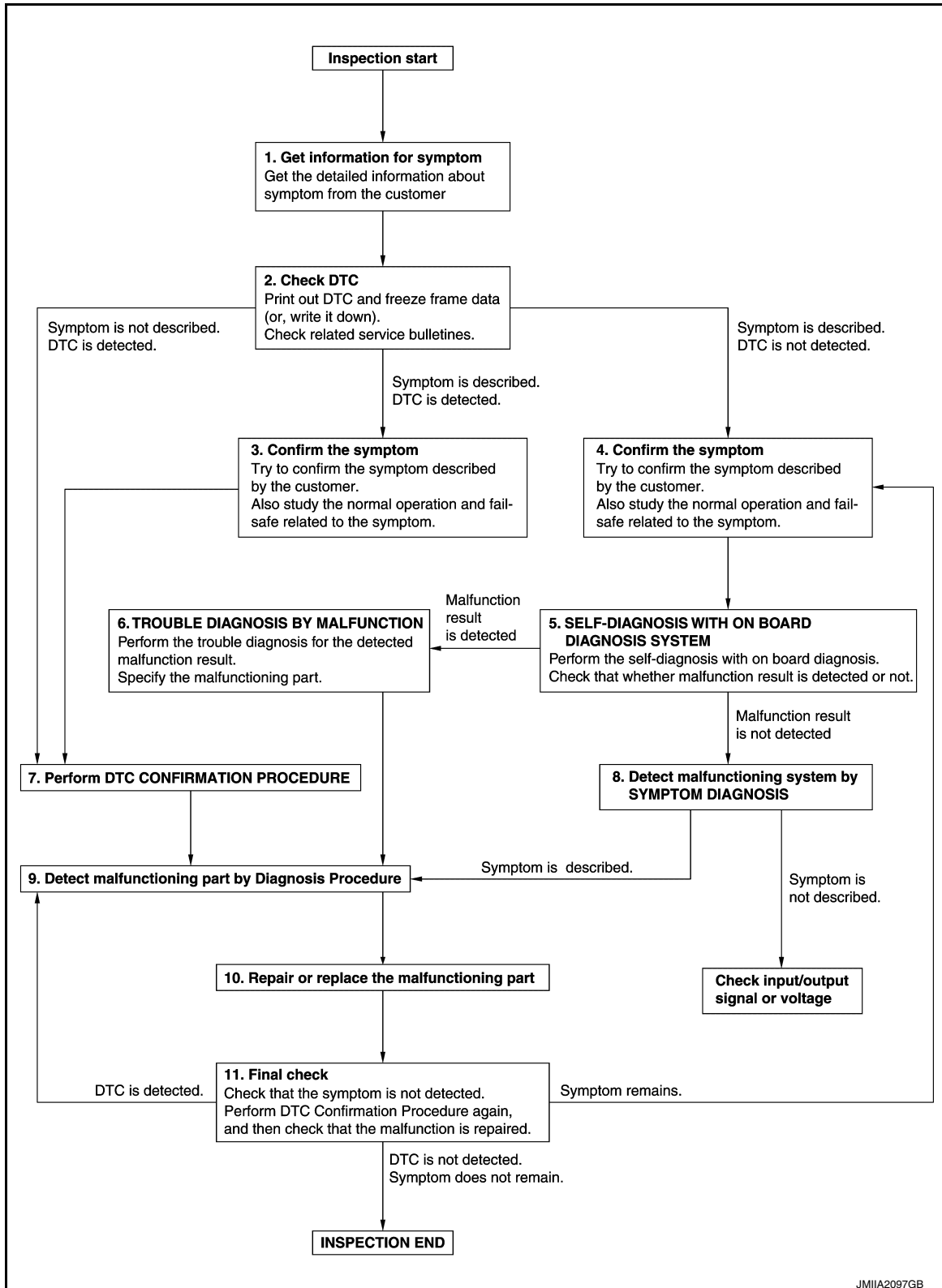
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000012171949

OVERALL SEQUENCE



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DETAILED FLOW

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[XENON TYPE]

1. GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2. CHECK DTC

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

Are any symptoms described and any DTC detected?

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

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

Symptom is not described, DTC is detected>>GO TO 7.

3. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

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

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

>> GO TO 7.

4. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

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

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

>> GO TO 5.

5. SELF-DIAGNOSIS WITH ON BOARD DIAGNOSIS SYSTEM

Perform the self-diagnosis with on board diagnosis. Check that whether malfunction result is detected or not.

Is malfunction result detected?

YES >> GO TO 6.

NO >> GO TO 8.

6. TROUBLE DIAGNOSIS BY MALFUNCTION

Perform the trouble diagnosis for the detected malfunction result. Specify the malfunctioning part.

>> GO TO 9.

7. PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time.

If two or more DTCs are detected, refer to DTC INSPECTION PRIORITY CHART, and determine trouble diagnosis order.

NOTE:

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

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

Is DTC detected?

DIAGNOSIS AND REPAIR WORK FLOW

[XENON TYPE]

< BASIC INSPECTION >

YES >> GO TO 9.

NO >> Check according to [GI-42, "Intermittent Incident"](#).

8. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

Is the symptom described?

YES >> GO TO 9.

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

9. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 10.

NO >> Check according to [GI-42, "Intermittent Incident"](#).

10. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 11.

11. FINAL CHECK

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

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

Is DTC detected and does symptom remain?

YES-1 >> DTC is detected: GO TO 9.

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

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

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[XENON TYPE]

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (AFS CONTROL UNIT)

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (AFS CONTROL UNIT) : Description

INFOID:000000012171950

Perform levelizer adjustment when replacing the AFS control unit. (For details, refer to [EXL-10, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT \(AFS CONTROL UNIT\) : Special Repair Requirement"](#).)

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (AFS CONTROL UNIT) : Special Repair Requirement

INFOID:000000012171951

1.LEVELIZER ADJUSTMENT

Perform levelizer adjustment. Refer to [EXL-10, "LEVELIZER ADJUSTMENT : Description"](#).

>> WORK END

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (HEIGHT SENSOR)

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (HEIGHT SENSOR) : Description

INFOID:000000012171952

Perform levelizer adjustment when replacing the height sensor. (For details, refer to [EXL-10, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT \(HEIGHT SENSOR\) : Special Repair Requirement"](#).)

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT (HEIGHT SENSOR) : Special Repair Requirement

INFOID:000000012171953

1.LEVELIZER ADJUSTMENT

Perform levelizer adjustment. Refer to [EXL-10, "LEVELIZER ADJUSTMENT : Description"](#).

>> WORK END

LEVELIZER ADJUSTMENT

LEVELIZER ADJUSTMENT : Description

INFOID:000000012171954

Perform levelizer adjustment when the following operation is performed. (For details, refer to [EXL-10, "LEVELIZER ADJUSTMENT : Special Repair Requirement"](#).)

- Replacing AFS control unit
- Removing, installing or replacing height sensor
- Adjusting, removing, installing or replacing suspension components

LEVELIZER ADJUSTMENT : Special Repair Requirement

INFOID:000000012171955

1.CHECK VEHICLE CONDITION

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

>> GO TO 2.

2.LEVELIZER ADJUSTMENT

ⓈCONSULT WORK SUPPORT

1. Select "LEVELIZER ADJUSTMENT" of ADAPTIVE LIGHT work support item.
2. Select "START".

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

[XENON TYPE]

3. When "ADJUSTMENT IS COMPLETED", select "END".

CAUTION:

If "CAN NOT BE TESTED" is indicated, AFS control unit detects that the height sensor signal changes. The levelizer adjustment is cancelled. In this case, turn the ignition switch OFF to prevent the vehicle from the height change. Perform the levelizer adjustment again.

Is the levelizer adjustment completed?

YES >> GO TO 3.

NO >> Perform the levelizer adjustment again.

3.SELF-DIAGNOSIS RESULT CHECK

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

Is any DTC detected?

YES >> GO TO 2.

NO >> WORK END

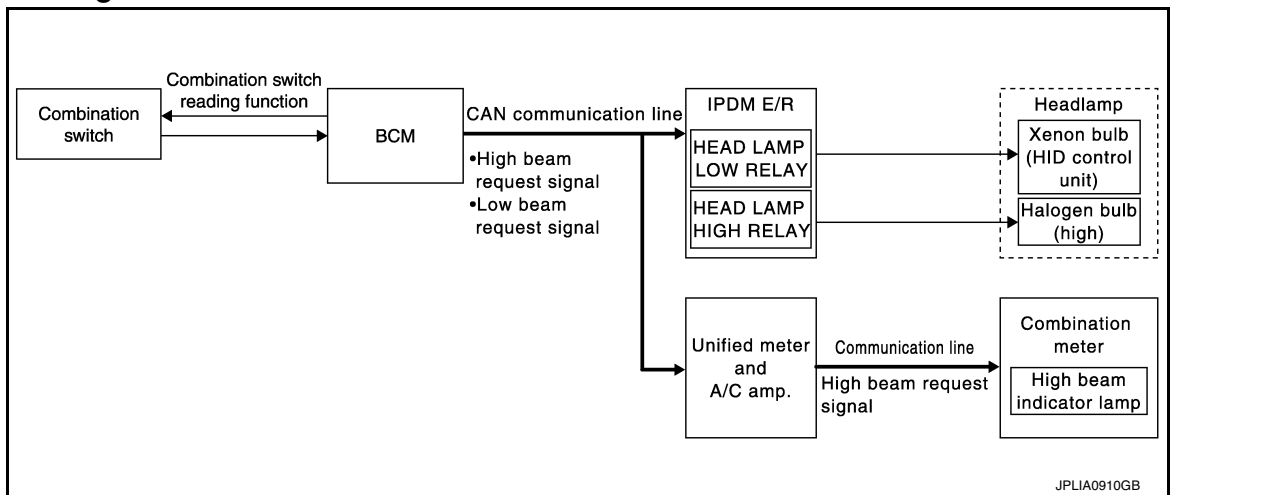
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SYSTEM DESCRIPTION

HEADLAMP SYSTEM

System Diagram



System Description

INFOID:0000000012171957

OUTLINE

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

HEADLAMP (LO) OPERATION

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

Headlamp (LO) ON condition

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

HEADLAMP (HI) OPERATION

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

Headlamp (HI) ON condition

- Lighting switch HI with the lighting switch 2ND
- Lighting switch PASS
- Combination meter turns the high beam indicator lamp ON according to the high beam request signal.
- IPDM E/R turns the integrated headlamp high relay ON, and turns the headlamp ON according to the high beam request signal.

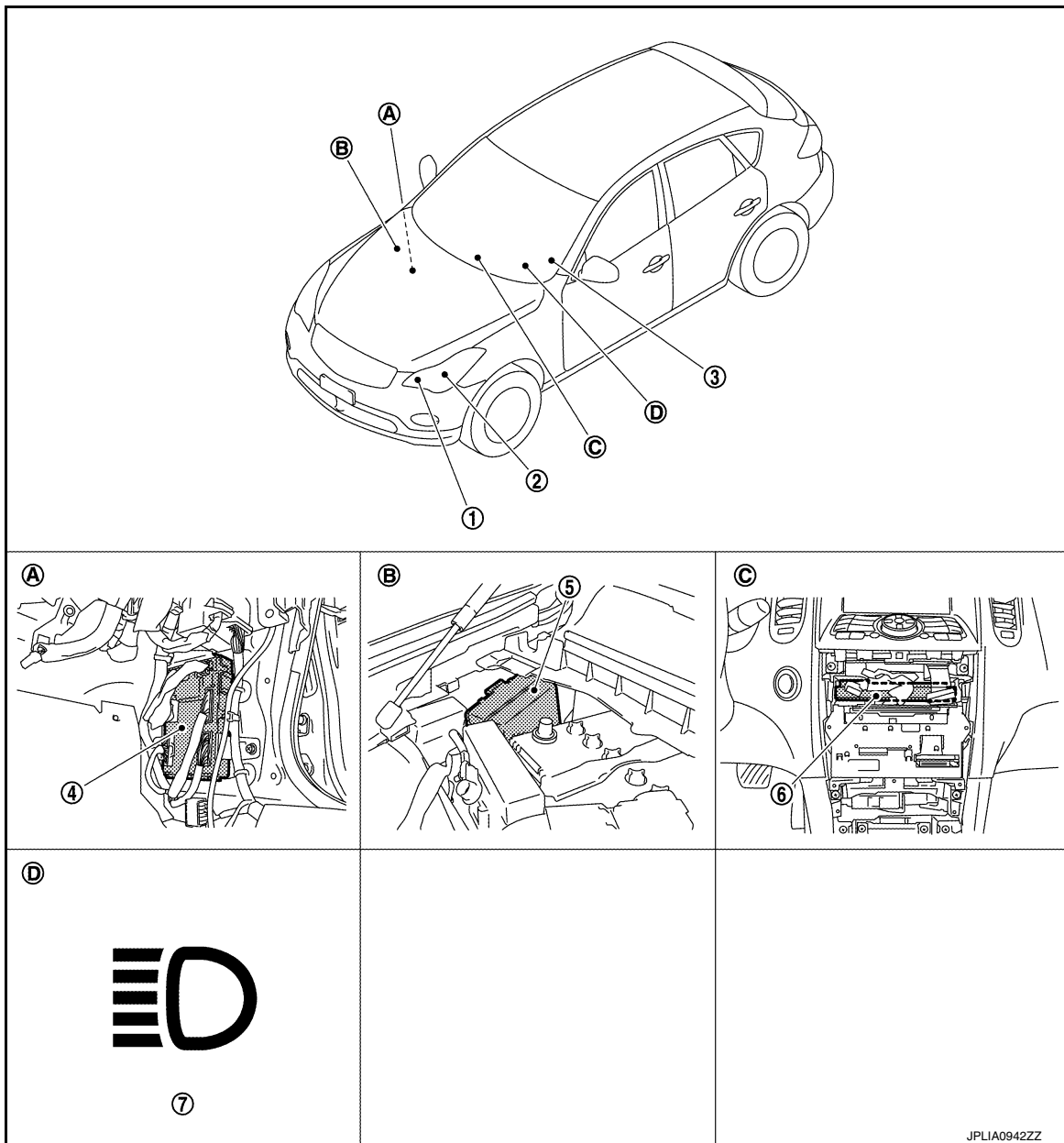
HEADLAMP SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Parts Location

INFOID:000000012171958



- | | | |
|-------------------------------------|--------------------------------|-------------------------------|
| 1. Headlamp (HI) | 2. Headlamp (LO) | 3. Combination switch |
| 4. BCM | 5. IPDM E/R | 6. Unified meter and A/C amp. |
| 7. High beam indicator lamp | | |
| A. Dash side lower (Passenger side) | B. Engine room dash panel (RH) | C. Behind the cluster lid C |
| D. On the combination meter | | |

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HEADLAMP SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Description

INFOID:000000012171959

Part	Description
BCM	<ul style="list-style-type: none">• Detects each switch condition by the combination switch reading function.• Judges that the headlamp is turned ON according to the vehicle condition.- Requests the headlamp relay (HI/LO) ON to IPDM E/R (with CAN communication).- Requests the high beam indicator lamp ON to the combination meter [with CAN communication (through unified meter and A/C amp.)].
IPDM E/R	Controls the integrated relay, and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .
Combination meter (High beam indicator lamp)	Turns the high beam indicator lamp ON according to the request from BCM [with CAN communication (through unified meter and A/C amp.)].
Front combination lamp assembly	<ul style="list-style-type: none">• HID control unit• Xenon bulb Refer to EXL-71, "Description" .

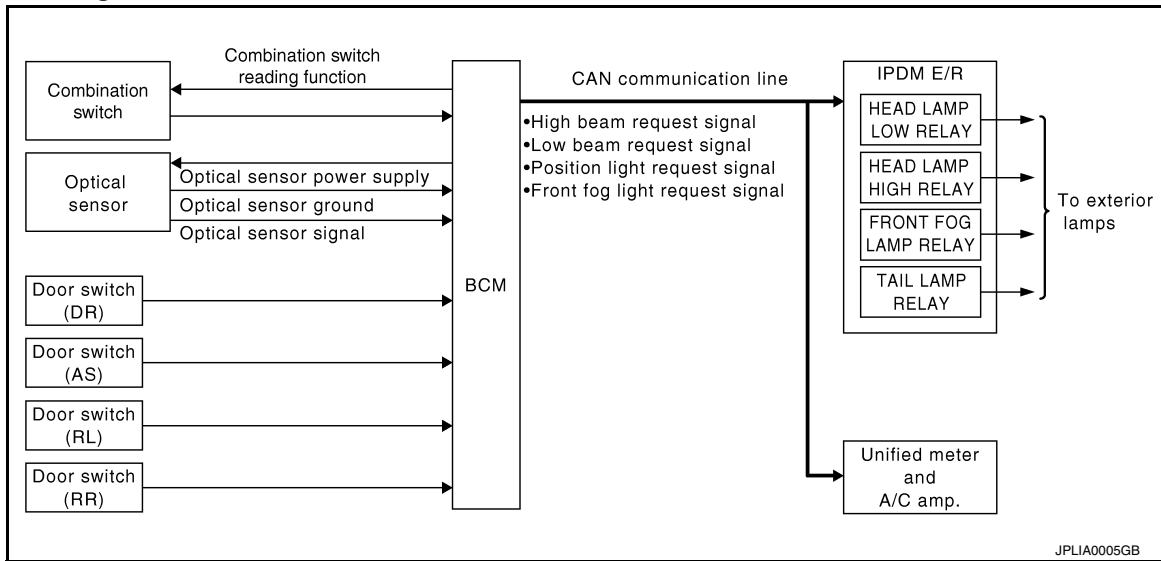
AUTO LIGHT SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

AUTO LIGHT SYSTEM

System Diagram



System Description

INFOID:000000012171961

OUTLINE

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

Control by BCM

- Combination switch reading function
- Headlamp control function
- Auto light function
- Delay timer function

Control by IPDM E/R

- Relay control function
- Auto light system has the auto light function and the delay timer function.
- Auto light function turns the exterior lamps* and each illumination ON/OFF automatically according to the outside brightness.
- When auto light system turns the exterior lamps ON with the ignition switch OFF, delay timer function turns the exterior lamps OFF depending on the vehicle condition with the auto light function after a certain period of time.

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

NOTE:

Headlamp HI and front fog lamp depend on the combination switch condition.

AUTO LIGHT FUNCTION

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

NOTE:

ON/OFF timing differs based on the sensitivity from the setting. The setting can be set by CONSULT. Refer to [EXL-34, "HEADLAMP : CONSULT Function \(BCM - HEAD LAMP\) \(Xenon Type\)".](#)

DELAY TIMER FUNCTION

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

- Turns the exterior lamp OFF 5 minutes after detecting that any door opens (Door switch ON).

AUTO LIGHT SYSTEM

[XENON TYPE]

< SYSTEM DESCRIPTION >

- Turns the exterior lamp OFF a certain period of time* after closing all doors (Door switch ON→OFF).
- Turns the exterior lamp OFF with the ignition switch ACC or the light switch OFF.

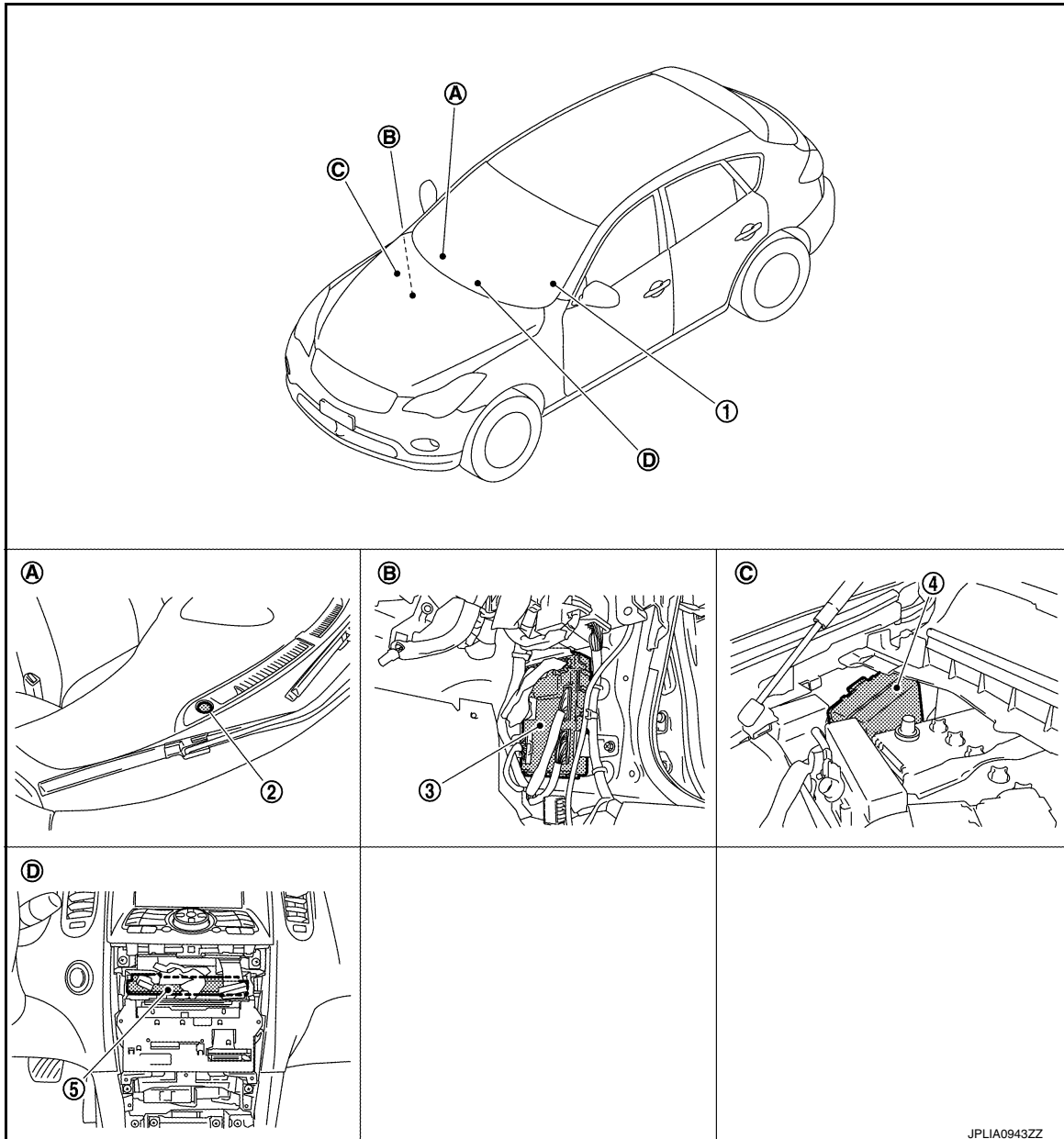
*: The preset time is 45 seconds. The timer operating time can be set by CONSULT. Refer to [EXL-34. "HEAD-LAMP : CONSULT Function \(BCM - HEAD LAMP\) \(Xenon Type\)".](#)

NOTE:

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

Component Parts Location

INFOID:000000012171962



- | | | |
|--------------------------------|-------------------------------------|--------------------------------|
| 1. Combination switch | 2. Optical sensor | 3. BCM |
| 4. IPDM E/R | 5. Unified meter and A/C amp. | |
| A. Instrument upper panel (RH) | B. Dash side lower (Passenger side) | C. Engine room dash panel (RH) |
| D. Behind the cluster lid C | | |

AUTO LIGHT SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Description

INFOID:000000012171963

Part	Description
BCM	<ul style="list-style-type: none">• Judges each switch condition by the combination switch reading function.• Judges the outside brightness from the optical sensor signal.• Judges the OFF timing according to the vehicle condition.• Judges the ON/OFF status of the exterior lamp and each illumination according to the outside brightness and the vehicle condition. Requests ON/OFF of each relay to IPDM E/R (with CAN communication).
IPDM E/R	Controls the integrated relay, and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-10. "System Diagram" .
Optical sensor	Refer to EXL-85. "Description" .

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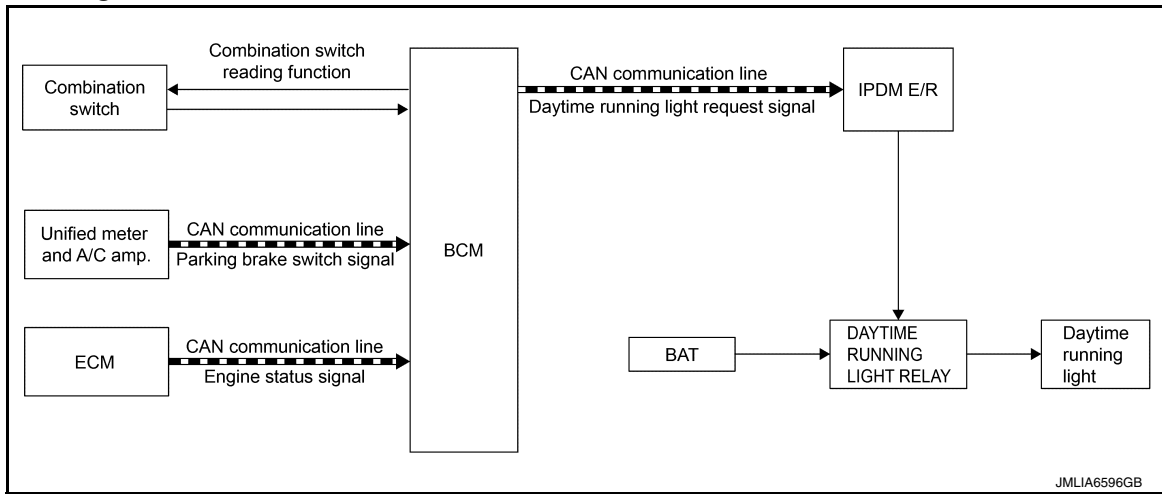
DAYTIME RUNNING LIGHT SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

System Diagram



System Description

INFOID:000000012171965

OUTLINE

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

DAYTIME RUNNING LIGHT OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM detects the vehicle condition depending on the following signals.
 - Engine status signal (received from ECM with CAN communication)
 - Parking brake switch signal (received from unified meter and A/C amp. with CAN communication)
- BCM transmits the daytime running light request signal to IPDM E/R via CAN communication according to the daytime running light ON condition.

Daytime running light ON condition

- Engine running with the parking brake released and any following conditions are satisfied.
 - Lighting switch OFF
 - Lighting switch AUTO (Only when the illumination judgment by auto light system is OFF. For details, refer to [EXL-15. "System Description"](#)).
- IPDM E/R turns the daytime running light relay ON, and turns the daytime running light ON according to the daytime running light request signal.

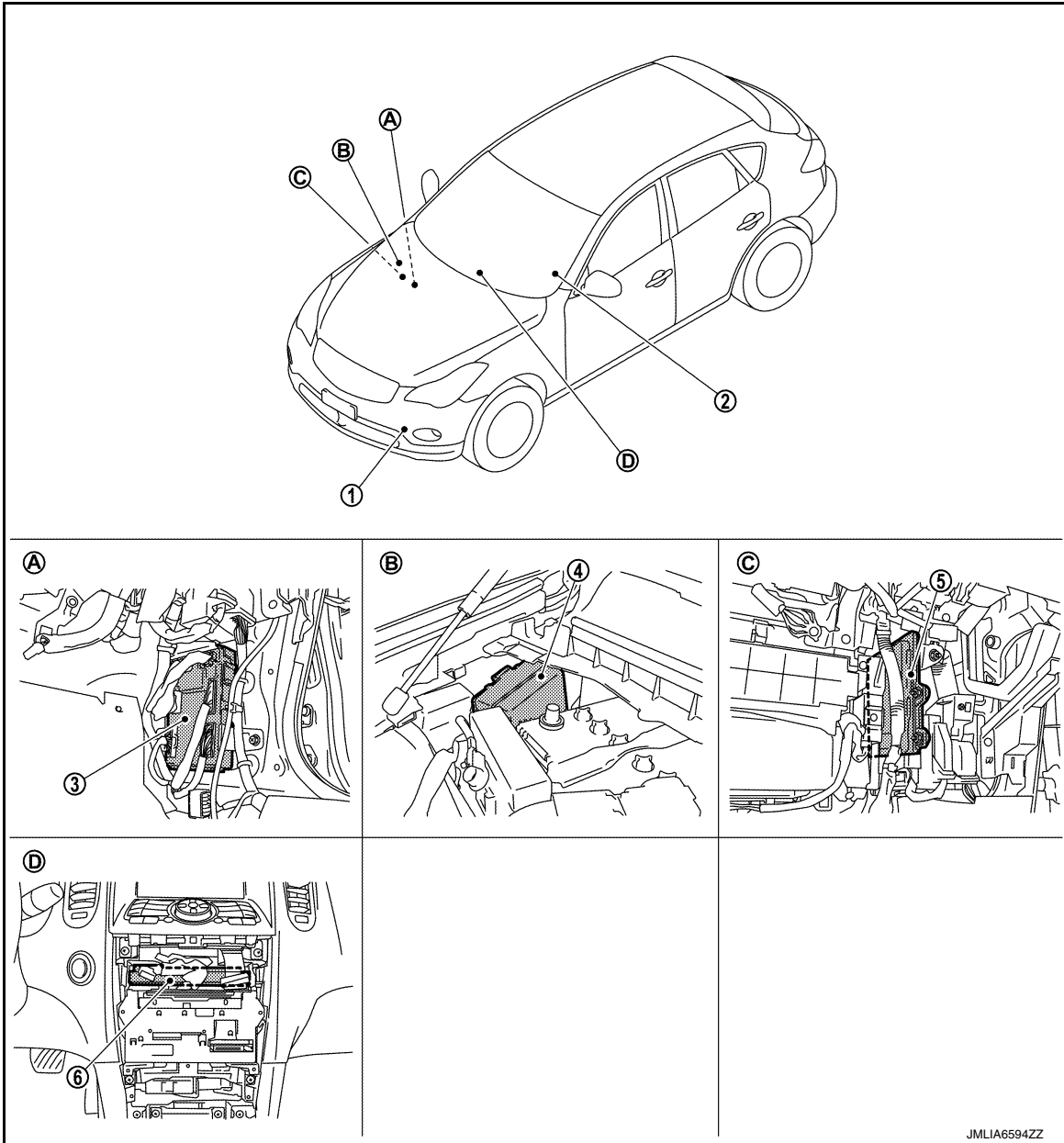
DAYTIME RUNNING LIGHT SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Parts Location

INFOID:000000012171966



- | | | |
|-------------------------------------|--------------------------------|-------------------------------|
| 1. Daytime running light | 2. Combination switch | 3. BCM |
| 4. IPDM E/R | 5. ECM | 6. Unified meter and A/C amp. |
| A. Dash side lower (Passenger side) | B. Engine room dash panel (RH) | C. Behind the glove box |
| D. Behind the cluster lid C | | |

Component Description

INFOID:000000012171967

Part	Description
BCM	<ul style="list-style-type: none"> Judges each switch condition with the combination switch reading function. Judges the daytime running light ON/OFF status according to the vehicle condition. Requests the daytime running light relay ON to IPDM E/R (with CAN communication).
IPDM E/R	Controls the daytime running light relay and supplies voltage to the load according to the request from BCM (with CAN communication).

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DAYTIME RUNNING LIGHT SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Part	Description
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .
ECM	Transmits the engine status signal to BCM with CAN communication.
Unified meter and A/C amp.	Transmits the parking brake switch signal to BCM with CAN communication.

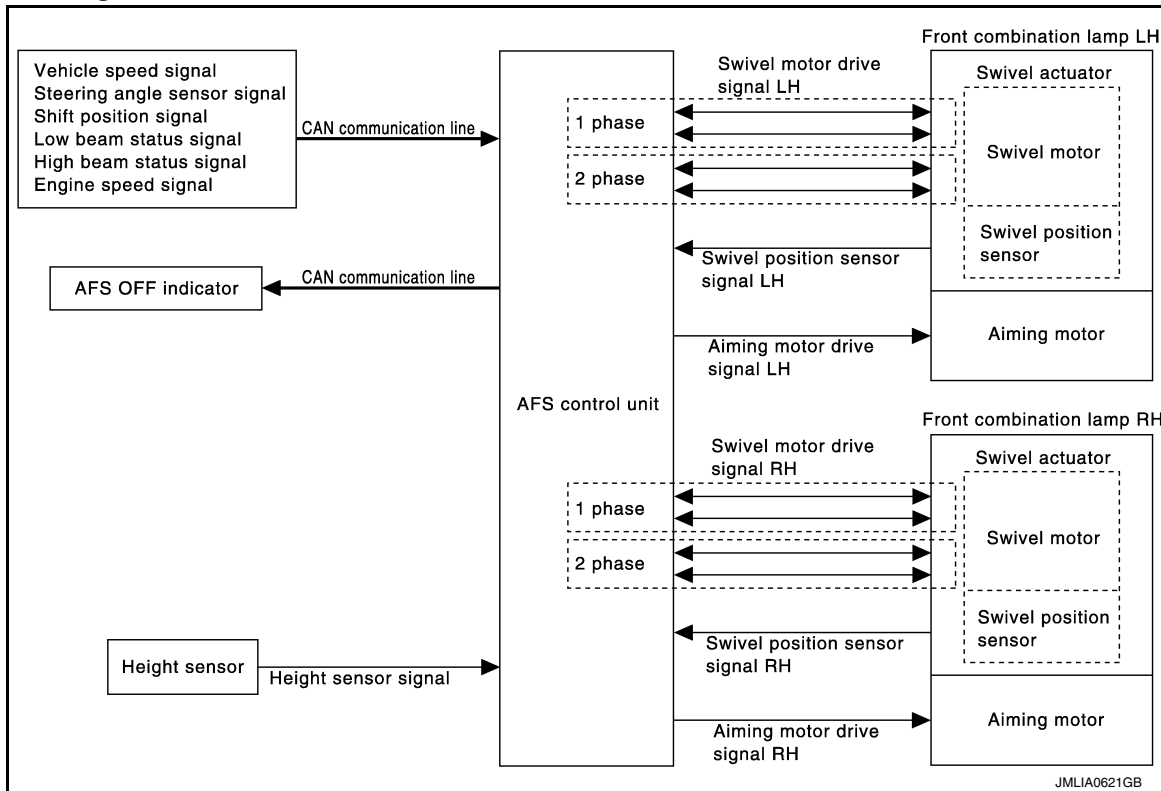
ACTIVE ADAPTIVE FRONT-LIGHTING SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

ACTIVE ADAPTIVE FRONT-LIGHTING SYSTEM

System Diagram



System Description

INFOID:000000012171969

OUTLINE

- AFS (ACTIVE ADAPTIVE FRONT-LIGHTING SYSTEM) is controlled by AFS control unit.
- AFS has AFS control (swivel control) and the headlamp auto aiming control.
 - AFS control swivels the headlamp to the steering direction.
 - Headlamp auto aiming control moves the headlamp light axis up/down according to the vehicle height.

AFS (ADAPTIVE FRONT-LIGHTING SYSTEM)

AFS Control Description

- AFS control controls the headlamp (right) only when the steering wheel is turned rightward, and the headlamp (left) only when the steering wheel is turned leftward.
- AFS control unit detects the vehicle condition necessary for AFS control with the following signals.
 - Steering angle sensor signal (received from steering angle sensor with CAN communication)
 - Engine speed signal (received from ECM with CAN communication)
 - Shift position signal (received from TCM with CAN communication)
 - Low beam status and high beam status (received from IPDM E/R with CAN communication)
 - Vehicle speed signal (received from unified meter and A/C amp. with CAN communication)
- When the operation conditions are satisfied, AFS control unit controls the swivel angle depending on the steering angle and the vehicle speed.

AFS operation condition

- Swivel actuator initialization completed
- Headlamp ON
- While the engine running
- Selector lever position other than "P" or "R"
- Vehicle speed approximately 25 km/h (15.5 MPH) or more (left swivel only; Right swivel activates regardless of the vehicle speed.)

Swivel Actuator Initialization

- AFS control unit performs the swivel actuator initialization when detecting that the engine starts.

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ACTIVE ADAPTIVE FRONT-LIGHTING SYSTEM

[XENON TYPE]

< SYSTEM DESCRIPTION >

- Swivels the headlamp to the vehicle-center side until it hits the stopper.
- Returns the swivel angle from the stopper. Completes the initialization with regarding the returned position as the swivel angle 0° (straight-forward position).

Swivel Operation

- AFS control unit transmits the drive signal to the swivel actuator when activation conditions are satisfied. And swivels the headlamp.
- The swivel starts after steering approximately 20° or more from straight-forward position.

NOTE:

- The steering angle differs between right turn and left turn.
- The swivel angle becomes the maximum angle toward the driving direction if the steering angle is approximately 90° or more depending on the vehicle speed. The swivel angle is maintained by shutting off the drive signal.
- The swivel starts, and returns to the swivel angle 0° (straight-forward position) when the steering is returned to the straight-forward position.
- AFS control unit returns the swivel angle to the straight-forward position, and stops the swivel regardless of the steering angle if the operation condition is not satisfied while the swivel angle is 0°.

AFS OFF Indicator Lamp

- AFS control unit transmits AFS OFF indicator lamp signal to the combination meter (through the unified meter and A/C amp.) with CAN communication.
- Combination meter turns AFS OFF indicator lamp ON/OFF/blinking according to AFS OFF indicator lamp signal.
- AFS OFF indicator lamp is turned ON for 1 second for the AFS OFF indicator lamp bulb check when the ignition switch is turned ON. AFS OFF indicator lamp is turned OFF within 1 second when the engine starts.
- AFS OFF indicator lamp blinks (1 second each) if AFS control unit detects a specific DTC.

NOTE:

Combination meter blinks AFS OFF indicator lamp (approximately 1 second each) if AFS OFF indicator lamp signal is not received from AFS control unit.

HEADLAMP AUTO AIMING

Headlamp Auto Aiming Control Description

- Headlamp auto aiming control controls the headlamp light axis height appropriately according to the vehicle height.
- AFS control unit detects the vehicle condition necessary for headlamp auto aiming control with the following signals.
 - Height sensor signal
 - Engine speed signal (received from ECM with CAN communication)
 - Low beam status signal and high beam status signal (received from IPDM E/R with CAN communication)
 - Vehicle speed signal (received from unified meter and A/C amp. with CAN communication)
- When the operation conditions are satisfied, AFS control unit transmits the aiming motor drive signal for adjusting the headlamp axis height.

Headlamp auto aiming operation condition

- Headlamp ON
- While the engine running
- Vehicle speed (Control mode is switched according to the driving condition.)

Headlamp Auto Aiming Operation

- AFS control unit calculates the vehicle pitch angle from the height sensor signal. AFS control unit judges the angle for adjusting the axis gap from the preset position.

CAUTION:

Adjusted axis position may differ from the preset position although the headlamp auto aiming activates properly if the suspension is replaced or worn.

- AFS control unit controls the headlamp axis by changing the aiming motor drive signal output according to the vehicle-rearward height when detecting the following vehicle condition. Output is maintained if other condition than following is detected.
 - Engine starts.
 - Headlamp is turned ON.
 - Vehicle posture becomes stable after changing the vehicle posture change is detected with the headlamp ON and the vehicle stopped.
 - Vehicle speed is maintained with the headlamp ON and the vehicle driven.

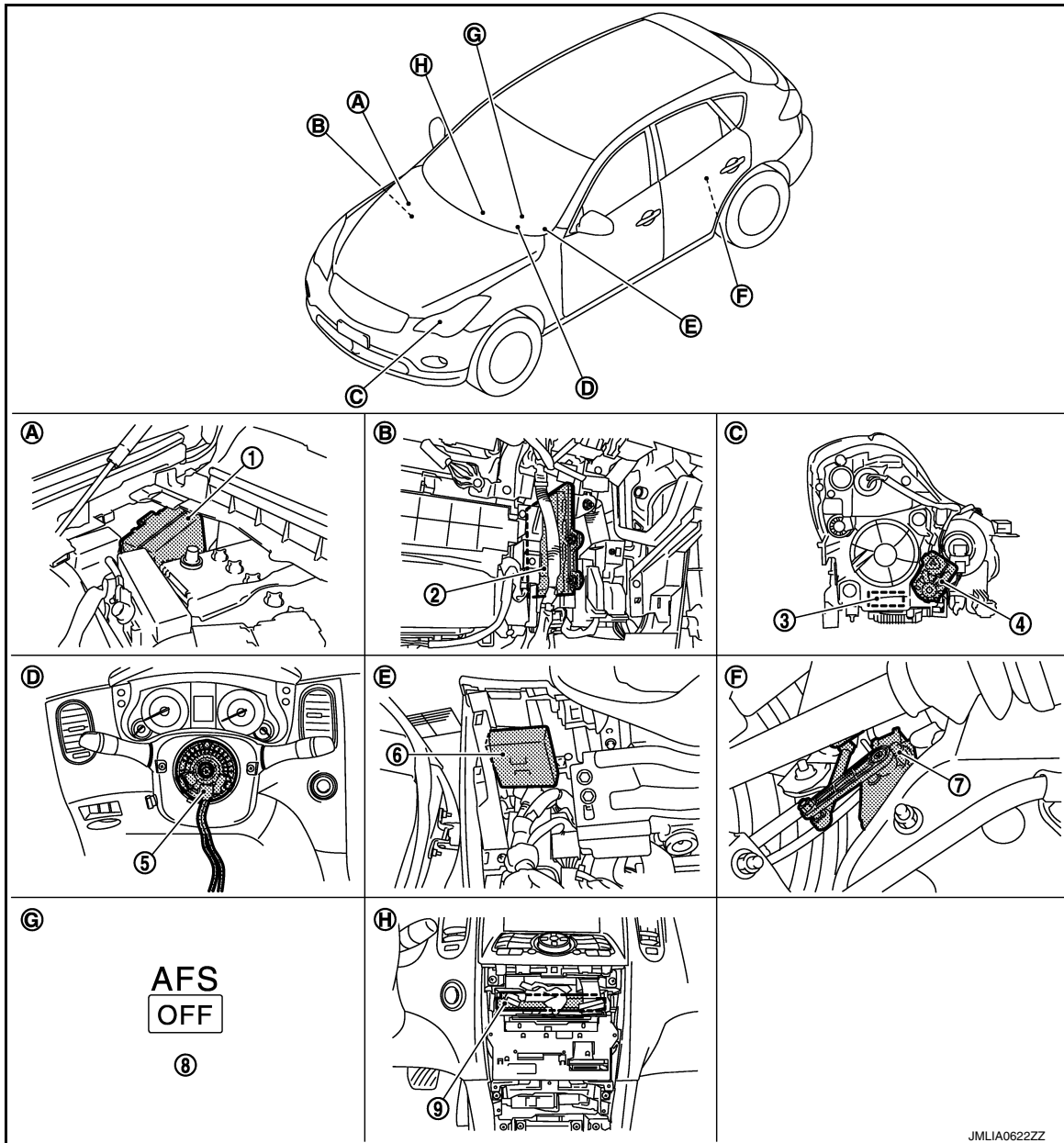
ACTIVE ADAPTIVE FRONT-LIGHTING SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Parts Location

INFOID:000000012171970



- | | | |
|-----------------------------------|---|----------------------------------|
| 1. IPDM E/R | 2. ECM | 3. Swivel actuator |
| 4. Aiming motor | 5. Steering angle sensor | 6. AFS control unit |
| 7. Height sensor | 8. AFS OFF indicator lamp | 9. Unified meter and A/C amp. |
| A. Engine room dash panel (RH) | B. Behind the glove box | C. Front combination lamp (back) |
| D. Steering column cover (inside) | E. Behind the instrument driver lower panel | F. Rear suspension member (LH) |
| G. On the combination meter | H. Behind the cluster lid C | |

Component Description

INFOID:000000012171971

Part	Description
AFS control unit	Refer to EXL-57, "Description" .
Swivel actuator	Refer to EXL-45, "Description" .

ACTIVE ADAPTIVE FRONT-LIGHTING SYSTEM

[XENON TYPE]

< SYSTEM DESCRIPTION >

Part	Description
Aiming motor	Refer to EXL-72. "Description" .
Height sensor	Refer to EXL-51. "Description" .
Steering angle sensor	Refer to EXL-60. "Description" .
IPDM E/R	Transmits the headlamp (LO) ON signal and the headlamp (HI) ON signal to AFS control unit with CAN communication.
ECM	Transmits the engine speed signal to AFS control unit with CAN communication.
TCM	Refer to EXL-54. "Description" .
Unified meter and A/C amp.	Refer to EXL-55. "Description" .
Combination meter	Turns AFS OFF indicator lamp ON/OFF/blinking according to AFS control unit request [with CAN communication (through unified meter and A/C amp.)].

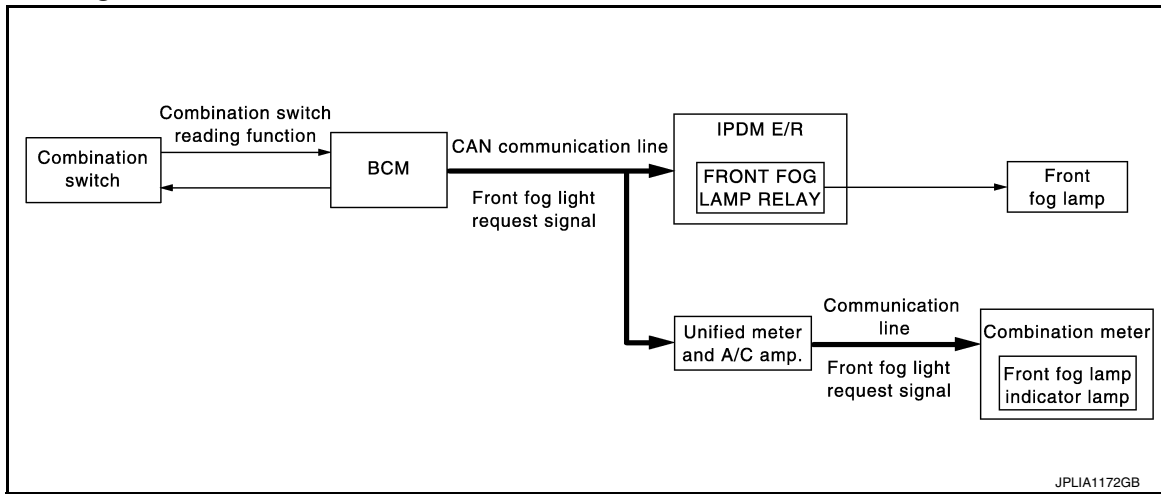
FRONT FOG LAMP SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

FRONT FOG LAMP SYSTEM

System Diagram



System Description

INFOID:000000012171973

OUTLINE

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

FRONT FOG LAMP OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits the front fog light request signal to IPDM E/R and the combination meter (through the unified meter and A/C amp.) with CAN communication according to the front fog lamp ON condition.

Front fog lamp ON condition

- Front fog lamp switch ON and any of the followings
 - Lighting switch 1ST
 - Lighting switch 2ND
 - Lighting switch AUTO and the ignition switch ON
- IPDM E/R turns the integrated front fog lamp relay ON, and turns the front fog lamp ON according to the front fog light request signal.
- Combination meter turns the front fog lamp indicator lamp ON according to the front fog light request signal.

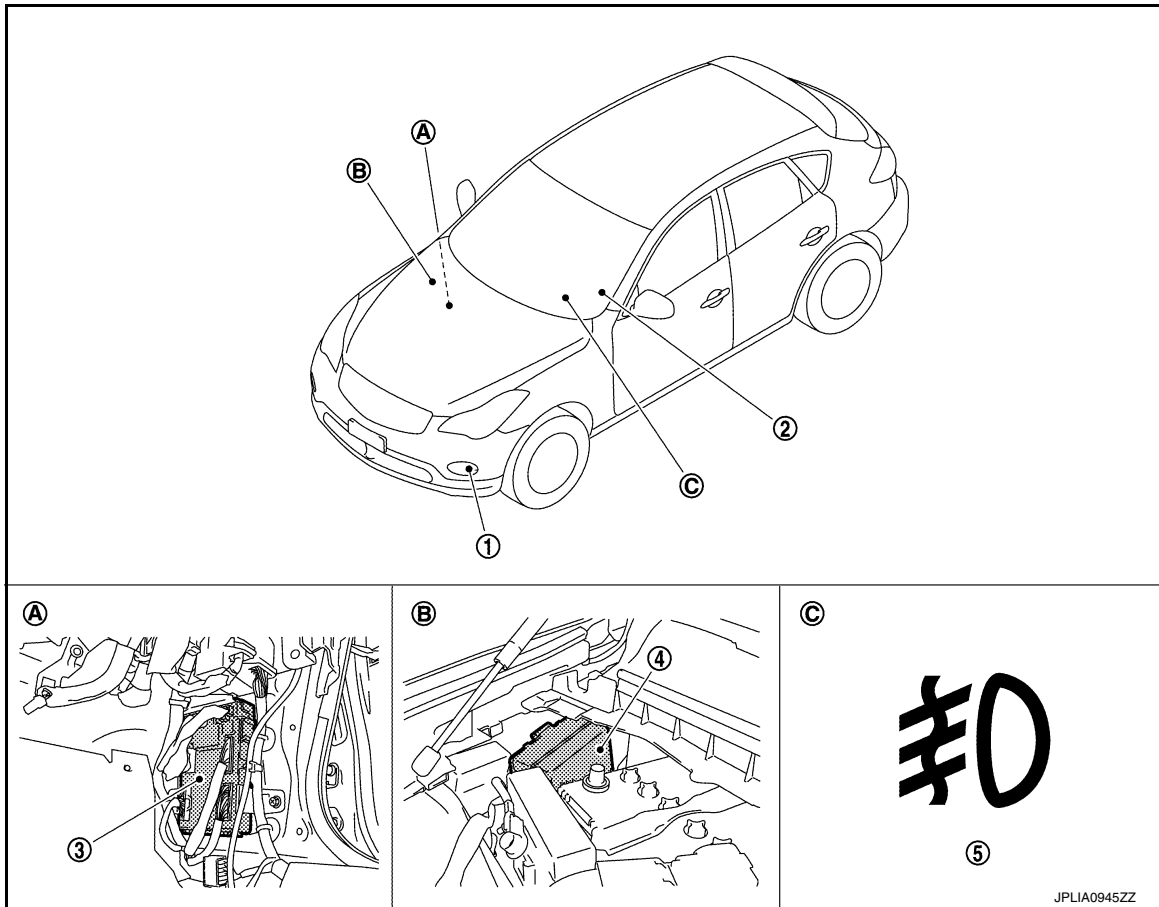
FRONT FOG LAMP SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Parts Location

INFOID:000000012171974



- | | | |
|-------------------------------------|----------------------------------|-----------------------------|
| 1. Front fog lamp | 2. Combination switch | 3. BCM |
| 4. IPDM E/R | 5. Front fog lamp indicator lamp | |
| A. Dash side lower (Passenger side) | B. Engine room dash panel (RH) | C. On the combination meter |

Component Description

INFOID:000000012171975

Part	Description
BCM	<ul style="list-style-type: none"> Judges each switch condition by the combination switch reading function. Judges the front fog lamp ON/OFF status according to the vehicle condition. Requests the front fog lamp relay ON to IPDM E/R (with CAN communication).
IPDM E/R	Controls the integrated relay and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .
Combination meter (Front fog lamp indicator lamp)	Turns the front fog lamp indicator lamp ON according to the request from BCM [with CAN communication (through the unified meter and A/C amp.)].

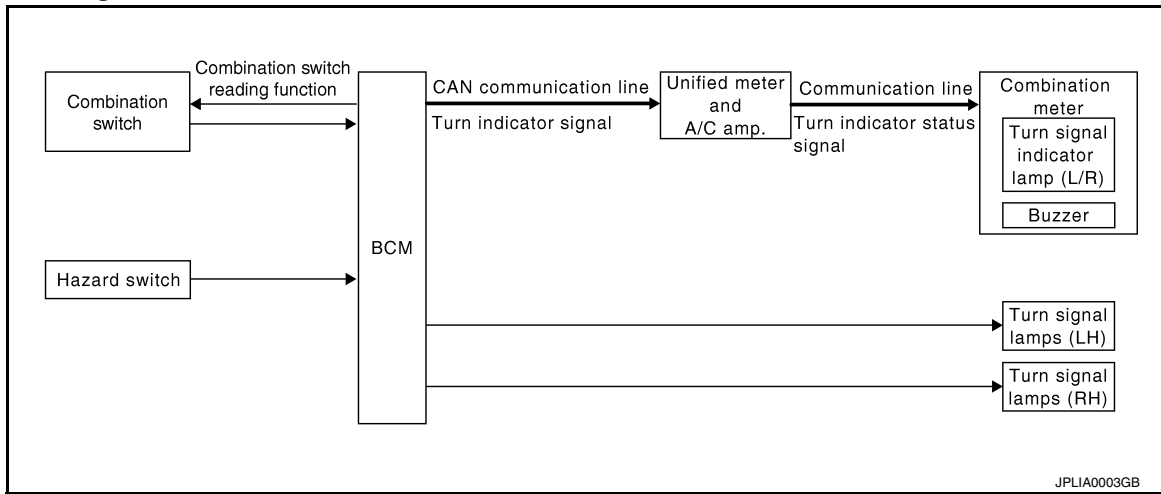
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

System Diagram



System Description

INFOID:000000012171977

OUTLINE

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

TURN SIGNAL LAMP OPERATION

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

HAZARD WARNING LAMP OPERATION

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

TURN SIGNAL INDICATOR LAMP AND TURN SIGNAL SOUND OPERATION

- BCM transmits the turn signal indicator lamp signal to the combination meter (through the unified meter and A/C amp.) with CAN communication while the turn signal lamp and the hazard warning lamp operating.
- Combination meter outputs the turn signal sound with the integrated buzzer while blinking the turn signal indicator lamp according to the turn signal indicator lamp signal.

HIGH FLASHER OPERATION (FAIL-SAFE)

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

NOTE:

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

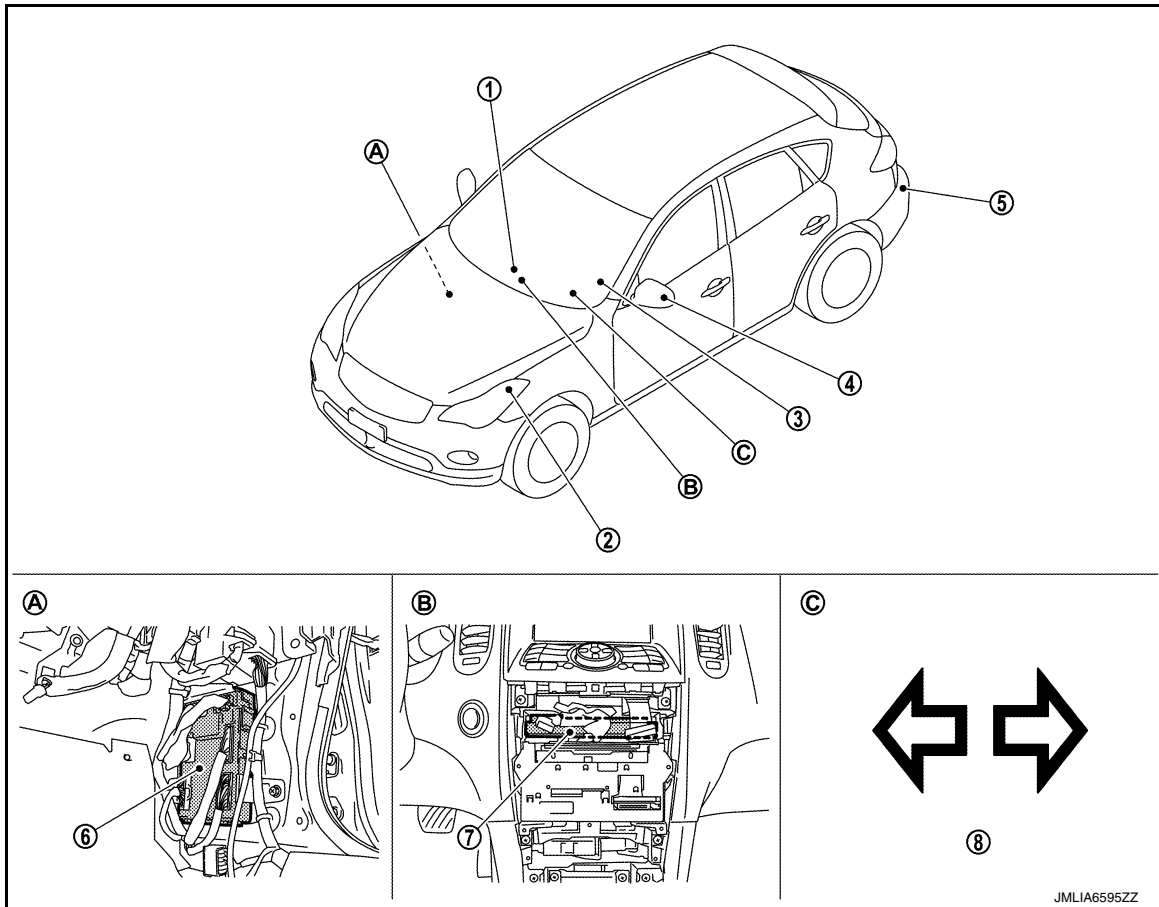
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Parts Location

INFOID:000000012171978



- | | | |
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| 1. Hazard warning switch | 2. Front turn signal lamp | 3. Combination switch |
| 4. Side turn signal lamp | 5. Rear turn signal lamp | 6. BCM |
| 7. Unified meter and A/C amp. | 8. Turn signal indicator lamp | |
| A. Dash side lower (Passenger side) | B. Behind the cluster lid C | C. On the combination meter |

Component Description

INFOID:000000012171979

Part	Description
BCM	<ul style="list-style-type: none"> Judges each switch condition by the combination switch reading function. Judges the blinks of the turn signal lamp and the hazard warning lamp from each switch status. The applicable turn signal lamp blinks. Requests the turn signal indicator lamp blink to the combination meter (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .
Hazard switch (Multifunction switch)	Refer to EXL-88, "Description" .
Combination meter (Turn signal indicator lamp & buzzer)	Blinks the turn signal indicator lamp and outputs the turn signal operating sound with integrated buzzer according to the request from BCM [with CAN communication (through unified meter and A/C amp.)].

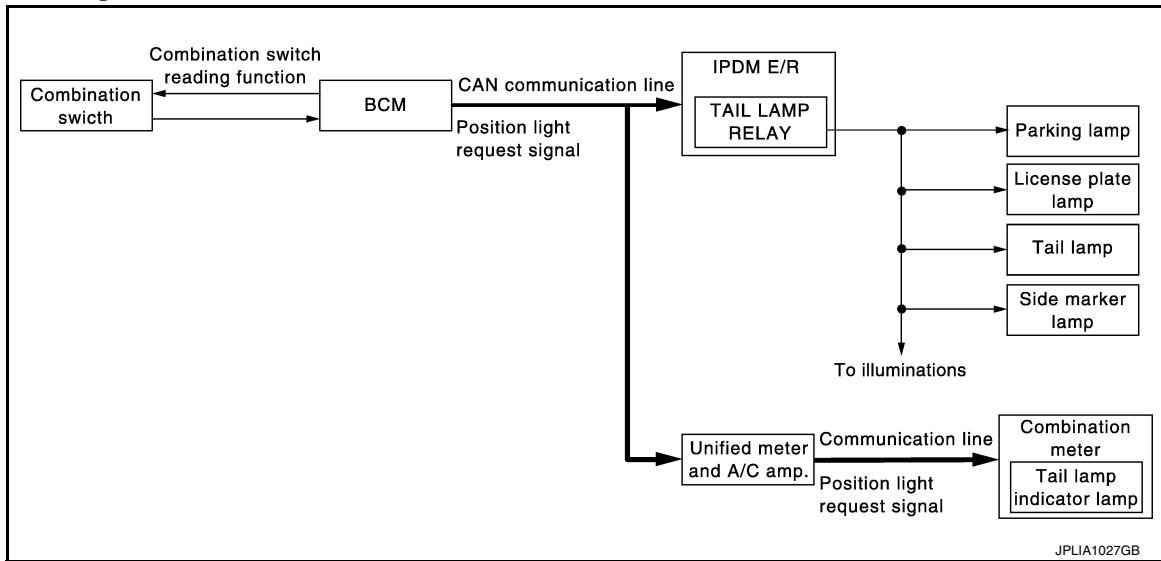
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

System Diagram



System Description

INFOID:000000012171981

OUTLINE

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

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits the position light request signal to IPDM E/R with CAN communication according to the ON/OFF condition of the parking, license plate, side marker and tail lamps.

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

- Lighting switch 1ST
- Lighting switch 2ND
- Lighting switch AUTO, and the auto light function ON judgment.
- IPDM E/R turns the integrated tail lamp relay ON and turns the parking lamp, license plate, side marker and tail lamps ON according to the position light request signal.
- Combination meter turns the tail lamp indicator lamp ON according to the position light request signal.

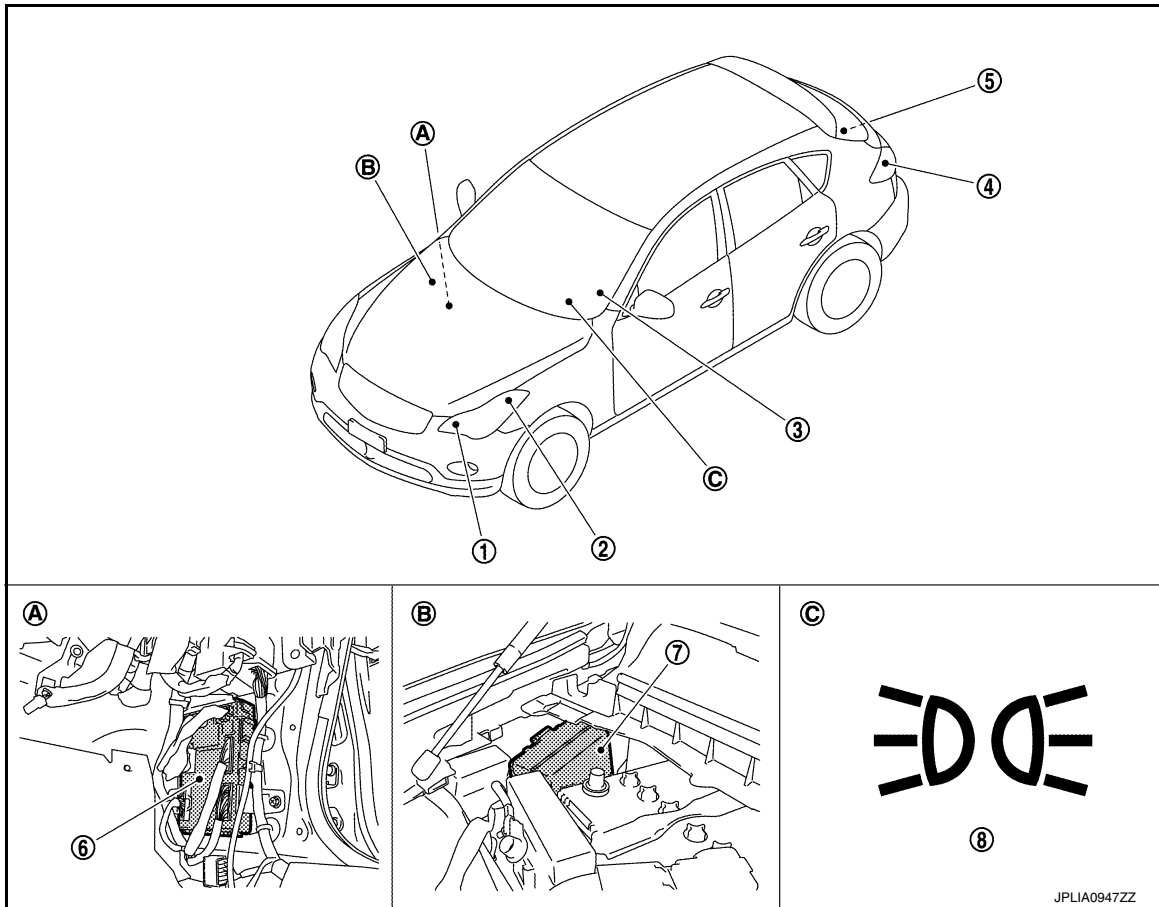
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Parts Location

INFOID:000000012171982



- | | | |
|-------------------------------------|--------------------------------|-----------------------------|
| 1. Parking lamp | 2. Side marker lamp | 3. Combination switch |
| 4. Tail lamp and side marker lamp | 5. License plate lamp | 6. BCM |
| 7. IPDM E/R | 8. Tail lamp indicator lamp | |
| A. Dash side lower (Passenger side) | B. Engine room dash panel (RH) | C. On the combination meter |

Component Description

INFOID:000000012171983

Part	Description
BCM	<ul style="list-style-type: none"> Judges each switch condition by the combination switch reading function. Judges the ON/OFF status of the clearance, license plate, side marker and tail lamps according to the vehicle condition. Requests the tail lamp relay ON to IPDM E/R (with CAN communication).
IPDM E/R	Controls the integrated relay and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .
Combination meter (Tail lamp indicator lamp)	Turns the tail lamp indicator lamp ON according to the request from BCM [with CAN communication (through the unified meter and A/C amp.)].

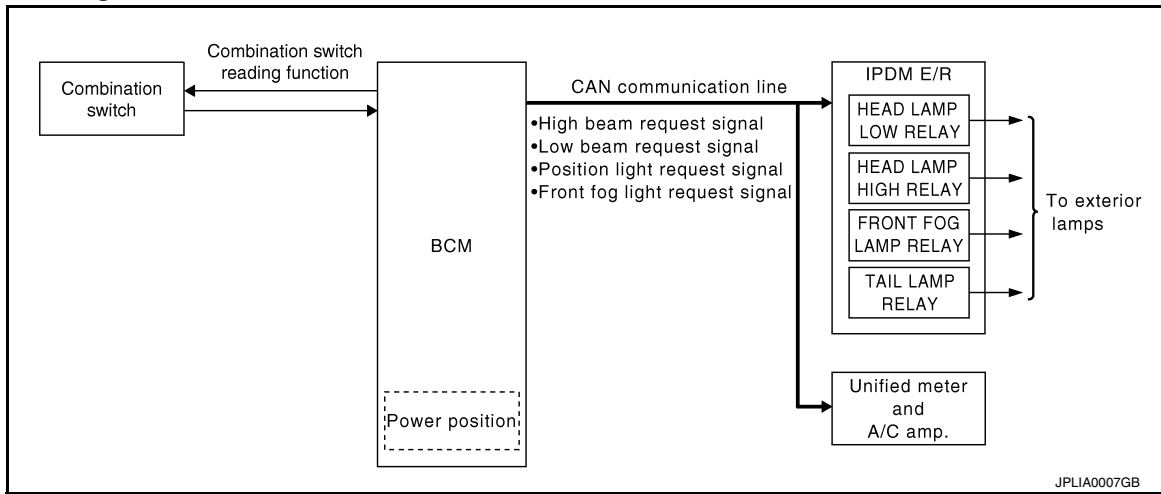
EXTERIOR LAMP BATTERY SAVER SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

EXTERIOR LAMP BATTERY SAVER SYSTEM

System Diagram



System Description

INFOID:000000012171985

OUTLINE

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

Control by BCM

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

Control by IPDM E/R

- Relay control function
- BCM turns the exterior lamp* OFF after a period of time to prevent the battery from over-discharge when the ignition switch is turned OFF with the exterior lamp ON.

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

NOTE:

When the lighting switch is turned AUTO, the exterior lamp battery saver switches to the auto light system. Refer to [EXL-15. "System Description"](#).

EXTERIOR LAMP BATTERY SAVER ACTIVATION

BCM activates the timer and turns the exterior lamp OFF 45 seconds after the ignition switch is turned from ON → OFF with the exterior lamps ON.

NOTE:

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

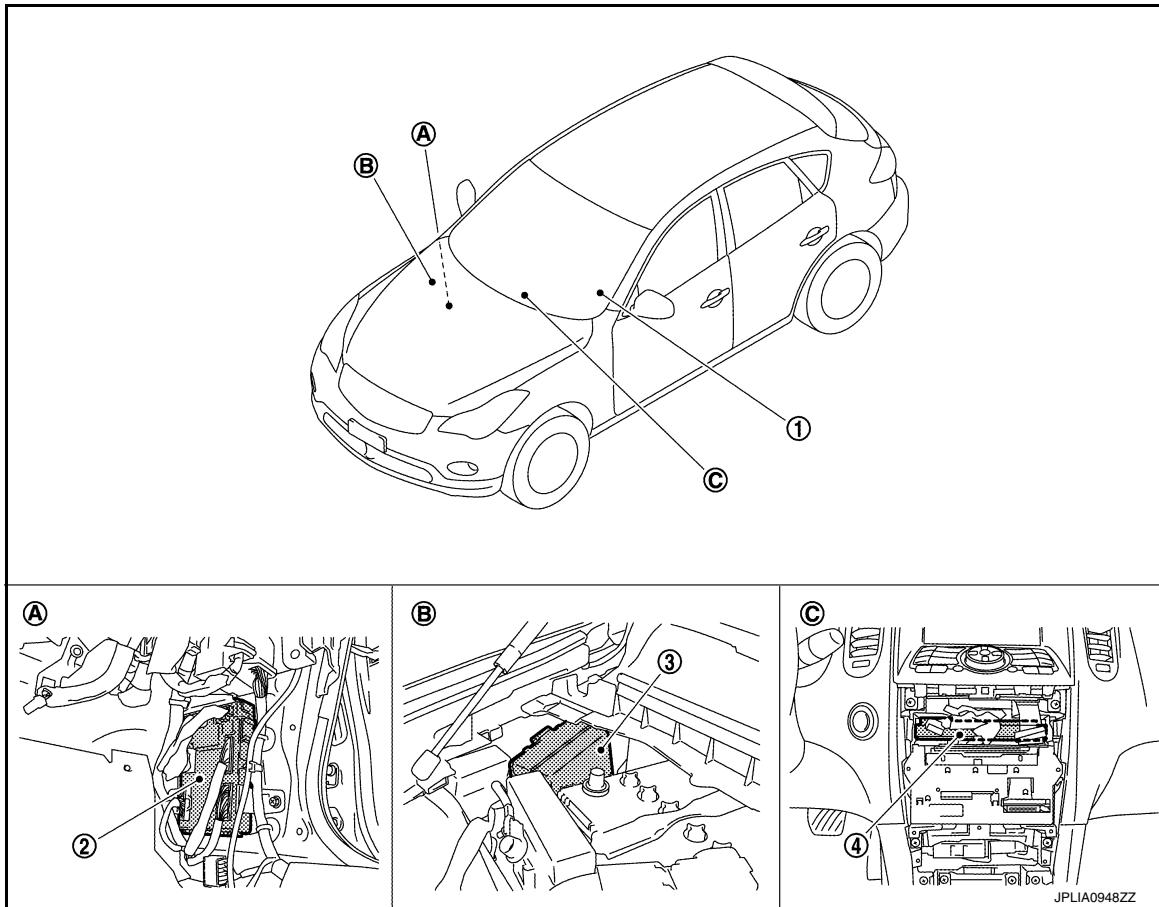
EXTERIOR LAMP BATTERY SAVER SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Parts Location

INFOID:000000012171986



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|-------------------------------|-------------------------------------|--------------------------------|
| 1. Combination switch | 2. BCM | 3. IPDM E/R |
| 4. Unified meter and A/C amp. | A. Dash side lower (Passenger side) | B. Engine room dash panel (RH) |
| | C. Behind the cluster lid C | |

Component Description

INFOID:000000012171987

Part	Description
BCM	<ul style="list-style-type: none"> Judges each switch condition by the combination switch reading function. Judges the exterior lamp OFF according to the vehicle condition. Requests each relay OFF to IPDM E/R (with CAN communication).
IPDM E/R	Controls the integrated relay according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[XENON TYPE]

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000012750579

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	<ul style="list-style-type: none"> Read and save the vehicle specification. Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
—	AIR CONDITONER*			
<ul style="list-style-type: none"> Intelligent Key system Engine start system 	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

NOTE:

*: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

DIAGNOSIS SYSTEM (BCM)

[XENON TYPE]

< SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power supply position status of the moment a particular DTC is detected*	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)
	LOCK>ACC		While turning power supply position from "LOCK"* to "ACC"
	ACC>ON		While turning power supply position from "ACC" to "IGN"
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Except emergency stop operation)
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)
	ACC>OFF		While turning power supply position from "ACC" to "OFF"
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"*
	OFF>ACC		While turning power supply position from "OFF" to "ACC"
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK"*.) to low power consumption mode
	LOCK		Power supply position is "LOCK"*
	OFF		Power supply position is "OFF" (Ignition switch OFF)
	ACC		Power supply position is "ACC" (Ignition switch ACC)
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)
CRANKING	Power supply position is "CRANKING" (At engine cranking)		
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 	

NOTE:

*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met.

- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

The power supply position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

HEADLAMP

HEADLAMP : CONSULT Function (BCM - HEAD LAMP) (Xenon Type)

INFOID:0000000012171989

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[XENON TYPE]

Service item	Setting item	Setting
BATTERY SAVER SET	On*	With the exterior lamp battery saver function
	Off	Without the exterior lamp battery saver function
ILL DELAY SET	MODE 1*	45 sec.
	MODE 2	Without the function
	MODE 3	30 sec.
	MODE 4	60 sec.
	MODE 5	90 sec.
	MODE 6	120 sec.
	MODE 7	150 sec.
	MODE 8	180 sec.
CUSTOM A/LIGHT SETTING	MODE 1*	Normal
	MODE 2	More sensitive setting than normal setting (Turns ON earlier than normal operation.)
	MODE 3	More sensitive setting than MODE 2 (Turns ON earlier than MODE 2.)
	MODE 4	Less sensitive setting than normal setting (Turns ON later than normal operation.)

*: Initial setting

DATA MONITOR

NOTE:

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

Monitor item [Unit]	Description
PUSH SW [On/Off]	Indicates [ON/OFF] condition of push-button ignition switch.
ENGINE STATE [Stop/Stall/Crank/Run]	Indicates [STOP/START/CRANK/RUN] condition of engine states.
VEH SPEED 1 [km/h]	Display the vehicle speed signal received from unified meter and A/C amp. by numerical value [Km/h].
KEY SW-SLOT [On/Off]	Indicates [ON/OFF] condition of key slot.
TURN SIGNAL R [On/Off]	Each switch status that BCM judges from the combination switch reading function
TURN SIGNAL L [On/Off]	
TAIL LAMP SW [On/Off]	
HI BEAM SW [On/Off]	
HEAD LAMP SW1 [On/Off]	
HEAD LAMP SW2 [On/Off]	
PASSING SW [On/Off]	
AUTO LIGHT SW [On/Off]	
FR FOG SW [On/Off]	

DIAGNOSIS SYSTEM (BCM)

[XENON TYPE]

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
RR FOG SW [On/Off]	NOTE: The item is indicated, but not monitored.
DOOR SW-DR [On/Off]	Indicated [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS [On/Off]	Indicated [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR [On/Off]	Indicated [ON/OFF] condition of rear door switch RH.
DOOR SW- RL [On/Off]	Indicated [ON/OFF] condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicated [ON/OFF] condition of back door switch.
OPTICAL SENSOR [V]	The value of exterior brightness voltage input from the optical sensor

ACTIVE TEST

Test item	Operation	Description
TAIL LAMP	On	Transmits the position light request signal to IPDM E/R with CAN communication to turn the tail lamp ON.
	Off	Stops the position light request signal transmission.
HEAD LAMP	Hi	Transmits the high beam request signal with CAN communication to turn the headlamp (HI).
	Low	Transmits the low beam request signal with CAN communication to turn the headlamp (LO).
	Off	Stops the high & low beam request signal transmission.
FR FOG LAMP	On	Transmits the front fog light request signal to IPDM E/R with CAN communication to turn the front fog lamp ON.
	Off	Stops the front fog light request signal transmission.
RR FOG LAMP	On	NOTE: The item is indicated, but cannot be tested.
	Off	
DAYTIME RUNNING LIGHT	On	Transmits the daytime running light request signal with CAN communication to turn the daytime running light ON.
	Off	Stops the daytime running light request signal transmission.
CORNERING LAMP	RH	NOTE: The item is indicated, but cannot be tested.
	LH	
	Off	
ILL DIM SIGNAL	On	NOTE: The item is indicated, but cannot be tested.
	Off	

FLASHER

FLASHER : CONSULT Function (BCM - FLASHER) (Xenon Type)

INFOID:000000012171990

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[XENON TYPE]

Service item	Setting item	Setting	
HAZARD ANSWER BACK	Lock Only*	With locking only	Sets the hazard warning lamp answer back function when the door is lock/unlock with the request switch or the key fob.
	Unlk Only	With unlocking only	
	Lock/Unlk	With locking/unlocking	
	Off	Without the function	

*: Initial setting

DATA MONITOR

NOTE:

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

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	Indicated [ON/OFF] condition of door request switch (driver side).
REQ SW-AS [On/Off]	Indicated [ON/OFF] condition of door request switch (passenger side).
PUSH SW [On/Off]	Indicates [ON/OFF] condition of push-button ignition switch.
TURN SIGNAL R [On/Off]	Each switch condition that BCM judges from the combination switch reading function
TURN SIGNAL L [On/Off]	
HAZARD SW [On/Off]	The switch status input from the hazard switch
RKE-LOCK [On/Off]	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.
RKE-UNLOCK [On/Off]	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
RKE-PANIC [On/Off]	Indicates [ON/OFF] condition of PANIC button of Intelligent Key.

ACTIVE TEST

Test item	Operation	Description
FLASHER	RH	Outputs the voltage to blink the right side turn signal lamps.
	LH	Outputs the voltage to blink the left side turn signal lamps.
	Off	Stops the voltage to turn the turn signal lamps OFF.

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DIAGNOSIS SYSTEM (IPDM E/R)

Diagnosis Description

INFOID:000000012750580

AUTO ACTIVE TEST

Description

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

- Oil pressure warning lamp
- Front wiper (LO, HI)
- Parking lamps
- License plate lamps
- Side maker lamps
- Tail lamps
- Front fog lamps
- Daytime running light
- Headlamps (LO, HI)
- A/C compressor (magnet clutch)
- Cooling fan (cooling fan control module)

Operation Procedure

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 front door switch (driver side) 10 times. Then turn the ignition switch OFF.
CAUTION:
Close passenger door.
4. Turn the ignition switch ON within 10 seconds. After that the horn sounds once and the auto active test starts.
5. The oil pressure warning lamp starts blinking when the auto active test starts.
6. After a series of the following operations is repeated 3 times, auto active test is completed.

NOTE:

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

CAUTION:

- **If auto active test mode cannot be actuated, check door switch system. Refer to [DLK-65, "Component Function Check"](#).**
- **Do not start the engine.**

Inspection in Auto Active Test Mode

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

Operation sequence	Inspection location	Operation
1	Oil pressure warning lamp	Blinks continuously during operation of auto active test
2	Front wiper	LO for 5 seconds → HI for 5 seconds
3	<ul style="list-style-type: none"> • Parking lamps • License plate lamps • Side maker lamps • Tail lamps • Front fog lamps • Daytime running light 	10 seconds
4	Headlamps	<ul style="list-style-type: none"> • LO 10 seconds • HI ON ↔ OFF 5 times
5	A/C compressor (magnet clutch)	ON ↔ OFF 5 times
6*	Cooling fan	MID for 5 seconds → HI for 5 seconds

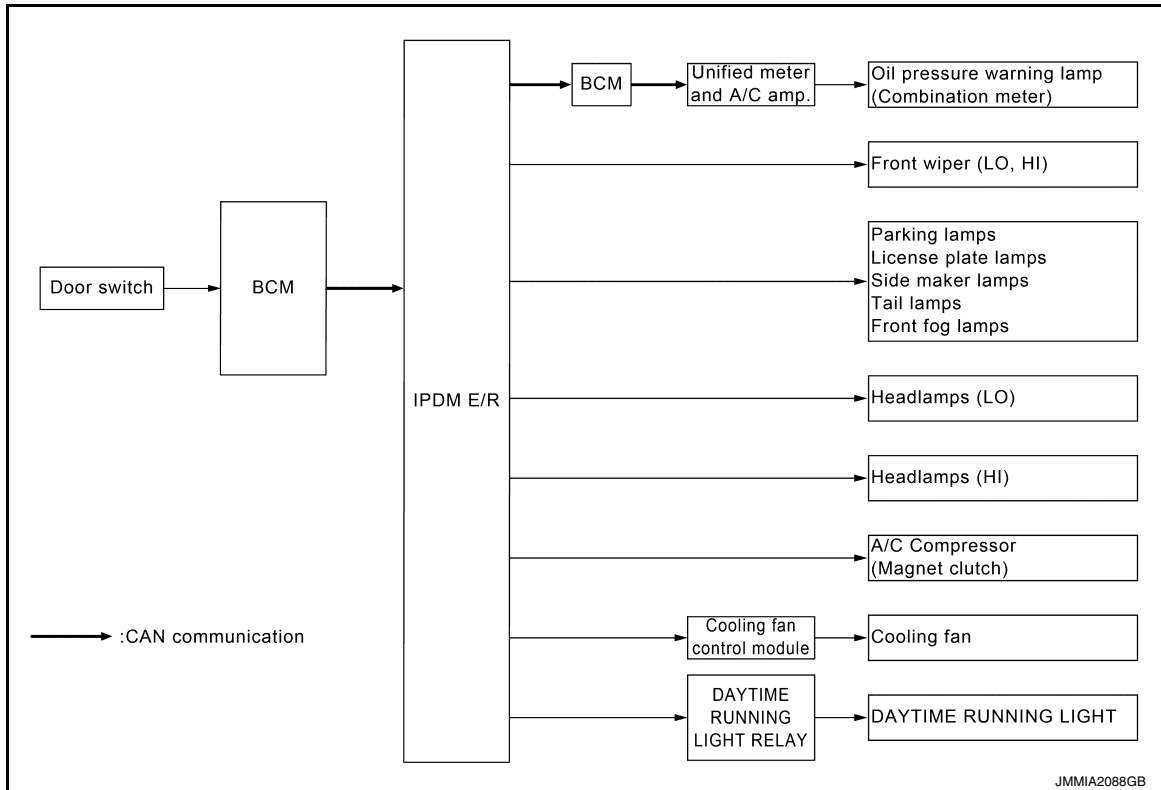
DIAGNOSIS SYSTEM (IPDM E/R)

[XENON TYPE]

< SYSTEM DESCRIPTION >

*: Outputs duty ratio of 50% for 5 seconds → duty ratio of 100% for 5 seconds on the cooling fan control module.

Concept of auto active test



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

Diagnosis chart in auto active test mode

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

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

[XENON TYPE]

Symptom	Inspection contents		Possible cause
Oil pressure warning lamp does not operate	Perform auto active test. Does the oil pressure warning lamp blink?	YES	<ul style="list-style-type: none"> • Harness or connector between IPDM E/R and oil pressure switch • Oil pressure switch • IPDM E/R
		NO	<ul style="list-style-type: none"> • CAN communication signal between IPDM E/R and BCM • CAN communication signal between BCM and unified meter and A/C amp. • Combination meter
Cooling fan does not operate	Perform auto active test. Does the cooling fan operate?	YES	<ul style="list-style-type: none"> • ECM signal input circuit • CAN communication signal between ECM and IPDM E/R
		NO	<ul style="list-style-type: none"> • Cooling fan • Harness or connector between cooling fan and cooling fan control module • Cooling fan control module • Harness or connector between IPDM E/R and cooling fan control module • Cooling fan relay • Harness or connector between IPDM E/R and cooling fan relay • IPDM E/R

CONSULT Function (IPDM E/R)

INFOID:000000012750581

APPLICATION ITEM

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

Diagnosis mode	Description
Ecu Identification	Allows confirmation of IPDM E/R part number.
Self Diagnostic Result	Displays the diagnosis results judged by IPDM E/R.
Data Monitor	Displays the real-time input/output data from IPDM E/R input/output data.
Active Test	IPDM E/R can provide a drive signal to electronic components to check their operations.
CAN Diag Support Monitor	The results of transmit/receive diagnosis of CAN communication can be read.

SELF DIAGNOSTIC RESULT

Refer to [EXL-204, "DTC Index"](#).

DATA MONITOR

NOTE:

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

Monitor Item [Unit]	MAIN SIGNALS	Description
RAD FAN REQ [%]	×	Displays the value of the cooling fan speed signal received from ECM via CAN communication.
AC COMP REQ [Off/On]	×	Displays the status of the A/C compressor request signal received from ECM via CAN communication.
TAIL&CLR REQ [Off/On]	×	Displays the status of the position light request signal received from BCM via CAN communication.

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

[XENON TYPE]

Monitor Item [Unit]	MAIN SIG- NALS	Description	
HL LO REQ [Off/On]	×	Displays the status of the low beam request signal received from BCM via CAN communication.	A
HL HI REQ [Off/On]	×	Displays the status of the high beam request signal received from BCM via CAN communication.	B
FR FOG REQ [Off/On]	×	Displays the status of the front fog light request signal received from BCM via CAN communication.	C
FR WIP REQ [Stop/1LOW/Low/Hi]	×	Displays the status of the front wiper request signal received from BCM via CAN communication.	D
WIP AUTO STOP [STOP P/ACT P]	×	Displays the status of the front wiper auto stop signal judged by IPDM E/R.	E
WIP PROT [Off/BLOCK]	×	Displays the status of the front wiper fail-safe operation judged by IPDM E/R.	E
IGN RLY1 -REQ [Off/On]		Displays the status of the ignition switch ON signal received from BCM via CAN communication.	
IGN RLY [Off/On]	×	Displays the status of the ignition relay judged by IPDM E/R.	F
PUSH SW [Off/On]		Displays the status of the push-button ignition switch judged by IPDM E/R.	G
INTER/NP SW [Off/On]		Displays the status of the shift position judged by IPDM E/R.	G
ST RLY CONT [Off/On]		Displays the status of the starter relay status signal received from BCM via CAN communication.	H
IHBT RLY -REQ [Off/On]		Displays the status of the starter control relay signal received from BCM via CAN communication.	I
ST/INHI RLY [Off/ ST ON/INHI ON/UNKWN]		Displays the status of the starter relay and starter control relay judged by IPDM E/R.	I
DETENT SW [Off/On]		Displays the status of the A/T shift selector (detention switch) judged by IPDM E/R.	J
S/L RLY -REQ [Off/On]		NOTE: The item is indicated, but not monitored.	K
S/L STATE [LOCK/UNLOCK/UNKWN]		NOTE: The item is indicated, but not monitored.	K
DTRL REQ [Off/On]		Displays the status of the daytime running light request signal received from BCM via CAN communication.	EXL
OIL P SW [Open/Close]		Displays the status of the oil pressure switch judged by IPDM E/R.	M
HOOD SW [Off/On]		Displays the status of the hood switch judged by IPDM E/R.	M
HL WASHER REQ [Off/On]		NOTE: The item is indicated, but not monitored.	N
THFT HRN REQ [Off/On]		Displays the status of the theft warning horn request signal received from BCM via CAN communication.	O
HORN CHIRP [Off/On]		Displays the status of the horn reminder signal received from BCM via CAN communication.	O
CRNRNG LMP REQ [Off/On]		NOTE: The item is indicated, but not monitored.	P

ACTIVE TEST

Test item

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

[XENON TYPE]

Test item	Operation	Description
CORNERING LAMP	Off	NOTE: The item is indicated, but cannot be tested.
	LH	
	RH	
HORN	On	Operates horn relay 1 and horn relay 2 for 20 ms.
FRONT WIPER	Off	OFF
	Lo	Operates the front wiper relay.
	Hi	Operates the front wiper relay and front wiper high relay.
MOTOR FAN	1	OFF
	2	Outputs 50% pulse duty signal (PWM signal) to the cooling fan control module.
	3	Outputs 80% pulse duty signal (PWM signal) to the cooling fan control module.
	4	Outputs 100% pulse duty signal (PWM signal) to the cooling fan control module.
HEAD LAMP WASHER	On	NOTE: The item is indicated, but cannot be tested.
EXTERNAL LAMPS	Off	OFF
	TAIL	Operates the tail lamp relay.
	Lo	Operates the headlamp low relay.
	Hi	Operates the headlamp low relay and ON/OFF the headlamp high relay at 1 second intervals.
	Fog	Operates the front fog lamp relay.

DIAGNOSIS SYSTEM (AFS)

[XENON TYPE]

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (AFS)

CONSULT Function (ADAPTIVE LIGHT)

INFOID:000000012171993

APPLICATION ITEM

Diagnostic mode	Description
ECU Identification	Allows confirmation of auto levelizer control unit part number.
Self Diagnostic Result	Displays the diagnosis results judged by AFS control unit.
Work support	Sets each sensor.
Data monitor	Indicates AFS control unit input data in real time.
Active test	Provides the drive signal to the load. Checks operation.

WORK SUPPORT

Service item	Description
ST ANG SEN ADJUSTMENT*	—
LEVELIZER ADJUSTMENT	Adjusts the height sensor signal output value (AFS control unit recognized) in the unloaded vehicle condition.

*: Adjusts the steering angle sensor neutral position on ABS actuator and electrical unit (control unit) side. Refer to [BRC-8. "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement"](#).

DATA MONITOR

NOTE:

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

Monitor item [Unit]	Description
STR ANGLS SIG [deg]	The steering angle value judged by the steering angle sensor signal received from the steering angle sensor with CAN communication
VHCL SPD [km/h]	The vehicle speed signal value from the unified meter and A/C amp. with CAN communication
SLCT LVR POSI [P - 1]	The selector lever status judged by the position indicator signal received from TCM with CAN communication
HEAD LAMP [On/Off]	The headlamp On/Off status judged by the low beam headlamp (ON) signal received from IPDM E/R with CAN communication
AFS SW [On/Off]	NOTE: The item is indicated, but not monitored.
HI SEN OTP RR [V]	The height sensor signal voltage value input from the height sensor
LEV ACTR VLTG [%]	The ratio value to the battery voltage generated by the levelizer activation signal control value judged by AFS control unit
SWVL SEN RH* [deg]	The head lamp swivel angle value judged by AFS control unit received from the swivel position sensor signal input from the swivel actuator
SWVL SEN LH* [deg]	
SWVL ANGLE RH* [deg]	The swivel angle command value to the swivel motor judged by AFS control unit
SWVL ANGLE LH * [deg]	

*: The swivel angle "0°" (feedback value) of the swivel position sensor signal may differ from the swivel angle "0°" of the swivel motor (AFS control unit command value). This causes that the swivel motor initializes the value based on the step number from the stopper.

DIAGNOSIS SYSTEM (AFS)

< SYSTEM DESCRIPTION >

[XENON TYPE]

ACTIVE TEST

NOTE:

Start the engine when using "ACTIVE TEST".

Test item	Operation Item	Description
LOW BEAM TEST RIGHT	Origin Fast	Swivels the right headlamp to the swivel angle 0° in the normal speed.
	Peak Fast	Swivels the right headlamp to the swivel angle approximately 15° in the normal speed.
	Origin Slow	Swivels the right headlamp to the swivel angle 0° in the speed at the initialization.
	Peak Slow	Swivels the right headlamp to the swivel angle approximately 15° in the speed at the initialization.
LOW BEAM TEST LEFT	Origin Fast	Swivels the left headlamp to the swivel angle 0° in the normal speed.
	Peak Fast	Swivels the left headlamp to the swivel angle approximately 17° in the normal speed.
	Origin Slow	Swivels the left headlamp to the swivel angle 0° in the speed at the initialization.
	Peak Slow	Swivels the left headlamp to the swivel angle approximately 17° in the speed at the initialization.
LEVELIZER TEST	Origin	Changes the aiming motor drive signal to approximately 70% of the battery voltage. Moves the headlamp upward and downward.
	Peak	Changes the aiming motor drive signal to approximately 15% of the battery voltage. Moves the headlamp upward and downward.

NOTE:

"Fast" operation speed is as three times fast as "Slow".

DTC/CIRCUIT DIAGNOSIS

B2503, B2504 SWIVEL ACTUATOR

Description

INFOID:0000000012171994

SWIVEL ACTUATOR

The swivel actuator is installed in the headlamp unit. The swivel actuator consists of the swivel motor and the swivel position sensor.

SWIVEL MOTOR

- The swivel motor is the two-phase step motor.
- The swivel motor drives headlamp by exciting the two drive coils according to the drive signal from AFS control unit.
- The rotation direction of the swivel motor is changeable by changing the exciting pattern.

SWIVEL POSITION SENSOR

The swivel position sensor detects the headlamp swivel angle to transmit the swivel position sensor signal to AFS control unit.

DTC Logic

INFOID:0000000012171995

DTC DETECTION LOGIC

- [B2503] Swivel actuator [RH]
- [B2504] Swivel actuator [LH]

DTC detection condition	DTC erase condition	Possible cause
AFS control unit indicates an applicable DTC when detecting any of the following conditions continuously for 2 seconds or more. <ul style="list-style-type: none"> • AFS control unit-recognized swivel position differs extremely from the swivel position sensor-input value while the swivel operating.* • The swivel position sensor signal does not change even though AFS control unit transmits the swivel motor driving signal while the swivel operating*. • The swivel motor short and open is detected while the swivel operating*. • The swivel position sensor power supply is 6 V or more, or 4 V or less. • The swivel position sensor signal is 0.25 V or less, or 4.75 V or more. 	Ignition switch OFF	Swivel position sensor <ul style="list-style-type: none"> • Swivel position sensor • Harness and connector • AFS control unit Swivel motor <ul style="list-style-type: none"> • Swivel motor • Harness and connector • AFS control unit

*: Initialization is not included.

DTC CONFIRMATION PROCEDURE

1. DTC ERASE

Erase the DTC memory of AFS with CONSULT.

>> GO TO 2.

2. CONFIRMATION DTC SELECTION

Select "B2503" or "B2504" for confirmation.

Which DTC is confirmation?

B2503 >> GO TO 3.

B2504 >> GO TO 4.

3. DTC CONFIRMATION (B2503)

1. Steer to the straight-forward position.
2. Start the engine.
3. Turn the headlamp ON.
4. Shift the selector lever to "N".
5. Steer to the right. (Rotate it once or more.)
6. Perform the self-diagnosis with CONSULT.

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B2503, B2504 SWIVEL ACTUATOR

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

Is "B2503" detected?

- YES >> Refer to [EXL-46. "Diagnosis Procedure"](#).
- NO >> Refer to [GI-42. "Intermittent Incident"](#).

4. DTC CONFIRMATION (B2504)

1. Steer to the straight-forward position.
2. Start the engine.
3. Turn the headlamp ON.
4. Drive at 25 km/h (15.5 MPH) or more.
5. Steer to the left. (Rotate it once or more.)
6. Stop the vehicle.
7. Perform the self-diagnosis with CONSULT.

Is "B2504" detected?

- YES >> Refer to [EXL-46. "Diagnosis Procedure"](#).
- NO >> Refer to [GI-42. "Intermittent Incident"](#).

Diagnosis Procedure

INFOID:0000000012171996

1. CHECK SWIVEL POSITION SENSOR SIGNAL INPUT

1. Turn the ignition switch ON.
2. Check the voltage between the AFS control unit harness connector and the ground.

Terminals			Voltage (Approx.)
(+)	(-)		
AFS control unit			Ground
Connector		Terminal	
RH	M16	9	
LH		29	

Is the measurement value within the standard value?

- YES >> GO TO 2.
- Less than the standard value >> GO TO 6.
- Higher than the standard value >> GO TO 9.

2. CHECK SWIVEL MOTOR

Check the swivel motor. [EXL-49. "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 3.
- NO >> Replace the front combination lamp.

3. CHECK SWIVEL MOTOR OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect AFS control unit connector and the headlamp swivel actuator connector.
3. Check continuity between the AFS control unit harness connector and the headlamp swivel actuator harness connector.

B2503, B2504 SWIVEL ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

AFS control unit		Headlamp swivel actuator		Continuity	
Connector	Terminal	Connector	Terminal		
RH	M16	11	E29	8	Existed
		13		7	
		32		3	
		34		4	
LH		15	E59	3	
		17		4	
		36		8	
		38		7	

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4. CHECK SWIVEL MOTOR SHORT CIRCUIT

Check continuity between the AFS control unit harness connector and the ground.

AFS control unit		Continuity		
Connector	Terminal			
RH	M16	11	Ground	Not existed
		13		
		32		
		34		
LH		15		
		17		
		36		
		38		

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 5.

5. CHECK SWIVEL MOTOR CIRCUIT VOLTAGE OUTPUT

1. Connect AFS control unit connector.
2. Turn the ignition switch ON.
3. Turn the headlamp ON.
4. Select "LOW BEAM TEST RIGHT" or "LOW BEAM TEST LEFT" of ADAPTIVE LIGHT active test item.
5. With operating the test item, check the voltage between the AFS control unit harness connector and the ground.

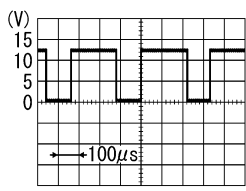
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EXL

B2503, B2504 SWIVEL ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

Terminals			Condition	Voltage (Approx.)			
(+)		(-)					
AFS control unit			Swivel motor				
Connector	Terminal						
RH	M16	11	Ground	Active			
		32					
		15					
LH		36					
		13				Stop	9.5 - 11.5 V
		34					
17							
LH	38						

Is the measurement value within the standard value?

- YES >> Replace the front combination lamp.
- NO >> Replace AFS control unit.

6. CHECK SWIVEL POSITION SENSOR SIGNAL OUTPUT

Check the voltage between the AFS control unit harness connector and the ground.

Terminals			Voltage (Approx.)
(+)		(-)	
AFS control unit			5 V
Connector	Terminal		
RH	M16	4	
LH		24	

Is the measurement value normal?

- YES >> GO TO 7.
- NO >> GO TO 9.

7. CHECK SWIVEL POSITION SENSOR POWER SUPPLY CIRCUIT INPUT VOLTAGE

1. Turn the ignition switch OFF.
2. Disconnect the headlamp swivel actuator connector.
3. Turn the ignition switch ON.
4. Check the voltage between the headlamp swivel actuator harness connector and the ground.

Terminals			Voltage (Approx.)
(+)		(-)	
Headlamp swivel actuator			5 V
Connector	Terminal		
RH	E29	2	
LH	E59	2	

Is the measurement value normal?

- YES >> GO TO 8.
- NO >> Repair the harnesses or connectors.

8. CHECK SWIVEL POSITION SENSOR SIGNAL SHORT CIRCUIT

B2503, B2504 SWIVEL ACTUATOR

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

1. Turn the ignition switch OFF.
2. Disconnect AFS control unit connector.
3. Check continuity between the AFS control unit harness connector and the headlamp swivel actuator harness connector.

AFS control unit		Headlamp swivel actuator		Continuity
Connector	Terminal	Connector	Terminal	
RH	M16	9	E29	Existed
LH		29	E59	

Does continuity exist?

- YES >> Replace the front combination lamp.
 NO >> Repair the harnesses or connectors.

9. CHECK SWIVEL POSITION SENSOR GROUND CIRCUIT VOLTAGE OUTPUT

Check the voltage between the AFS control unit harness connector and the ground.

Terminals			Voltage (Approx.)	
(+)		(-)		
AFS control unit			Ground	
Connector	Terminal	0 V		
RH	M16			2
LH				27

Is the measurement value normal?

- YES >> GO TO 10.
 NO >> Replace AFS control unit.

10. CHECK SWIVEL POSITION SENSOR SHORT GROUND CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect AFS control unit connector and the headlamp swivel actuator connector.
3. Check continuity between the AFS control unit harness connector and the headlamp swivel actuator harness connector.

AFS control unit		Headlamp swivel actuator		Continuity
Connector	Terminal	Connector	Terminal	
RH	M16	2	E29	Existed
LH		27	E59	

Does continuity exist?

- YES >> Replace the front combination lamp.
 NO >> Repair the harnesses or connectors.

Component Inspection

INFOID:0000000012171997

1. CHECK SWIVEL MOTOR SINGLE PART

1. Disconnect the swivel actuator connector.
2. Check the resistance among each swivel actuator connector terminal.

Swivel actuator		Resistance (Approx.)
Terminal	Terminal	
3	7	7.2 Ω
4	8	7.2 Ω
3	4	10 MΩ or more

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EXL

B2503, B2504 SWIVEL ACTUATOR

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

Is the measurement value normal?

YES >> Swivel actuator is normal.

NO >> Replace the front combination lamp.

B2514 HEIGHT SENSOR UNUSUAL [RR]

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

B2514 HEIGHT SENSOR UNUSUAL [RR]

Description

INFOID:000000012171998

The height sensor is installed to the rear suspension arm. The height sensor detects the suspension arm displacement as the vehicle height change. The height sensor transmits the height sensor signal to AFS control unit.

NOTE:

The sensor angle of the unloaded vehicle position is the reference value.

DTC Logic

INFOID:000000012171999

DTC DETECTION LOGIC

[B2514] Height sensor unusual [RR]

DTC detection condition	DTC erase condition	Possible cause
An applicable DTC is indicated when any of the following conditions is detected continuously for 2 seconds or more. <ul style="list-style-type: none">The height sensor power supply is 6 V or more, or 4 V or less.The height sensor signal is 0.25 V or less, or 4.75 V or more.	Ignition switch OFF	Height sensor <ul style="list-style-type: none">Height sensorHarness and connectorAFS control unit

DTC CONFIRMATION PROCEDURE

1. DTC ERASE

Erase the DTC memory of AFS with CONSULT.

>> GO TO 2.

2. DTC CONFIRMATION

- Start the engine.
- Turn the headlamp ON.
- Select the self-diagnosis with CONSULT.
- Check the self-diagnosis result. Refer to [EXL-219. "DTC Index"](#).

Is "B2514" detected?

YES >> Refer to [EXL-51. "Diagnosis Procedure"](#).

NO >> Refer to [GI-42. "Intermittent Incident"](#).

Diagnosis Procedure

INFOID:000000012172000

1. CHECK HEIGHT SENSOR POWER SUPPLY OUTPUT

- Turn the ignition switch ON.
- Check the voltage between the AFS control unit harness connector and the ground.

Terminals		Voltage (Approx.)
(+)	(-)	
AFS control unit		5 V
Connector	Terminal	
M16	6	

Is the measurement value within the standard value?

YES >> GO TO 2.

NO >> Replace AFS control unit.

2. CHECK HEIGHT SENSOR POWER SUPPLY INPUT

Check the voltage between the AFS control unit harness connector and the ground.

B2514 HEIGHT SENSOR UNUSUAL [RR]

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

Terminals		Voltage (Approx.)
(+)	(-)	
AFS control unit		Ground
Connector	Terminal	
M16	28	
		0.25 - 4.75 V

Is the measurement value within the standard value?

- YES >> Replace AFS control unit.
Less than the standard value >>GO TO 3.
Higher than the standard value>>GO TO 6.

3.CHECK HEIGHT SENSOR POWER SUPPLY CIRCUIT OUTPUT VOLTAGE

1. Turn the ignition switch OFF.
2. Disconnect the height sensor connector.
3. Turn the ignition switch ON.
4. Check the voltage between the height sensor harness connector and the ground.

Terminals		Voltage (Approx.)
(+)	(-)	
Height sensor		Ground
Connector	Terminal	
B32	1	
		5 V

Is the measurement value within the standard value?

- YES >> GO TO 4.
NO >> Repair the harnesses or connectors.

4.CHECK HEIGHT SENSOR SIGNAL OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect AFS control unit connector.
3. Check continuity between the AFS control unit harness connector and the height sensor harness connector.

AFS control unit		Height sensor		Continuity
Connector	Terminal	Connector	Terminal	
M16	28	B32	2	Existed

Does continuity exist?

- YES >> GO TO 5.
NO >> Repair the harnesses or connectors.

5.CHECK HEIGHT SENSOR SIGNAL SHORT CIRCUIT

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

Height sensor		Ground	Continuity
Connector	Terminal		
B32	2		Not existed

Does continuity exist?

- YES >> Repair the harnesses or connectors.
NO >> Replace the height sensor.

6.CHECK HEIGHT SENSOR GROUND

Check the voltage between the AFS control unit harness connector and the ground.

B2514 HEIGHT SENSOR UNUSUAL [RR]

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

Terminals		Voltage (Approx.)
(+)	(-)	
AFS control unit		Ground
Connector	Terminal	
M16	8	
		0 V

Is the measurement value within the standard value?

- YES >> GO TO 7.
 NO >> Replace AFS control unit.

7.CHECK HEIGHT SENSOR GROUND CIRCUIT

- Turn the ignition switch OFF.
- Disconnect AFS control unit connector and the height sensor connector.
- Check continuity between the AFS control unit harness connector and the height sensor harness connector.

AFS control unit		Height sensor		Continuity
Connector	Terminal	Connector	Terminal	
M16	8	B32	3	Existed

Does continuity exist?

- YES >> Replace the height sensor.
 NO >> Repair the harnesses or connectors.

Component Inspection

INFOID:0000000012172001

1.CHECK HEIGHT SENSOR

- Remove the height sensor (the height sensor connector is connected).
- Start the engine.
- Turn the light switch 2ND.
- Select "HI SEN OTP RR" of AFS data monitor item.
- With moving the sensor lever, check the monitor status.

Monitor item	Condition		Monitor status [Standard value (Approx.)]
HI SEN OTP RR	Sensor lever position	Contact with stopper	0.9 V
		Moving between two positions	Smooth movement
		90° from stopper	4.5 V

Is the output value normal?

- YES >> Height sensor is normal.
 NO >> Replace the height sensor.

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B2516 SHIFT SIGNAL [P, R]

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

B2516 SHIFT SIGNAL [P, R]

Description

INFOID:0000000012172002

AFS control unit receives the shift position signal from TCM with CAN communication.

DTC Logic

INFOID:0000000012172003

DTC DETECTION LOGIC

[B2516] Shift signal [P, R]

DTC detection condition	DTC erase condition	Possible causes
The shift position signal is not received.	Ignition switch OFF	<ul style="list-style-type: none">• TCM• AFS control unit

DTC CONFIRMATION PROCEDURE

1.DTC ERASE

Erase the DTC memory of AFS with CONSULT.

>> GO TO 2.

2.DTC CONFIRMATION

1. Turn ignition ON.
2. Select the self-diagnosis with CONSULT.
3. Check the self-diagnosis result. Refer to [EXL-219. "DTC Index"](#).

Is "B2516" detected?

- YES >> Refer to [EXL-54. "Diagnosis Procedure"](#).
NO >> Refer to [GI-42. "Intermittent Incident"](#).

Diagnosis Procedure

INFOID:0000000012172004

1.TCM SELF-DIAGNOSIS

Check the self-diagnosis result with CONSULT. Check that TCM does not detect any DTCs.

Is any DTC detected?

- YES >> Check TCM. Refer to [TM-157. "DTC Index"](#).
NO >> GO TO 2.

2.DTC ERASE

Erase the DTC memory of AFS with CONSULT.

Is the memory erased?

- YES >> Inspection end.
NO >> Replace AFS control unit.

B2517 VEHICLE SPEED SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

B2517 VEHICLE SPEED SIGNAL

Description

INFOID:0000000012172005

AFS control unit receives the vehicle speed signal from the unified meter and A/C amp. with CAN communication.

DTC Logic

INFOID:0000000012172006

DTC DETECTION LOGIC

[B2517] Vehicle speed signal

DTC detection condition	DTC erase condition	Possible causes
The vehicle speed signal is not received.	Ignition switch OFF	<ul style="list-style-type: none">Unified meter and A/C amp.AFS control unit

DTC CONFIRMATION PROCEDURE

1. DTC ERASE

Erase the DTC memory of AFS with CONSULT.

>> GO TO 2.

2. DTC CONFIRMATION

- Turn ignition ON.
- Select the self-diagnosis with CONSULT.
- Check the self-diagnosis result. Refer to [EXL-219, "DTC Index"](#).

Is "B2517" detected?

- YES >> Refer to [EXL-55, "Diagnosis Procedure"](#).
NO >> Refer to [GI-42, "Intermittent Incident"](#).

Diagnosis Procedure

INFOID:0000000012172007

1. UNIFIED METER AND A/C AMP. SELF-DIAGNOSIS

Check the self-diagnosis result with CONSULT. Check that the unified meter and A/C amp. does not detect any DTCs.

Is any DTC detected?

- YES >> Check the unified meter and A/C amp. Refer to [MWI-108, "DTC Index"](#).
NO >> GO TO 2.

2. DTC ERASE

Erase the DTC memory of AFS with CONSULT.

Is the memory erased?

- YES >> Inspection end.
NO >> Replace AFS control unit.

B2519 LEVELIZER CALIBRATION

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

B2519 LEVELIZER CALIBRATION

Description

INFOID:000000012172008

AFS control unit transmits the height sensor signal from the height sensor.

DTC Logic

INFOID:000000012172009

[B2519] Levelizer calibration

DTC detection condition	DTC erase condition	Possible causes
The height sensor adjustment position is not recognized.	When the levelizer adjustment is completed	AFS control unit

Diagnosis Procedure

INFOID:000000012172010

1. LEVELIZER ADJUSTMENT

Perform the levelizer adjustment.

>> Refer to [EXL-10, "LEVELIZER ADJUSTMENT : Description"](#).

B2521 ECU CIRCUIT

Description

INFOID:0000000012172011

AFS control unit judges the vehicle condition from each signal. AFS control unit controls AFS function and the headlamp aiming.

DTC Logic

INFOID:0000000012172012

DTC DETECTION LOGIC

[B2521] ECU circuit

Error detection condition	DTC erase condition	Possible cause
<ul style="list-style-type: none"> • AFS control unit indicates an applicable DTC when detecting any of the following conditions continuously for 2 seconds or more. - The swivel position sensor is shorted to the power supply or the ground. - The swivel position sensor signal is shorted to the ground. - The height sensor power supply is shorted to the power supply or the ground. - The height sensor signal is shorted to the ground. • AFS control unit RAM/ROM error 	Ignition switch OFF	Swivel position sensor <ul style="list-style-type: none"> • Swivel position sensor • Harness and connector • AFS control unit Height sensor <ul style="list-style-type: none"> • Height sensor • Harness and connector • AFS control unit AFS control unit (RAM/ROM) <ul style="list-style-type: none"> • AFS control unit

DTC CONFIRMATION PROCEDURE

1. DTC ERASE

Erase the DTC memory of AFS with CONSULT.

>> GO TO 2.

2. DTC CONFIRMATION PROCEDURE

1. Turn ignition ON.
2. Select the self-diagnosis with CONSULT.
3. Check the self-diagnosis result. Refer to [EXL-219, "DTC Index"](#).

Is "B2521" detected?

- YES >> Refer to [EXL-57, "Diagnosis Procedure"](#).
 NO >> Refer to [GI-42, "Intermittent Incident"](#).

Diagnosis Procedure

INFOID:0000000012172013

1. CHECK EACH SENSOR POWER SUPPLY

1. Turn the ignition switch ON.
2. Check the voltage between the AFS control unit harness connector and the ground.

Terminals		Voltage (Approx.)
(+)	(-)	
AFS control unit		5 V
Connector	Terminal	
M16	4	
	6	
	24	
		Ground

Is the measurement value within the standard value?

- YES >> GO TO 2.
 Less than the standard value >>GO TO 3.
 Higher than the standard value>>GO TO 4.

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B2521 ECU CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK EACH SENSOR SIGNAL

Check the voltage between the AFS control unit harness connector and the ground.

Terminals			Voltage (Approx.)
(+)	(-)		
AFS control unit		Ground	0.25 - 4.75 V
Connector	Terminal		
M16	9		
	28		
	29		

Is the measurement value within the standard value?

- YES >> Replace AFS control unit.
Less than the standard value >>GO TO 5.
Higher than the standard value>>GO TO 6.

3. CHECK EACH SENSOR POWER SUPPLY SHORT CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect AFS control unit connector.
3. Check continuity between the AFS control unit harness connector and the ground.

AFS control unit			Continuity
Connector	Terminal		
M16	4	Ground	Not existed
	6		
	24		

Does continuity exist?

- YES >> Repair the harnesses or connectors.
NO >> Replace AFS control unit.

4. CHECK EACH SENSOR POWER SUPPLY CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect AFS control unit connector.
3. Check the voltage between the AFS control unit harness connector and the ground.

Terminals			Voltage (Approx.)
(+)	(-)		
AFS control unit		Ground	0 V
Connector	Terminal		
M16	4		
	6		
	24		

Is the measurement value normal?

- YES >> Replace AFS control unit.
NO >> Repair the harnesses or connectors.

5. CHECK EACH SENSOR SIGNAL SHORT CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect AFS control unit connector.
3. Check continuity between the AFS control unit harness connector and the ground.

B2521 ECU CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

AFS control unit		Ground	Continuity
Connector	Terminal		
M16	9	Ground	Not existed
	28		
	29		

Does continuity exist?

- YES >> Repair the harnesses or connectors.
 NO >> Replace AFS control unit.

6. CHECK EACH SENSOR SIGNAL SHORT CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect AFS control unit connector.
3. Turn the ignition switch ON.
4. Check the voltage between the AFS control unit harness connector and the ground.

Terminals		Ground	Voltage (Approx.)
(+)	(-)		
AFS control unit		Ground	0 V
Connector	Terminal		
M16	9		
	28		
	29		

Is the measurement value normal?

- YES >> Replace AFS control unit.
 NO >> Repair the harnesses or connectors.

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C0126 STEERING ANGLE SENSOR SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

C0126 STEERING ANGLE SENSOR SIGNAL

Description

INFOID:000000012172014

AFS control unit receives the steering angle sensor signal from the steering angle sensor with CAN communication.

DTC Logic

INFOID:000000012172015

DTC DETECTION LOGIC

[C0126] Steering angle sensor signal

DTC detection condition	DTC erase condition	Possible causes
In any of the following conditions <ul style="list-style-type: none">The steering angle sensor signal is not received.The steering angle sensor signal error is received.Out-of-standard signal (-900°- +900°) is received.	The ignition switch OFF	<ul style="list-style-type: none">Steering angle sensorAFS control unit

DTC CONFIRMATION PROCEDURE

1. DTC ERASE

Erase the DTC memory of AFS with CONSULT.

>> GO TO 2.

2. DTC CONFIRMATION

- Start the engine.
- Turn the steering wheel to the maximum right/left.
- Select the self-diagnosis with CONSULT.
- Check the self-diagnosis result. Refer to [EXL-219, "DTC Index"](#).

Is "C0126" detected?

- YES >> Refer to [EXL-60, "Diagnosis Procedure"](#).
NO >> Refer to [GI-42, "Intermittent Incident"](#).

Diagnosis Procedure

INFOID:000000012172016

1. ABS ACTUATOR AND ELECTRICAL UNIT (CONTROL UNIT) SELF-DIAGNOSIS

Check the self-diagnosis result with CONSULT. Check that ABS actuator and electrical unit (control unit) does not detect any DTCs.

Is any DTC detected?

- YES >> Check ABS actuator and electrical unit (control unit). Refer to [BRC-143, "DTC No. Index"](#).
NO >> GO TO 2.

2. DTC ERASE

Erase DTC memory of AFS with CONSULT.

Is the memory erased?

- YES >> Inspection end.
NO >> Replace AFS control unit.

C0428 STEERING ANGLE SENSOR CALIBRATION

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

C0428 STEERING ANGLE SENSOR CALIBRATION

Description

INFOID:000000012172017

AFS control unit receives the steering angle sensor signal from the steering angle sensor with CAN communication.

DTC Logic

INFOID:000000012172018

[C0428] Steering angle sensor calibration

DTC detection condition	DTC erase condition	Possible causes
The steering angle sensor neutral position is not recognized.	When the steering angle sensor neutral position registration is completed	Steering angle sensor

Diagnosis Procedure

INFOID:000000012172019

1. STEERING ANGLE SENSOR NEUTRAL POSITION ADJUSTMENT

Perform the steering angle sensor neutral position adjustment.

CAUTION:

Perform the steering angle sensor neutral position adjustment on VDC side. VDC may activate incorrectly.

>> Refer to [BRC-8, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Description"](#).

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U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

U1000 CAN COMM CIRCUIT

Description

INFOID:000000012172020

CAN (Controller Area Network) is the serial transmission for real time application. CAN is the multiplex communication for the vehicle with superior data transmission speed and error detection ability. Many electronic control units are equipped on the vehicle. These control units do not operate individually, but associates with other control units by sharing information. In CAN communication, each control unit is connected with two communication lines (CAN-H and CAN-L). Much information is transmitted with fewer communication lines than before. Each control unit transmits/receives data and reads the necessary data only. CAN Communication Signal Chart. Refer to [LAN-28. "CAN Communication Signal Chart"](#).

DTC Logic

INFOID:000000012172021

DTC DETECTION LOGIC

[U1000] CAN communication circuit

DTC detection condition	DTC erase condition	Possible causes
When AFS control unit does not transmit/receive CAN communication signal continuously for 2 seconds or more	Ignition switch OFF	CAN communication system

Diagnosis Procedure

INFOID:000000012172022

1. PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check "Self Diagnostic Result".

Is "CAN COMM CIRCUIT" displayed?

- YES >> Refer to [LAN-18. "Trouble Diagnosis Flow Chart"](#).
NO >> Refer to [GI-42. "Intermittent Incident"](#).

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:0000000012172023

DTC DETECTION LOGIC

[U1000] CAN communication circuit

DTC	CONSULT display description	DTC detection condition	Possible causes
U1010	CONTROL UNIT (CAN)	AFS control unit detected internal CAN communication circuit malfunction.	AFS control unit

Diagnosis Procedure

INFOID:0000000012172024

1. REPLACE AFS CONTROL UNIT

When DTC [U1010] is detected, replace AFS control unit.

>> Replace AFS control unit.

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

POWER SUPPLY AND GROUND CIRCUIT

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:000000012750596

1. CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown (open).

Signal name	Fuse and fusible link No.
Battery power supply	K
	10

Is the fuse or fusible link is blown (open)?

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

2. CHECK POWER SUPPLY CIRCUIT

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

Terminals		Voltage (Approx.)
(+)	(-)	
BCM		Ground Battery voltage
Connector	Terminal	
M118	1	
M119	11	

Is the measurement value normal?

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

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		Existed
M119	13		

Does continuity exist?

- YES >> INSPECTION END
NO >> Repair harness or connector.

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

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

INFOID:000000012750597

1. CHECK FUSES AND FUSIBLE LINK

Check that the following IPDM E/R fuses or fusible links are not blown (open).

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

Signal name	Fuses and fusible link No.
Battery power supply	C
	50
	51

Is the fuse blown (open)?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Check voltage between IPDM E/R harness connector and the ground.

Terminals		Voltage (Approx.)
(+)	(-)	
IPDM E/R		Battery voltage
Connector	Terminal	
E4	1	

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair the harness or connector.

3.CHECK GROUND CIRCUIT

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
E5	12		Existed
E6	41		

Does continuity exist?

YES >> INSPECTION END

NO >> Repair the harness or connector.

AFS CONTROL UNIT

AFS CONTROL UNIT : Diagnosis Procedure

INFOID:0000000012172027

1.FUSE INSPECTION

Check that the following fuses are not blown (open).

Signal name	Connection position	Fuse No.	Capacity
Ignition power supply	FUSE BLOCK (J/B)	3	10 A

Is the fuse blown (open)?

YES >> Repair the applicable circuit. And then replace the fuse.

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect AFS control unit harness connector.
3. Turn ignition switch ON.
4. Check voltage between AFS control unit harness connector and ground.

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EXL

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

Terminals		Voltage (Approx.)
(+)	(-)	
AFS control unit		Ground
Connector	Terminal	
M16	1	
		Battery voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between AFS control unit harness connectors and ground.

AFS control unit		Ground	Continuity
Connector	Terminal		
M16	25		Existed

Does continuity exist?

YES >> Power supply and ground circuit are normal.

NO >> Repair harness or connector.

HEADLAMP (HI) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

HEADLAMP (HI) CIRCUIT

Component Function Check

INFOID:000000012172028

1. CHECK HEADLAMP (HI) OPERATION

⊗ IPDM E/R AUTO ACTIVE TEST

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

Ⓜ CONSULT ACTIVE TEST

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

Hi : Headlamp (HI) ON

Off : Headlamp (HI) OFF

NOTE:

ON/OFF is repeated 1 second each.

Is the headlamp (HI) turned ON?

YES >> Headlamp (HI) circuit is normal.

NO >> Refer to [EXL-67, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172029

1. CHECK HEADLAMP (HI) OUTPUT VOLTAGE

Ⓜ CONSULT ACTIVE TEST

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

Terminals			Condition	Voltage (Approx.)
(+)	(-)			
IPDM E/R			External lamp	Battery voltage
Connector	Terminal			
RH	E8	89	Hi	Battery voltage
		90	Off	0 V
LH	90		Hi	Battery voltage
		Off	0 V	

Is the measurement value normal?

YES >> GO TO 2.

NO >> GO TO 3.

2. CHECK HEADLAMP (HI) OPEN CIRCUIT

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

HEADLAMP (HI) CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

IPDM E/R		Front combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E8	E28	7	Existed
LH		90	E58	

Does continuity exist?

YES >> GO TO 5.

NO >> Repair the harnesses or connectors.

3. CHECK HEADLAMP (HI) FUSE

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

Unit	Location	Fuse No.	Capacity
Headlamp HI (RH)	IPDM E/R	#55	10 A
Headlamp HI (LH)	IPDM E/R	#54	10 A

Is the fuse blown (open)?

YES >> GO TO 4.

NO >> Replace IPDM E/R.

4. CHECK HEAD LAMP (HI) SHORT CIRCUIT

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
RH	E8		Not existed
LH			

Does continuity exist?

YES >> Repair the harnesses or connectors. And then replace the fuse.

NO >> Replace the fuse. (Replace IPDM E/R if the fuse is blown again.)

5. CHECK HEAD LAMP (HI) GROUND OPEN CIRCUIT

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

Front combination lamp		Ground	Continuity
Connector	Terminal		
RH	E28		Existed
LH	E58		

Does continuity exist?

YES >> Replace the headlamp (HI) bulb. (Bulb socket is abnormally.)

NO >> Repair the harnesses or connectors.

HEADLAMP (LO) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

HEADLAMP (LO) CIRCUIT

Description

INFOID:0000000012172030

Headlamp (LO) circuit is connected to HID control unit integrated in the headlamp. Headlamp (LO) circuit turns xenon headlamp ON.

For the details of HID control unit and the xenon headlamp, refer to [EXL-71, "Description"](#).

Component Function Check

INFOID:0000000012172031

1. CHECK HEADLAMP (LO) OPERATION

IPDM E/R AUTO ACTIVE TEST

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

CONSULT ACTIVE TEST

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

Lo : Headlamp (LO) ON

Off : Headlamp (LO) OFF

Is the headlamp (LO) turned ON?

YES >> Headlamp (LO) is normal.

NO >> Refer to [EXL-69, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012172032

1. CHECK HEADLAMP (LO) OUTPUT VOLTAGE

CONSULT ACTIVE TEST

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

Terminals			Test item	Voltage (Approx.)		
(+)	(-)					
IPDM E/R			EXTERNAL LAMP	Battery voltage		
Connector	Terminal					
RH	E8	83			Lo	Battery voltage
LH		84			Off	0 V
			Lo	Battery voltage		
			Off	0 V		

Is the measurement value normal?

YES >> GO TO 2.

NO >> GO TO 3.

2. CHECK HEADLAMP (LO) OPEN CIRCUIT

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

HEADLAMP (LO) CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

IPDM E/R		Front combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E8	83	E28	Existed
LH		84	E58	

Does continuity exist?

YES >> GO TO 5.

NO >> Repair the harnesses or connectors.

3. CHECK HEADLAMP (LO) FUSE

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

Unit	Lotion	Fuse No.	Capacity
Headlamp LO (RH)	IPDM E/R	#57	15 A
Headlamp LO (LH)	IPDM E/R	#56	15 A

Is the fuse blown (open)?

YES >> GO TO 4.

NO >> Replace IPDM E/R.

4. CHECK HEADLAMP (LO) SHORT CIRCUIT

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
RH	E8	83	Not existed
LH		84	

Does continuity exist?

YES >> Repair the harnesses or connectors. And then replace the fuse.

NO >> Replace the fuse. (Replace IPDM E/R if the fuse is blown again.)

5. CHECK HEADLAMP (LO) GROUND OPEN CIRCUIT

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

Front combination lamp		Ground	Continuity
Connector	Terminal		
RH	E28	3	Existed
LH	E58	3	

Does continuity exist?

YES >> Perform the xenon headlamp diagnosis. Refer to [EXL-71. "Diagnosis Procedure"](#).

NO >> Repair the harnesses or connectors.

XENON HEADLAMP

Description

INFOID:000000012172033

OUTLINE

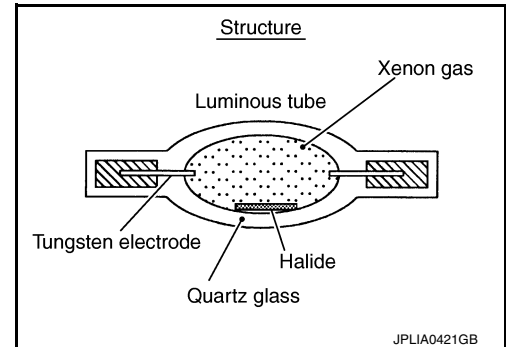
- The lamp light source is by the arch discharge by applying high voltage into the xenon gas-filled bulb instead of the halogen bulb filament.
- Sight becomes more natural and brighter because the amount of light are gained adequately and the color of light is sunshine-like white.
- The xenon bulb drops the amount of light, repeats blinking, and illuminates in red if the bulb reaches the service life.

ILLUMINATION PRINCIPLE

1. Discharging starts in high voltage pulse between bulb electrodes.
2. Xenon gas is activated by current between electrodes. Pale light is emitted.
3. The luminous tube (bulb) temperature elevates. Evaporated halide is activated by discharge. The color of light changes into white.

NOTE:

- Brightness and the color of light may change slightly immediately after the headlamp turned ON until the xenon bulb becomes stable. This is not malfunction.
- Illumination time lag may occur between right and left. This is not malfunction.



PRECAUTIONS FOR TROUBLE DIAGNOSIS

Representative malfunction examples are; "Light does not turn ON", "Light blinks", and "Brightness is inadequate." The cause often be the xenon bulb. Such malfunctions, however, are occurred occasionally by HID control unit malfunction or lamp case malfunction. Specify the malfunctioning part with diagnosis procedure.

WARNING:

- **Never touch the harness, HID control unit, the inside and metal part of lamp when turning the headlamp ON or operating the light switch.**
- **Never work with wet hands.**

CAUTION:

- **Never perform HID control unit circuit diagnosis with a circuit tester or an equivalent.**
- **Temporarily install the headlamp on the vehicle. Connect the battery to the connector (vehicle side) when checking ON/OFF status.**
- **Disconnect the battery negative terminal before disconnecting the lamp socket connector or the harness connector.**
- **Check for blown of the fusible link(s), open around connector, short, disconnection if the symptom is caused by electric error.**

NOTE:

- Turn the switch OFF once before turning ON, if the ON/OFF is inoperative.
- The xenon bulb drops the amount of light, repeats blinking, and illuminates in red if the bulb reaches the service life.

Diagnosis Procedure

INFOID:000000012172034

1. CHECK XENON BULB

Install the normal bulb to the applicable headlamp. Check that the xenon bulb is turned ON.

Is the headlamp turned ON?

- YES >> Replace the xenon bulb.
- NO >> Check the headlamp control system, replace the xenon headlamp assembly if normal.

HEADLAMP LEVELIZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

HEADLAMP LEVELIZER CIRCUIT

Description

INFOID:000000012172035

The headlamp levelizer adjusts the headlamp light axis upward and downward with the aiming motor integrated in the front combination lamp.

Component Function Check

INFOID:000000012172036

1. CHECK AIMING MOTOR OPERATION

Ⓟ CONSULT ACTIVE TEST

1. Start the engine.
2. Turn the lighting switch 2ND.
3. Select "LEVELIZER TEST" of ADAPTIVE LIGHT active test item.
4. With operating the test item, check the operation.

Test item	Light axis angle (Reference value)	10 m (32.8 ft)-forward light axis change reference quantity (Approx.)
LEVELIZER TEST		
Origin	0°	—
Peak	2.5°	450 mm (17.9 in)

Is the operation normal?

- YES >> Headlamp levelizer circuit is normal.
 NO >> Refer to [EXL-72, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172037

1. CHECK AIMING MOTOR DRIVE SIGNAL OUTPUT

Ⓟ CONSULT ACTIVE TEST

1. Start the engine.
2. Turn the light switch 2ND.
3. Select "LEVELIZER TEST" of ADAPTIVE LIGHT active test item.
4. With operating the test item, check the voltage between the AFS control unit harness connector and the ground.

Terminals			Test item	Voltage (Approx.)		
(+)	(-)					
AFS control unit			LEVELIZER TEST			
Connector	Terminal					
RH	M16	19			Origin	8.8 V
		Peak			1.9 V	
LH	M16	40	Origin	8.8 V		
		Peak	1.9 V			

Is the measurement value normal?

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

2. CHECK AIMING MOTOR DRIVE SIGNAL CIRCUIT INPUT

1. Turn the ignition switch OFF.
2. Disconnect AFS control unit connector and aiming motor connector.
3. Check continuity between AFS control unit harness connector and the aiming motor harness connector.

HEADLAMP LEVELIZER CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

AFS control unit		Aiming motor		Continuity
Connector	Terminal	Connector	Terminal	
RH	M16	19	E26	Existed
LH		40	E56	

A

B

Does continuity exist?

YES >> Replace the front combination lamp.

NO >> Repair the harnesses and connectors.

C

3. CHECK AIMING MOTOR DRIVE SIGNAL SHORT CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect AFS control unit connector and aiming motor connector.
3. Check continuity between AFS control unit harness connector and ground.

D

AFS control unit		Ground	Continuity
Connector	Terminal		
RH	M16	19	Not existed
LH		40	

E

F

Does continuity exist?

YES >> Repair the harness and connectors.

NO >> Replace AFS control unit.

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DAYTIME RUNNING LIGHT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

DAYTIME RUNNING LIGHT CIRCUIT

Component Function Check

INFOID:000000012775895

1. CHECK DAYTIME RUNNING LIGHT OPERATION

Ⓟ With CONSULT

1. Turn ignition switch ON.
2. Select "HEAD LAMP" of "BCM" using CONSULT.
3. Select "DAYTIME RUNNING LIGHT" in "Active Test" mode.
4. With operating the test items, check that the daytime running light is turned ON.

On : Daytime running light ON

Off : Daytime running light OFF

Is the inspection result normal?

- YES >> Daytime running light circuit is normal.
NO >> Refer to [EXL-74, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012775896

1. CHECK DAYTIME RUNNING LIGHT RELAY FUSES

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

Unit	Location	Fuse No.	Capacity
Daytime running light relay (Switch side)	Fuse block (J/B)	#6	10 A
Daytime running light relay (Coil side)	IPDM E/R	#59	

Is the inspection result normal?

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

2. CHECK DAYTIME RUNNING LIGHT RELAY POWER SUPPLY

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

+		Terminal	-	Voltage
Daytime running light relay				
Connector				
Switch side	E123	3	Ground	Battery voltage
Coil side		1		

Is the inspection result normal?

- YES >> GO TO 4.
NO-1 >> Switch side: Check battery power supply circuit. Refer to [PG-6, "Wiring Diagram - BATTERY POWER SUPPLY -"](#).
NO-2 >> Coil side: GO TO 3.

3. CHECK DAYTIME RUNNING LIGHT RELAY (COIL SIDE) POWER SUPPLY CIRCUIT

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

DAYTIME RUNNING LIGHT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

Daytime running light relay		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
E123	1	E5	6	Existed

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-35, "Removal and Installation"](#).
- NO >> Repair or replace harness.

4. CHECK DAYTIME RUNNING LIGHT RELAY

Check daytime running light relay. Refer to [EXL-76, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace daytime running light relay.

5. CHECK DAYTIME RUNNING LIGHT RELAY CONTROL SIGNAL

Ⓜ With CONSULT

1. Install daytime running light relay.
2. Turn ignition switch ON.
3. Select "HEAD LAMP" of "BCM" using CONSULT.
4. Select "DAYTIME RUNNING LIGHT" in "Active Test" mode.
5. With operating the test item, check voltage between IPDM E/R harness connector and ground.

+		-	Test item	Voltage (Approx.)	
IPDM E/R					
Connector	Terminal				
E9	105	Ground	DAYTIME RUNNING LIGHT	On	0 V
				Off	Battery voltage

Is the inspection result normal?

- YES >> GO TO 8.
- NO-1 >> Fixed at 0 V: GO TO 7.
- NO-2 >> Fixed at battery voltage: GO TO 6.

6. CHECK DAYTIME RUNNING LIGHT REQUEST SIGNAL

Ⓜ With CONSULT

1. Select "DTRL REQ" in "Data Monitor" mode of "IPDM E/R" using CONSULT.
2. With operating the daytime running light ON condition, check the monitor status.

Monitor item	Condition	Monitor status	
DTRL REQ	Daytime running light	ON condition	On
		OFF condition	Off

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-35, "Removal and Installation"](#).
- NO >> Replace BCM. Refer to [BCS-97, "Removal and Installation"](#).

7. CHECK DAYTIME RUNNING LIGHT RELAY CONTROL SIGNAL CIRCUIT

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

DAYTIME RUNNING LIGHT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

Daytime running light relay		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
E123	2	E9	105	Existed

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-35, "Removal and Installation"](#).
 NO >> Repair or replace harness.

8. CHECK DAYTIME RUNNING LIGHT POWER SUPPLY CIRCUIT

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

Daytime running light relay		Daytime running light		Continuity	
Connector	Terminal	Connector	Terminal		
RH	E123	5	E121	1	Existed
LH			E122		

Is the inspection result normal?

- YES >> GO TO 9.
 NO >> Repair or replace harness.

9. CHECK DAYTIME RUNNING LIGHT GROUND CIRCUIT

Check continuity between daytime running light harness connector and ground.

Daytime running light		Terminal	—	Continuity
Connector	Terminal			
RH	E121	2	Ground	Existed
LH	E122			

Is the inspection result normal?

- YES >> Replace the corresponding daytime running light. Refer to [EXL-237, "Removal and Installation"](#).
 NO >> Repair or replace harness.

Component Inspection

INFOID:000000012775897

1. CHECK DAYTIME RUNNING LIGHT RELAY

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

Daytime running light relay		Condition		Continuity
Terminal				
3	5	Battery voltage	Apply	Existed
			Not apply	Not existed

Is the inspection result normal?

- YES >> INSPECTION END
 NO >> Replace daytime running light relay.

FRONT FOG LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

FRONT FOG LAMP CIRCUIT

Component Function Check

INFOID:000000012172038

1. CHECK FRONT FOG LAMP OPERATION

IPDM E/R AUTO ACTIVE TEST

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

CONSULT ACTIVE TEST

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

Fog : Front fog lamp ON
Off : Front fog lamp OFF

Is the front fog lamp turned ON?

- YES >> Front fog lamp circuit is normal.
NO >> Refer to [EXL-77, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172039

1. CHECK FRONT FOG LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
Front fog lamp	IPDM E/R	#58	15 A

Is the fuse blown (open)?

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

2. CHECK FRONT FOG LAMP SHORT CIRCUIT

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
RH	E8	86	Not existed
LH		87	

Does continuity exist?

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

3. CHECK FRONT FOG LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

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

4. CHECK FRONT FOG LAMP OUTPUT VOLTAGE

CONSULT ACTIVE TEST

1. Disconnect the front fog lamp connector.
2. Turn the ignition switch ON.
3. Select "EXTERNAL LAMPS" of IPDM E/R active test item.

FRONT FOG LAMP CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

- With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

Terminals			Test item	Voltage (Approx.)
(+)		(-)		
IPDM E/R			EXTERNAL LAMP	Battery voltage
Connector	Terminal			
RH	E8	86	Fog	Battery voltage
LH		87	Off	0 V
			Fog	Battery voltage
			Off	0 V

Is the measurement value normal?

YES >> GO TO 5.

NO >> Replace IPDM E/R.

5. CHECK FRONT FOG LAMP OPEN CIRCUIT

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

IPDM E/R			Front fog lamp		Continuity
Connector	Terminal		Connector	Terminal	
RH	E8	86	E34	1	Existed
LH		87	E64	1	

Does continuity exist?

YES >> GO TO 6.

NO >> Repair the harnesses or connectors.

6. CHECK FRONT FOG LAMP GROUND CIRCUIT OPEN CIRCUIT

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

Front fog lamp			Ground	Continuity
Connector	Terminal			
RH	E34	2	Ground	Existed
LH	E64	2		

Does continuity exist?

YES >> Replace the front fog lamp.

NO >> Repair the harnesses or connectors.

PARKING LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

PARKING LAMP CIRCUIT

Component Function Check

INFOID:000000012172040

1. CHECK PARKING LAMP OPERATION

IPDM E/R AUTO ACTIVE TEST

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

CONSULT ACTIVE TEST

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

TAIL : Parking lamp ON
Off : Parking lamp OFF

Is the parking lamp turned ON?

- YES >> Parking lamp circuit is normal.
NO >> Refer to [EXL-79, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172041

1. CHECK PARKING LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
Parking lamp	IPDM E/R	#52	10 A

Is the fuse blown (open)?

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

2. CHECK PARKING LAMP SHORT CIRCUIT

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
RH	E9	91	Not existed
LH		92	

Does continuity exist?

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

3. CHECK PARKING LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

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

4. CHECK PARKING LAMP OUTPUT VOLTAGE

CONSULT ACTIVE TEST

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

PARKING LAMP CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

4. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

Terminals			Test item	Voltage (Approx.)
(+)		(-)		
IPDM E/R			EXTERNAL LAMP	Battery voltage
Connector	Terminal			
RH	E9	91	TAIL	0 V
LH		92	Off	Battery voltage
			Off	0 V

Is the measurement value normal?

- YES >> GO TO 5.
 NO >> Replace IPDM E/R.

5. CHECK PARKING LAMP OPEN CIRCUIT

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

IPDM E/R		Front combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E9	E28	8	Existed
LH		92	E58	

Does continuity exist?

- YES >> GO TO 6.
 NO >> Repair the harnesses or connectors.

6. CHECK PARKING LAMP GROUND OPEN CIRCUIT

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

Front combination lamp			Ground	Continuity
Connector	Terminal			
RH	E28	4	Ground	Existed
LH	E58	4		

Does continuity exist?

- YES >> Replace the front combination lamp.
 NO >> Repair the harnesses or connectors.

TURN SIGNAL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL LAMP CIRCUIT

Description

INFOID:0000000012172042

BCM performs the high 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:0000000012172043

1. CHECK TURN SIGNAL LAMP

Ⓜ CONSULT ACTIVE TEST

1. Select "FLASHER" of BCM (FLASHER) active test item.
2. With operating the test items, check that the turn signal 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-81, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012172044

1. CHECK TURN SIGNAL LAMP BULB

Check the applicable lamp bulb.

NOTE:

Except side turn signal lamp.

Is the bulb normal?

YES >> GO TO 2.

NO >> Replace the bulb.

2. CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

Ⓜ CONSULT ACTIVE TEST

1. Turn the ignition switch OFF.
2. Disconnect the following connectors.
 - Front combination lamp
 - Door mirror
 - Rear combination lamp
3. Turn the ignition switch ON.
4. Select "FLASHER" of BCM (FLASHER) active test item.
5. With operating the turn signal switch, check the voltage between the BCM harness connector and the ground.

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EXL

TURN SIGNAL LAMP CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

Front turn signal lamp and side turn signal lamp

Terminals			Test item	Voltage (Approx.)	
(+)	(-)				
BCM			FLASHER		
Connector	Terminal				
RH	M119	17	Ground	RH	
				Off	0 V
LH	M119	18	Ground	LH	
				Off	0 V

Rear turn signal lamp

Terminals			Test item	Voltage (Approx.)	
(+)	(-)				
BCM			FLASHER		
Connector	Terminal				
RH	M120	20	Ground	RH	
				Off	0 V
LH	M120	25	Ground	LH	
				Off	0 V

Is the measurement value normal?

- YES >> GO TO 3.
- NO >> Replace BCM.

3. CHECK TURN SIGNAL LAMP OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect the BCM connector.
3. Check the continuity between the BCM harness connector and the each turn signal lamp harness connector.

TURN SIGNAL LAMP CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

Front turn signal lamp

BCM			Front combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	M119	17	E28	6	Existed
LH		18	E58		

Side turn signal lamp

BCM			Door mirror		Continuity
Connector		Terminal	Connector	Terminal	
RH	M119	17	D33	1	Existed
LH		18	D3		

Rear turn signal lamp

BCM			Rear combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	M120	20	B261	1	Existed
LH		25	B260		

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4. CHECK TURN SIGNAL LAMP SHORT CIRCUIT

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

Front turn signal lamp and side turn signal lamp

BCM			Ground	Continuity
Connector		Terminal		
RH	M119	17		Not existed
LH		18		

Rear turn signal lamp

BCM			Ground	Continuity
Connector		Terminal		
RH	M120	20		Not existed
LH		25		

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 5.

5. CHECK TURN SIGNAL LAMP GROUND OPEN CIRCUIT

Check the continuity between the each turn signal lamp harness connector and the ground.

Front turn signal lamp

Front combination lamp			Ground	Continuity
Connector		Terminal		
RH	E28	4		Existed
LH	E58			

Side turn signal lamp

Door mirror			Ground	Continuity
Connector		Terminal		
RH	D33	19		Existed
LH	D3			

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TURN SIGNAL LAMP CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

Rear turn signal lamp

Rear combination lamp		Terminal	Ground	Continuity
Connector				Existed
RH	B261	2		
LH	B260			

Does continuity exist?

- YES >> Replace the front combination lamp, door mirror or the rear combination lamp.
- NO >> Repair the harnesses or connectors.

OPTICAL SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

OPTICAL SENSOR

Description

INFOID:000000012172045

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

Component Function Check

INFOID:000000012172046

1.CHECK OPTICAL SENSOR SIGNAL BY CONSULT

CONSULT DATA MONITOR

1. Turn the ignition switch ON.
2. Select "OPTICAL SENSOR" of BCM (HEADLAMP) data monitor item.
3. Turn the lighting switch AUTO.
4. With the optical sensor illuminating, check the monitor status.

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

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

Is the item status normal?

- YES >> Optical sensor is normal.
NO >> Refer to [EXL-85, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172047

1.CHECK OPTICAL SENSOR POWER SUPPLY INPUT

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

Terminals			Voltage (Approx.)	
(+)	(-)			
Optical sensor			Ground	5 V
Connector	Terminal			
M94	1			

Is the measurement value normal?

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

2.CHECK OPTICAL SENSOR GROUND INPUT

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

Terminals			Voltage (Approx.)	
(+)	(-)			
Optical sensor			Ground	0 V
Connector	Terminal			
M94	3			

Is the measurement value normal?

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

3.CHECK OPTICAL SENSOR SIGNAL OUTPUT

OPTICAL SENSOR

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

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

Terminals		Condition	Voltage (Approx.)
(+)	(-)		
Optical sensor		Optical sensor	3.1 V or more *
Connector	Terminal		
M94	2	Ground	When illuminating
		When shutting off light	0.6 V or less

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

Is the measurement value normal?

YES >> GO TO 7.

NO >> Replace the optical sensor.

4.CHECK OPTICAL SENSOR OPEN CIRCUIT

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M94	1	M123	138	Existed

Does continuity exist?

YES >> GO TO 5.

NO >> Repair the harnesses or connectors.

5.CHECK OPTICAL SENSOR SHORT CIRCUIT

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

Optical sensor		Ground	Continuity
Connector	Terminal		
M94	1		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM.

6.CHECK OPTICAL SENSOR GROUND OPEN CIRCUIT

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M94	3	M123	137	Existed

Does continuity exist?

YES >> Replace BCM.

NO >> Repair the harnesses or connectors.

7.CHECK OPTICAL SENSOR SIGNAL OPEN CIRCUIT

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

OPTICAL SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M94	2	M123	113	Existed

Does continuity exist?

YES >> GO TO 8.

NO >> Repair the harnesses or connectors.

8.CHECK OPTICAL SENSOR SHORT CIRCUIT

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

Optical sensor		Ground	Continuity
Connector	Terminal		
M94	2		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM.

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HAZARD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

HAZARD SWITCH

Description

INFOID:000000012172048

Hazard switch is integrated in the multifunction switch. Hazard switch inputs the signals to BCM when pressing the switch.

Component Function Check

INFOID:000000012172049

1. CHECK HAZARD SWITCH SIGNAL BY CONSULT

CONSULT DATA MONITOR

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

Monitor item	Condition		Monitor status
HAZARD SW	Hazard switch	While pressing the switch	On
		While not pressing the switch	Off

Is the item status normal?

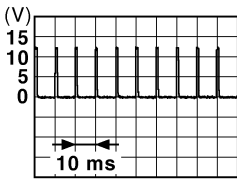
- YES >> Hazard switch circuit is normal.
NO >> Refer to [EXL-88, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172050

1. CHECK HAZARD SWITCH SIGNAL INPUT

With operating the hazard switch, check the voltage between the BCM harness connector and the ground.

Terminals		Condition	Voltage (Approx.)
(+)	(-)		
BCM		Hazard switch	0 V
Connector	Terminal		
M122	110	While pressing the switch	
		While not pressing the switch	
Ground			

JPMIA0012GB

Is the measurement value normal?

- YES >> Replace BCM.
NO >> GO TO 2.

2. CHECK HAZARD SWITCH SIGNAL OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect the multifunction switch connector and BCM connector.
3. Check continuity between the multifunction switch harness connector and the BCM harness connector.

HAZARD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

Multifunction switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M72	16	M122	110	Existed

Does continuity exist?

YES >> GO TO 3.

NO >> Repair the harnesses or connectors.

3.CHECK HAZARD SWITCH SIGNAL SHORT CIRCUIT

Check continuity between the multifunction switch harness connector and the ground.

Multifunction switch		Ground	Continuity
Connector	Terminal		
M72	16		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 4.

4.CHECK HAZARD SWITCH GROUND OPEN CIRCUIT

Check continuity between the multifunction switch harness connector and the ground.

Multifunction switch		Ground	Continuity
Connector	Terminal		
M72	1		Existed

Does continuity exist?

YES >> Replace the hazard switch (multifunction switch).

NO >> Repair the harnesses or connectors.

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TAIL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TAIL LAMP CIRCUIT

Component Function Check

INFOID:000000012172051

1. CHECK TAIL LAMP OPERATION

IPDM E/R AUTO ACTIVE TEST

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

CONSULT ACTIVE TEST

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

TAIL : Tail lamp ON

Off : Tail lamp OFF

Is the tail lamp turned ON?

- YES >> Tail lamp circuit is normal.
NO >> Refer to [EXL-90, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172052

1. CHECK TAIL LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
<ul style="list-style-type: none">• Tail lamp• Rear side marker lamp• License plate lamp	IPDM E/R	#53	10 A

Is the fuse blown (open)?

- YES >> Repair the malfunctioning part before replacing the fuse.
NO >> GO TO 2.

2. CHECK TAIL LAMP OUTPUT VOLTAGE

CONSULT ACTIVE TEST

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

Terminals		Test item	Voltage (Approx.)
(+)	(-)		
IPDM E/R		EXTERNAL LAMP	Battery voltage
Connector	Terminal		
E5	7	TAIL	Battery voltage
		Off	0 V

Is the measurement value normal?

- YES >> GO TO 3.
NO >> Replace IPDM E/R.

3. CHECK TAIL LAMP OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect IPDM E/R connector.

TAIL LAMP CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

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

IPDM E/R		Rear combination lamp		Continuity	
Connector	Terminal	Connector	Terminal		
RH	E5	7	B232	1	Existed
LH			B60	1	

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4. CHECK TAIL LAMP GROUND OPEN CIRCUIT

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

Rear combination lamp			Ground	Continuity
Connector	Terminal			
RH	B232	4		Existed
LH	B60	4		

Does continuity exist?

YES >> Replace the rear combination lamp.

NO >> Repair the harnesses or connectors.

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LICENSE PLATE LAMP CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

LICENSE PLATE LAMP CIRCUIT

Component Function Check

INFOID:000000012172053

NOTE:

Check the tail lamp circuit if the tail lamp and the license plate lamp are not turned ON.

1. CHECK LICENSE PLATE LAMP OPERATION

⊗ IPDM E/R AUTO ACTIVE TEST

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

Ⓟ CONSULT ACTIVE TEST

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

TAIL : License plate lamp ON

Off : License plate lamp OFF

Is the license plate lamp turned ON?

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

Diagnosis Procedure

INFOID:000000012172054

1. CHECK LICENSE PLATE LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

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

2. CHECK LICENSE PLATE LAMP OPEN CIRCUIT

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

IPDM E/R		License plate lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E5	D117	1	Existed
LH		D112	1	

Does continuity exist?

- YES >> GO TO 3.
NO >> Repair the harnesses or connectors.

3. CHECK LICENSE PLATE LAMP GROUND OPEN CIRCUIT

Check continuity between the license plate lamp harness connector and the ground.

License plate lamp			Ground	Continuity
Connector	Terminal			
RH	D117	2	Existed	
LH	D112	2		

Does continuity exist?

- YES >> Replace the license plate lamp.
NO >> Repair the harnesses or connectors.

HEADLAMP SYSTEM

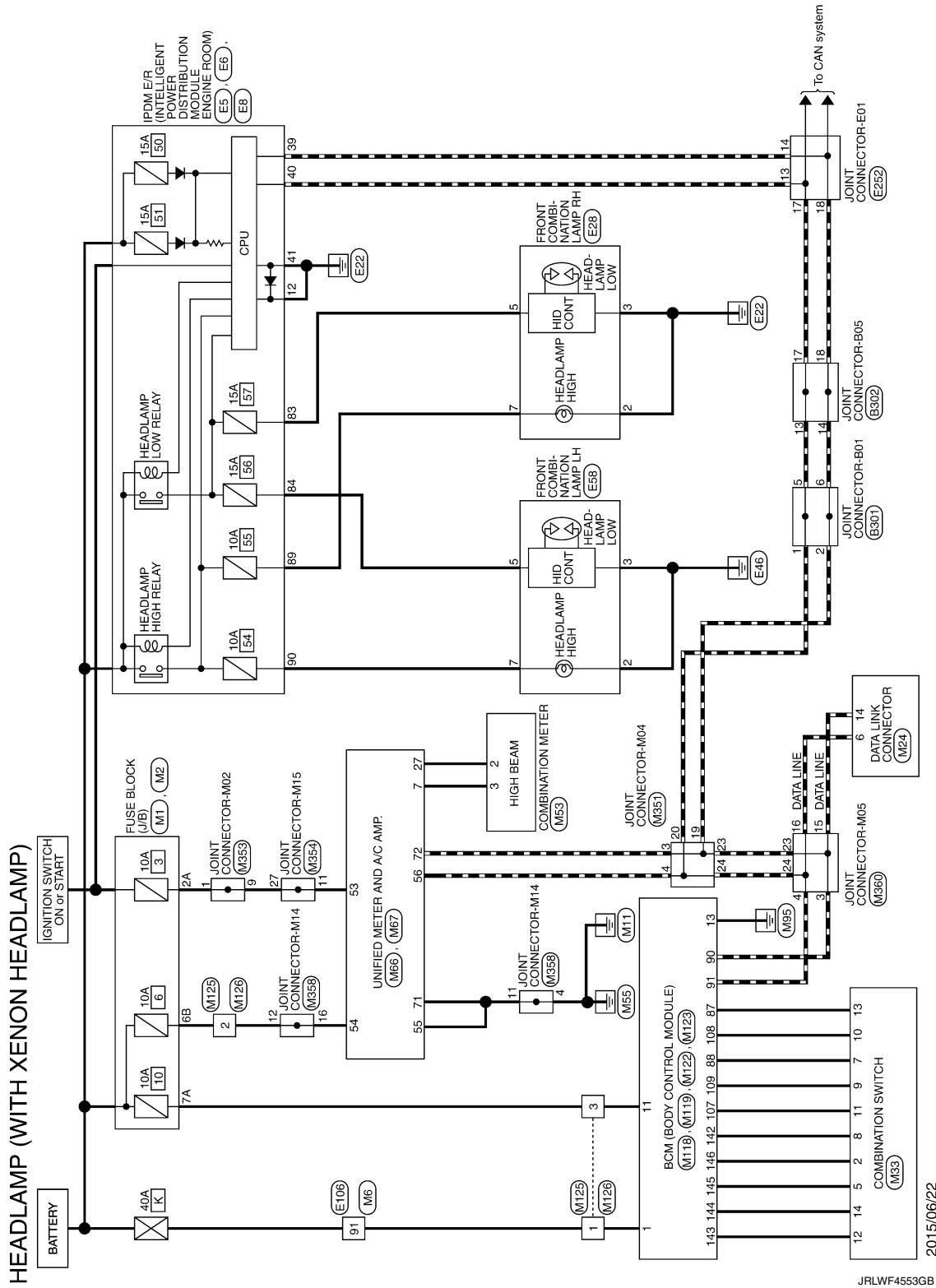
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[XENON TYPE]

HEADLAMP SYSTEM

Wiring Diagram - HEADLAMP -

INFOID:000000012172055



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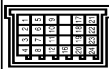
HEADLAMP SYSTEM

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[XENON TYPE]

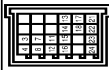
HEADLAMP (WITH XENON HEADLAMP)

Connector No.	E330
Connector Name	JOINT CONNECTOR-B01
Connector Type	NH24FB-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	SB	-
4	LG	-
5	L	-
6	P	-
7	SB	-
8	LG	-
9	L	-
10	P	-
11	SB	-
12	LG	-
13	L	-
14	P	-
15	SB	-
16	Y	-
17	R	-
18	B	-
19	B	-
20	SB	-
21	R	-
22	Y	-
23	B	-
24	SB	-

Connector No.	B302
Connector Name	JOINT CONNECTOR-B05
Connector Type	NH24FCY-J



Terminal No.	Color Of Wire	Signal Name [Specification]
3	Y	-
4	L	-
7	Y	-
8	L	-
11	Y	-
12	L	-
13	L	-
14	P	-
15	Y	-
16	L	-
17	L	-
18	P	-
19	L	-
22	B	-
23	Y	-
24	L	-

Connector No.	E5
Connector Name	FROM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20PW-CS12-IM-1V



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

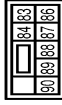
7	R	-
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	B/G	-
28	L	-
30	GR	-
36	G	-

Connector No.	E6
Connector Name	FROM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20PW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-
46	R	-

Connector No.	E8
Connector Name	FROM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	NS20FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
83	EG	-
84	V	-
86	W	-
87	L	-
88	GR	-
89	BR	-
90	P	-

Connector No.	E28
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS20FE-PR



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

HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

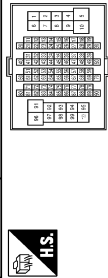
HEADLAMP (WITH XENON HEADLAMP)

Connector No.	E53
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS308FB-PR



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

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TR480PW-CSI16-TM4

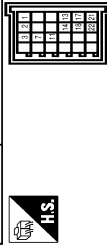


Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	GR	-
5	GR	-
6	GR	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-
13	L	-

14	R	-
15	P	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	V	-
23	G	-
24	P	-
25	Y	-
26	V	-
27	W	-
28	G	-
31	BG	-
32	W	-
33	W	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-
41	W	-
42	G	-
43	BR	-
45	W	-
46	L	-
49	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
63	W	-
64	B	-
65	G	-
66	G	-
67	SHIELD	-
68	LG	-
69	W	-
70	W	-
71	R	-
72	Y	-
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74	BR	-
74	L	-
75	G	-

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76	W	- [With ICC]
76	Y	- [Without ICC]
77	P	- [Without ICC]
77	R	- [With ICC]
78	BR	- [Without ICC]
78	L	- [With ICC]
79	L	- [Without ICC]
79	Y	- [With ICC]
80	SB	-
81	R	-
82	SB	-
83	BG	-
84	G	-
85	W	-
86	P	-
87	V	-
88	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-
95	BG	-
96	P	-
97	R	-
98	SHIELD	-
99	S	-
100	P	-

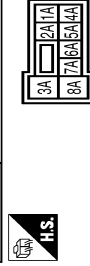
Connector No.	E252
Connector Name	JOINT CONNECTOR-ED1
Connector Type	NI124HW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	GR	-
7	GR	-
11	GR	-

13	L	-
14	P	-
17	L	-
18	P	-
21	L	-
22	P	-

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS308PW-M2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS108PW-OS



Terminal No.	Color Of Wire	Signal Name [Specification]
3B	P	-
4B	G	-
5B	BG	-
6B	Y	-

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HEADLAMP SYSTEM

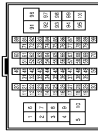
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[XENON TYPE]

HEADLAMP (WITH XENON HEADLAMP)

75	P	-	-
88	R	-	-
95	SB	-	-

Connector No.	M6
Connector Name	WIPE TO WIPE
Connector Type	TH80MM-C516-TM4

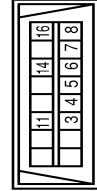


Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	- [With NAV]
2	Y	- [Without NAV]
2	B	- [Without NAV]
3	R	- [With NAV]
3	B	- [With NAV]
3	G	- [Without NAV]
4	SHIELD	-
5	G	-
6	B	-
7	W	-
8	Y	-
9	BR	-
10	R	-
11	BR	-
12	BG	-
13	L	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	BG	-
19	BG	-
20	W	-
21	L	-
22	P	-
23	W	-
24	BR	-
25	Y	-
26	V	-
27	G	-
28	G	-
31	L	-

32	G	-	-
33	B	-	-
34	W	-	-
35	R	-	-
36	SHIELD	-	-
37	V	-	-
38	BG	-	-
39	BR	-	-
41	W	-	-
42	BG	-	-
43	BG	-	-
45	W	-	-
46	L	-	-
50	B	-	-
51	BR	-	-
54	Y	-	-
57	G	-	-
59	W	-	-
60	L	-	-
61	G	-	-
62	SB	-	-
63	G	-	-
64	B	-	-
65	W	-	-
66	R	-	-
67	SHIELD	-	-
68	GR	-	-
69	LG	-	-
70	LG	-	-
71	LG	-	-
72	Y	-	-
73	SB	-	-
74	BR	- [With ICC]	-
74	L	- [Without ICC]	-
75	G	-	-
76	GR	- [Without ICC]	-
76	W	- [With ICC]	-
77	P	- [Without ICC]	-
77	R	- [With ICC]	-
78	L	- [Without ICC]	-
78	R	- [With ICC]	-
79	W	- [Without ICC]	-
79	X	- [With ICC]	-
80	SB	-	-
81	SB	-	-
82	SB	-	-
83	V	-	-
84	G	-	-
85	L	-	-
86	P	-	-

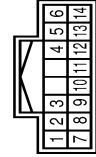
87	W	-	-
88	GR	-	-
90	SHIELD	-	-
91	W	-	-
92	Y	-	-
93	BR	-	-
94	P	-	-
95	GR	-	-
96	W	-	-
97	L	-	-
98	SHIELD	-	-
99	V	-	-
100	SB	-	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD18FW



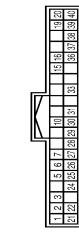
Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
7	V	-
8	G	-
11	SB	-
14	P	-
16	Y	-

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH18FM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	SB	OUTPUT 4
3	GR	FR WASHER(+)
4	G	IGN
5	L	GROUND
6	B	GROUND
7	V	INPUT 3
8	BG	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	INPUT 1
12	P	OUTPUT 1
13	BR	INPUT 2
14	G	OUTPUT 2

Connector No.	M33
Connector Name	COMBINATION METER
Connector Type	TH48FM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BATTERY POWER SUPPLY
2	LG	COMMUNICATION SIGNAL (METER->AMP)
3	GR	COMMUNICATION SIGNAL (AMP->METER)
5	B	GROUND
6	P	ALTERNATOR SIGNAL
7	BR	AIR BAG SIGNAL

HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

HEADLAMP (WITH XENON HEADLAMP)

10	G	SECURITY SIGNAL
15	B	GROUND
16	B	METER CONTROL SWITCH GROUND
19	B	ILL GND
20	R	ILL
21	BG	IGNITION SIGNAL
22	B	GROUND
24	BR	COMMUNICATION SIGNAL (LCD->AMP.)
25	Y	COMMUNICATION SIGNAL (AMP->LCD)
26	R	VEHICLE SPEED SIGNAL (G-PULSE)
27	V	PARKING BRAKE SWITCH SIGNAL
28	W	BRAKE FLUID LEVEL SWITCH SIGNAL
29	SB	SEAT BELT Buckle SWITCH SIGNAL (DRIVER SIDE)
30	SB	SEAT BELT Buckle SWITCH SIGNAL (PASSENGER SIDE)
31	G	WASHER LEVEL SWITCH SIGNAL
33	B	ILLUMINATION CONTROL SIGNAL
36	LG	SELECT SWITCH SIGNAL
37	SB	ENTER SWITCH SIGNAL
38	L	TRIP A/B RESET SWITCH SIGNAL
39	P	ILLUMINATION CONTROL SWITCH SIGNAL (C)
40	BG	ILLUMINATION CONTROL SWITCH SIGNAL (O)

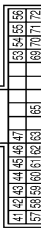
Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH40FPW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
5	L	MANUAL MODE SHIFT UP SIGNAL
7	GR	COMMUNICATION SIGNAL (AMP->METER)
8	L	VEHICLE SPEED SIGNAL (G-PULSE)
9	SB	SEAT BELT Buckle SWITCH SIGNAL (DRIVER SIDE)
10	SB	SEAT BELT Buckle SWITCH SIGNAL (PASSENGER SIDE)
11	G	WASHER LEVEL SWITCH SIGNAL
14	BR	COMMUNICATION SIGNAL (LCD->AMP.)
20	L	IGN ON OFF SIGNAL
23	Y	AT SNOW SWITCH SIGNAL
25	V	MANUAL MODE SHIFT DOWN SIGNAL
27	LG	COMMUNICATION SIGNAL (METER->AMP.)
28	R	VEHICLE SPEED SIGNAL (G-PULSE)
30	V	PARKING BRAKE SWITCH SIGNAL

34	Y	COMMUNICATION SIGNAL (AMP->LCD)
38	P	BLOWER MOTOR CONTROL SIGNAL

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH32FPW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	ACQ POWER SUPPLY
42	Y	FUEL LEVEL SENSOR SIGNAL
43	R	INTAKE SENSOR SIGNAL
44	LG	IN-VEHICLE SENSOR SIGNAL
45	P	AMBIENT SENSOR SIGNAL
46	BG	SUNLOAD SENSOR SIGNAL
47	G	EXHAUST GAS - OUTSIDE COORDINATING SENSOR SIGNAL
53	G	IGNITION POWER SUPPLY
54	Y	BATTERY POWER SUPPLY
56	B	IGNITION POWER SUPPLY
57	L	IGNITION POWER SUPPLY
58	W	BRAKE FLUID LEVEL SWITCH SIGNAL
59	GR	FUEL LEVEL SENSOR GROUND
60	L	INTAKE SENSOR GROUND
61	BR	IN-VEHICLE SENSOR GROUND
62	SB	AMBIENT SENSOR GROUND
63	R	SUNLOAD SENSOR GROUND
65	BG	ECV SIGNAL
69	L	A/C LAN SIGNAL
70	R	EACH DOOR MOTOR POWER SUPPLY
71	B	GROUND
72	P	GROUND

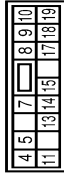
Connector No.	M11B
Connector Name	ECM (BODY CONTROL MODULE)
Connector Type	M03FB-LC

Connector No.	M11B
Connector Name	ECM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (E/L)
2	W	POWER WINDOW POWER SUPPLY (BAT)
3	Y	POWER WINDOW POWER SUPPLY (GRAP)

Connector No.	M119
Connector Name	ECM (BODY CONTROL MODULE)
Connector Type	INS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (R/USE)
13	B	GROUND
14	W	ACQ IND
15	W	PUSH-BUTTON ON SW ILL GND
16	W	TURN SIGNAL RH (FRONT)
17	W	TURN SIGNAL LH (FRONT)
18	BG	TURN SIGNAL RH (FRONT)
19	V	INT ROOM LAMP CONT

Connector No.	M12Z
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FE-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 -
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANTI -
79	BR	ROOM ANTI +
80	GR	MATS ANT AMP.
81	W	MATS ANT AMP.
82	R	IGN RELAY (7/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 3
88	W	COMBI SW INPUT 1
89	P	COMBI SW INPUT 2
91	L	CAN-H
92	LG	KEY SLOT ILL CONT
93	V	ON IND
94	Y	Puddle LAMP CONT
95	BG	ACQ RELAY CONT
96	GR	A-T SHIFT SELECTOR POWER SUPPLY
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	Y	COMBI SW INPUT 2
109	Y	COMBI SW INPUT 3
110	G	HAZARD SW

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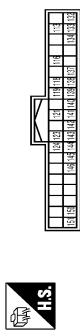
HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

HEADLAMP (WITH XENON HEADLAMP)

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



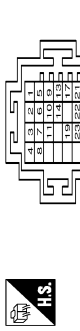
Connector No.	M123
Connector Name	WIRE TO WIRE
Connector Type	M03FW-LC



Connector No.	M031
Connector Name	JOINT CONNECTOR-M04
Connector Type	NH24FW-J



Connector No.	M053
Connector Name	JOINT CONNECTOR-M02
Connector Type	SGM28FDGY-J



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F.B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	BG	RECEIVER SENSOR GND
138	Y	RECEIVER SENSOR POWER SUPPLY
140	GR	TIRE PRESSURE RECEIVER COMM
141	GR	SWIFT LAMP
142	GS	SECURITY IND LAMP CONT
143	BG	COMBI SW OUTPUT 5
144	G	COMBI SW OUTPUT 1
145	L	COMBI SW OUTPUT 2
146	SB	COMBI SW OUTPUT 3
150	LG	COMBI SW OUTPUT 4
151	G	REAR WINDOW DEFOGGER RELAY CONT

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	—
2	Y	—
3	R	—

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	IM03MW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	—
2	Y	—
3	R	—

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BG	—
2	B	—
3	P	—
4	L	—
6	B	—
7	P	—
8	L	—
10	W	—
11	P	—
12	L	—
14	B	—
15	P	—
16	L	—
17	V	—
18	B	—
19	P	—
20	L	—
21	V	—
22	B	—
23	P	—
24	L	—

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	—
2	R	— [Without BOSE system]
3	V	— [With BOSE system]
4	V	—
5	G	—
6	R	—
7	V	—
8	BG	—
9	G	—
10	R	—
11	V	—
12	W	—
13	W	—
14	W	—
15	W	—
16	W	—
17	W	—
18	V	—
19	V	—
21	W	—
22	R	—
23	V	—
26	R	—
27	G	—

HEADLAMP SYSTEM

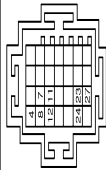
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

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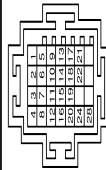
HEADLAMP (WITH XENON HEADLAMP)

Connector No.	M354
Connector Name	JOINT CONNECTOR-M15
Connector Type	SGA28FQY-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	V	-
3	LG	-
4	B	-
5	BR	-
6	V	-
7	W	-
8	B	-
9	G	-
10	B	-
11	G	-
12	B	-
13	W	-
14	B	-
15	G	-
16	B	-
17	W	-
18	B	-
19	G	-
20	B	-
21	G	-
22	B	-
23	W	-
24	B	-
25	G	-
26	B	-
27	G	-

Connector No.	M358
Connector Name	JOINT CONNECTOR-M14
Connector Type	SGA28F5B-J

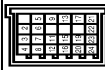


Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	- [Without BOSE system]
2	V	- [With BOSE system]
3	LG	- [With BOSE system]
4	B	- [Without BOSE system]
5	BR	- [Without BOSE system]
6	V	- [With BOSE system]
7	W	- [With BOSE system]
8	B	- [Without BOSE system]

22	P	L	-
24	L	-	-

8	L	-	-
10	W	-	-
11	B	-	-
12	Y	-	-
13	L	-	-
14	W	-	-
15	BR	-	-
16	Y	-	-
17	L	-	-
18	W	-	-
19	BR	-	-
20	BR	-	-
21	L	-	-
22	BR	-	-
23	BR	-	-
24	BR	-	-
25	BR	-	-

Connector No.	M360
Connector Name	JOINT CONNECTOR-M05
Connector Type	IM42FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-
8	L	-
9	BR	-
10	P	-
11	L	-
12	L	-
13	BR	-
14	P	-
15	P	-
16	L	-
17	V	-
18	P	-
19	P	-
20	L	-
21	V	-
22	G	-

AUTO LIGHT SYSTEM

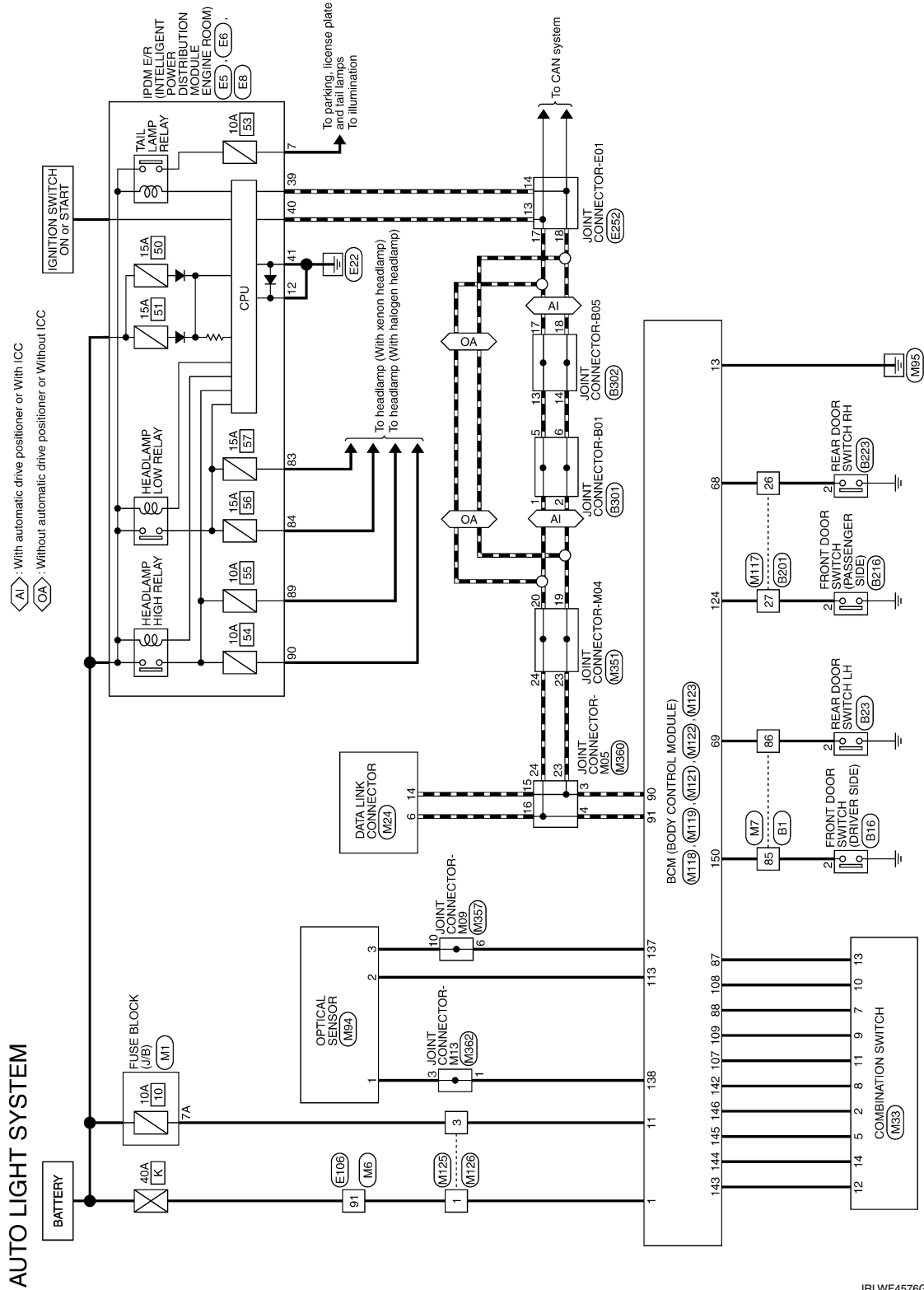
[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

AUTO LIGHT SYSTEM

Wiring Diagram - AUTO LIGHT SYSTEM -

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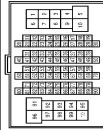
AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

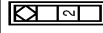
AUTO LIGHT SYSTEM

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
36	L	
37	P	
38	P	
39	Y	
40	SB	
44	Y	
45	GR	
46	LG	
47	SB	
48	BG	
49	R	
50	L	
60	P	
62	SHIELD	
63	R	
64	G	
65	SHIELD	
66	W	
67	V	
68	SB	
69	SHIELD	
70	W	
73	SB	
74	L	
75	W	
76	BR	
77	R	
78	P	
79	GR	
83	BG	
85	V	
86	LG	
87	Y	
88	R	
89	B	
90	BG	
91	G	
92	BR	
93	G	
94	SB	
95	G	
96	W	
98	W	
99	GR	

Connector No.	B16
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



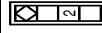
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	
2	R	
3	GR	
4	BG	
7	LG	
10	W	
15	SB	
16	V	
17	BR	
18	GR	
19	P	
20	BR	
21	Y	
22	Y	
23	Y	
28	Y	
29	GR	
30	GR	
31	R	
32	BR	
33	G	
51	R	
55	G	
56	R	
57	W	
58	B	
59	SHIELD	
60	LG	
61	V	
62	BR	
63	P	
64	L	
65	G	
66	P	
67	L	
68	SHIELD	
69	V	
70	Y	
71	SB	
72	W	
73	GR	
74	Y	
80	V	
81	SB	
82	LG	
83	P	
84	R	
85	L	
86	BG	

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



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

Connector No.	B23
Connector Name	REAR DOOR SWITCH-LH
Connector Type	A03FW



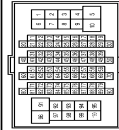
Terminal No.	Color Of Wire	Signal Name [Specification]
2	Y	

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



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

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



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

Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	
5	G	
6	SB	
7	V	
8	L	
11	V	
12	SB	
13	LG	
14	GR	
15	LG	
18	R	
17	W	
18	SB	
19	BR	
20	BG	
21	SHIELD	
22	Y	
24	P	
25	G	
26	Y	
27	B	
27	BR	
28	R	
28	W	
28	L	
28	W	
30	SHIELD	
31	SHIELD	
32	P	
32	W	
32	Y	
33	SB	
34	L	
35	P	

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

EXL

AUTO LIGHT SYSTEM

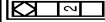
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

AUTO LIGHT SYSTEM

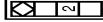
87	L	-
88	P	-
91	V	-
92	R	-
94	R	-
95	SB	-
97	G	-
98	R	-
99	P	-
100	L	-

Connector No.	B216
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



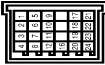
Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-

Connector No.	B223
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



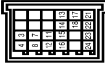
Terminal No.	Color Of Wire	Signal Name [Specification]
2	BR	-

Connector No.	B301
Connector Name	JOINT CONNECTOR-B01
Connector Type	NH24FB-J



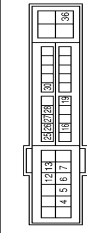
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	SB	-
4	LG	-
5	L	-
6	P	-
7	SB	-
8	LG	-
9	L	-
10	P	-
11	SB	-
12	LG	-
13	SB	-
14	R	-
15	Y	-
16	B	-
17	Y	-
18	B	-
20	SB	-
21	R	-
22	Y	-
23	B	-
24	SB	-

Connector No.	B302
Connector Name	JOINT CONNECTOR-B05
Connector Type	NH24FCY-J



Terminal No.	Color Of Wire	Signal Name [Specification]
3	Y	-
4	L	-
7	Y	-
8	L	-
11	Y	-
12	L	-
13	L	-
14	P	-
15	Y	-
16	L	-
17	L	-
18	P	-
20	B	-
22	Y	-
23	Y	-
24	L	-

Connector No.	E5
Connector Name	IPM E-R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE (ROOM)
Connector Type	TH20PW-CS12-M-TV



Terminal No.	Color Of Wire	Signal Name [Specification]
4	V	-
5	L	-
6	R	-
7	R	-

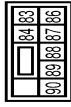
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	EG	-
28	L	-
30	GR	-
36	G	-

Connector No.	E6
Connector Name	IPM E-R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE (ROOM)
Connector Type	TH08FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
36	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-
46	R	-

Connector No.	E8
Connector Name	IPM E-R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE (ROOM)
Connector Type	NS08FW-CS



AUTO LIGHT SYSTEM

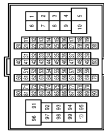
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

AUTO LIGHT SYSTEM

Terminal No.	Color Of Wire	Signal Name [Specification]
83	BG	-
84	BV	-
86	W	-
87	L	-
88	GR	-
89	BR	-
90	P	-

Connector No.	E108
Connector Name	WIRE TO WIRE
Connector Type	T180FW-C516-TM4

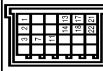


Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
4	GR	-
5	GR	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-
13	L	-
14	R	-
15	P	-
16	SB	-
18	SB	-
20	BG	-
21	BG	-
22	V	-
23	G	-
24	P	-
25	Y	-
26	V	-

27	W	-
28	G	-
31	BG	-
32	W	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-
41	W	-
42	GR	-
43	GR	-
45	W	-
50	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
63	W	-
64	B	-
65	G	-
66	B	-
68	Y	-
68	LG	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	- [With DCC]
74	L	- [Without DCC]
75	G	- [With DCC]
75	W	- [Without DCC]
76	W	- [With DCC]
76	L	- [Without DCC]
77	P	- [With DCC]
77	R	- [Without DCC]
78	BR	- [With DCC]
78	L	- [Without DCC]
79	L	- [With DCC]
79	Y	- [Without DCC]
80	SB	-
81	R	-
82	SB	-

82	BG	-
84	G	-
85	L	-
86	P	-
87	V	-
89	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-
95	BG	-
96	P	-
97	R	-
98	SHIELD	-
99	L	-
100	P	-

Connector No.	E252
Connector Name	JOINT CONNECTOR-E01
Connector Type	IR124FW-J



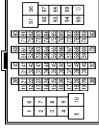
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	GR	-
7	GR	-
11	GR	-
13	L	-
14	P	-
17	L	-
18	P	-
21	P	-
22	P	-

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS26FW-W2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	T180MH-C516-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	- [With NAVI]
1	W	- [Without NAVI]
2	B	- [With NAVI]
2	B	- [Without NAVI]
3	R	- [With NAVI]
3	R	- [Without NAVI]
4	SHIELD	-
5	G	-
6	R	-
7	W	-
8	Y	-
9	BR	-

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AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

AUTO LIGHT SYSTEM

10	R	-	-	-
11	BR	-	-	-
12	BG	-	-	-
13	L	-	-	-
14	R	-	-	-
15	P	-	-	-
16	V	-	-	-
17	SB	-	-	-
18	V	-	-	-
20	BG	-	-	-
21	L	-	-	-
22	W	-	-	-
24	BR	-	-	-
25	Y	-	-	-
26	V	-	-	-
27	G	-	-	-
28	G	-	-	-
31	L	-	-	-
32	G	-	-	-
33	B	-	-	-
34	W	-	-	-
35	R	-	-	-
36	SHIELD	-	-	-
37	V	-	-	-
38	BG	-	-	-
41	BR	-	-	-
42	BG	-	-	-
43	BG	-	-	-
45	W	-	-	-
46	L	-	-	-
49	P	-	-	-
50	BR	-	-	-
51	Y	-	-	-
54	R	-	-	-
57	G	-	-	-
59	W	-	-	-
60	L	-	-	-
61	G	-	-	-
62	SB	-	-	-
63	G	-	-	-
64	B	-	-	-
65	W	-	-	-
66	R	-	-	-
67	SHIELD	-	-	-
68	R	-	-	-
69	Y	-	-	-
69	GR	-	-	-
70	LG	-	-	-
71	LG	-	-	-
72	Y	-	-	-

73	SB	-	-	-
74	BR	- [With ICC]	-	-
74	L	- [Without ICC]	-	-
75	G	- [With ICC]	-	-
76	GR	- [Without ICC]	-	-
76	W	- [With ICC]	-	-
77	P	- [Without ICC]	-	-
77	R	- [With ICC]	-	-
78	L	- [Without ICC]	-	-
79	W	- [With ICC]	-	-
80	SB	- [Without ICC]	-	-
81	SB	- [With ICC]	-	-
82	SB	-	-	-
83	V	-	-	-
84	G	-	-	-
85	L	-	-	-
86	P	-	-	-
87	W	-	-	-
89	GR	-	-	-
90	SHIELD	-	-	-
91	W	-	-	-
92	Y	-	-	-
93	BR	-	-	-
94	P	-	-	-
95	GR	-	-	-
97	L	-	-	-
98	SHIELD	-	-	-
99	V	-	-	-
100	SB	-	-	-

Connector No. M7
 Connector Name WIRE TO WIRE
 Connector Type TH80MW-CS1F-TM4

Terminal No.	Color Of Wire	Signal Name [Specification]
3	SB	- [With automatic drive positioner]
5	G	- [Without automatic drive positioner]
6	BG	-
7	W	-
8	B	-
11	V	-
12	SB	-
13	LG	-
14	Y	-
15	G	-
17	W	-
18	SB	-
19	LG	-
20	BR	-
21	SHIELD	-
22	Y	-
24	V	-
25	G	-
26	Y	-
27	B	- [With NAV]
27	R	- [Without NAV]
28	W	-
29	B	- [With NAV]
29	GR	- [Without NAV]
30	SHIELD	- [With NAV]
31	L	-
32	P	- [Without Blind Spot Warning]
32	Y	- [With Blind Spot Warning]
33	SB	-
34	L	-
35	P	-
36	L	-
37	P	-
38	P	-
39	Y	-
40	SB	-
41	SB	-
44	GR	-
46	LG	-
47	SB	-
48	BG	-
49	R	-
50	L	-
60	P	-
61	L	-
62	SHIELD	-

63	R	-
64	G	-
65	SHIELD	-
66	SB	-
67	V	-
68	LG	-
69	SHIELD	-
70	W	-
73	G	-
74	R	-
75	W	-
76	W	-
77	B	-
78	B	-
79	GR	-
83	BG	-
85	LG	-
86	R	-
87	Y	-
88	W	-
89	BR	-
90	BG	-
91	G	-
92	V	-
93	BR	-
94	V	-
95	Q	-
96	Q	-
98	W	-
99	R	-

Connector No. M24
 Connector Name DATA LINK CONNECTOR
 Connector Type BDI6FW

Terminal No. Color Of Wire Signal Name [Specification]

3	LG	-
4	B	-
5	B	-
6	L	-

AUTO LIGHT SYSTEM

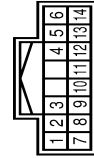
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

AUTO LIGHT SYSTEM

7	V	-
8	G	-
11	SB	-
14	P	-
16	Y	-

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	SB	OUTPUT 4
3	GR	FR WASHER(+)
4	G	IGN
5	L	OUTPUT 3
6	V	GROUND
7	V	GROUND
8	BG	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	INPUT 1
12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

Connector No.	M84
Connector Name	OPTICAL SENSOR
Connector Type	TM03FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	POWER
2	P	OUTPUT
3	B	GROUND

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS18-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	GR	-
4	SB	-
7	W	-
10	W	-
15	SB	- (Without BOSE system)
16	V	- (With BOSE system)
17	GR	- (Without BOSE system)
18	GR	- (With BOSE system)
19	W	-
26	BR	-
27	LG	-
28	Y	-
29	Y	-
30	V	-
31	R	-

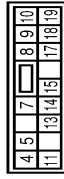
32	BR	-
33	G	-
51	R	-
55	W	-
56	B	-
57	R	-
58	G	-
59	SHIELD	-
60	V	-
61	LG	-
62	BR	-
63	L	-
64	LG	-
65	B	-
66	W	-
67	W	-
68	SHIELD	-
69	V	-
70	Y	-
71	SB	-
72	W	-
73	G	-
75	W	-
80	V	-
81	SB	-
82	V	-
83	P	-
84	R	-
85	L	-
86	BG	-
87	L	-
88	P	-
91	V	-
92	G	-
94	G	-
95	W	-
96	G	-
97	Y	-
98	BR	-
99	P	-
99	V	- (Without BOSE system)
99	V	- (With BOSE system)
100	SB	- (Without BOSE system)
100	SB	- (With BOSE system)

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BATT (E/L)
2	W	POWER WINDOW POWER SUPPLY(BAT)
3	Y	POWER WINDOW POWER SUPPLY(VRAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS18FW-OS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID LOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BATT (FUSE)
12	B	GROUND
13	V	GROUND
14	V	PUSH-BUTTON LOCK SW L/R GND
15	V	ACC MD
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT

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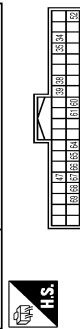
AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

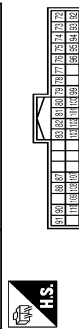
AUTO LIGHT SYSTEM

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FGY-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
34	SB	LUGGAGE ROOM ANT+
35	V	LUGGAGE ROOM ANT-
36	B	BACK DOOR ANT+
37	W	BACK DOOR ANT-
38	W	IGN RELAY (P/D/L/R) CONT
39	W	IGN RELAY (P/D/L/R) CONT
40	BR	PUSH SW
41	BR	PUSH SW
42	BR	STARTER RELAY CONT
43	BR	STARTER RELAY CONT
44	BR	STARTER RELAY CONT
45	BR	STARTER RELAY CONT
46	BR	STARTER RELAY CONT
47	Y	BACK DOOR OPENER REQUEST SW
48	V	1-KEY WARN BUZZER (ENG ROOM)
49	V	1-KEY WARN BUZZER (ENG ROOM)
50	EG	REAR WIPER STOP POSITION
51	R	BACK DOOR SW
52	R	BACK DOOR OPENER SW
53	GR	REAR TRAILER SW
54	GR	REAR TRAILER SW
55	GR	REAR TRAILER SW
56	R	REAR LIT DOOR SW
57	R	REAR LIT DOOR SW
58	R	REAR LIT DOOR SW
59	R	REAR LIT DOOR SW

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 -
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT-
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+

78	Y	ROOM ANT1 -
79	BR	ROOM ANT1 +
80	GR	MATS ANT AMP
81	W	MATS ANT AMP
82	R	IGN RELAY (F/B) CONT
83	R	KEYLESS ENTRY RECEIVER COMM
84	R	KEYLESS ENTRY RECEIVER COMM
85	BR	COMBI SW INPUT 5
86	V	COMBI SW INPUT 3
87	P	CAN-L
88	L	CAN-H
89	L	KEY SLOT ILL CONT
90	L	KEY SLOT ILL CONT
91	L	KEY SLOT ILL CONT
92	L	KEY SLOT ILL CONT
93	V	IGN IND CONT
94	V	PURGE RELAY CONT
95	EG	ACC RELAY CONT
96	GR	A/T SHIFT SELECTOR POWER SUPPLY
97	R	SHIFT P
98	R	SHIFT P
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
104	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
105	LG	COMBI SW INPUT 1
106	R	COMBI SW INPUT 4
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
113	SB	OPTICAL SENSOR
114	SB	STOP LAMP SW 1
115	P	STOP LAMP SW 2
116	P	STOP LAMP SW 2
117	P	STOP LAMP SW 2
118	P	DR DOOR UNLOCK SENSOR
119	SB	KEY SLOT SW
120	BR	IGN F/B
121	BR	IGN F/B
122	W	IGN F/B
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
125	LG	PASSENGER DOOR SW
126	BR	POWER WINDOW SW COMM
127	BR	POWER WINDOW SW COMM
128	W	PUSH-BUTTON IGNITION SW ILL POWER
129	W	PUSH-BUTTON IGNITION SW ILL POWER
130	GR	LOCK IND
131	GR	LOCK IND
132	GR	LOCK IND
133	GR	LOCK IND
134	GR	LOCK IND

137	BG	RECEIVER/SENSOR GND
138	Y	RECEIVER/SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SHIFT N/P
141	G	SECURITY IND LAMP CONT
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
147	SB	COMBI SW OUTPUT 4
148	SB	COMBI SW OUTPUT 4
149	SB	COMBI SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M125
Connector Name	WIRE TO WIRE
Connector Type	M03FW-LC



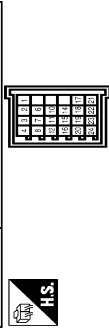
Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	WIRE TO WIRE
2	Y	WIRE TO WIRE
3	R	WIRE TO WIRE

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03MW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	WIRE TO WIRE
2	Y	WIRE TO WIRE
3	R	WIRE TO WIRE

Connector No.	M351
Connector Name	JOINT CONNECTOR-M04
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	EG	WIRE TO WIRE
2	B	WIRE TO WIRE
3	P	WIRE TO WIRE
4	L	WIRE TO WIRE
5	L	WIRE TO WIRE
6	B	WIRE TO WIRE
7	P	WIRE TO WIRE
8	L	WIRE TO WIRE
9	L	WIRE TO WIRE
10	W	WIRE TO WIRE
11	P	WIRE TO WIRE
12	L	WIRE TO WIRE
13	L	WIRE TO WIRE
14	B	WIRE TO WIRE
15	P	WIRE TO WIRE
16	V	WIRE TO WIRE
17	V	WIRE TO WIRE
18	B	WIRE TO WIRE
19	P	WIRE TO WIRE
20	L	WIRE TO WIRE
21	V	WIRE TO WIRE
22	B	WIRE TO WIRE
23	P	WIRE TO WIRE
24	L	WIRE TO WIRE

AUTO LIGHT SYSTEM

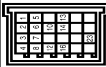
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

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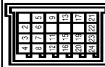
AUTO LIGHT SYSTEM

Connector No.	M357
Connector Name	JOINT CONNECTOR-M0B
Connector Type	NH24FG-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	BG	-
3	B	-
4	L	-
5	R	-
6	BG	-
7	B	-
8	L	-
10	B	-
12	L	-
13	BR	-
14	BG	-
16	G	-
23	B	-

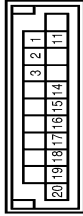
Connector No.	M360
Connector Name	JOINT CONNECTOR-M05
Connector Type	NH24EW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-

8	L	-
9	BR	-
11	P	-
12	L	-
13	BR	-
15	P	-
16	L	-
17	V	-
19	P	-
20	L	-
21	V	-
22	G	-
23	P	-
24	L	-

Connector No.	M382
Connector Name	JOINT CONNECTOR-M13
Connector Type	NH26RW-DC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	Y	-
3	Y	-
11	B	-
14	B	-
15	B	-
16	SHIELD	-
17	SHIELD	-
18	SHIELD	-
19	B	-
20	SHIELD	-

DAYTIME RUNNING LIGHT SYSTEM

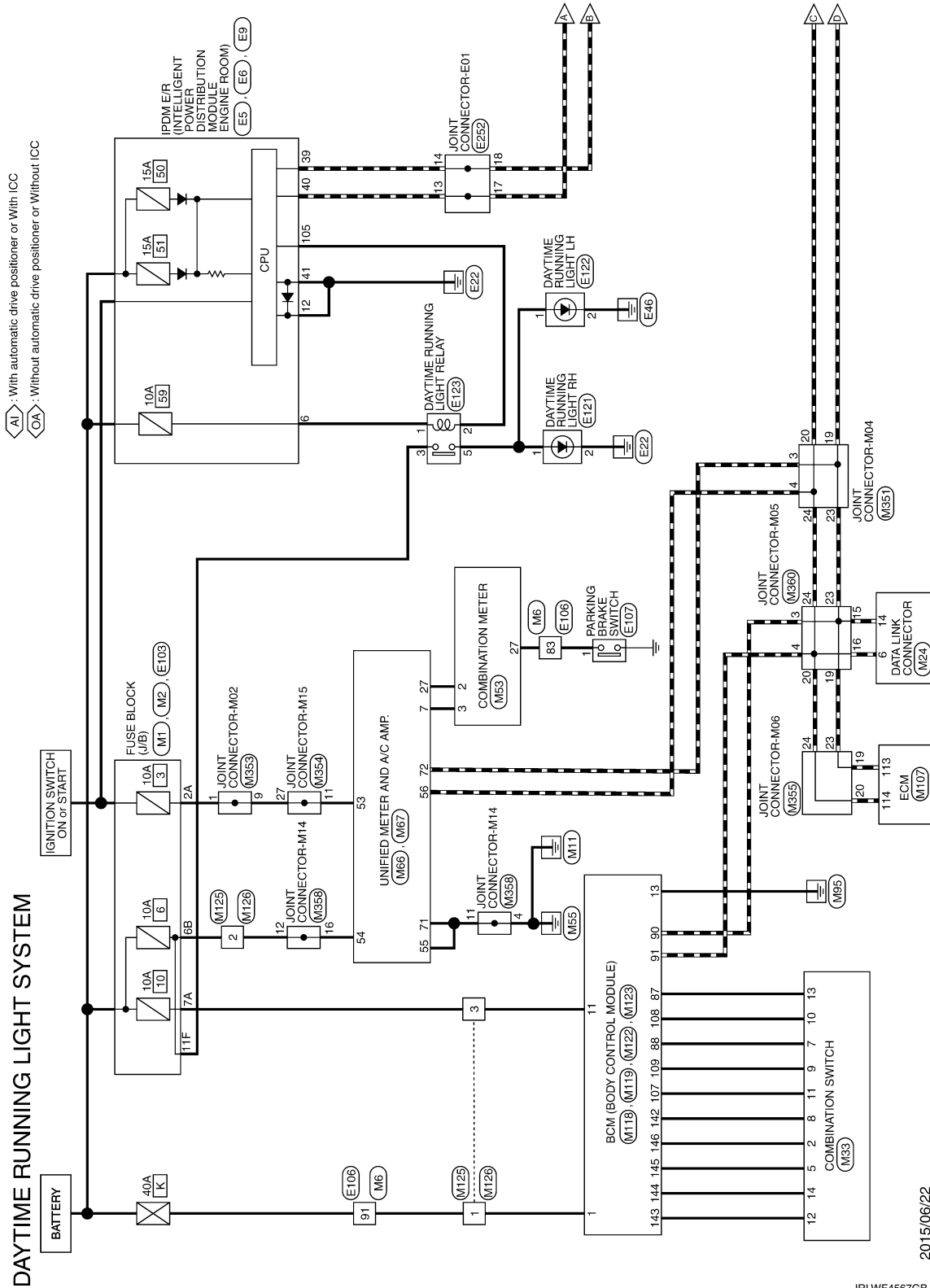
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[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Wiring Diagram - DAYTIME LIGHT SYSTEM -

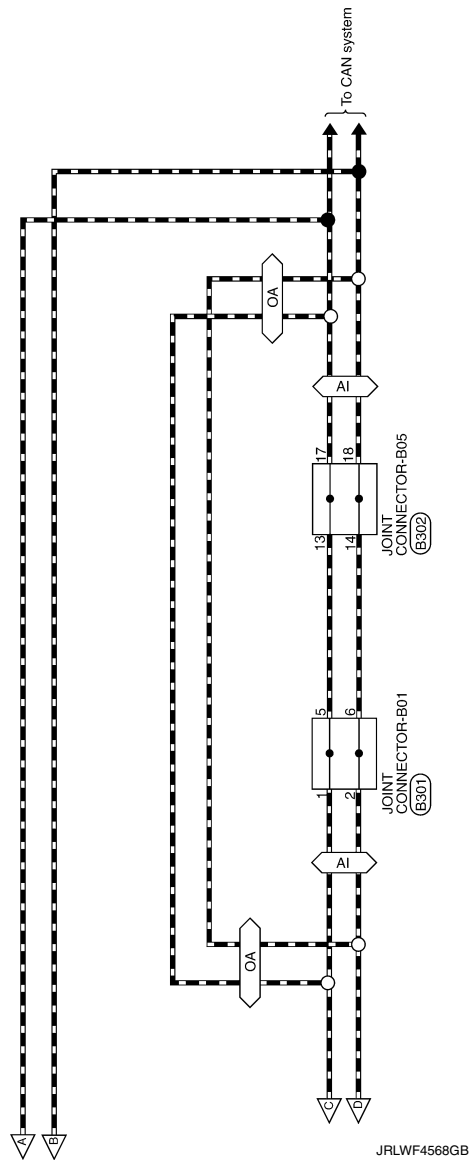
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DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]



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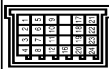
DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

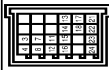
DAYTIME RUNNING LIGHT SYSTEM

Connector No.	E301
Connector Name	JOINT CONNECTOR-B01
Connector Type	NH24FB-J



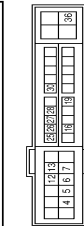
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	SB	-
4	LG	-
5	L	-
6	P	-
7	SB	-
8	LG	-
9	L	-
10	P	-
11	SB	-
12	LG	-
13	L	-
14	P	-
15	SB	-
16	Y	-
17	B	-
18	Y	-
19	B	-
20	SB	-
21	R	-
22	Y	-
23	B	-
24	SB	-

Connector No.	B302
Connector Name	JOINT CONNECTOR-B05
Connector Type	NH24FG-J



Terminal No.	Color Of Wire	Signal Name [Specification]
3	Y	-
4	L	-
7	Y	-
8	L	-
11	Y	-
12	L	-
13	L	-
14	P	-
15	Y	-
16	L	-
17	L	-
18	L	-
19	P	-
20	L	-
21	P	-
22	B	-
23	Y	-
24	L	-

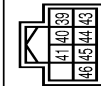
Connector No.	E5
Connector Name	FROM E: INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20PW-CS12-MA-1V



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

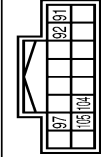
7	R	-
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	BG	-
28	L	-
30	GR	-
36	G	-

Connector No.	E6
Connector Name	FROM E: INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20PW-NH



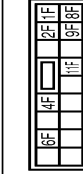
Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-
46	R	-

Connector No.	E9
Connector Name	FROM E: INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH16FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
91	P	-
92	BG	-
97	V	-
104	LG	-
105	SB	-

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
11F	W	-
1F	SB	-
2F	W	-
4F	G	-
8F	BR	-
9F	R	-

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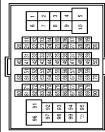
DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TR80FW-C516-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BL	-
2	W	-
3	B	-
4	GR	-
5	GR	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-
13	L	-
14	B	-
15	P	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	V	-
23	G	-
24	P	-
25	Y	-
26	V	-
27	W	-
28	G	-
29	W	-
30	M	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-

41	W	-
42	G	-
43	BR	-
45	W	-
46	L	-
50	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
63	W	-
64	B	-
65	G	-
66	R	-
67	SHIELD	-
68	Y	-
69	LG	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	-
74	L	- [Without LCC]
75	G	- [With LCC]
75	W	- [Without LCC]
76	W	- [With LCC]
76	Y	- [Without LCC]
77	P	-
77	R	- [With LCC]
78	BR	- [Without LCC]
78	L	- [With LCC]
79	L	- [Without LCC]
79	Y	- [With LCC]
80	SB	-
81	R	-
82	SB	-
83	BG	-
84	G	-
85	L	-
86	F	-
87	V	-
88	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-

95	BG	-
96	P	-
97	R	-
98	SHIELD	-
99	L	-
100	P	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TB01FW



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

Connector No.	E121
Connector Name	DAYTIME RUNNING LIGHT RH
Connector Type	FR02FB



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

Connector No.	E122
Connector Name	DAYTIME RUNNING LIGHT LH
Connector Type	FR02FB



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

Connector No.	E123
Connector Name	DAYTIME RUNNING LIGHT RELAY
Connector Type	MS02FL-M2-LG



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	SB	-
3	W	-
5	BG	-

A
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EXL

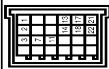
DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	E232
Connector Name	JOINT CONNECTOR-ED
Connector Type	NH4ZFW-J



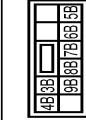
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	GR	-
7	GR	-
11	GR	-
13	L	-
14	P	-
17	L	-
18	P	-
21	L	-
22	P	-

Connector No.	M1
Connector Name	FUSE BLOCK (U/B)
Connector Type	NS06FW-M2



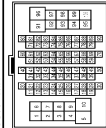
Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (U/B)
Connector Type	NS10FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
3B	P	-
4B	G	-
5B	BG	-
6B	Y	-
7B	P	-
8B	R	-
9B	SB	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TR80MR-CS (E-TM)

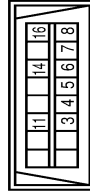


Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	- [With NAVI]
1	Y	- [Without NAVI]
2	B	- [Without NAVI]
3	R	- [Without NAVI]
4	B	- [With NAVI]
5	G	- [Without NAVI]
6	SHIELD	-
7	G	-
8	R	-
9	W	-
10	R	-

11	BR	-
12	BG	-
13	L	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	Y	-
23	P	-
24	BR	-
25	SB	-
26	V	-
27	G	-
28	G	-
31	L	-
32	G	-
33	B	-
34	W	-
35	R	-
36	SHIELD	-
37	V	-
38	BG	-
39	BR	-
40	W	-
42	BG	-
43	BG	-
45	W	-
46	L	-
50	P	-
51	BR	-
54	Y	-
57	G	-
59	W	-
60	L	-
61	G	-
62	SB	-
63	G	-
64	B	-
65	W	-
66	R	-
67	SHIELD	-
68	Y	-
69	GR	-
70	LG	-
71	LG	-
72	Y	-
73	SB	-

74	BR	- [With LCC]
74	L	- [Without LCC]
75	G	-
76	GR	- [Without LCC]
76	W	- [With LCC]
77	P	- [Without LCC]
77	R	- [With LCC]
78	L	- [Without LCC]
78	R	- [With LCC]
79	W	- [Without LCC]
79	Y	- [With LCC]
80	SB	-
81	SB	-
82	SB	-
83	V	-
84	G	-
85	L	-
86	P	-
87	W	-
89	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	BR	-
94	P	-
95	GR	-
97	W	-
98	SHIELD	-
99	V	-
100	SB	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-

DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

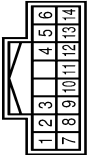
[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	TH4QFW-NH



Connector No.	M53
Connector Name	COMBINATION SWITCH
Connector Type	TH1BFW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	SB	OUTPUT 4
3	GR	FR WASHER(+)
4	G	IGN
5	B	OUTPUT 3
6	V	OUTPUT 2
7	V	INPUT 3
8	BG	OUTPUT 5
9	Y	INPUT 5
10	R	INPUT 4
11	LG	INPUT 1
12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

Connector No.	M55
Connector Name	COMBINATION METER
Connector Type	TH4QFW-NH



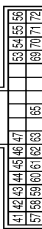
Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BATTERY POWER SUPPLY
2	LG	COMMUNICATION SIGNAL (METER->METER)
3	GR	COMMUNICATION SIGNAL (METER->METER)
4	B	GROUND
5	P	ALTERNATOR SIGNAL
6	P	AIR BAG SIGNAL
7	BR	SECURITY SIGNAL
10	G	GROUND
15	B	ILL GND
16	B	METER CONTROL SWITCH GROUND
19	B	ILL GND
20	R	ILL
21	BG	GROUND
22	B	GROUND
23	BR	COMMUNICATION SIGNAL (METER->METER)
24	X	COMMUNICATION SIGNAL (METER->LCD)
25	X	VEHICLE SPEED SIGNAL (R-PULSE)
26	V	PARKING BRAKE SWITCH SIGNAL
27	V	VEHICLE SPEED SIGNAL (DRIVER SIDE)
28	W	VEHICLE SPEED SIGNAL (PASSENGER SIDE)
29	SB	SEAT BELT SWITCH SIGNAL (DRIVER SIDE)
30	G	SEAT BELT SWITCH SIGNAL (PASSENGER SIDE)
31	L	WASHER LEVEL SWITCH SIGNAL
33	B	ILLUMINATION CONTROL SIGNAL
36	LG	SELECT SWITCH SIGNAL
37	SB	ENTER SWITCH SIGNAL
38	L	TRIP A/B RESET SWITCH SIGNAL
39	P	ILLUMINATION CONTROL SWITCH SIGNAL (C)
40	BG	ILLUMINATION CONTROL SWITCH SIGNAL (G)

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH4QFW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
5	W	MANUAL MODE SHIFT UP SIGNAL
7	GR	COMMUNICATION SIGNAL (AMP->METER)
8	L	VEHICLE SPEED SIGNAL (2-PULSE)
9	SB	SEAT BELT SWITCH SIGNAL (DRIVER SIDE)
10	W	MANUAL MODE SIGNAL
11	G	NON-MANUAL MODE SIGNAL
14	BR	COMMUNICATION SIGNAL (LCD->AMP.)
20	L	IGN ON/OFF SIGNAL
23	Y	AT SNOW SWITCH SIGNAL
25	V	MANUAL MODE SHIFT DOWN SIGNAL
27	LG	COMMUNICATION SIGNAL (METER->AMP.)
28	R	VEHICLE SPEED SIGNAL (R-PULSE)
30	V	PARKING BRAKE SWITCH SIGNAL
34	Y	COMMUNICATION SIGNAL (METER->LCD)
38	P	BLOWER MOTOR CONTROL SIGNAL

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH3ZPW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	ACC POWER SUPPLY
42	Y	FUEL LEVEL SENSOR SIGNAL
43	R	INTAKE SENSOR SIGNAL
44	LG	IN-VEHICLE SENSOR SIGNAL
45	P	AMBIENT SENSOR SIGNAL

46	BG	SUNLOAD SENSOR SIGNAL
47	G	EMERGENCY flasher indicator sensor signal
53	G	IGNITION POWER SUPPLY
54	Y	BATTERY POWER SUPPLY
55	B	GROUND
56	L	CAN-H
57	W	BRAKE FLUID LEVEL SWITCH SIGNAL
58	BR	FUEL LEVEL SENSOR GROUND
59	GR	INTAKE SENSOR GROUND
60	L	IN-VEHICLE SENSOR GROUND
61	BR	AMBIENT SENSOR GROUND
62	SB	SUNLOAD SENSOR GROUND
63	R	ECV SIGNAL
65	BG	A-CAN SIGNAL
69	R	ECV SIGNAL
70	R	EACH DOOR MOTOR POWER SUPPLY
71	B	GROUND
72	P	CAN-L

Connector No.	M107
Connector Name	ECM
Connector Type	Br24FGY-R2R-R-LH-Z



Terminal No.	Color Of Wire	Signal Name [Specification]
97	R	ACCELERATOR PEDAL POSITION SENSOR 1
98	P	ACCELERATOR PEDAL POSITION SENSOR 2 (Without ICC)
98	Y	ACCELERATOR PEDAL POSITION SENSOR 2 (With ICC)
99	O	SENSOR POWER SUPPLY (With ICC)
99	L	SENSOR POWER SUPPLY (Without ICC)
100	W	SENSOR GROUND
101	SB	ASD/DOY STEERING SWITCH
102	CG	SENSOR POWER SUPPLY (Without ICC)
103	O	SENSOR POWER SUPPLY (With ICC)
103	G	SENSOR GROUND (With ICC)
104	BR	SENSOR GROUND (Without ICC)
104	GR	REFRIGERANT PRESS SENSOR
105	L	FUEL TANK TEMPERATURE SENSOR
106	W	FUEL TANK TEMPERATURE SENSOR
107	BG	SENSOR POWER SUPPLY
108	Y	SENSOR GROUND

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

EXL

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DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

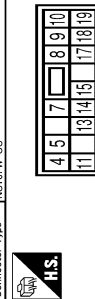
Terminal No.	Color Of Wire	Signal Name [Specification]
109	G	PMP SIGNAL
110	R	ENGINE SPEED OUTPUT SIGNAL
112	B	SENSOR GROUND
113	P	CAN COMMUNICATION LINE
114	L	CAN COMMUNICATION LINE
117	V	DATA LINK CONNECTOR
121	LG	EVAP CANISTER VENT CONTROL VALVE
122	P	STOP LAMP SWITCH
123	B	ECM GROUND
124	B	ECM GROUND
125	R	POWER SUPPLY FOR ECM
126	BR	ASCD/EC BRAKE SWITCH
127	P	ECM GROUND
128	B	ECM GROUND

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	W	POWER WINDOW POWER SUPPLY(BAT)
3	Y	POWER WINDOW POWER SUPPLY(BRAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	H01BFW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GROUND
14	W	PUSH-BUTTON IGNITION SW ILL OND
15	V	ACD IND
16	W	TURNSIGNAL (FRONT)
17	W	TURNSIGNAL (LH FRONT)
18	BG	TURNSIGNAL (RH FRONT)
19	V	INT ROOM LAMP CONT

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANTZ -
73	G	ROOM ANTZ +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	WATS ANT1 AMP
81	W	WATS ANT2 AMP
82	R	IGN RELAY (F/L) CONT
83	X	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL CONT
93	V	ON IND
94	Y	PUDDLE LAMP CONT

Terminal No.	Color Of Wire	Signal Name [Specification]
95	BG	ACC RELAY CONT
98	GR	A/T SHIFT SELECTOR POWER SUPPLY
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
112	B	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	W	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	BG	RECEIVER SENSOR GND
138	Y	RECEIVED SENSOR POWER SUPPLY
139	L	THE PRESSURE RECEIVER COMM
140	GR	SECURITY IND LAMP CONT
142	G	COMBI SW OUTPUT 5
143	BG	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M125
Connector Name	WIRE TO WIRE
Connector Type	M03FW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03MM-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

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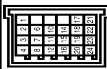
DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

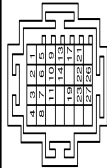
DAYTIME RUNNING LIGHT SYSTEM

Connector No.	M351
Connector Name	JOINT CONNECTOR-M04
Connector Type	NH24FW-J



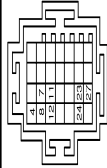
Terminal No.	Color Of Wire	Signal Name [Specification]
1	BG	-
2	B	-
3	P	-
4	L	-
6	B	-
7	P	-
8	L	-
10	W	-
11	P	-
12	L	-
14	B	-
15	P	-
16	V	-
18	B	-
19	P	-
20	V	-
21	B	-
22	P	-
23	P	-
24	L	-

Connector No.	M353
Connector Name	JOINT CONNECTOR-M02
Connector Type	SGA28FDG7-J



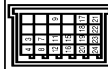
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	R	-
3	V	-
4	BG	-
5	G	-
6	R	-
7	V	-
8	BG	-
9	G	-
10	R	-
11	V	-
13	W	-
14	R	-
16	W	-
21	W	-
22	V	-
23	V	-
26	R	-
27	G	-

Connector No.	M354
Connector Name	JOINT CONNECTOR-M15
Connector Type	SGA28FDG7-J



Terminal No.	Color Of Wire	Signal Name [Specification]
4	W	-
7	W	-
8	B	-
11	G	-
12	G	-
23	W	-
24	B	-
27	G	-

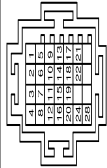
Connector No.	M355
Connector Name	JOINT CONNECTOR-M06
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
3	P	-
4	L	-
7	P	-
8	L	-
9	B	-
11	P	-
12	L	-
15	P	-
16	L	-
17	P	-
18	V	-
19	P	-

20	L	-
21	P	-
22	V	-
23	P	-
24	L	-

Connector No.	M358
Connector Name	JOINT CONNECTOR-M14
Connector Type	SGA28FSB-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	- [Without BOSE system]
1	V	- [With BOSE system]
2	LG	- [With BOSE system]
2	R	- [Without BOSE system]
3	B	-
4	B	-
5	BY	- [Without BOSE system]
5	BY	- [With BOSE system]
6	LG	- [With BOSE system]
6	R	- [Without BOSE system]
7	B	-
8	B	-
9	L	-
10	W	-
11	B	-
12	Y	-
13	L	-
14	W	-
15	BR	-
16	Y	-
17	W	-
18	W	-
19	BR	-
20	BR	-
21	L	-
22	W	-
24	BR	-
28	BR	-

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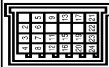
DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	M360
Connector Name	JOINT CONNECTOR-M360
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-
8	L	-
9	BR	-
11	P	-
12	L	-
13	BR	-
18	P	-
17	V	-
19	V	-
20	L	-
21	V	-
22	G	-
23	P	-
24	L	-

JRLWF4575GB

FRONT FOG LAMP SYSTEM

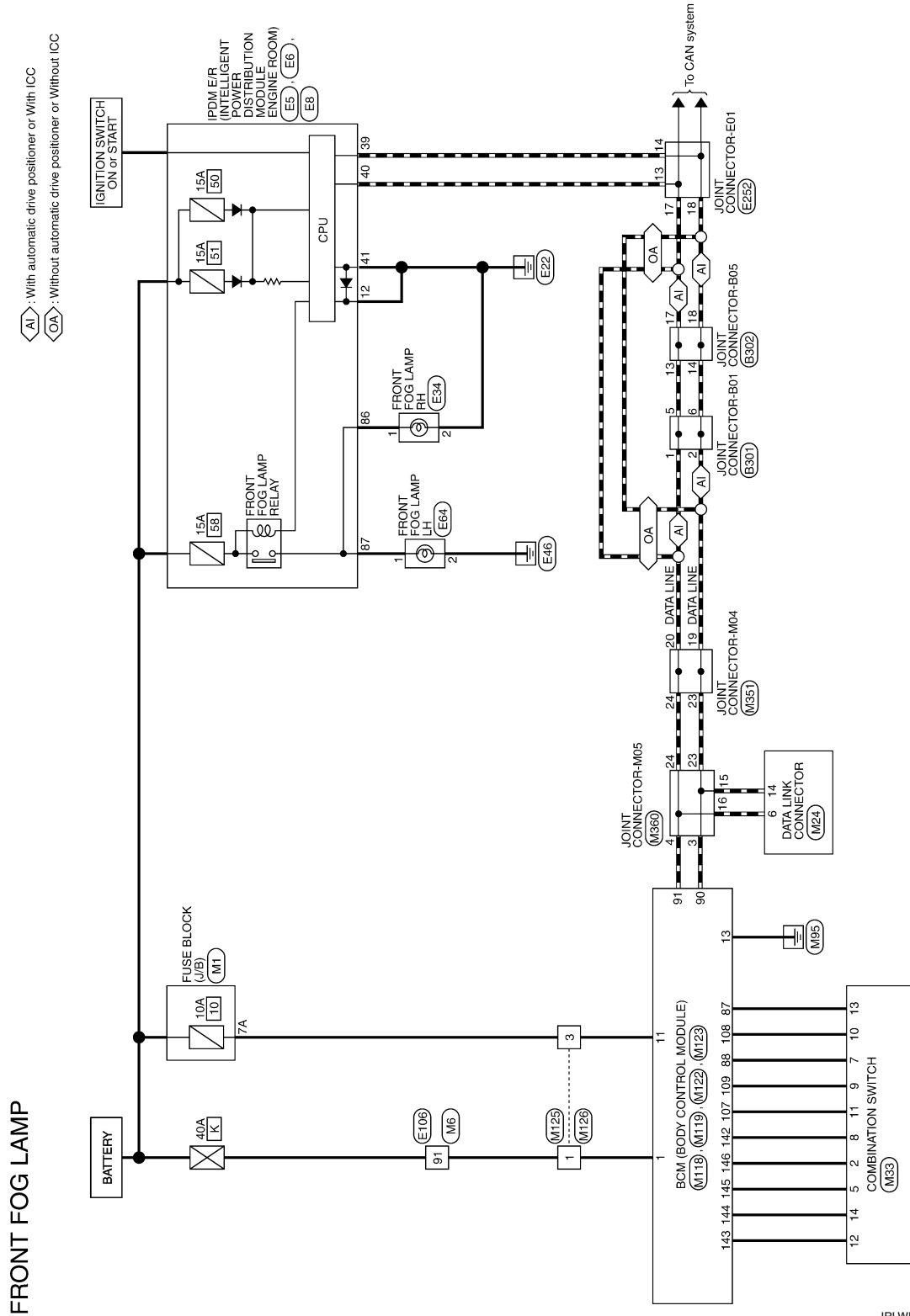
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

FRONT FOG LAMP SYSTEM

Wiring Diagram - FRONT FOG LAMP -

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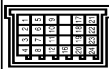
FRONT FOG LAMP SYSTEM

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[XENON TYPE]

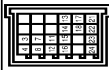
FRONT FOG LAMP

Connector No.	E330
Connector Name	JOINT CONNECTOR-B01
Connector Type	NH24FB-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	SB	-
4	LG	-
5	L	-
6	P	-
7	SB	-
8	LG	-
9	L	-
10	P	-
11	SB	-
12	LG	-
13	L	-
14	P	-
15	SB	-
16	Y	-
17	B	-
18	Y	-
19	B	-
20	SB	-
21	R	-
22	Y	-
23	B	-
24	SB	-

Connector No.	B302
Connector Name	JOINT CONNECTOR-B05
Connector Type	NH24FG-J



Terminal No.	Color Of Wire	Signal Name [Specification]
3	Y	-
4	L	-
7	Y	-
8	L	-
11	Y	-
12	L	-
13	L	-
14	P	-
15	Y	-
16	L	-
17	L	-
18	P	-
19	L	-
20	P	-
21	R	-
22	B	-
23	Y	-
24	L	-

Connector No.	E5
Connector Name	FROM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20PW-CS12-IM-1V



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

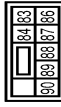
7	R	-
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	BG	-
28	L	-
30	GR	-
36	G	-

Connector No.	E6
Connector Name	FROM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20PW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-
46	R	-

Connector No.	E8
Connector Name	FROM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	NS20FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
83	EG	-
84	V	-
86	W	-
87	L	-
88	GR	-
89	BR	-
90	P	-

Connector No.	E34
Connector Name	FRONT FOG LAMP RH
Connector Type	FH202FB



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

FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

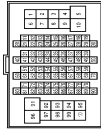
FRONT FOG LAMP

Connector No.	E54
Connector Name	FRONT FOG LAMP LH
Connector Type	F14202FB



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

Connector No.	E108
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-C516-TM4

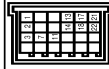


Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	GR	-
5	GR	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	SG	-
11	SB	-
12	B/G	-
13	L	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	V	-

20	B/G	-
21	L	-
22	V	-
23	Y	-
24	P	-
25	Y	-
26	V	-
27	W	-
28	G	-
31	B/G	-
32	W	-
33	B	-
34	R	-
35	C	-
36	SHIELD	-
37	V	-
38	BR	-
39	B/G	-
41	W	-
42	G	-
43	BR	-
45	W	-
49	L	-
50	P	-
51	L	-
54	B/G	-
57	BR	-
60	L	-
61	G	-
62	SB	-
63	W	-
64	B	-
65	G	-
66	R	-
67	SHIELD	-
68	Y	-
69	LG	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	-
75	L	-
76	W	-
77	P	-

78	BR	-
79	L	-
80	SB	-
81	R	-
82	SB	-
83	B/G	-
84	G	-
85	L	-
86	P	-
87	V	-
88	GR	-
89	SHIELD	-
90	V	-
92	V	-
93	V	-
94	LG	-
95	B/G	-
96	P	-
97	R	-
98	SHIELD	-
99	L	-
100	P	-

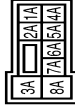
Connector No.	E252
Connector Name	JOINT CONNECTOR-E01
Connector Type	NR24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	GR	-
3	GR	-
7	GR	-
11	GR	-
13	L	-
14	P	-
17	L	-
18	P	-
21	L	-

22	P	-
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Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS58FM-M2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-C516-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	B	-
3	B	-
4	SHIELD	-
5	G	-
6	R	-

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FRONT FOG LAMP SYSTEM

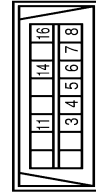
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

FRONT FOG LAMP	
7	W
8	Y
9	BR
10	R
11	BR
12	BG
13	L
14	R
15	P
16	V
17	SB
18	V
19	BG
20	BG
21	L
22	W
23	P
24	BR
25	Y
26	V
27	G
28	G
31	L
32	G
33	B
34	W
35	SHIELD
37	V
38	BG
39	BR
41	W
42	BG
43	BG
45	W
49	L
50	P
51	BR
54	Y
57	G
58	W
60	G
61	G
62	SB
63	B
64	B
65	W
66	R
67	SHIELD
68	Y
69	GR

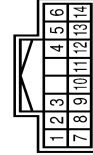
70	LG
71	LG
72	Y
73	SB
74	BR
75	L
76	GR
77	W
77	P
77	R
78	L
78	R
79	W
79	X
80	SB
81	SB
82	SB
83	V
84	G
85	L
86	P
87	W
89	GR
90	SHIELD
91	W
92	BR
93	P
95	GR
96	W
97	L
98	SHIELD
99	V
100	SB

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD1BFW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	LG	-
3	LG	-
4	LG	-
5	B	-
6	L	-
7	V	-
8	G	-
11	SB	-
14	P	-
16	Y	-

Connector No.	M23
Connector Name	COMBINATION SWITCH
Connector Type	1H1BFW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	SB	FR WASHER(+)
3	GR	FR WASHER(+)
4	G	IGN
5	L	OUTPUT 3
6	B	GROUND
7	V	INPUT 3
8	BG	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	INPUT 1

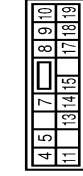
12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F.L)
2	W	POWER WINDOW POWER SUPPLY(BAT)
3	Y	POWER WINDOW POWER SUPPLY(RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS1BFP-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GROUND
14	W	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)

FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

FRONT FOG LAMP

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Wire	Signal Name [Specification]
72	R	ROOM ANTZ -
73	G	ROOM ANTZ +
74	SB	PASSENGER DOOR ANTI-
75	GR	PASSENGER DOOR ANTI+
76	V	DRIVER DOOR ANTI-
77	LG	DRIVER DOOR ANTI+
78	Y	ROOM ANTI-
79	BR	ROOM ANTI+
80	GR	HATS ANTI AMP.
81	W	HATS ANTI AMP.
82	Y	IGN RELAY LAMP CONT
83	V	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	CAN-L
90	P	CAN-H
91	L	CAN-H
92	LG	KEY SLOT TILL CONT
93	V	ON IND.
94	Y	PUDDLE LAMP CONT
95	EG	ACC RELAY CONT
96	GR	A/T SHIFT SELECTOR POWER SUPPLY
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
112	BF	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND.
137	BG	RECEIVER SENSOR GND
138	Y	RECEIVER SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SECURITY IND LAMP CONT
142	CG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFROGGER RELAY CONT

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03FW-LC



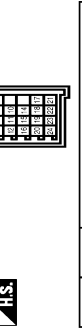
Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	R	-
3	R	-

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03MM-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M251
Connector Name	JOINT CONNECTOR-M04
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	EG	-
2	BF	-
3	P	-
4	L	-
6	B	-
7	P	-
8	L	-
10	W	-
11	P	-
12	L	-
14	B	-
15	P	-
16	L	-
17	B	-
18	B	-
19	P	-
20	L	-
21	V	-
22	B	-
23	P	-
24	L	-

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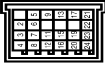

FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

FRONT FOG LAMP

Connector No.	M360
Connector Name	JOINT CONNECTOR-M36
Connector Type	NH24FW-J

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-
8	L	-
9	BR	-
11	P	-
12	L	-
13	BR	-
18	P	-
17	V	-
19	P	-
20	L	-
21	V	-
22	G	-
23	P	-
24	L	-

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TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

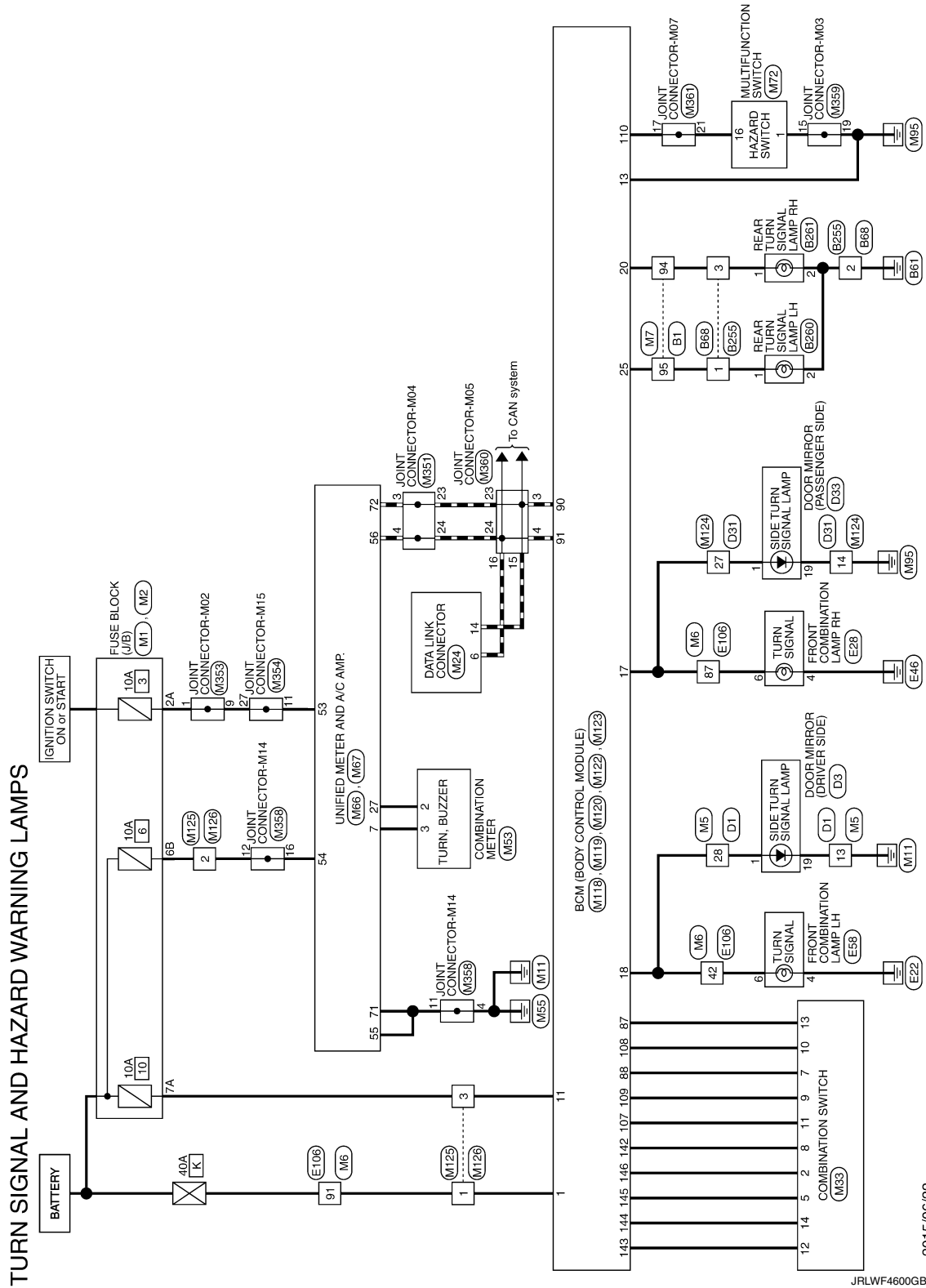
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

Wiring Diagram - TURN AND HAZARD WARNING LAMPS -

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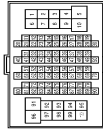
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-
5	G	-
6	SB	-
7	V	-
8	L	-
11	V	-
12	SB	-
13	LG	-
14	GR	-
15	LG	-
16	R	-
17	W	-
18	B	-
19	LG	-
20	BR	-
21	SHIELD	-
22	Y	-
24	P	-
25	G	-
26	Y	-
27	B	- [With NAVI]
27	BR	- [Without NAVI]
28	R	- [With NAVI]
28	W	- [Without NAVI]
29	L	- [With NAVI]
29	L	- [Without NAVI]
30	SHIELD	- [With neutral view monitor]
31	L	- [Without second view monitor]
31	SHIELD	- [With NAVI] [Without Blind Spot Warning]
32	W	- [Without NAVI] [Without Blind Spot Warning]
32	Y	- [With NAVI] [Without Blind Spot Warning]
33	SB	- [With NAVI] [With Blind Spot Warning]
34	L	-
35	P	-

36	L	-
37	P	-
38	P	-
39	Y	-
40	SB	-
44	Y	-
45	GR	-
46	LG	-
47	SB	-
48	BG	-
49	R	-
50	L	-
50	L	-
51	L	-
52	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	W	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
73	SB	-
74	L	-
75	W	-
76	GR	-
77	R	-
78	P	-
79	GR	-
83	BG	-
85	V	-
86	LG	-
87	Y	-
89	R	-
89	B	-
90	BG	-
91	G	-
92	BR	-
93	G	-
94	SB	-
95	G	-
96	Y	-
98	W	-
99	GR	-

Connector No.	B68
Connector Name	WIRE TO WIRE
Connector Type	RH08MB



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	B	-
3	SB	-
4	R	- [With NAVI]
4	W	- [Without NAVI]
5	Y	-
6	B	-
6	BR	- [With NAVI]
7	L	- [Without NAVI]
7	W	- [With NAVI]
8	G	-

Connector No.	B245
Connector Name	WIRE TO WIRE
Connector Type	RH08FB



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

Connector No.	B260
Connector Name	REAR TURN SIGNAL LAMP LH
Connector Type	HS02FC-W



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

Connector No.	B261
Connector Name	REAR TURN SIGNAL LAMP RH
Connector Type	HS02FC-W



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

JRLWF4601GB

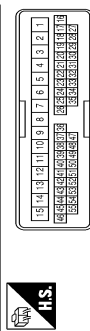
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

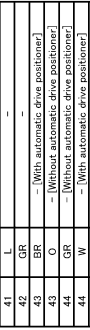
TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



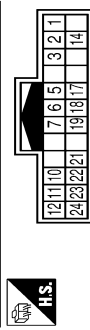
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	W	-
4	V	-
5	L	-
6	O	-
7	GR	-
8	W	-
9	O	-
10	BR	-
11	P	-
12	LG	-
13	G	-
14	W	-
15	W	-
16	SB	-
17	LG	-
18	SHIELD	-
19	P	-
20	W	-
21	O	-
22	P	-
23	BR	-
24	V	-
25	GR	-
26	V	-
27	BR	-
28	LG	-
29	LG	-
30	G	-
31	W	-
32	G	-
33	L	-
34	SB	-
35	R	-
36	LG	-

37	R	-
38	P	-
39	O	-
40	BR	-
41	L	-
42	GR	-
43	BR	-
44	O	-
45	G	-
46	V	-
47	R	-
48	GR	-
49	SHIELD	-
50	SHIELD	-
51	B	-
52	R	-
53	SB	-
54	O	-
55	Y	-



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	W	-
4	V	-
5	L	-
6	O	-
7	GR	-
8	W	-
9	O	-
10	BR	-
11	P	-
12	LG	-
13	G	-
14	W	-
15	W	-
16	SB	-
17	LG	-
18	SHIELD	-
19	P	-
20	W	-
21	O	-
22	P	-
23	BR	-
24	V	-
25	GR	-
26	V	-
27	BR	-
28	LG	-
29	LG	-
30	G	-
31	W	-
32	G	-
33	L	-
34	SB	-
35	R	-
36	LG	-

Connector No.	D3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH24MP-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	BR	-
3	O	-
4	SB	-
5	SB	-
6	SB	-
7	W	-
10	G	-
11	P	-
12	O	-
14	LG	-
17	SHIELD	-

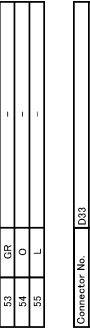
18	LG	-
19	B	-
21	GR	-
22	BR	-
23	Y	-
24	V	-



Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15

Terminal No.	Color Of Wire	Signal Name [Specification]
7	R	-
8	BR	-
9	V	-
12	P	-
13	G	-
14	B	-
15	W	-
16	BR	-
17	B	-
18	R	-
19	B	-
20	G	-
21	BR	-
22	V	-
23	P	-
24	W	-
25	SB	-
26	R	-
27	O	-
33	O	-
34	GR	-
35	G	-
36	R	-
37	G	-
43	Y	-
44	V	-

45	P	-
46	W	-
47	SHIELD	-
52	G	-
53	GR	-
54	O	-
55	L	-



Connector No.	D33
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	TH24MP-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
3	W	-
5	G	-
6	R	-
9	G	-
10	G	-
11	GR	-
12	O	-
17	SHIELD	-
18	B	-
19	B	-
21	P	-
22	Y	-
23	W	-
24	V	-

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EXL

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	E28
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS20FB-PR



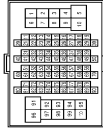
Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
5	BG	-
6	V	-
7	BR	-
8	P	-

Connector No.	E28
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS20FB-PR



Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
6	BG	-
7	V	-
8	P	-

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4

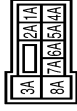


Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	GR	-
5	GR	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-
13	E	-
14	E	-
15	P	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	V	-
23	G	-
24	P	-
25	Y	-
26	V	-
27	W	-
28	G	-
31	BG	-
32	W	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-

41	W	-
42	G	-
43	BR	-
45	W	-
49	L	-
50	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
80	LG	-
81	G	-
82	SB	-
84	B	-
85	G	-
66	R	-
67	SHIELD	-
68	Y	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	-
75	L	-
76	W	-
77	P	-
78	BR	-
79	L	-
80	SB	-
81	R	-
82	SB	-
83	BG	-
84	G	-
86	P	-
87	V	-
88	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-

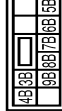
95	BG	-
96	P	-
97	R	-
98	SHIELD	-
99	L	-
100	P	-

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS26FM-M2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	R	-
5A	Y	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS10FM-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
3B	P	-
4B	G	-
5B	BG	-
6B	Y	-

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

70	LG	-
71	LG	-
72	Y	-
73	SB	-
74	L	- [With ICC]
74	L	- [Without ICC]
75	G	-
76	GR	- [With ICC]
76	W	- [Without ICC]
77	P	- [With ICC]
77	R	- [Without ICC]
78	L	- [With ICC]
78	R	- [Without ICC]
79	V	- [With ICC]
79	V	- [Without ICC]
80	SB	- [With ICC]
81	SB	-
82	SB	-
83	V	-
84	G	-
85	L	-
86	P	-
87	W	-
89	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	EG	-
94	EG	-
95	GR	-
96	W	-
97	L	-
98	SHIELD	-
99	V	-
100	SB	-

7	W	-
8	Y	-
9	BR	-
10	R	-
11	BR	-
12	BG	-
13	L	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	V	-
23	P	-
24	BR	-
25	Y	-
26	V	-
27	G	-
28	G	-
31	L	-
32	G	-
33	B	-
34	W	-
35	R	-
36	SHIELD	-
37	BG	-
38	BG	-
39	BR	-
41	W	-
42	BG	-
43	BG	-
45	W	-
49	L	-
50	P	-
51	BR	-
54	Y	-
57	G	-
59	W	-
60	L	-
61	G	-
62	SB	-
63	G	-
64	B	-
65	W	-
66	R	-
67	SHIELD	-
68	Y	-
69	GR	-

32	BR	-
33	SB	-
34	Y	-
35	P	-
36	LG	-
37	BR	-
38	P	-
39	BG	-
40	SB	-
41	L	-
42	R	-
43	BR	-
44	V	-
45	G	-
46	SB	- [With automatic drive restorer]
46	SB	- [Without automatic drive restorer]
47	R	-
48	G	-
49	P	-
50	SHIELD	-
51	B	-
52	R	-
53	V	-
54	LG	-
55	SB	-

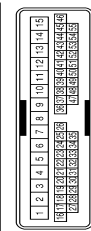
Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CSE-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	- [With NAVI]
1	Y	- [Without NAVI]
2	B	- [With NAVI]
2	R	- [Without NAVI]
3	B	- [With NAVI]
3	G	- [Without NAVI]
4	SHIELD	-
5	G	-
6	R	-

76	P	-
86	R	-
98	SB	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CSE15



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	BR	-
4	P	-
5	L	-
6	R	-
7	R	-
8	W	-
9	G	-
10	L	-
11	G	-
12	V	-
13	B	-
14	Y	-
15	W	-
16	R	-
17	B	-
18	SHIELD	-
19	G	-
20	L	-
21	LG	-
22	G	-
24	Y	-
25	GR	-
26	GR	-
27	W	-
28	V	-
29	Y	-
30	Y	-
31	R	-

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

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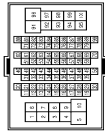
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS 16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	SB	-- [With automatic drive positioner]
4	SB	-- [Without automatic drive positioner]
5	G	--
6	BG	--
7	W	--
8	B	--
11	V	--
12	SB	--
13	LG	--
14	Y	--
15	G	--
16	R	--
18	SB	--
19	LG	--
20	BR	--
21	SHIELD	--
22	Y	--
24	V	--
25	G	--
26	Y	--
27	R	-- [With NAVI]
27	R	-- [Without NAVI]
28	W	--
29	B	-- [Without NAVI]
30	SHIELD	-- [With NAVI]
31	L	--
32	Y	-- [Without Blind Spot Warning]
32	Y	-- [With Blind Spot Warning]
33	SB	--
34	L	--
35	P	--
36	L	--
37	P	--
38	P	--

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD1BFV



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	--
4	B	--
5	B	--
6	L	--
7	V	--
8	G	--
11	SB	--
14	P	--
16	Y	--

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH1BFV-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	GR	FR WASHER(+)
4	G	IGN
5	L	OUTPUT 3
6	B	GROUND
7	V	INPUT 3
8	BG	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	INPUT 1

12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

Connector No.	M33
Connector Name	COMBINATION METER
Connector Type	TH40FP-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BATTERY POWER SUPPLY
2	LG	COMMUNICATION SIGNAL (METER->AMP)
3	GR	COMMUNICATION SIGNAL (AMP->METER)
5	B	GROUND
6	P	ALTERNATOR SIGNAL
7	BR	AIR BAG SIGNAL
10	G	SECURITY SIGNAL
13	B	ILL GND
16	B	METER CONTROL SWITCH GROUND
19	B	ILL GND
20	R	ILL
21	BG	IGNITION SIGNAL
22	B	GROUND
24	BR	COMMUNICATION SIGNAL (LCD->AMP)
25	Y	COMMUNICATION SIGNAL (AMP->LCD)
26	R	VEHICLE SPEED SIGNAL (8-PULSED)
27	V	PARKING BRAKE SWITCH SIGNAL
28	W	BRAKE FLUID LEVEL SWITCH SIGNAL
29	SB	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
30	G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
31	L	WASHER LEVEL SWITCH SIGNAL
32	GR	ILLUMINATION CONTROL SWITCH SIGNAL
36	LG	SELECT SWITCH SIGNAL
37	SB	ENTER SWITCH SIGNAL
38	L	TRIP A/B RESET SWITCH SIGNAL
39	P	ILLUMINATION CONTROL SWITCH SIGNAL (-)
40	BG	ILLUMINATION CONTROL SWITCH SIGNAL (+)

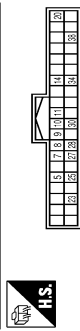
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	M66
Connector Name	UNIFIED METER AND A. C. AMP.
Connector Type	TH40FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
5	L	MANUAL MODE SHIFT UP SIGNAL
7	GR	COMMUNICATION SIGNAL (AMP->METER)
8	L	VEHICLE SPEED SIGNAL (P-PULSE)
9	SB	SEAT BELT BRACKE SWITCH SIGNAL (DRIVER SIDE)
10	W	MANUAL MODE SIGNAL
11	G	NON-MANUAL MODE SIGNAL
14	BR	COMMUNICATION SIGNAL (LCD->AMP)
20	L	IGN ON/OFF SIGNAL
23	Y	AT SNOW SWITCH SIGNAL
25	V	MANUAL MODE SHIFT DOWN SIGNAL
27	LG	COMMUNICATION SIGNAL (METER->AMP)
28	R	VEHICLE SPEED SIGNAL (P-PULSE)
30	Y	WARNING BRAKE SWITCH SIGNAL
31	Y	COMMUNICATION SIGNAL (AMP->LCD)
38	P	BLOWER MOTOR CONTROL SIGNAL

Connector No.	M67
Connector Name	UNIFIED METER AND A. C. AMP.
Connector Type	TH43ZFV-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	ACC POWER SUPPLY
42	Y	FUEL LEVEL SENSOR SIGNAL
43	R	INTAKE SENSOR SIGNAL
44	LG	IN-VEHICLE SENSOR SIGNAL
45	P	AMBIENT SENSOR SIGNAL

46	BG	SUN/GAS SENSOR SIGNAL
47	G	EXHAUST GAS OXIDIZER OPERATING SENSOR SIGNAL
53	G	IGNITION POWER SUPPLY
54	Y	BATTERY POWER SUPPLY
55	B	GROUND
56	L	CAN-H
57	W	BRAKE FLUID LEVEL SWITCH SIGNAL
58	BR	FUEL LEVEL SENSOR GROUND
59	GR	INTAKE SENSOR GROUND
60	L	IN-VEHICLE SENSOR GROUND
61	BR	AMBIENT SENSOR GROUND
62	SB	SUNLOAD SENSOR GROUND
63	R	EVY SIGNAL
65	LG	A. C. LAN SIGNAL
70	R	EACH DOOR MOTOR POWER SUPPLY
71	B	GROUND
72	P	CAN-L

Connector No.	M7Z
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
3	V	ACC
4	R	ILL
5	Y	ILL CONT
8	SB	AV COMM (H)
8	LG	AV COMM (L)
9	P	SHF GND
9	Y	DISK SIGNAL
16	G	HAZARD ON

Connector No.	M11B
Connector Name	ECM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (E/L)
2	W	POWER WINDOW POWER SUPPLY (BAT)
3	Y	POWER WINDOW POWER SUPPLY (GRAP)

Connector No.	M119
Connector Name	ECM (BODY CONTROL MODULE)
Connector Type	NS18FW-CS



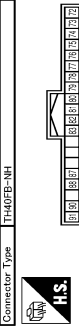
Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (R/USE)
13	B	GROUND
14	W	ACC IND
15	W	PUSH-BUTTON ON SW ILL GND
16	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT

Connector No.	M12B
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
20	VY	TURN SIGNAL RH (REAR)
23	G	BACK DOOR OPEN OUTPUT
25	G	TURN SIGNAL LH (REAR)
26	G	REAR WIPER OUTPUT

Connector No.	M12Z
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FE-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	W	ROOM ANT1 -
79	BR	ROOM ANT1 +
80	GR	NAISS ANT AMP
81	W	NAISS ANT AMP
82	R	IGN RELAY (E/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H

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

EXL

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM


< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

92	LG	KEY SLOT ILL CONT
93	V	ON IND
94	Y	PUDDLE LAMP CONT
95	BG	ACC RELAY CONT
96	GR	A/T SHIF SELECTOR POWER SUPPLY
98	R	SHIF P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	R	COMBI SW OUTPUT 2
110	G	HAZARD SW

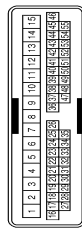
Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND AND
135	GR	RECEIVER SENSOR POWER SUPPLY
137	G	RECEIVER SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SHIF N/P
141	G	SECURITY IND LAMP CONT
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4

150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFROGGER RELAY CONT

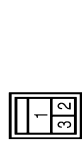
Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
7	Y	-
8	LG	-
9	Y	-
12	L	-
13	V	-
14	B	-
15	W	-
16	BR	-
17	B	-
18	R	-
19	B	-
20	G	- [With around view monitor]
20	W	- [Without around view monitor]
21	L	- [Without around view monitor]
21	SHIELD	- [With around view monitor]
22	SB	-
23	GR	-
24	G	-
25	Y	-
26	R	-
27	W	-
30	W	-
32	GR	-
34	Y	-
35	G	-
38	Y	-
37	BR	-
43	L	-
44	Y	-
45	R	-
46	W	-
47	SHIELD	-

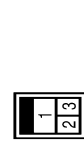
52	R	-
53	G	-
54	W	-
55	BG	-

Connector No.	M125
Connector Name	WIRE TO WIRE
Connector Type	MO3FW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	MO3MW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M351
Connector Name	JOINT CONNECTOR-M04
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	EG	-
2	B	-
3	P	-
4	L	-
6	B	-
7	P	-
8	L	-
10	W	-
11	P	-
12	L	-
14	B	-
15	P	-
17	V	-
18	B	-
19	P	-
20	L	-
21	V	-
22	B	-
23	P	-
24	L	-

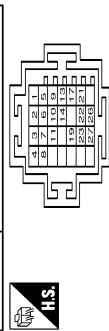
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

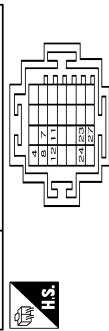
TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	M255
Connector Name	JOINT CONNECTOR-M02
Connector Type	SGA28FD07-J



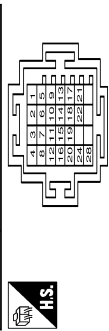
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	R	-
3	V	-
4	BG	-
5	G	-
6	R	-
7	V	-
8	BG	-
9	G	-
10	R	-
11	V	-
12	R	-
13	B	-
14	W	-
15	W	-
16	W	-
17	W	-
18	W	-
19	W	-
20	W	-
21	W	-
22	R	-
23	V	-
24	R	-
25	R	-
26	R	-
27	G	-

Connector No.	M354
Connector Name	JOINT CONNECTOR-M15
Connector Type	SGA28FD07-J



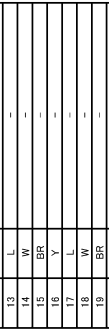
Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	W	-
3	L	-
4	W	-
5	L	-
6	W	-
7	L	-
8	W	-
9	L	-
10	W	-
11	G	-
12	B	-
23	W	-
24	B	-
27	G	-

Connector No.	M358
Connector Name	JOINT CONNECTOR-M14
Connector Type	SGA28FS8-J



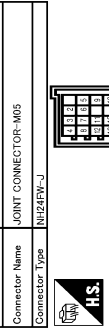
Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	- [Without BOSE system]
1	V	- [With BOSE system]
2	LG	- [Without BOSE system]
2	R	- [With BOSE system]
3	B	-
4	B	-
5	BR	- [Without BOSE system]
5	V	- [With BOSE system]
6	LG	- [Without BOSE system]
6	R	- [With BOSE system]
7	B	-
8	B	-

8	L	-
10	W	-
11	B	-
12	Y	-
13	L	-
14	W	-
15	BR	-
16	Y	-
17	L	-
18	W	-
19	BR	-
20	BR	-
21	L	-
22	W	-
23	BR	-
24	BR	-



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	R	-
3	SHIELD	-
4	BG	-
5	BG	-
6	BG	-
7	V	-
8	V	-
9	V	-
10	P	-
11	B	-
12	V	-
13	B	-
14	L	-
15	L	-
16	L	-
17	L	-
18	L	-
19	B	-
20	L	-
21	V	-
22	B	-
23	B	-
24	BG	-
25	V	-
26	L	-

28	BR	-
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Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-
8	L	-
9	BR	-
11	P	-
12	L	-
13	BS	-
14	L	-
16	L	-
17	V	-
19	P	-
20	L	-
21	V	-
22	G	-
23	P	-
24	L	-

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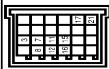
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	M381
Connector Name	JOINT CONNECTOR-M07
Connector Type	NH24FL-J



Terminal No.	Color Of Wire	Signal Name [Specification]
3	B	-
7	B	-
8	R	-
11	B	-
12	R	-
15	R	-
16	Y	-
17	G	-
21	G	-

JRLWF4609GB

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

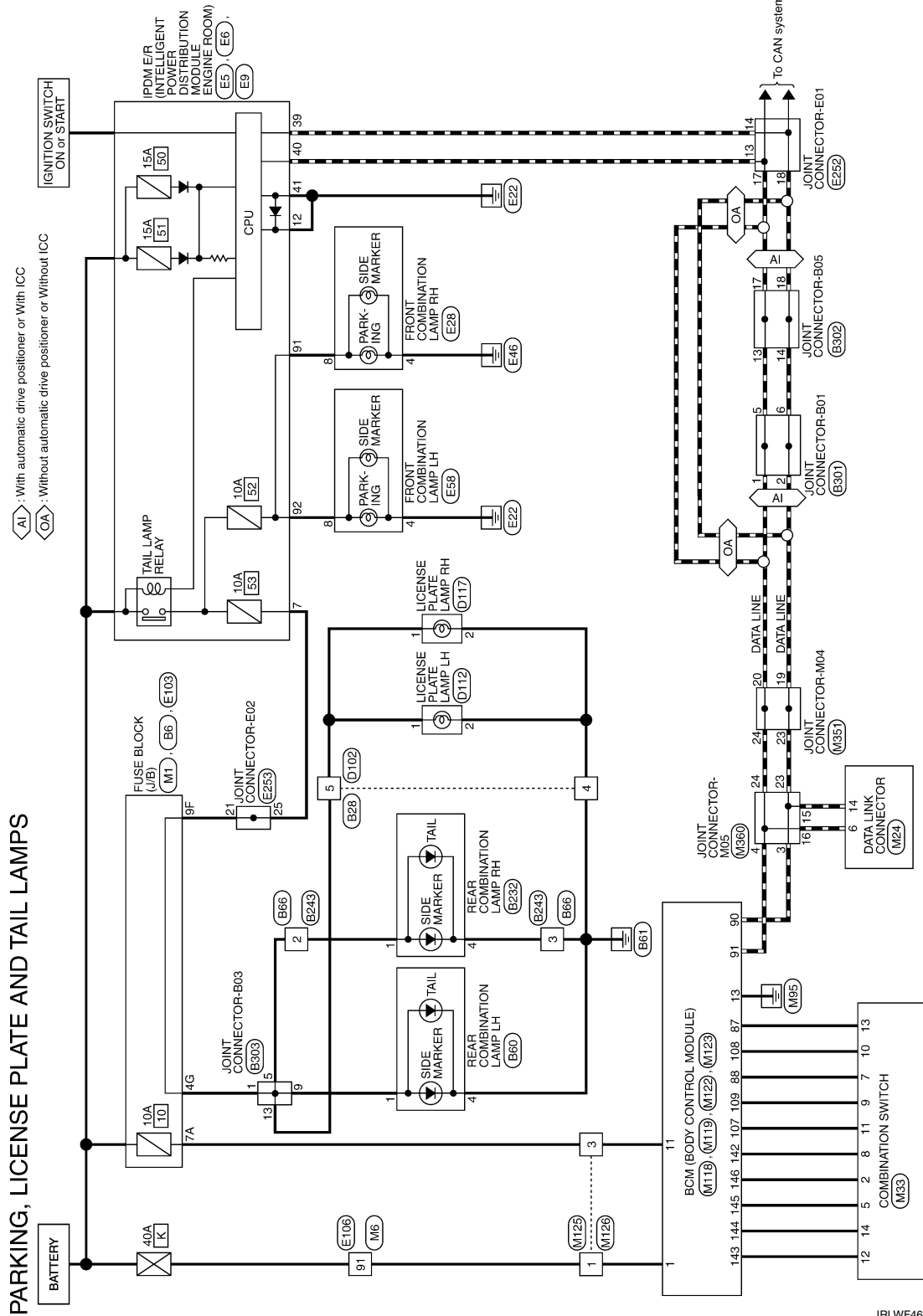
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[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

Wiring Diagram - PARKING, LICENSE PLATE AND TAIL LAMPS -

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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	B53
Connector Name	FUSE BLOCK (L/B)
Connector Type	NS1ZFBF-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10G	W	-
11G	W	-
12G	GR	-
4G	R	-
5G	LG	-

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH2MM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
3	W	-
4	B	-
5	R	-
9	BG	-
14	R	-
14	R	- [With around view monitor]
15	B	- [Without around view monitor]
15	B	- [Without around view monitor]
15	Y	- [With around view monitor]
16	W	-
17	L	- [With around view monitor]
17	R	- [Without around view monitor]
18	SHIELD	-

19	LG	-
20	BG	-
21	B	-
22	P	-
23	BR	-
24	R	-

Connector No.	B60
Connector Name	REAR COMBINATION LAMP LH
Connector Type	TH3MM-NH



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

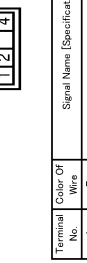
Connector No.	B66
Connector Name	WIRE TO WIRE
Connector Type	TH2MM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	R	-
13	L	-
14	W	-
15	B	-
16	BR	-
17	BG	-

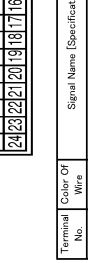
18	P	-
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Connector No.	B232
Connector Name	REAR COMBINATION LAMP RH
Connector Type	TH3MM-NH



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

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH2MM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	B	-
13	L	-
14	W	-
15	GR	-
16	BR	-
17	LG	-
18	L	-

Connector No.	B301
Connector Name	JOINT CONNECTOR-B01
Connector Type	NH24FF-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	P	-
3	SB	-
4	LG	-
5	L	-
6	P	-
7	SB	-
8	LG	-
9	L	-
10	P	-
11	SB	-
12	LG	-
13	SB	-
14	Y	-
18	Y	-
19	B	-
20	SB	-
21	R	-
22	Y	-
23	B	-
24	SB	-

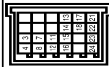
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

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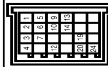
[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	E3292
Connector Name	JOINT CONNECTOR-B05
Connector Type	NH4Z4FG7-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	L	-
3	Y	-
4	L	-
5	Y	-
6	L	-
7	Y	-
8	L	-
9	Y	-
10	L	-
11	Y	-
12	L	-
13	L	-
14	P	-
15	Y	-
16	L	-
17	L	-
18	P	-
21	L	-
22	P	-
23	Y	-
24	L	-



Connector No.	E3303
Connector Name	JOINT CONNECTOR-B03
Connector Type	NH4Z4FW-J

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

Terminal No.	Color Of Wire	Signal Name [Specification]
5	R	-
6	LG	-
7	BG	-
8	R	-
9	R	-
10	LG	-
12	B	-
13	R	-
14	LG	-
19	V	-
20	B	-
24	B	-

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	W	-
3	W	-
4	B	-
5	R	-
6	O	-
13	R	-
14	L	- [With around view monitor]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	G	- [With around view monitor]
16	L	- [Without around view monitor]
17	G	- [Without around view monitor]
17	W	- [With around view monitor]
18	SHIELD	- [Without around view monitor]
18	LG	- [With around view monitor]
20	G	-
21	V	-
22	P	-
23	BR	-
24	R	-

Connector No.	D112
Connector Name	LICENSE PLATE LAMP LH
Connector Type	TK02FBR



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

Connector No.	D117
Connector Name	LICENSE PLATE LAMP RH
Connector Type	TK02FBR



Terminal No.	1	R	Signal Name [Specification]	-
Terminal No.	2	B	Signal Name [Specification]	-

Connector No.	E5
Connector Name	FROM E IN INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20FW-CS1Z-M4-1V



Terminal No.	Color Of Wire	Signal Name [Specification]
4	Y	-
5	Y	-
6	R	-
7	R	-
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	BG	-
28	L	-
30	GR	-
36	G	-

Connector No.	E5
Connector Name	FROM E IN INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-

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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

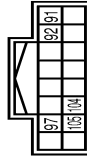
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

46	R	-
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Connector No.	E9
Connector Name	SMALL INTELLIGENT POWER DISTRIBUTION/MOBILE ENGINE FUSION
Connector Type	TH118FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
91	P	-
92	BG	-
97	V	-
104	LG	-
105	SB	-

Connector No.	E28
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS20FEB-PR



Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
5	BG	-
6	V	-
7	BR	-
8	P	-

Connector No.	E58
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS20FEB-PR



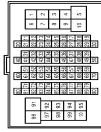
Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
5	V	-
6	G	-
7	P	-
8	BG	-

Connector No.	E103
Connector Name	FUSE BLOCK (L/B)
Connector Type	NS1EFPW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
11F	W	-
1F	SB	-
2F	W	-
4F	BR	-
8F	L	-
9F	R	-

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FPW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	GR	-
5	GR	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-
13	L	-
14	B	-
15	P	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	V	-
23	G	-
24	P	-
25	Y	-
26	V	-
27	W	-
28	BG	-
32	W	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-

41	W	-
42	G	-
43	BR	-
45	W	-
49	L	-
50	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
63	B	-
64	B	-
65	G	-
66	R	-
67	SHIELD	-
68	Y	-
69	LG	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	- [With ICC]
74	L	- [Without ICC]
75	G	- [With ICC]
75	W	- [Without ICC]
76	W	- [With ICC]
76	W	- [Without ICC]
77	P	- [With ICC]
77	R	- [Without ICC]
78	BR	- [With ICC]
78	L	- [Without ICC]
79	Y	- [With ICC]
79	L	- [Without ICC]
80	SB	-
81	R	-
82	SB	-
83	BG	-
84	G	-
85	L	-
86	P	-
87	V	-
89	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

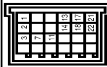
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

Terminal No.	Color Of Wire	Signal Name [Specification]
65	BG	-
66	P	-
67	R	-
68	SHIELD	-
69	L	-
100	P	-

Connector No.	EF52
Connector Name	JOINT CONNECTOR-E01
Connector Type	NR24FW-J



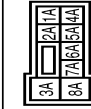
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	GR	-
7	GR	-
11	GR	-
13	P	-
14	P	-
17	L	-
18	P	-
21	L	-
22	P	-

Connector No.	EF53
Connector Name	JOINT CONNECTOR-E02
Connector Type	SC242FBR-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	G	-
4	Y	-
5	P	-
6	L	-
7	G	-
8	Y	-
10	L	-
11	G	-
12	W	-
14	B	- [Without BOSE system] - [With BOSE system]
15	SHIELD	-
16	R	-
17	W	-
18	G	-
19	GR	-
20	B	-
21	R	-
22	G	-
23	SHIELD	-
24	B	-
25	R	-
26	G	-
27	SHIELD	-
28	G	-
28	L	- [Without NAVI]

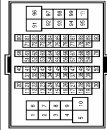
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS5EFPW-M2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-

Terminal No.	Color Of Wire	Signal Name [Specification]
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TR80DMW-CST1E-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	- [With NAVI]
1	Y	- [Without NAVI]
2	B	- [Without NAVI]
2	R	- [With NAVI]
3	B	- [With NAVI]
3	R	- [Without NAVI]
4	SHIELD	-
5	G	-
6	R	-
7	W	-
8	Y	-
9	BR	-
10	R	-
11	BR	-
12	BG	-
13	L	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	SB	-
20	BG	-
21	L	-
22	W	-
23	P	-
24	BR	-
25	Y	-
26	V	-
27	G	-

Terminal No.	Color Of Wire	Signal Name [Specification]
28	G	-
31	L	-
32	G	-
33	B	-
34	W	-
35	R	-
36	SHIELD	-
37	V	-
38	BG	-
39	BR	-
41	W	-
42	BG	-
43	BG	-
44	W	-
45	Y	-
50	P	-
51	BR	-
54	Y	-
57	G	-
59	W	-
60	L	-
61	G	-
62	SB	-
63	G	-
64	B	-
65	W	-
66	R	-
68	SHIELD	-
69	GR	-
70	LG	-
71	LG	-
72	Y	-
73	SB	-
74	L	- [With LCC] - [Without LCC]
75	G	- [Without LCC]
76	GR	- [Without LCC]
76	W	- [With LCC]
77	P	- [Without LCC]
78	R	- [With LCC]
78	R	- [Without LCC]
79	W	- [Without LCC]
79	Y	- [With LCC]
80	SB	-
81	SB	-
82	SB	-
83	V	-
84	G	-

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EXL

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

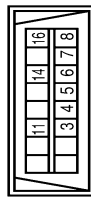
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

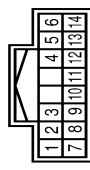
85	L	-	-
86	P	-	-
87	W	-	-
88	GR	-	-
89	GR	-	-
90	SHIELD	-	-
91	W	-	-
92	Y	-	-
93	BR	-	-
94	P	-	-
95	GR	-	-
96	W	-	-
97	SHIELD	-	-
98	Y	-	-
100	SB	-	-

Connector No. M24
 Connector Name DATA LINK CONNECTOR
 Connector Type BDI/EFW



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
7	V	-
8	G	-
11	SB	-
14	P	-
16	Y	-

Connector No. M33
 Connector Name COMBINATION SWITCH
 Connector Type TH3FEW-NH



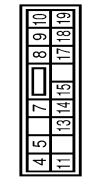
Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	SB	OUTPUT 4
3	GR	FR WASHER(+)
4	G	IGN
5	L	OUTPUT 3
6	B	GROUND
7	V	INPUT 3
8	BIG	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	OUTPUT 1
12	P	OUTPUT 2
13	BR	OUTPUT 1
14	G	OUTPUT 2

Connector No. M118
 Connector Name BCM (BODY CONTROL MODULE)
 Connector Type M03FB-LC



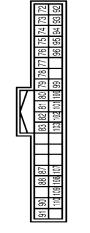
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	W	POWER WINDOW POWER SUPPLY(BAT)
3	Y	POWER WINDOW POWER SUPPLY(RAP)

Connector No. M119
 Connector Name BCM (BODY CONTROL MODULE)
 Connector Type NS1BFW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	LG	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GROUND
14	W	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT

Connector No. M122
 Connector Name BCM (BODY CONTROL MODULE)
 Connector Type TH40FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 -
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-

79	BR	ROOM ANT1+
80	GR	MATS ANT AMP
81	W	MATS ANT AMP
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMMA
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL CONT
93	V	IGN IND
94	Y	Puddle LAMP CONT
95	BR	DRIVER DOOR LOCK SW
96	GR	A. T SHIFT SELECTOR COVERS SUPPLY
99	R	SHEET P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

Connector No. M123
 Connector Name BCM (BODY CONTROL MODULE)
 Connector Type TH40FC-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
118	SB	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMMA
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	BG	RECEIVER/SENSOR GND

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

LAMPS

133	Y	RECEIVER SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SHIELD N/P
141	G	SECURITY IND LAMP CONT
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M125
Connector Name	WIRE TO WIRE
Connector Type	M03PW-LC



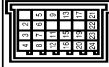
Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	Y	-
3	R	-

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03MW-LC



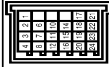
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M128
Connector Name	JOINT CONNECTOR-M05
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-
8	L	-
9	BR	-
11	P	-
12	L	-
13	BR	-
15	P	-
16	L	-
17	V	-
18	P	-
20	L	-
21	V	-
22	G	-
23	P	-
24	L	-

Connector No.	M151
Connector Name	JOINT CONNECTOR-M04
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BE	-
2	B	-
3	P	-
4	L	-
6	B	-
7	P	-
8	L	-
10	W	-
11	P	-
12	L	-
14	B	-
15	P	-
16	L	-
17	V	-
18	B	-
20	P	-
21	V	-
22	B	-
23	P	-
24	L	-

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EXL

STOP LAMP

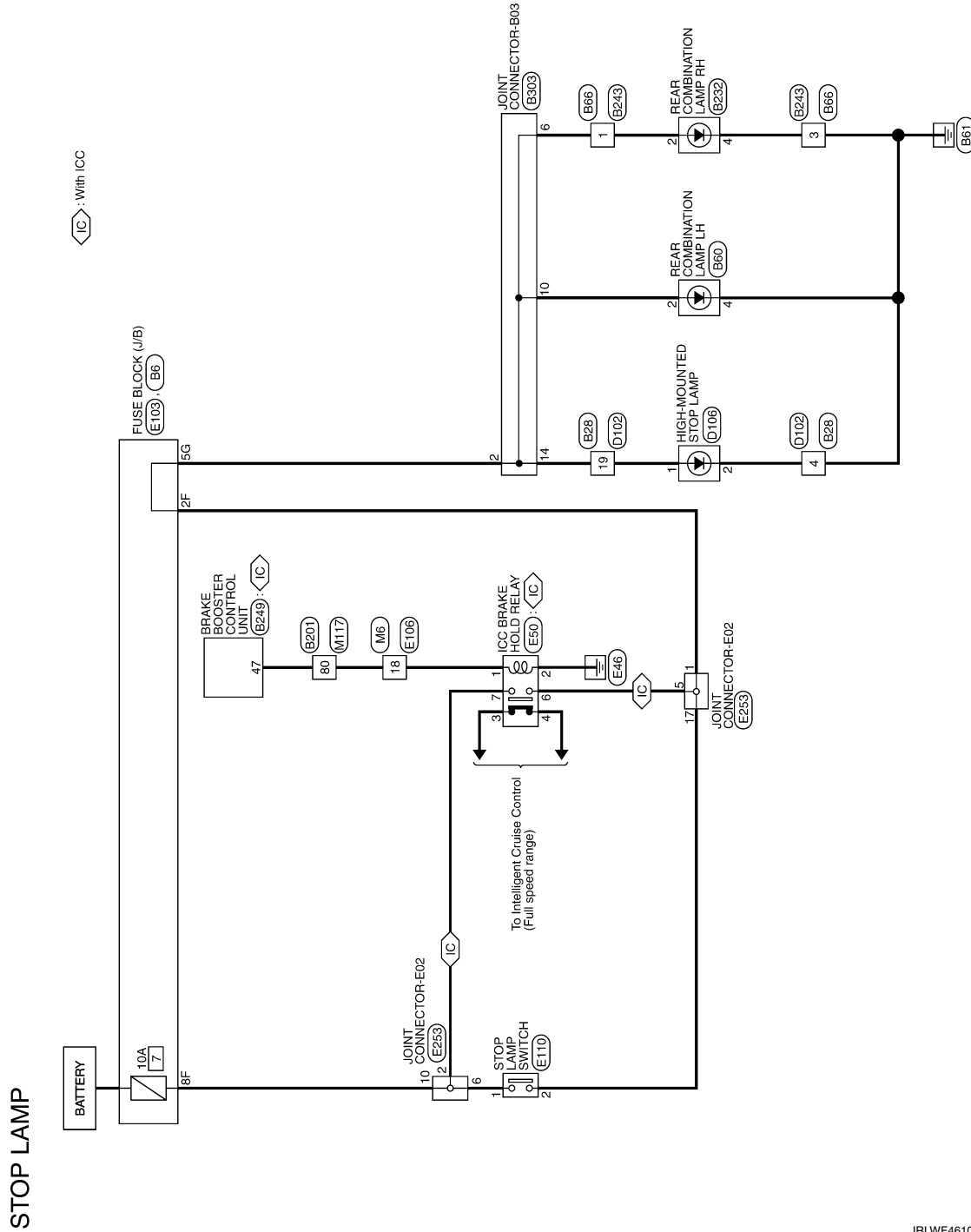
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

STOP LAMP

Wiring Diagram - STOP LAMP -

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2015/06/22

JRLWF4610GB

STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

STOP LAMP

Connector No.	B58
Connector Name	FUSE BLOCK (L/B)
Connector Type	NS12FBR-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10G	W	-
11G	W	-
12G	GR	-
4G	R	-
5G	LG	-

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH22MM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
3	W	-
4	B	-
5	R	-
6	BG	-
7	BR	-
13	SHIELD	-
14	SHIELD	-
15	B	-
16	W	-
17	L	-
18	SHIELD	-

18	LG	-
20	BG	-
21	B	-
22	P	-
23	BR	-
24	R	-

Connector No.	B60
Connector Name	REAR COMBINATION LAMP LH
Connector Type	TH65MM-NH



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

Connector No.	B66
Connector Name	WIRE TO WIRE
Connector Type	TH24MM-NH

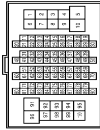


Terminal No.	Color Of Wire	Signal Name [Specification]
2	R	-
3	B	-
13	L	-
14	W	-
15	B	-
16	BR	-
17	BG	-

18	P	-
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Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80PM-CSE-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	GR	-
4	BG	-
7	LG	-
10	W	-
15	SB	-
16	V	-
17	BR	-
18	GR	-
20	BR	-
27	L	-
28	Y	-
29	Y	-
30	GR	-
31	R	-
32	BR	-
33	G	-
51	R	-
55	G	-
56	R	-
57	W	-
58	B	-
60	SHIELD	-
61	LG	-
62	BR	-
63	P	-
64	L	-
65	G	-
66	P	-

67	L	-
68	SHIELD	-
69	V	-
70	Y	-
71	SB	-
72	W	-
73	BR	-
75	Y	-
80	V	-
81	SB	-
82	LG	-
83	P	-
84	R	-
85	L	-
86	BG	-
87	P	-
88	P	-
91	V	-
92	R	-
94	R	-
95	SB	-
96	G	-
97	G	-
98	R	-
99	P	-
100	L	-

Connector No.	B222
Connector Name	REAR COMBINATION LAMP RH
Connector Type	TH65MM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	-
4	B	-

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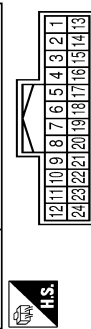
STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

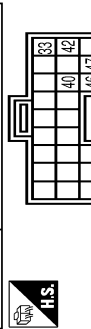
STOP LAMP

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



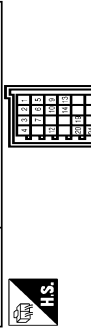
Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	B	-
3	B	-
13	L	-
14	W	-
15	GR	-
16	BR	-
17	LG	-
18	L	-
24	LG	-

Connector No.	B249
Connector Name	BRAKE BOOSTER CONTROL UNIT
Connector Type	TK24FGY



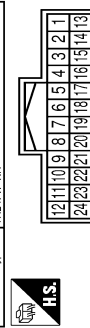
Terminal No.	Color Of Wire	Signal Name [Specification]
33	BR	IGNITION
40	SB	BEAT/PSW
42	SB	IGNITION
46	B	GROUND
47	V	BRAKE HOLD RLY DRIVE SIGNAL

Connector No.	B303
Connector Name	JOINT CONNECTOR-B03
Connector Type	NH24FW-J



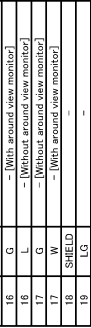
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	LG	-
3	BG	-
4	B	-
5	R	-
6	LG	-
7	BG	-
9	R	-
10	LG	-
12	B	-
13	R	-
14	LG	-
16	V	-
20	B	-
24	B	-

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
3	W	-
4	B	-
5	R	-
6	O	-

13	R	-
14	L	- [With around view monitor]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	G	- [With around view monitor]
16	L	- [Without around view monitor]
17	G	- [With around view monitor]
17	W	- [Without around view monitor]
18	SHIELD	-
19	LG	-
20	O	-
21	V	-
22	R	-
22	BR	-
24	R	-

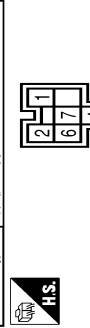


Connector No.	D106
Connector Name	HIGH-MOUNTED STOP LAMP
Connector Type	TB02RMW



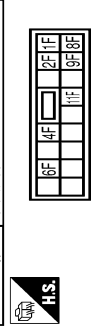
Terminal No.	1	LG	Signal Name [Specification]
Terminal No.	2	B	-

Connector No.	E50
Connector Name	ICC BRAKE HOLD RELAY
Connector Type	IM65GY-R-US



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	B	-
3	P	-
4	SB	-
6	P	-
7	R	-

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FP-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
11F	W	-
12F	SB	-
17	W	-
4F	G	-
6F	BR	-
8F	L	-
9F	R	-

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80PW-CS1E-TM4



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

STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

STOP LAMP

4	GR	-	-	-	-
5	GR	-	-	-	-
6	G	-	-	-	-
7	L	-	-	-	-
8	Y	-	-	-	-
9	BR	-	-	-	-
10	BG	-	-	-	-
11	SB	-	-	-	-
12	BG	-	-	-	-
13	L	-	-	-	-
14	R	-	-	-	-
15	P	-	-	-	-
16	SB	-	-	-	-
17	SB	-	-	-	-
18	G	-	-	-	-
19	BR	-	-	-	-
20	BG	-	-	-	-
21	L	-	-	-	-
22	V	-	-	-	-
23	G	-	-	-	-
24	P	-	-	-	-
25	Y	-	-	-	-
26	V	-	-	-	-
27	W	-	-	-	-
28	G	-	-	-	-
31	BG	-	-	-	-
32	W	-	-	-	-
33	B	-	-	-	-
34	G	-	-	-	-
35	G	-	-	-	-
36	SHIELD	-	-	-	-
37	V	-	-	-	-
38	BR	-	-	-	-
39	BG	-	-	-	-
41	W	-	-	-	-
42	G	-	-	-	-
43	BR	-	-	-	-
45	W	-	-	-	-
49	L	-	-	-	-
50	P	-	-	-	-
51	L	-	-	-	-
54	BG	-	-	-	-
55	BR	-	-	-	-
56	WR	-	-	-	-
60	LG	-	-	-	-
61	G	-	-	-	-
62	SB	-	-	-	-
63	W	-	-	-	-
64	B	-	-	-	-
65	G	-	-	-	-
66	R	-	-	-	-

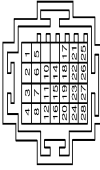
67	SHIELD	-	-	-	-
68	Y	-	-	-	-
69	LG	-	-	-	-
70	W	-	-	-	-
71	R	-	-	-	-
72	Y	-	-	-	-
73	B	-	-	-	-
74	BR	-	-	-	-
75	G	-	-	-	-
76	W	-	-	-	-
77	P	-	-	-	-
78	BR	-	-	-	-
79	L	-	-	-	-
80	SB	-	-	-	-
81	R	-	-	-	-
82	SB	-	-	-	-
83	BG	-	-	-	-
84	G	-	-	-	-
85	L	-	-	-	-
86	P	-	-	-	-
87	V	-	-	-	-
88	CG	-	-	-	-
89	SHIELD	-	-	-	-
90	W	-	-	-	-
92	Y	-	-	-	-
93	V	-	-	-	-
94	LG	-	-	-	-
95	BG	-	-	-	-
96	P	-	-	-	-
97	R	-	-	-	-
98	SHIELD	-	-	-	-
99	L	-	-	-	-
100	P	-	-	-	-

Connector No.	E110
Connector Name	STOP LAMP SWITCH
Connector Type	M04FW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	W	-
3	Y	-
4	SB	-

Connector No.	E253
Connector Name	JOINT CONNECTOR-ED2
Connector Type	SGA28FBR-J



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

18	G	-	-
19	GR	-	-
20	B	-	-
21	R	-	-
22	G	-	-
23	SHIELD	-	-
24	B	-	-
25	R	-	-
26	G	-	-
27	SHIELD	-	-
28	G	-	-
28	L	-	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MMV-GS18-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	- [Without NAV]
2	B	- [Without NAV]
3	B	- [With NAV]
4	G	- [Without NAV]
5	G	-
6	R	-
7	W	-
8	Y	-
9	L	-
10	BR	-
11	BR	-
12	BG	-
13	L	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	V	-

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STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

STOP LAMP

20	BG	-	-	-	-
21	L	-	-	-	-
22	W	-	-	-	-
23	P	-	-	-	-
24	BR	-	-	-	-
25	Y	-	-	-	-
26	V	-	-	-	-
27	G	-	-	-	-
28	G	-	-	-	-
31	L	-	-	-	-
32	G	-	-	-	-
33	B	-	-	-	-
34	R	-	-	-	-
35	R	-	-	-	-
36	SHIELD	-	-	-	-
37	V	-	-	-	-
38	BG	-	-	-	-
39	BR	-	-	-	-
41	W	-	-	-	-
42	BG	-	-	-	-
43	EG	-	-	-	-
45	W	-	-	-	-
48	L	-	-	-	-
50	P	-	-	-	-
51	BR	-	-	-	-
54	G	-	-	-	-
55	G	-	-	-	-
56	W	-	-	-	-
60	L	-	-	-	-
61	G	-	-	-	-
62	SB	-	-	-	-
63	G	-	-	-	-
64	B	-	-	-	-
65	W	-	-	-	-
66	R	-	-	-	-
67	SHIELD	-	-	-	-
68	Y	-	-	-	-
69	GR	-	-	-	-
70	LG	-	-	-	-
71	G	-	-	-	-
72	SB	-	-	-	-
73	SB	-	-	-	-
74	BR	-	-	-	-
74	L	-	-	-	-
74	L	-	-	-	-
75	G	-	-	-	-
76	GR	-	-	-	-
76	W	-	-	-	-
77	P	-	-	-	-
77	R	-	-	-	-
78	L	-	-	-	-

78	R	-	-	-	-
78	W	-	-	-	-
79	Y	-	-	-	-
80	SB	-	-	-	-
81	SB	-	-	-	-
82	SB	-	-	-	-
83	V	-	-	-	-
84	G	-	-	-	-
85	L	-	-	-	-
86	P	-	-	-	-
87	W	-	-	-	-
88	P	-	-	-	-
89	GR	-	-	-	-
90	SHIELD	-	-	-	-
91	W	-	-	-	-
92	Y	-	-	-	-
93	BR	-	-	-	-
94	P	-	-	-	-
95	GR	-	-	-	-
96	W	-	-	-	-
97	L	-	-	-	-
98	SHIELD	-	-	-	-
99	V	-	-	-	-
100	SB	-	-	-	-

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	T180MM-CST6-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	GR	-
4	SB	-
7	W	-
10	W	-
15	SB	-
16	V	-
17	BR	-
18	GR	-
19	W	-

26	BR	-	-	-	-
27	LG	-	-	-	-
28	Y	-	-	-	-
29	Y	-	-	-	-
30	V	-	-	-	-
31	R	-	-	-	-
32	BR	-	-	-	-
33	G	-	-	-	-
51	R	-	-	-	-
55	W	-	-	-	-
56	B	-	-	-	-
57	R	-	-	-	-
58	G	-	-	-	-
59	SHIELD	-	-	-	-
60	V	-	-	-	-
61	LG	-	-	-	-
62	BR	-	-	-	-
63	L	-	-	-	-
64	LG	-	-	-	-
65	B	-	-	-	-
66	R	-	-	-	-
67	W	-	-	-	-
68	SHIELD	-	-	-	-
69	V	-	-	-	-
70	Y	-	-	-	-
71	SB	-	-	-	-
72	R	-	-	-	-
73	G	-	-	-	-
75	W	-	-	-	-
80	V	-	-	-	-
81	SB	-	-	-	-
82	V	-	-	-	-
83	P	-	-	-	-
84	R	-	-	-	-
85	L	-	-	-	-
86	BG	-	-	-	-
87	L	-	-	-	-
88	P	-	-	-	-
91	V	-	-	-	-
92	G	-	-	-	-
94	W	-	-	-	-
96	G	-	-	-	-
97	Y	-	-	-	-
98	BR	-	-	-	-
99	P	-	-	-	-
99	V	-	-	-	-
100	L	-	-	-	-
100	SB	-	-	-	-

BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

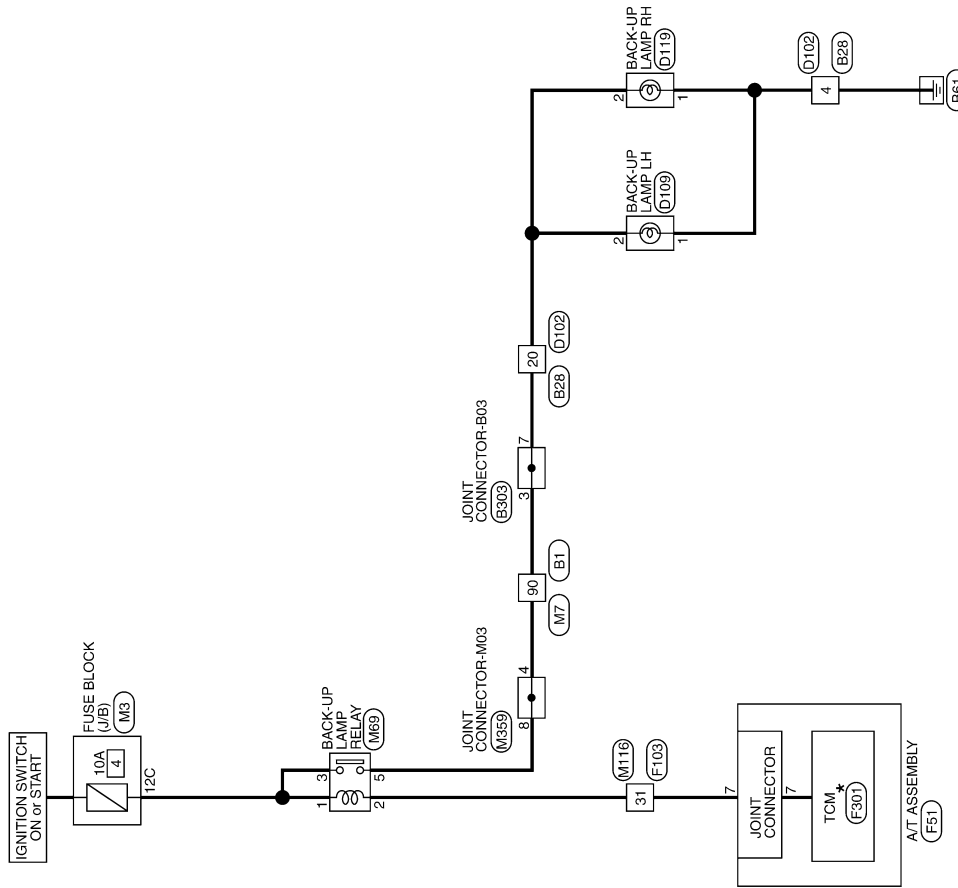
[XENON TYPE]

BACK-UP LAMP

Wiring Diagram - BACK-UP LAMP -

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BACK-UP LAMP



*: This connector is not shown in "Harness Layout".

2015/06/22

JRLWF4615GB

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

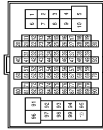
BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

BACK-UP LAMP

Connector No.	B51
Connector Name	WIRE TO WIRE
Connector Type	TH480FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-
5	G	-
6	SB	-
7	V	-
8	L	-
11	V	-
12	SB	-
13	LG	-
14	GR	-
15	LG	-
16	R	-
17	W	-
18	GR	-
19	LG	-
20	BR	-
21	SHIELD	-
22	Y	-
24	P	-
25	G	-
26	Y	-
27	B	- [With NAVI]
27	BR	- [Without NAVI]
28	R	- [With NAVI]
28	W	- [Without NAVI]
29	L	- [With NAVI]
29	BR	- [Without NAVI]
30	SHIELD	- [With around view monitor]
31	SHIELD	- [Without around view monitor]
32	P	- [With NAVI] [Without Blind Spot Warning]
32	W	- [Without NAVI] [Without Blind Spot Warning]
32	Y	- [With NAVI] [Without Blind Spot Warning]
33	SB	- [With NAVI] [With Blind Spot Warning]
34	L	-
35	P	-

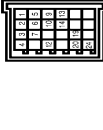
36	L	-
37	P	-
38	P	-
39	Y	-
40	SB	-
44	Y	-
45	GR	-
46	LG	-
47	SB	-
48	BG	-
49	R	-
50	L	-
50	P	-
60	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	W	-
67	V	-
69	SB	-
69	SHIELD	-
70	W	-
73	SB	-
74	L	-
75	W	-
76	GR	-
76	P	-
78	GR	-
83	BG	-
85	V	-
86	LG	-
87	Y	-
89	R	-
89	B	-
90	BG	-
91	G	-
92	BR	-
93	G	-
94	SB	-
95	G	-
96	Y	-
98	W	-
99	GR	-

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



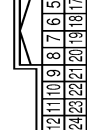
Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	W	-
3	B	-
4	R	-
5	R	-
6	BG	-
7	BR	-
8	R	-
9	SHIELD	- [With around view monitor]
10	SHIELD	- [Without around view monitor]
11	Y	-
12	Y	-
13	SHIELD	-
14	SHIELD	-
15	Y	-
16	W	-
17	R	-
18	SHIELD	-
19	LG	-
20	BG	-
21	P	-
22	P	-
23	BR	-
24	R	-

Connector No.	B303
Connector Name	JOINT CONNECTOR-B03
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	LG	-
3	BG	-
4	B	-
5	R	-
6	LG	-
7	BG	-
9	R	-
10	LG	-
12	B	-
13	R	-
14	LG	-
15	V	-
20	B	-
24	B	-

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
3	W	-
4	B	-
5	R	-

JRLWF4616GB

BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

BACK-UP LAMP

6	O	-
13	R	-
14	L	- [With around view monitor] - [Without around view monitor]
15	Y	-
16	G	- [With around view monitor] - [Without around view monitor]
17	G	- [With around view monitor] - [Without around view monitor]
18	SHIELD	- [With around view monitor]
19	LG	-
20	O	-
21	P	-
22	BR	-
24	R	-

Connector No.	D109
Connector Name	BACK-UP LAMP LH
Connector Type	NS02MMW-CS



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

Connector No.	D118
Connector Name	BACK-UP LAMP RH
Connector Type	NS02MMW-CS



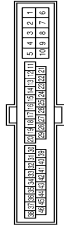
Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	O	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	RK10FG-DGY



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	IGNITION POWER SUPPLY
2	BR	BATTERY POWER SUPPLY
3	O	CAN-H
4	V	K-LINE
5	B	GROUND
6	Y	IGNITION POWER SUPPLY
7	R	BACK-UP LAMP RELAY
8	LG	CAN-L
9	GR	STARTER RELAY
10	B	GROUND

Connector No.	F102
Connector Name	WIRE TO WIRE
Connector Type	TK30FW-N310



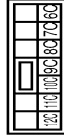
Terminal No.	Color Of Wire	Signal Name [Specification]
2	G	-
3	W	-
4	R	-
5	B	-
9	Y	-
10	GR	-
19	BG	- [Without ICC] - [With ICC]
20	Y	-
28	B	-
29	LG	-
31	R	-
32	GR	-
34	B	-
35	B	-
36	P	-
37	Y	-
38	G	-
43	LG	-
44	O	-
45	Y	-
46	V	-

Connector No.	F301
Connector Name	TCM
Connector Type	SPT10FG



Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	IGNITION POWER SUPPLY
2	-	BATTERY POWER SUPPLY
3	-	CAN-H
4	-	K-LINE
5	-	GROUND
6	-	IGNITION POWER SUPPLY
7	-	BACK-UP LAMP RELAY
8	-	CAN-L
9	-	STARTER RELAY
10	-	GROUND

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FM-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	L	-
10G	L	-
10G	BG	-
6C	R	-
7C	B	-
8C	G	-
9C	BG	-

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

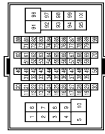
BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

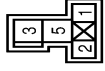
BACK-UP LAMP

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TF480MW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	SB	-- [With automatic drive positioner]
4	W	-- [Without automatic drive positioner]
5	G	--
6	BG	--
7	W	--
8	B	--
11	V	--
12	SB	--
13	LG	--
14	Y	--
15	G	--
16	R	--
17	BR	--
18	SB	--
19	LG	--
20	BR	--
21	SHIELD	--
22	Y	--
24	V	--
25	G	--
26	Y	--
27	B	-- [With NAV]
27	R	-- [Without NAV]
28	W	--
29	B	-- [Without NAV]
29	G	-- [With NAV]
30	SHIELD	--
31	L	--
32	P	-- [Without Blind Spot Warning]
32	Y	-- [With Blind Spot Warning]
33	SB	--
34	L	--
35	P	--
36	L	--
37	P	--
38	P	--

Connector No.	M68
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS29FL-M2-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	--
2	W	--
3	R	--
5	BG	--

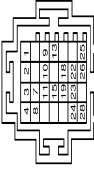
Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK30MP-NS10



Terminal No.	Color Of Wire	Signal Name [Specification]
2	P	--
3	L	--
4	R	--
5	B	--
9	R	--
10	R	--
10	RG	--
20	Y	--
23	B	--
28	B	--
29	LG	--
31	W	--
33	B	--
34	B	--
35	L	--
36	P	--
37	Y	--

38	G	--
43	P	--
44	L	--
45	BR	--
46	BG	--

Connector No.	M359
Connector Name	JOINT CONNECTOR-M03
Connector Type	SGA28FDGY-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	--
2	R	--
3	SHIELD	--
4	SHIELD	--
7	BG	--
8	W	--
9	W	--
10	P	--
11	B	--
13	V	--
15	B	--
18	L	--
19	B	--
22	R	--
23	B	--
24	BG	--
25	V	--
26	L	--
28	BR	--

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000012750587

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
RR WIPER ON	Other than rear wiper switch ON	Off
	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
TURN SIGNAL R	Other than turn signal switch RH	Off
	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Monitor Item	Condition	Value/Status
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
REVERSE SW	NOTE: The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of the key is not pressed	Off
	LOCK button of the key is pressed	On
RKE-UNLOCK	UNLOCK button of the key is not pressed	Off
	UNLOCK button of the key is pressed	On
RKE-TR/BD	NOTE: The item is indicated, but not monitored.	Off
RKE-PANIC	PANIC button of the key is not pressed	Off
	PANIC button of the key is pressed	On
RKE-P/W OPEN	UNLOCK button of the key is not pressed	Off
	UNLOCK button of the key is pressed and held	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Monitor Item	Condition	Value/Status	
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off	A
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On	B
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V	
	Dark outside of the vehicle	Close to 0 V	
REQ SW -DR	Driver door request switch is not pressed	Off	C
	Driver door request switch is pressed	On	
REQ SW -AS	Passenger door request switch is not pressed	Off	D
	Passenger door request switch is pressed	On	
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	E
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off	
REQ SW -BD/TR	Back door request switch is not pressed	Off	F
	Back door request switch is pressed	On	
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off	G
	Push-button ignition switch (push switch) is pressed	On	
IGN RLY2 -F/B	NOTE: The item is indicated, but not monitored.	Off	H
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off	
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off	I
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off	
	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On	J
BRAKE SW 2	The brake pedal is not depressed	Off	
	The brake pedal is depressed	On	K
DETE/CANCL SW	Selector lever in P position	Off	
	Selector lever in any position other than P	On	
SFT PN/N SW	Selector lever in any position other than P and N	Off	EXL
	Selector lever in P or N position	On	
S/L -LOCK	NOTE: The item is indicated, but not monitored.	Off	M
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off	
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off	N
UNLK SEN -DR	Driver door is unlocked	Off	
	Driver door is locked	On	O
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off	
	Push-button ignition switch (push-switch) is pressed	On	P
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off	
	Ignition switch in ON position	On	
DETE SW -IPDM	Selector lever in any position other than P	Off	
	Selector lever in P position	On	
SFT PN -IPDM	Selector lever in any position other than P and N	Off	
	Selector lever in P or N position	On	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Monitor Item	Condition	Value/Status
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The key is not inserted into key slot	Off
	The key is inserted into key slot	On
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—
CONFIRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the third key ID registered to BCM.	Done

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

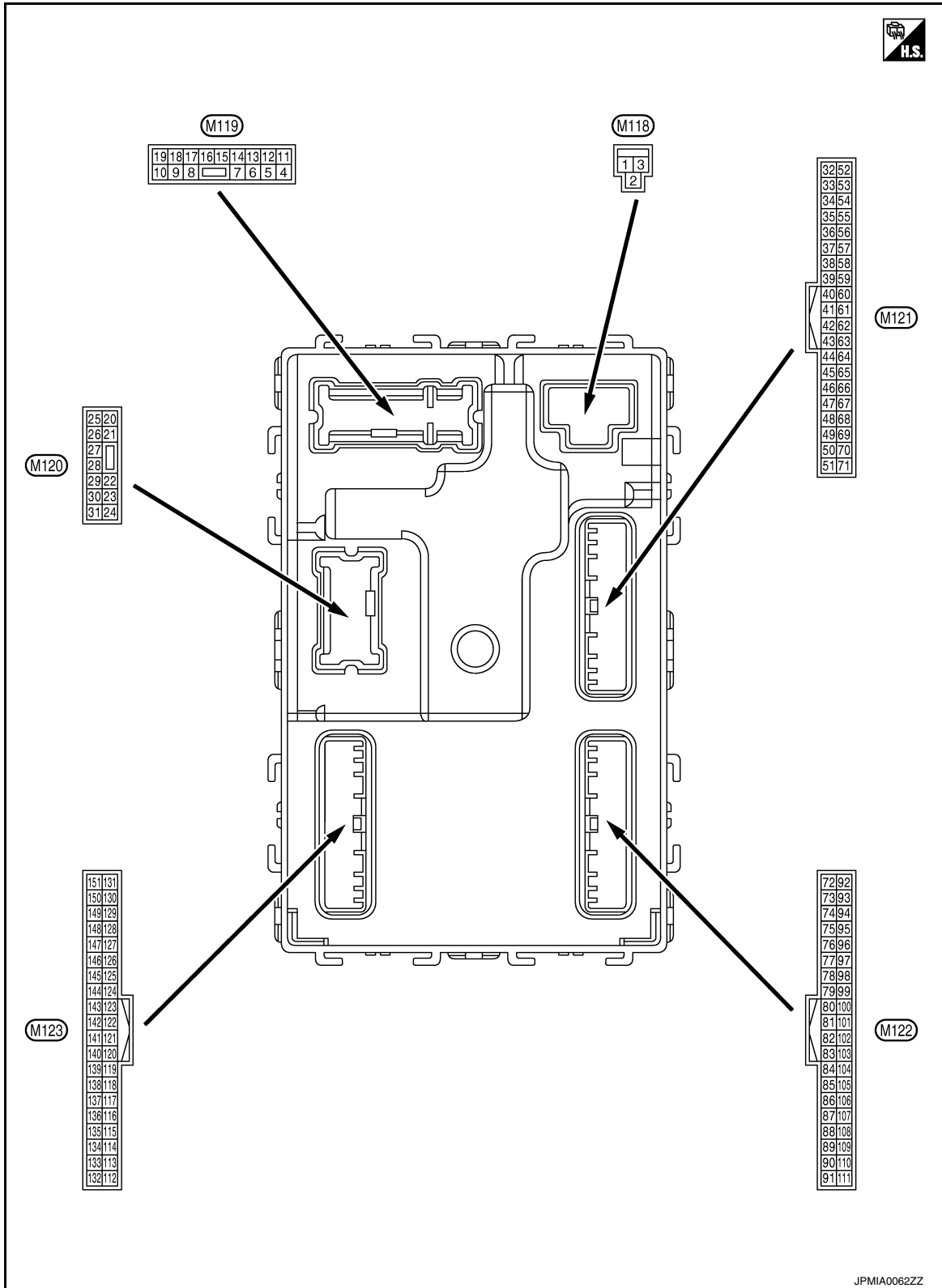
Monitor Item	Condition	Value/Status	
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	Yet	A
	The key ID that the key slot receives accords with the second key ID registered to BCM.	Done	B
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	Yet	C
	The key ID that the key slot receives accords with the first key ID registered to BCM.	Done	
TP 4	The ID of fourth key is not registered to BCM	Yet	D
	The ID of fourth key is registered to BCM	Done	
TP 3	The ID of third key is not registered to BCM	Yet	E
	The ID of third key is registered to BCM	Done	
TP 2	The ID of second key is not registered to BCM	Yet	F
	The ID of second key is registered to BCM	Done	
TP 1	The ID of first key is not registered to BCM	Yet	G
	The ID of first key is registered to BCM	Done	
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire	H
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire	I
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire	J
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire	K
ID REGST FL1	ID of front LH tire transmitter is registered	Done	
	ID of front LH tire transmitter is not registered	Yet	EXL
ID REGST FR1	ID of front RH tire transmitter is registered	Done	
	ID of front RH tire transmitter is not registered	Yet	
ID REGST RR1	ID of rear RH tire transmitter is registered	Done	
	ID of rear RH tire transmitter is not registered	Yet	
ID REGST RL1	ID of rear LH tire transmitter is registered	Done	
	ID of rear LH tire transmitter is not registered	Yet	
WARNING LAMP	Tire pressure indicator OFF	Off	M
	Tire pressure indicator ON	On	
BUZZER	Tire pressure warning alarm is not sounding	Off	N
	Tire pressure warning alarm is sounding	On	O
			P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

TERMINAL LAYOUT

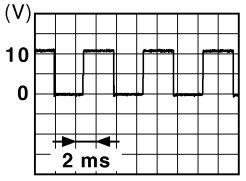


PHYSICAL VALUES

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

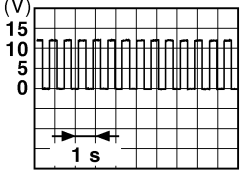
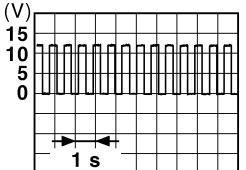
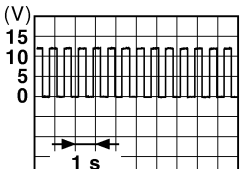
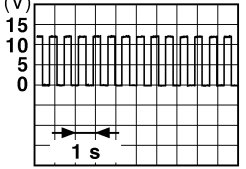
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-					
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (Y)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4 (LG)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		Battery voltage
5 (L)	Ground	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (Y)	Ground	Step lamp	Output	Step lamp	ON	0 V
					OFF	Battery voltage
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door, fuel lid UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
10 (BR)	Ground	Rear RH door and rear LH door UN- LOCK	Output	Rear RH door and rear LH door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	<p>NOTE: When the illumination brightening/dimming level is in the neutral position</p>  <p style="text-align: right; font-size: small;">JSNIA0010GB</p>
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF or ON	Battery voltage
					ACC	0 V

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

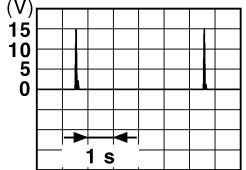
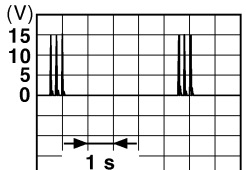
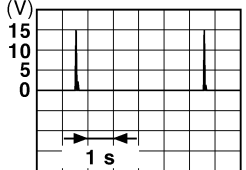
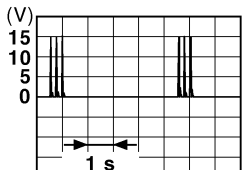
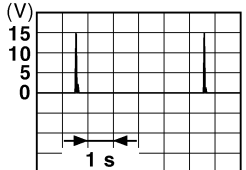
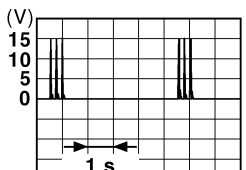
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
17 (W)	Ground	Turn signal RH (Front, side)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
18 (BG)	Ground	Turn signal LH (Front, side)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
19 (V)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
23 (G)	Ground	Back door open	Output	Back door	OPEN (Back door opener actuator is activated)	Battery voltage
					Other than OPEN (Back door opener actuator is not activated)	0 V
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
26 (G)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
					ON (Operated)	Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

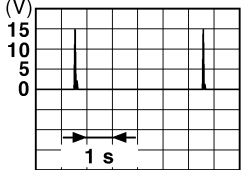
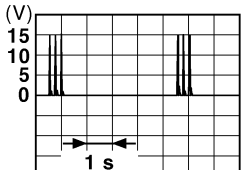
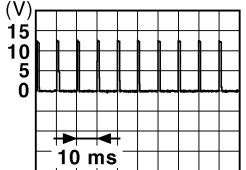
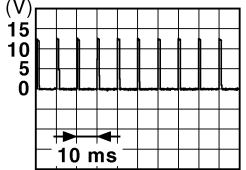
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
34 (SB)	Ground	Luggage room antenna (-)	Output	Ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compartment	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
35 (V)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compartment	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
38 (B)	Ground	Back door antenna (-)	Output	When the back door opener request switch is operated with ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

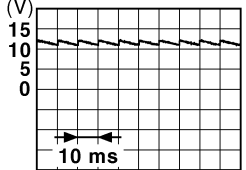
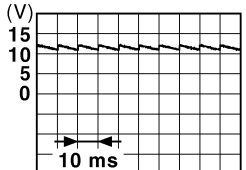
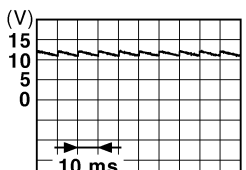
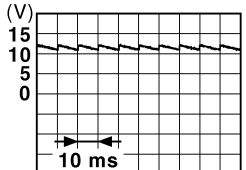
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	-					
39 (W)	Ground	Back door antenna (+)	Output	When the back door opener re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is in the antenna detection area	 <small>JMKIA0062GB</small>
					When Intelligent Key is not in the antenna detection area	 <small>JMKIA0063GB</small>
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
52 (SB)	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position	Battery voltage
					When selector lever is not in P or N position	0 V
60 (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button igni- tion switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
61 (W)	Ground	Back door opener re- quest switch	Input	Back door opener request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <small>JPMIA0016GB</small> 1.0 V
64 (V)	Ground	Intelligent Key warn- ing buzzer (Engine room)	Output	Intelligent Key warning buzzer (Engine room)	Sounding	0 V
					Not sounding	Battery voltage
65 (BG)	Ground	Rear wiper stop posi- tion	Input	Rear wiper	In stop position	 <small>JPMIA0016GB</small> 1.0 V
					Not in stop position	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
66 (R)	Ground	Back door switch	Input	Back door switch	OFF (Door close)	 11.8 V
					ON (Door open)	0 V
67 (GR)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 11.8 V
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (Door close)	 11.8 V
					ON (Door open)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (Door close)	 11.8 V
					ON (Door open)	0 V

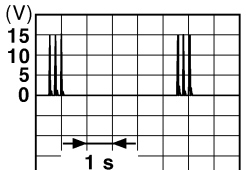
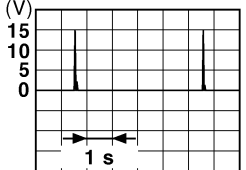
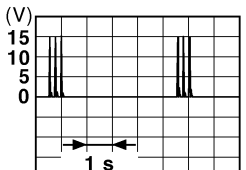
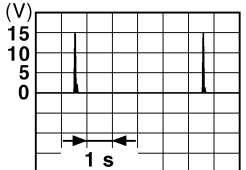
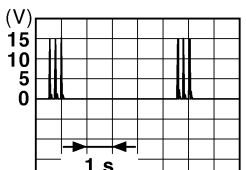
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

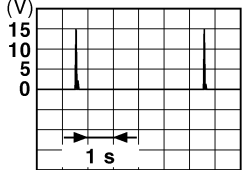
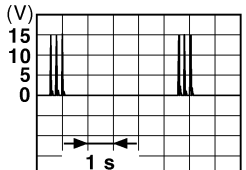
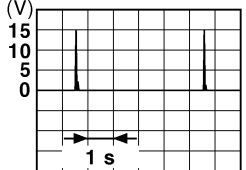
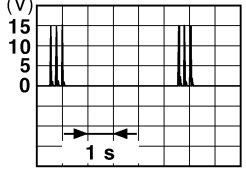
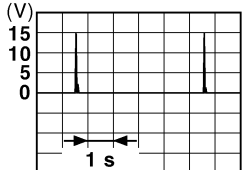
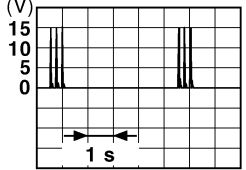
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
72 (R)	Ground	Room antenna 2 (-) (Console)	Output		
				Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment  <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
73 (G)	Ground	Room antenna 2 (+) (Console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment  <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment  <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
74 (SB)	Ground	Passenger door an- tenna (-)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is in the antenna detection area  <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				Ignition switch OFF	When Intelligent Key is not in the antenna detection area  <p style="text-align: right; font-size: small;">JMKIA0063GB</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
75 (GR)	Ground	Passenger door antenna (+)	Output	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When the passenger door request switch is operated with ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
76 (V)	Ground	Driver door antenna (-)	Output	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When the driver door request switch is operated with ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
77 (LG)	Ground	Driver door antenna (+)	Output	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When the driver door request switch is operated with ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>

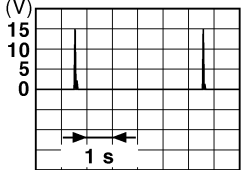
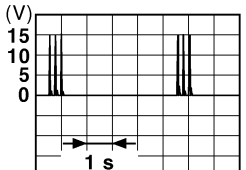
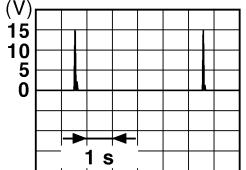
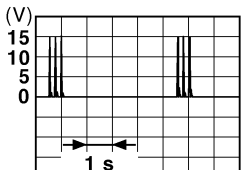
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

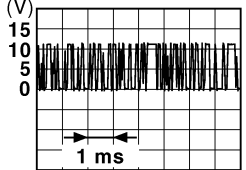
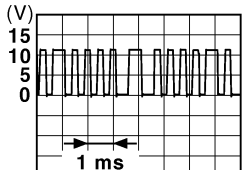
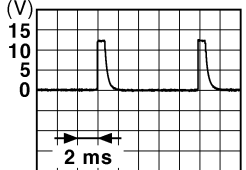
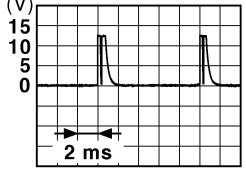

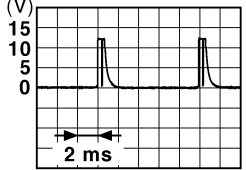
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
78 (Y)	Ground	Room antenna 1 (-) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment  <small>JMKIA0062GB</small>
				Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment  <small>JMKIA0063GB</small>
79 (BR)	Ground	Room antenna 1 (+) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment  <small>JMKIA0062GB</small>
				Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment  <small>JMKIA0063GB</small>
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot. Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot. Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC ON
				0 V	Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

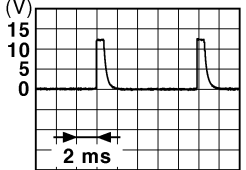
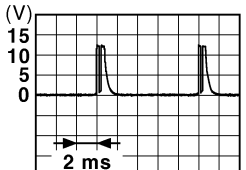

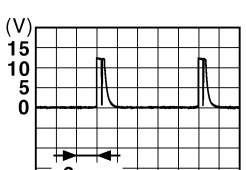
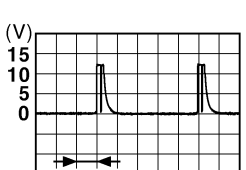
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
83 (Y)	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting	 <p style="text-align: right; font-size: small;">JMKIA0064GB</p>
				When operating either button on the key	 <p style="text-align: right; font-size: small;">JMKIA0065GB</p>
87 (BR)	Ground	Combination switch INPUT 5	Input	All switches OFF (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
				Front fog lamp switch ON (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p>
				Rear wiper switch ON (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>
				Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7 	 <p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

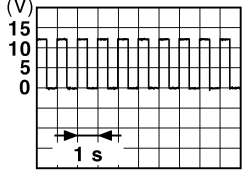
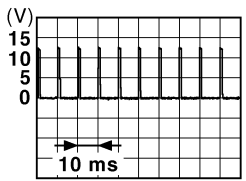
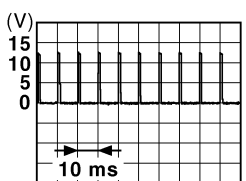
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 1.3 V
					Rear washer switch ON (Wiper intermittent dial 4)	 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 1.3 V
90 (P)	Ground	CAN-L	Input/ Output	—	—	
91 (L)	Ground	CAN-H	Input/ Output	—	—	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

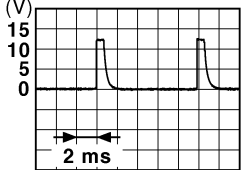

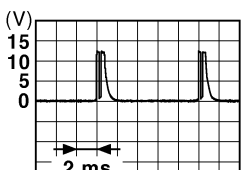
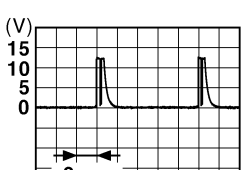
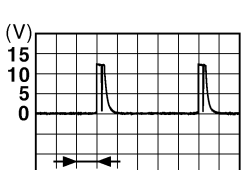
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
92 (LG)	Ground	Key slot illumination	Output	Key slot illumination	OFF	Battery voltage
					Blinking	 <p style="text-align: center;">6.5 V</p>
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
94 (Y)	Ground	Puddle lamp control	Output	Puddle lamp	OFF	Battery voltage
					ON	0 V
95 (BG)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output	—	Battery voltage	
99 (R)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	Battery voltage
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <p style="text-align: center;">1.0 V</p>
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <p style="text-align: center;">1.0 V</p>
102 (BG)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF	Battery voltage	

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

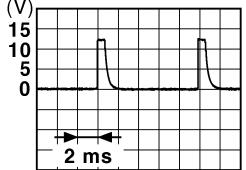
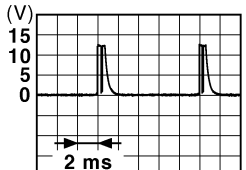

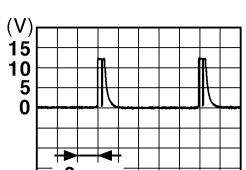

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
107 (LG)	Ground	Combination switch INPUT 1	Input	All switches OFF	 <small>JPMIA0041GB</small> 1.4 V
				Turn signal switch LH	 <small>JPMIA0037GB</small> 1.3 V
				Turn signal switch RH	 <small>JPMIA0036GB</small> 1.3 V
				Front wiper switch LO	 <small>JPMIA0038GB</small> 1.3 V
				Front washer switch ON	 <small>JPMIA0039GB</small> 1.3 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

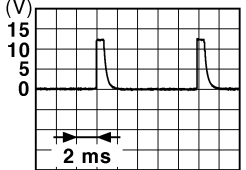

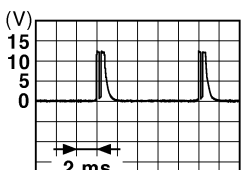
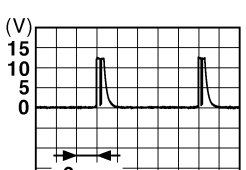
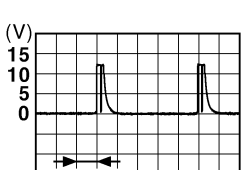
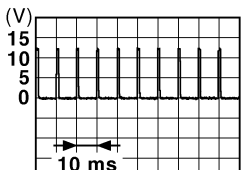
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)	 1.3 V
					Rear wiper switch INT (Wiper intermittent dial 4)	 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	 1.3 V

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

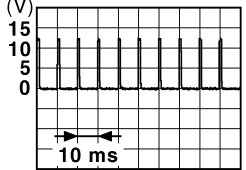
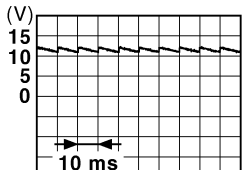
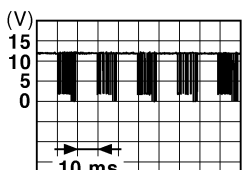
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 1.4 V
					Lighting switch PASS	 1.3 V
					Lighting switch 2ND	 1.3 V
					Front wiper switch INT	 1.3 V
					Front wiper switch HI	 1.3 V
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	 1.1 V	
				OFF	0 V	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	-					
113 (P)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
116 (SB)	Ground	Stop lamp switch 1	Input	—		Battery voltage
118 (P)	Ground	Stop lamp switch 2 (Without ICC)	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is de- pressed)	Battery voltage
		Stop lamp switch 2 (With ICC)		Stop lamp switch OFF (Brake pedal is not de- pressed) and ICC brake hold relay OFF	0 V	
				Stop lamp switch ON (Brake pedal is de- pressed) or ICC brake hold relay ON	Battery voltage	
119 (SB)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 1.1 V
					UNLOCK status (Unlock switch sensor ON)	0 V
121 (BR)	Ground	Key slot switch	Input	When the key is inserted into key slot		Battery voltage
				When the key is not inserted into key slot		0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	 11.8 V
					ON (Door open)	0 V
132 (BR)	Ground	Power window switch communication	Input/ Output	Ignition switch ON	 10.2 V	
				Ignition switch OFF or ACC	Battery voltage	

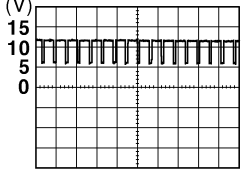
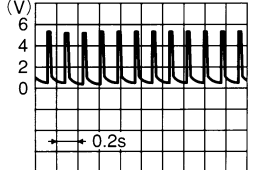

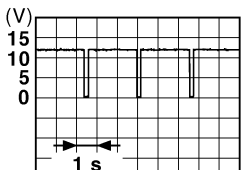
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BCM (BODY CONTROL MODULE)

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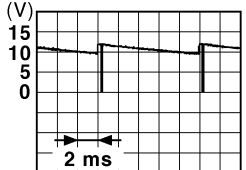
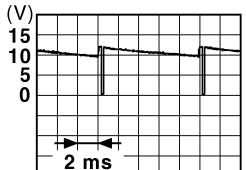
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (Tail lamps OFF)	9.5 V
				ON (Tail lamps ON)	<p>NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level.</p>  <p style="text-align: right; font-size: small;">JPMIA0159GB</p>	
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
				ON	0 V	
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch ON	0 V	
138 (Y)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
				ACC or ON	5.0 V	
139 (L)	Ground	Tire pressure receiv- er communication	Input/ Output	Ignition switch ON	Standby state	 <p style="text-align: right; font-size: small;">OCC3881D</p>
				When receiving the signal from the transmitter	 <p style="text-align: right; font-size: small;">OCC3880D</p>	
140 (GR)	Ground	Selector lever P/N position	Input	Selector lever	P or N position	Battery voltage
				Except P and N positions	0 V	
141 (G)	Ground	Security indicator	Output	Security indicator	ON	0 V
				Blinking	 <p style="text-align: right; font-size: small;">JPMIA0014GB</p>	
				OFF	Battery voltage	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
142 (BG)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Lighting switch 1ST	
					Lighting switch HI	
					Lighting switch 2ND	
					Turn signal switch RH	
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF	
					• Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF	
• Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	10.7 V					
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front wiper switch INT	
					Front wiper switch LO	
					Lighting switch AUTO	

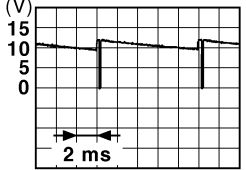
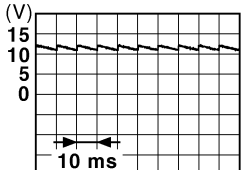
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front fog lamp switch ON	 <p style="text-align: right; font-size: small;">JPMIA0035GB</p>
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	
150 (LG)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	 <p style="text-align: right; font-size: small;">JPMIA0011GB</p>
					ON (Door open)	0 V
151 (G)	Ground	Rear window defog- ger relay control	Output	Rear window de- fogger	Active	0 V
					Not activated	Battery voltage

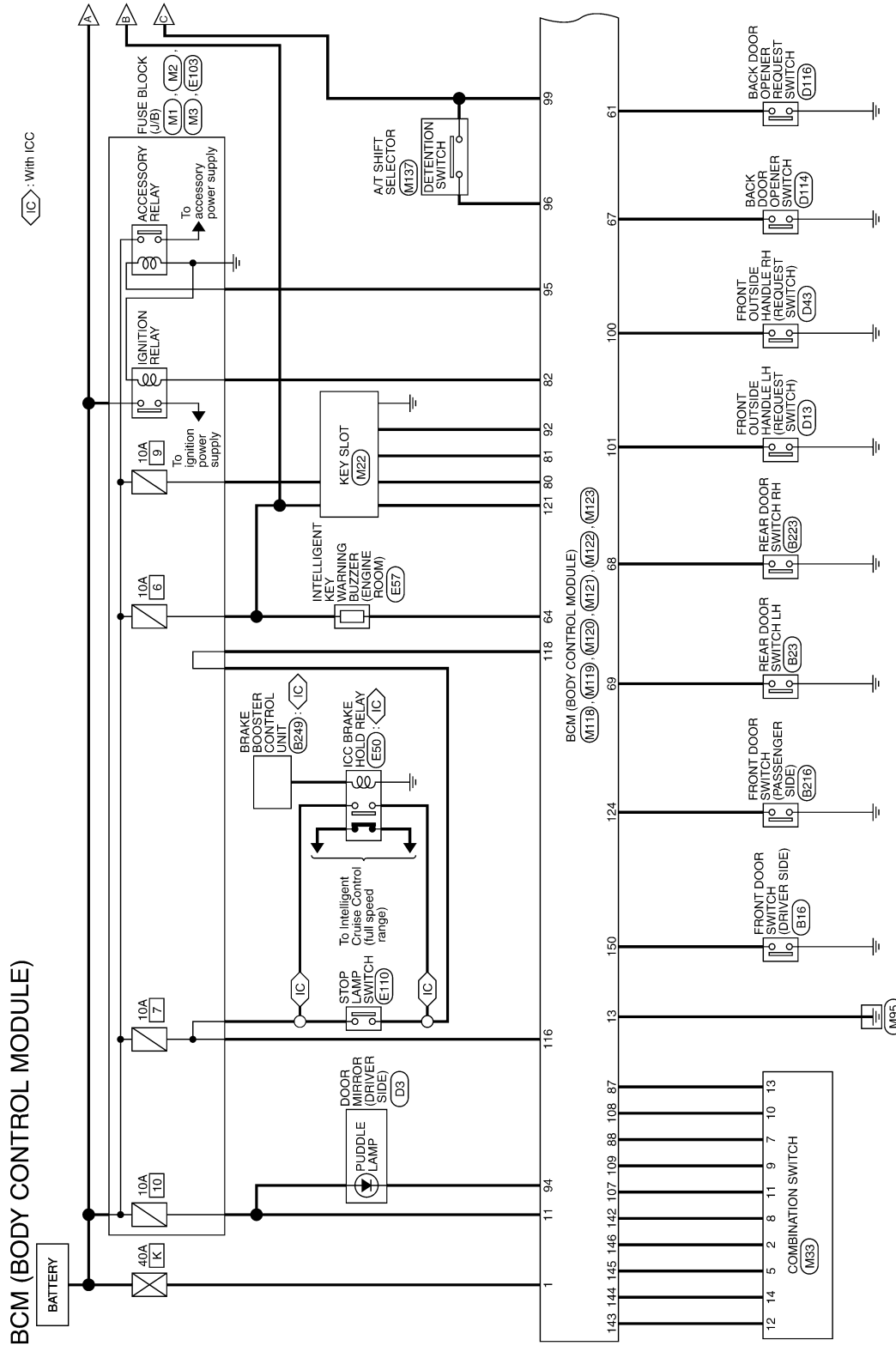
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Wiring Diagram - BCM -

INFOID:000000012750588



2015/06/22

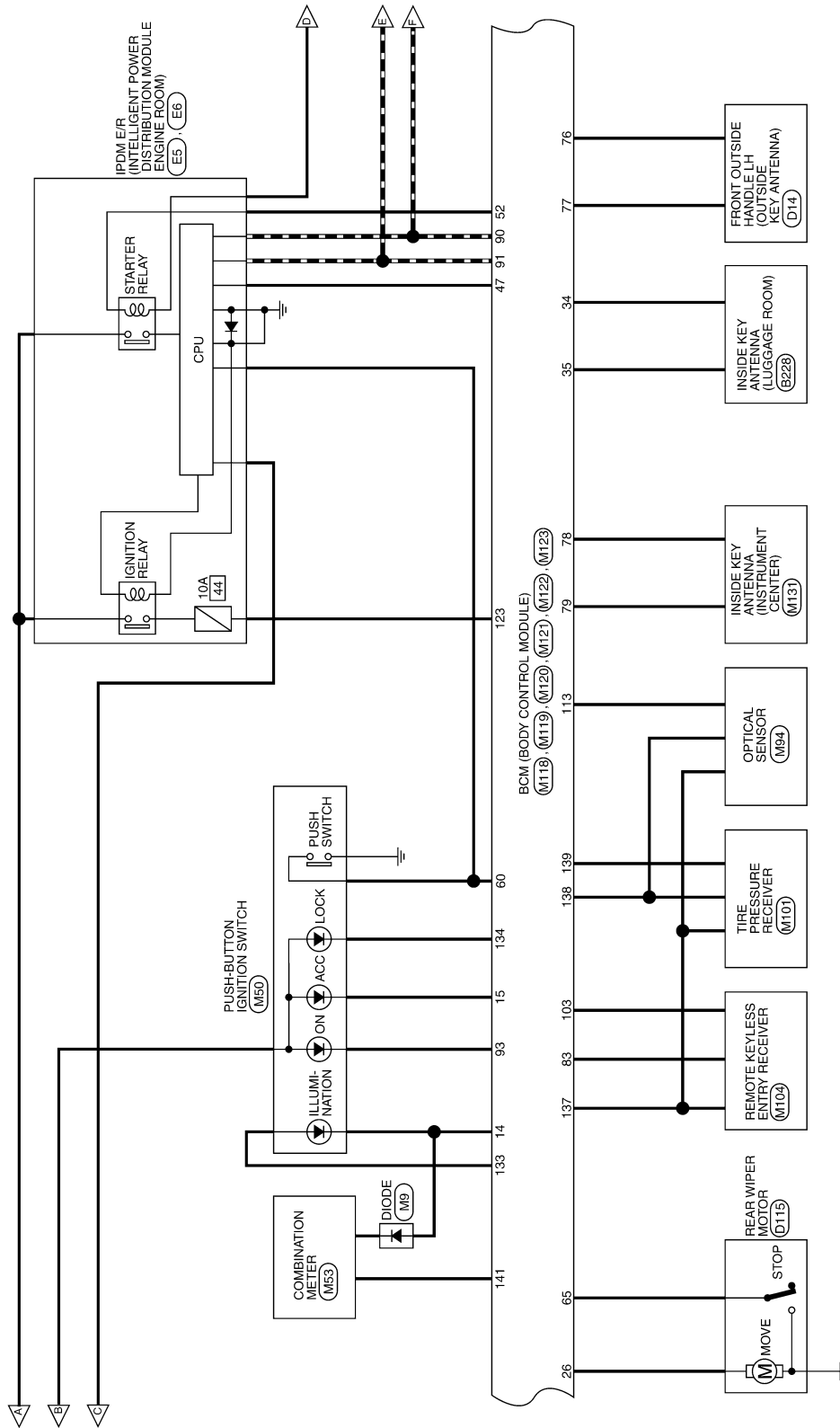
JRMW13746GB

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]



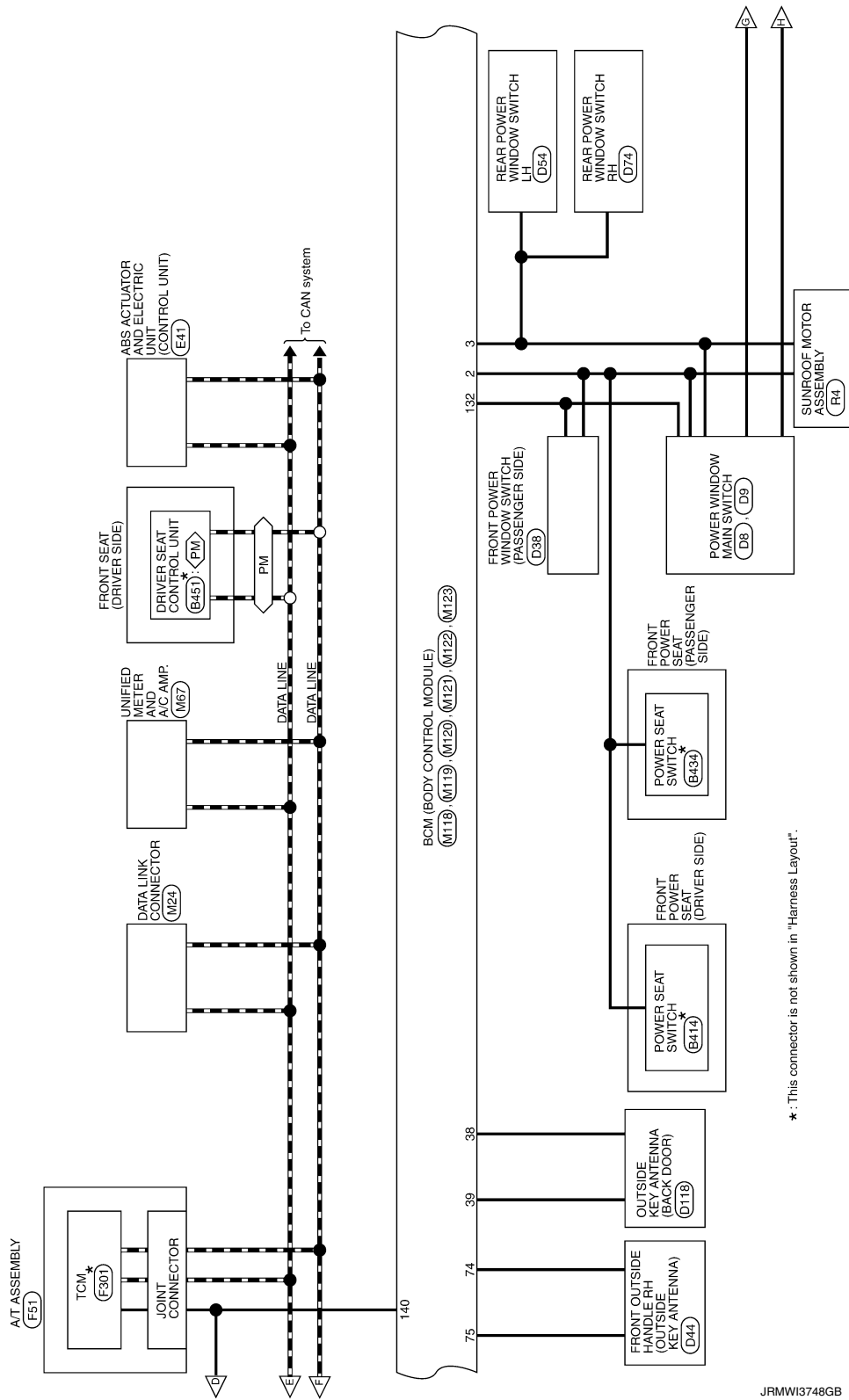
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

◊ (PM) : With automatic drive positioner



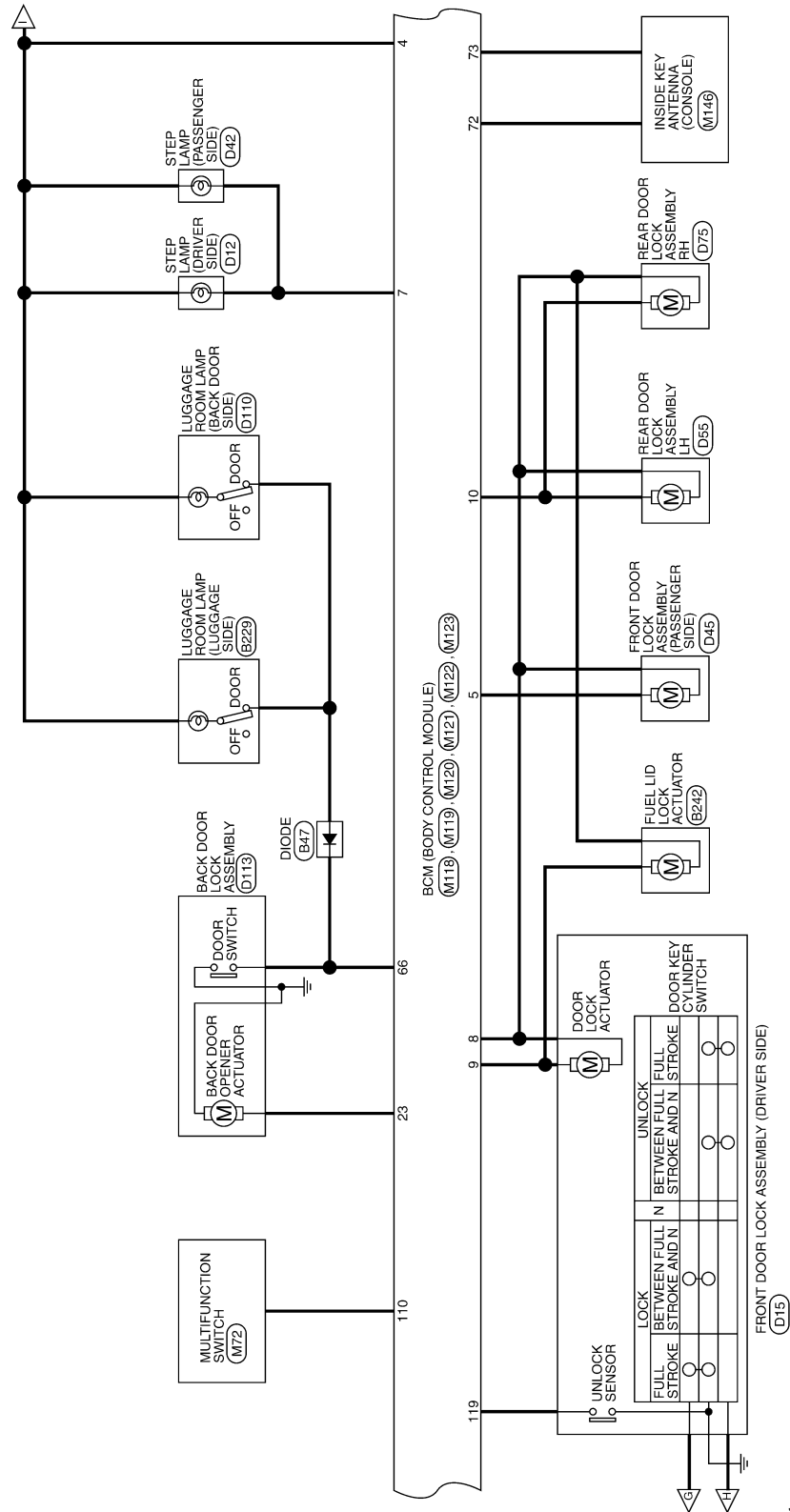
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

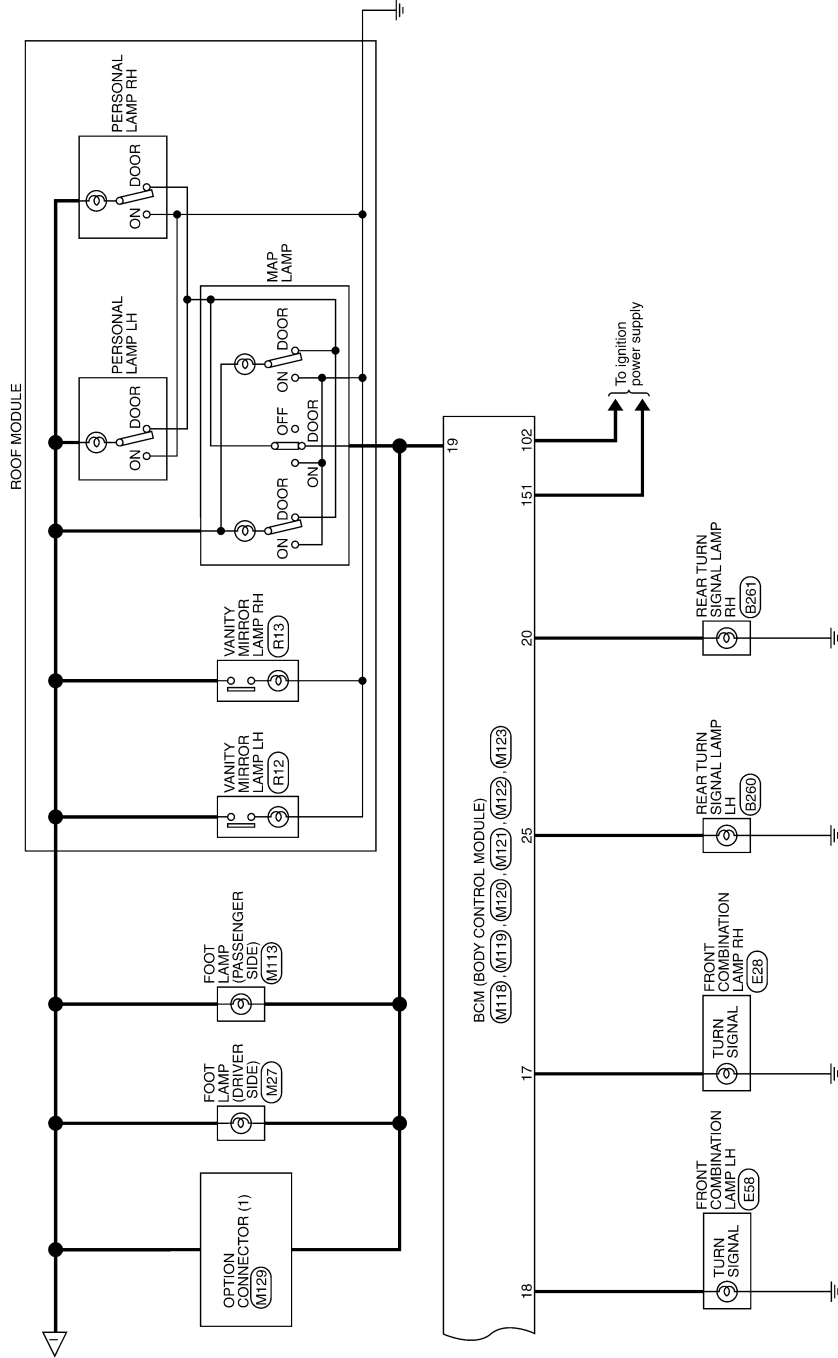


JRMW13749GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]



JRMWI3750GB

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BCM (BODY CONTROL MODULE)

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[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	B16
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



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

Connector No.	B23
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



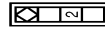
Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	-

Connector No.	B47
Connector Name	DIODE
Connector Type	Z133Z_C9900



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

Connector No.	B21B
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



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

Connector No.	B233
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



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

Connector No.	B22B
Connector Name	INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Type	RK02FCY



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

Connector No.	B229
Connector Name	LUGGAGE ROOM LAMP (LUGGAGE SIDE)
Connector Type	TR03FW



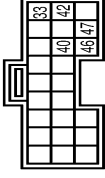
Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	L	-

Connector No.	B24Z
Connector Name	FUEL LID LOCK ACTUATOR
Connector Type	M04FW-LC



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

Connector No.	B249
Connector Name	BRAKE BOOSTER CONTROL UNIT
Connector Type	TR24FGY



Terminal No.	Color Of Wire	Signal Name [Specification]
33	BR	IGNITION
40	SB	IBA OFF SW
42	G	IGNITION
46	B	GROUND
47	V	BRAKE HOLD RLY DRIVE SIGNAL

JRMW13751GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	B260
Connector Name	REAR TURN SIGNAL LAMP LH
Connector Type	HS30ZFG-W



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	B	-

Connector No.	B261
Connector Name	REAR TURN SIGNAL LAMP RH
Connector Type	HS30ZFG-W



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	B	-

Connector No.	B414
Connector Name	POWER SEAT SWITCH
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	B	-
3	G/Y	-
4	P	-
5	W	-
6	V	-
7	L/Y	-
8	L	-
9	L/R	-
10	G/W	-

Connector No.	B454
Connector Name	POWER SEAT SWITCH
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	G/Y	-
4	P	-
5	W	-
6	V	-
7	L/Y	-
8	L	-
9	L/R	-
10	G/W	-

Connector No.	B451
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH32HW



Terminal No.	Color of Wire	Signal Name [Specification]
1	-	CAN-H
2	-	LIART (TX/RX)
3	-	-
4	-	PULSE (RECLINER)
5	-	PULSE (TELESCOPIC)
6	-	ADDRESS 2
7	-	IND 2
8	-	SLIDE SW (BACKWARD)
9	-	RECLINER SW (BACKWARD)
10	-	FRONT LIFTER SW (DOWNWARD)
11	-	REAR LIFTER SW (DOWNWARD)
12	-	POWER SUPPLY (ENCODER)
13	-	PULSE (LIFTERS)
14	-	PULSE (FRONT LIFTER)
15	-	PULSE (REAR LIFTER)
16	-	PULSE (LIFTERS)
17	-	PULSE (LIFTERS)
18	-	PULSE (LIFTERS)
19	-	PULSE (LIFTERS)
20	-	PULSE (LIFTERS)
21	-	PULSE (LIFTERS)
22	-	ADDRESS 1
23	-	IND 1
24	-	SLIDE SW (FORWARD)
25	-	RECLINER SW (FORWARD)
26	-	FRONT LIFTER SW (UPWARD)
27	-	REAR LIFTER SW (UPWARD)
28	-	SET SW

Connector No.	B3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH24MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	O	-
3	BR	COMP+
4	P	COMP+
5	P	COMP+
6	SB	ON
7	W	-
10	G	-
11	P	-
12	O	-
14	LG	-
17	SHIELD	COMP-
18	LG	GROUND
19	B	-
20	GR	-
22	BR	-
23	V	-
24	V	-

Connector No.	B8
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS18FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	REAR POWER WINDOW MOTOR LH UP SIGNAL
2	BR	ENCODER GROUND
3	GR	REAR POWER WINDOW MOTOR LH DOWN SIGNAL

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

4	V	DOOR KEY CYLINDER SWITCH LH LOCK SIGNAL
5	O	REAR POWER WINDOW MOTOR RH/DOWN SIGNAL
6	Y	DOOR KEY CYLINDER SWITCH LH UNLOCK SIGNAL
7	BR	REAR POWER WINDOW MOTOR RH UP SIGNAL
8	L	FRONT POWER WINDOW MOTOR (DRIVER SIDE) UP SIGNAL
9	O	ENCODER PULSE 2
10	Y	RETAINED POWER SIGNAL
11	G	FRONT POWER WINDOW MOTOR (DRIVER SIDE) DOWN SIGNAL
13	P	ENCODER PULSE 1
14	V	POWER WINDOW SERIAL LINK
15	B	ENCODER POWER SUPPLY

Connector No.	D9
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS303FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
17	B	GROUND
19	W	BATTERY POWER SUPPLY

Connector No.	D12
Connector Name	STEP LAMP (DRIVER SIDE)
Connector Type	TB02FW



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

Connector No.	D13
Connector Name	FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)
Connector Type	RK02FL



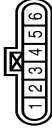
Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	B	-

Connector No.	D14
Connector Name	FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA)
Connector Type	RK02MEY



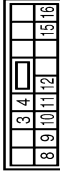
Terminal No.	Color Of Wire	Signal Name [Specification]
1	O	-
2	SB	-

Connector No.	D15
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	ED0FGY-RS



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

Connector No.	D38
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Type	NS16FY-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
3	L	ENCODER GROUND
4	O	ENCODER POWER SUPPLY
8	W	POWER WINDOW MOTOR UP SIGNAL
9	G	POWER WINDOW MOTOR DOWN SIGNAL
10	W	BATTERY SUPPLY
11	B	GROUND
12	R	ENCODER PULSE 1
15	O	ENCODER PULSE 2
16	V	POWER WINDOW SERIAL LINK

Connector No.	D42
Connector Name	STEP LAMP (PASSENGER SIDE)
Connector Type	TB02FW



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

Connector No.	D43
Connector Name	FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)
Connector Type	RK02FL



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

JRMW13753GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	D44
Connector Name	FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA)
Connector Type	RK02ZMGY



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

Connector No.	D45
Connector Name	FRONT DOOR LOCK ASSEMBLY PASSENGER SIDE
Connector Type	EB6FGY-RS



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

Connector No.	D54
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	NS02FW-CS



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

Connector No.	D55
Connector Name	REAR DOOR LOCK ASSEMBLY LH
Connector Type	EB6FGY-RS



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

Connector No.	D74
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	NS02FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	V	-
3	G	-
4	P	-
5	O	-
7	B	-

Connector No.	D75
Connector Name	REAR DOOR LOCK ASSEMBLY RH
Connector Type	EB6FGY-RS



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

Connector No.	D110
Connector Name	LUGGAGE ROOM LAMP (BACK DOOR SIDE)
Connector Type	TK03FW



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

Connector No.	D113
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS04FW-CS



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

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	D114
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	T102ZMR-P



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

Connector No.	D115
Connector Name	REAR WIPER MOTOR
Connector Type	CJ04FW-1V



Terminal No.	Color Of Wire	Signal Name [Specification]
2	G	-
3	O	-
4	B	-

Connector No.	D116
Connector Name	BACK DOOR OPENER REQUEST SWITCH
Connector Type	T102ZMR-P



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

Connector No.	D118
Connector Name	OUTSIDE KEY ANTENNA (BACK DOOR)
Connector Type	IRK02FGY



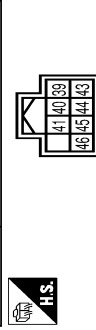
Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	R	-

Connector No.	E5
Connector Name	IPM F/R INTELLIGHT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	T120FW-C51Z-M-1V



Terminal No.	Color Of Wire	Signal Name [Specification]
4	V	-
5	L	-
6	R	-
7	R	-
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	BG	-
28	GR	-
30	G	-

Connector No.	E6
Connector Name	IPM F/R INTELLIGHT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	T100PW-NH



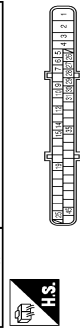
Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-

Connector No.	-
Connector Name	-
Connector Type	-



Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
5	BS	-
6	V	-
7	BR	-
8	P	-

Connector No.	E41
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	BAA42FB-AH24-LH



Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	GROUND
3	G	UBV2
4	R	UBV1
5	Y	DS FL
6	BG	DP FL
7	BR	DP FR
9	B	DP FR
10	W	DS FR
12	L	VAC

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

14	P	CON-L
15	SHIELD	GROUND
18	P	LIST
25	Y	BUS-L
26	LG	DP FL
27	GR	DS RL
28	G	LZ
29	LG	DS RR
30	SB	BLS
31	R	VDC OFF SW
33	L	CAN-H
43	B	BUS-H

Connector No.	E50
Connector Name	IGCC BRAKE HOLD RELAY
Connector Type	M08FGY-R-JS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	B	-
3	P	-
4	SB	-
6	P	-
7	R	-

Connector No.	E57
Connector Name	INTELLIGENT KEY WARNING BUZZER (ENGINE ROOM)
Connector Type	RM03FBR



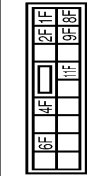
Terminal No.	Color Of Wire	Signal Name [Specification]
1	X	-
3	V	-

Connector No.	E58
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS08FB-PR



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

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS18FHW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
11F	W	-
1F	SB	-
2F	W	-
4F	G	-
6F	BR	-
8F	L	-
9F	R	-

Connector No.	E110
Connector Name	STOP LAMP SWITCH
Connector Type	M04FV-LG



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	Y	-
4	SB	-

Connector No.	E51
Connector Name	A/T ASSEMBLY
Connector Type	FK18FCG-DBY



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	IGNITION POWER SUPPLY
2	BR	BATTERY POWER SUPPLY
3	O	CAN-H
4	V	K-LINE
5	B	GROUND
6	Y	IGNITION POWER SUPPLY
7	R	BACK-UP LAMP RELAY
8	LG	CAN-L
9	GR	STARTER RELAY
10	B	GROUND

Connector No.	E301
Connector Name	TCM
Connector Type	SP10FG



Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	IGNITION POWER SUPPLY
2	-	BATTERY POWER SUPPLY
3	-	CAN-H
4	-	K-LINE
5	-	GROUND
6	-	IGNITION POWER SUPPLY
7	-	BACK-UP LAMP RELAY
8	-	CAN-L
9	-	STARTER RELAY
10	-	GROUND

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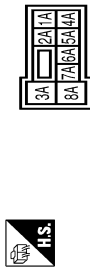
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

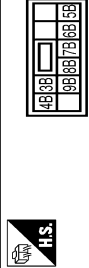
BCM (BODY CONTROL MODULE)

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS08FW-M2



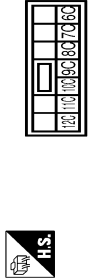
Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
3B	P	-
4B	G	-
5B	G	-
6B	Y	-
7B	P	-
8B	R	-
9B	SB	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	L	-
11C	R	-
12C	BG	-
6C	R	-
7C	B	-
8C	G	-
9C	BG	-

Connector No.	M9
Connector Name	DIODE
Connector Type	2435 CB960



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

Connector No.	M22
Connector Name	KEY SLOT
Connector Type	TH12FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	BAT
2	GR	CLOCK
3	W	DATA
5	Y	ILL BAT
6	LG	ILL
7	B	GROUND
11	BR	KEY SWITCH SIGNAL

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	ED10FW



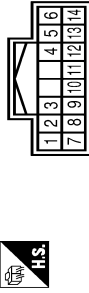
Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	V	-
7	Y	-
8	G	-
11	SB	-
14	P	-
16	Y	-

Connector No.	M27
Connector Name	FOOT LAMP (DRIVER SIDE)
Connector Type	A02FW



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

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	SB	OUTPUT 4
3	GR	FR WASHER(+)
4	G	IGN
5	L	OUTPUT 3
6	B	GROUND
7	V	INPUT 3
8	BG	OUTPUT 5
9	L	OUTPUT 2
10	R	INPUT 4
11	LG	INPUT 1
12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	M53
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FBR



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



Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	TK46FPN-NH

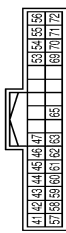


Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BATTERY POWER SUPPLY
2	LG	COMMUNICATION SIGNAL (METER->AMP)
3	GR	COMMUNICATION SIGNAL (AMP->METER)
4	B	ALTERNATOR SIGNAL
5	B	SECURITY SIGNAL
6	B	SECURITY SIGNAL
7	BR	AIR BAG SIGNAL
8	B	GROUND
9	B	GROUND
10	G	METER CONTROL SWITCH GROUND
11	B	ILL GND
12	R	ILL
13	R	IGNITION SIGNAL
14	EG	-
15	EG	-
16	EG	-
17	EG	-
18	EG	-
19	EG	-
20	EG	-
21	EG	-
22	EG	-
23	EG	-
24	EG	-

Terminal No.	Color Of Wire	Signal Name [Specification]
22	B	GROUND
24	BR	COMMUNICATION SIGNAL (GDP->AMP)
25	Y	COMMUNICATION SIGNAL (AMP->LCD)
26	R	VEHICLE SPEED SIGNAL (B-FULSEL)
27	V	PARKING BRAKE SWITCH SIGNAL
28	W	BRAKE FLUID LEVEL SWITCH SIGNAL
29	SB	SEAT BELT BRUCKLE SWITCH SIGNAL (DRIVER SIDE)
30	G	SEAT BELT BRUCKLE SWITCH SIGNAL (PASSENGER SIDE)
31	L	WASHER LEVEL SWITCH SIGNAL
33	B	ILLUMINATION CONTROL SIGNAL
38	LG	SELECT SWITCH SIGNAL
37	SB	ENTER SWITCH SIGNAL
38	L	TRIP X/P RESET SWITCH SIGNAL
39	B	ILLUMINATION CONTROL SWITCH SIGNAL (C)
40	EG	ILLUMINATION CONTROL SWITCH SIGNAL (C)



Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TK32FW-NH

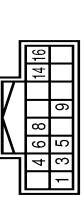


Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	ACC POWER SUPPLY
42	Y	FUEL LEVEL SENSOR SIGNAL
43	R	INTAKE SENSOR SIGNAL
44	LG	IN-VEHICLE SENSOR SIGNAL
45	P	AMBIENT SENSOR SIGNAL
46	EG	SUNLOAD SENSOR SIGNAL
47	G	IGNITION POWER SUPPLY
53	G	IGNITION POWER SUPPLY
54	Y	BATTERY POWER SUPPLY
55	B	GROUND
56	W	GROUND
57	W	BRAKE FLUID LEVEL SWITCH SIGNAL
58	BR	FUEL LEVEL SENSOR GROUND
59	GR	INTAKE SENSOR GROUND
60	L	IN-VEHICLE SENSOR GROUND
61	BR	AMBIENT SENSOR GROUND
62	SB	SUNLOAD SENSOR GROUND
63	R	-
65	EG	ECV SIGNAL

Terminal No.	Color Of Wire	Signal Name [Specification]
6B	L	A/C CLAN SIGNAL
70	R	EACH DOOR MOTOR POWER SUPPLY
71	B	GROUND
72	P	CAN-L



Connector No.	MTZ
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TK16FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
3	V	ACC
4	R	ILL
5	Y	ILL CONT
6	SB	AV COMM (H)
8	LG	AV COMM (L)
9	B	SW GND
14	Y	DISK CONTROL SIGNAL
16	G	HAZARD ON



Connector No.	M84
Connector Name	OPTICAL SENSOR
Connector Type	TK03PW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	POWER
2	P	OUTPUT
3	B	GROUND

Connector No.	M101
Connector Name	TIRE PRESSURE RECEIVER
Connector Type	TK04FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
2	EG	SIGNAL
4	Y	BATTERY



Connector No.	M104
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	JAB04FB



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
2	Y	SIGNAL OUTPUT
4	LG	BATTERY

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

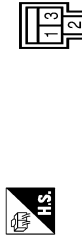
BCM (BODY CONTROL MODULE)

Connector No.	M113
Connector Name	FOOT LAMP (PASSENGER SIDE)
Connector Type	A02FW



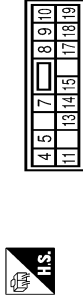
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	BR	-

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	W	POWER WINDOW POWER SUPPLY(BAT)
3	Y	POWER WINDOW POWER SUPPLY(TRAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS



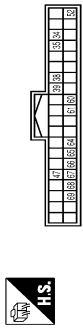
Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	LG	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GROUND
14	W	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT

Connector No.	M120
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS



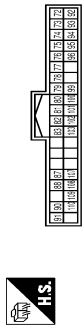
Terminal No.	Color Of Wire	Signal Name [Specification]
20	V	TURN SIGNAL RH (REAR)
23	G	BACK DOOR OPEN OUTPUT
25	G	TURN SIGNAL LH (REAR)
26	G	REAR WIPER OUTPUT

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FCY-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
34	SB	LUGGAGE ROOM ANT-
35	V	LUGGAGE ROOM ANT+
38	B	BACK DOOR ANT-
39	W	BACK DOOR ANT+
47	Y	IGN RELAY (PDM F/R) CONT
52	SB	STARTER RELAY CONT
60	BR	PUSH SW
61	W	BACK DOOR OPENER REQUEST SW
64	V	I-KEY WARN BUZZER (ENG ROOM)
65	BG	REAR WIPER STOP POSITION
66	R	BACK DOOR SW
67	GR	BACK DOOR OPENER SW
68	BR	REAR LID LOCK SW
69	R	REAR LID DOOR SW

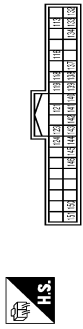
Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40PE-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 -
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+

78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	MATS ANT AMP.
81	W	MATS ANT AMP.
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL CONT
93	V	IGN IND
94	Y	POWER WINDOW SW
95	BG	ACC RELAY CONT
96	GR	A.T SHIFT SELECTOR POWER SUPPLY
89	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	EG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FC-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
111	SB	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

137	BG	RECEIVER SENSOR GND
138	Y	RECEIVER SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SHIFT N/P
141	G	SECURITY IND LAMP GND
142	BG	COMB SW OUTPUT 5
143	P	COMB SW OUTPUT 1
144	G	COMB SW OUTPUT 2
145	L	COMB SW OUTPUT 3
146	SB	COMB SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M129
Connector Name	OPTION CONNECTOR (1)
Connector Type	TH408MW-NH



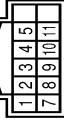
Terminal No.	Color of Wire	Signal Name [Specification]
3	G	-
6	R	-

Connector No.	M131
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FGY



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

Connector No.	M137
Connector Name	A/T SHIFT SELECTOR
Connector Type	TH12FW-NH



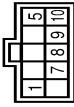
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	V	-
3	L	-
4	B	-
5	G	-
7	R	-
8	SB	-
9	B	-
10	GR	-
11	R	-

Connector No.	M146
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	R4
Connector Name	SUNROOF MOTOR ASSEMBLY
Connector Type	YEA10FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	SUNROOF CLOSE SWITCH (BITD) SIGNAL
5	P	SUNROOF OPEN SWITCH (BITD) SIGNAL
7	BR	SUNROOF POWER SUPPLY
8	L	VEHICLE SPEED SENSOR (2PULSE)
9	Y	RAP SIGNAL
10	G	GROUND

Connector No.	RI2
Connector Name	VANITY MIRROR LAMP LH
Connector Type	MC2A02FW



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

Connector No.	RI2
Connector Name	VANITY MIRROR LAMP RH
Connector Type	MC2A02FW



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

Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

JRMWI3760GB

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BCM (BODY CONTROL MODULE)

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[XENON TYPE]

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> • Starter control relay signal • Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent <ul style="list-style-type: none"> • Starter motor relay control signal • Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled <ul style="list-style-type: none"> • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled <ul style="list-style-type: none"> • Power position changes to ACC • Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

1. More than 1 minute is passed after the rear wiper stops.
2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	<ul style="list-style-type: none"> • U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
3	<ul style="list-style-type: none"> • B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Priority	DTC	
4	• B2553: IGNITION RELAY	A
	• B2555: STOP LAMP	
	• B2556: PUSH-BTN IGN SW	
	• B2557: VEHICLE SPEED	B
	• B2560: STARTER CONT RELAY	
	• B2601: SHIFT POSITION	
	• B2602: SHIFT POSITION	
	• B2603: SHIFT POSI STATUS	C
	• B2604: PNP SW	
	• B2605: PNP SW	
	• B2608: STARTER RELAY	
	• B260A: IGNITION RELAY	D
	• B260F: ENG STATE SIG LOST	
	• B2614: ACC RELAY CIRC	
	• B2615: BLOWER RELAY CIRC	
	• B2616: IGN RELAY CIRC	E
	• B2617: STARTER RELAY CIRC	
	• B2618: BCM	
	• B261A: PUSH-BTN IGN SW	F
	• B261E: VEHICLE TYPE	
• B26EA: KEY REGISTRATION		
• C1729: VHCL SPEED SIG ERR		
• U0415: VEHICLE SPEED SIG	G	
5	• C1704: LOW PRESSURE FL	
	• C1705: LOW PRESSURE FR	
	• C1706: LOW PRESSURE RR	H
	• C1707: LOW PRESSURE RL	
	• C1708: [NO DATA] FL	
	• C1709: [NO DATA] FR	
	• C1710: [NO DATA] RR	I
	• C1711: [NO DATA] RL	
	• C1716: [PRESSDATA ERR] FL	
	• C1717: [PRESSDATA ERR] FR	
	• C1718: [PRESSDATA ERR] RR	J
	• C1719: [PRESSDATA ERR] RL	
	• C1734: CONTROL UNIT	
6	• B2621: INSIDE ANTENNA	K
	• B2622: INSIDE ANTENNA	
	• B2623: INSIDE ANTENNA	

DTC Index

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EXL

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to [EXL-33. "COMMON ITEM : CONSULT Function \(BCM - COMMON ITEM\)"](#).

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
No DTC is detected. Further testing may be required.	—	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	—	BCS-41
U1010: CONTROL UNIT (CAN)	—	—	—	—	BCS-42
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-43
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-40

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-43
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-44
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-45
B2195: ANTI SCANNING	×	—	—	—	SEC-46
B2553: IGNITION RELAY	—	×	—	—	PCS-52
B2555: STOP LAMP	—	×	—	—	SEC-47
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-49
B2557: VEHICLE SPEED	×	×	×	—	SEC-51
B2560: STARTER CONT RELAY	×	×	×	—	SEC-52
B2562: LOW VOLTAGE	—	×	—	—	BCS-44
B2601: SHIFT POSITION	×	×	×	—	SEC-53
B2602: SHIFT POSITION	×	×	×	—	SEC-56
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-59
B2604: PNP SW	×	×	×	—	SEC-62
B2605: PNP SW	×	×	×	—	SEC-64
B2608: STARTER RELAY	×	×	×	—	SEC-66
B260A: IGNITION RELAY	×	×	×	—	PCS-54
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-68
B2614: ACC RELAY CIRC	—	×	×	—	PCS-56
B2615: BLOWER RELAY CIRC	—	×	×	—	PCS-59
B2616: IGN RELAY CIRC	—	×	×	—	PCS-62
B2617: STARTER RELAY CIRC	×	×	×	—	SEC-71
B2618: BCM	×	×	×	—	PCS-65
B261A: PUSH-BTN IGN SW	—	×	×	—	SEC-73
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-76
B2621: INSIDE ANTENNA	—	×	—	—	DLK-58
B2622: INSIDE ANTENNA	—	×	—	—	DLK-60
B2623: INSIDE ANTENNA	—	×	—	—	DLK-62
B26E1: ENG STATE NO RES	×	×	×	—	SEC-69
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-70
C1704: LOW PRESSURE FL	—	—	—	×	WT-25
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	
C1708: [NO DATA] FL	—	—	—	×	WT-27
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-30
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-32
C1734: CONTROL UNIT	—	—	—	×	WT-34

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

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[XENON TYPE]

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

Reference Value

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VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

Monitor Item	Condition		Value/Status
RAD FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	0 – 100 %
AC COMP REQ	Engine running	A/C switch OFF	Off
		A/C switch ON (Compressor is operating)	On
TAIL&CLR REQ	Lighting switch OFF		Off
	Lighting switch 1ST, 2ND, HI or AUTO (Light is illuminated)		On
HL LO REQ	Lighting switch OFF		Off
	Lighting switch 2ND HI or AUTO (Light is illuminated)		On
HL HI REQ	Lighting switch OFF		Off
	Lighting switch HI		On
FR FOG REQ	Lighting switch 2ND or AUTO (Light is illuminated)	Front fog lamp switch OFF	Off
		<ul style="list-style-type: none"> • Front fog lamp switch ON • Daytime running light activated (Only for Canada) 	On
FR WIP REQ	Ignition switch ON	Front wiper switch OFF	Stop
		Front wiper switch INT	1LOW
		Front wiper switch LO	Low
		Front wiper switch HI	Hi
WIP AUTO STOP	Ignition switch ON	Front wiper stop position	STOP P
		Any position other than front wiper stop position	ACT P
WIP PROT	Ignition switch ON	Front wiper operates normally	Off
		Front wiper stops at fail-safe operation	BLOCK
IGN RLY1 -REQ	Ignition switch OFF or ACC		Off
	Ignition switch ON		On
IGN RLY	Ignition switch OFF or ACC		Off
	Ignition switch ON		On
PUSH SW	Release the push-button ignition switch		Off
	Press the push-button ignition switch		On
INTER/NP SW	Ignition switch ON	Selector lever in any position other than P or N	Off
		Selector lever in P or N position	On
ST RLY CONT	Ignition switch ON		Off
	At engine cranking		On

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

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Monitor Item	Condition	Value/Status
IHBT RLY -REQ	Ignition switch ON	Off
	At engine cranking	On
ST/INHI RLY	Ignition switch ON	Off
	At engine cranking	INHI ON → ST ON
	The status of starter relay or starter control relay cannot be recognized by the battery voltage malfunction, etc. when the starter relay is ON and the starter control relay is OFF	UNKWN
DETENT SW	Ignition switch ON	Off
	Release the selector button with selector lever in P position	On
S/L RLY -REQ	NOTE: The item is indicated, but not monitored.	Off
S/L STATE	NOTE: The item is indicated, but not monitored.	UNLOCK
DTRL REQ	Daytime running light system is not operated	Off
	Daytime running light system is operated	On
OIL P SW	Ignition switch OFF, ACC or engine running	Open
	Ignition switch ON	Close
HOOD SW	Close the hood	Off
	Open the hood	On
HL WASHER REQ	NOTE: The item is indicated, but not monitored.	Off
THFT HRN REQ	Not operation	Off
	<ul style="list-style-type: none"> • Panic alarm is activated • Horn is activated with VEHICLE SECURITY (THEFT WARNING) SYSTEM 	On
HORN CHIRP	Not operating	Off
	Door locking with Intelligent Key (horn chirp mode)	On
CRNRNG LMP REQ	NOTE: The item is indicated, but not monitored.	Off

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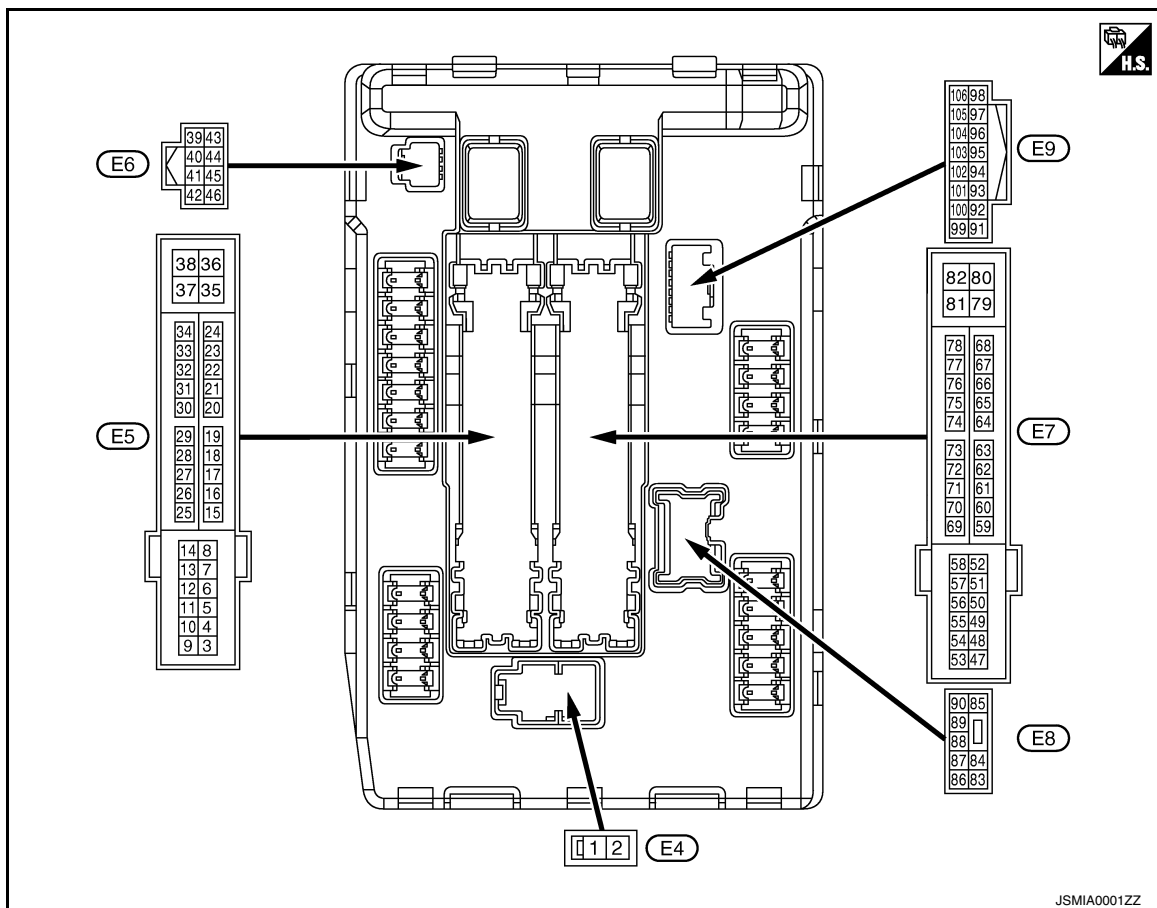
EXL

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

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (L)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
4 (V)	Ground	Front wiper LO	Output	Ignition switch OFF	Front wiper switch OFF	0 V
				Ignition switch ON	Front wiper switch LO	Battery voltage
5 (L)	Ground	Front wiper HI	Output	Ignition switch OFF	Front wiper switch OFF	0 V
				Ignition switch ON	Front wiper switch HI	Battery voltage
6 (R)	Ground	Daytime running light relay power supply	Output	Ignition switch OFF		Battery voltage
7 (R)	Ground	Tail, license plate lamps & interior lamps	Output	Ignition switch OFF	Lighting switch OFF	0 V
				Ignition switch ON	Lighting switch 1ST	Battery voltage
12 (B/W)	Ground	Ground	—	Ignition switch ON		0 V
13 (Y)	Ground	Fuel pump power supply	Output	Approximately 1 second or more after turning the ignition switch ON		0 V
				<ul style="list-style-type: none"> Approximately 1 second after turning the ignition switch ON Engine running 		Battery voltage

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

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
16 (LG)	Ground	Front wiper auto stop	Input	Ignition switch ON	Front wiper stop position	0 V
					Any position other than front wiper stop position	Battery voltage
19 (W)	Ground	Ignition relay power supply	Output	Ignition switch OFF	0 V	
				Ignition switch ON	Battery voltage	
25 (G)	Ground	Ignition relay power supply	Output	Ignition switch OFF	0 V	
				Ignition switch ON	Battery voltage	
26* (R)	Ground	Ignition relay power supply	Output	Ignition switch OFF	0 V	
				Ignition switch ON	Battery voltage	
27 (BG)	Ground	Ignition relay monitor	Input	Ignition switch OFF or ACC	Battery voltage	
				Ignition switch ON	0 V	
28 (L)	Ground	Push-button ignition switch	Input	Press the push-button ignition switch	0 V	
				Release the push-button ignition switch	Battery voltage	
30 (GR)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V
					Selector lever P or N	Battery voltage
36 (G)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage	
39 (P)	—	CAN-L	Input/ Output	—	—	
40 (L)	—	CAN-H	Input/ Output	—	—	
41 (B/W)	Ground	Ground	—	Ignition switch ON	0 V	
43 (SB)	Ground	A/T shift selector (Detention switch)	Input	Ignition switch ON	<ul style="list-style-type: none"> • Press the selector button (Selector lever P) • Selector lever in any position other than P 	Battery voltage
					Release the selector button (selector lever P)	0 V
44 (BR)	Ground	Horn relay control	Input	The horn is deactivated	Battery voltage	
				The horn is activated	0 V	
45 (G)	Ground	Anti theft horn relay control	Input	The horn is deactivated	Battery voltage	
				The horn is activated	0 V	
46 (R)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V
					Selector lever P or N	Battery voltage
48 (L)	Ground	A/C relay power supply	Output	Engine running	A/C switch OFF	0 V
					A/C switch ON (A/C compressor is operating)	Battery voltage
49 (BG)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)	0 V	
				<ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) 	Battery voltage	

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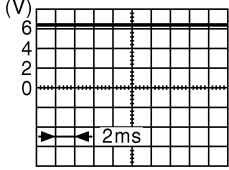
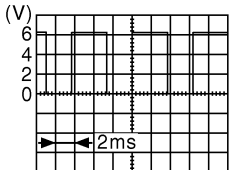
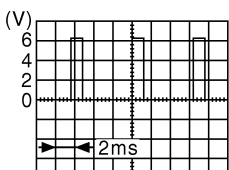
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
51 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
53 (W)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V
				<ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) 		Battery voltage
54 (P)	Ground	Throttle control motor relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V
				<ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) 		Battery voltage
55 (SB)	Ground	ECM power supply	Output	Ignition switch OFF		Battery voltage
56 (LG)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
57 (G)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
58 (V)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
69 (BR)	Ground	ECM relay control	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		Battery voltage
				<ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) 		0 – 1.5 V
70 (BG)	Ground	Throttle control motor relay control	Output	Ignition switch ON → OFF		0 – 1.0 V ↓ Battery voltage ↓ 0 V
				Ignition switch ON		0 – 1.0 V
74 (P)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
75 (SB)	Ground	Oil pressure switch	Input	Ignition switch ON	Engine stopped	0 V
					Engine running	Battery voltage

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

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-					
76 (Y)	Ground	Power generation command signal	Output	Ignition switch ON		 6.3 V
				40% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE"		 3.8 V
				80% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE"		 1.4 V
77 (R)	Ground	Fuel pump relay control	Output	<ul style="list-style-type: none"> • Approximately 1 second after turning the ignition switch ON • Engine running 		0 – 1.0 V
				Approximately 1 second or more after turning the ignition switch ON		Battery voltage
80 (W)	Ground	Starter motor	Output	At engine cranking		Battery voltage
83 (BG)	Ground	Headlamp LO (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 2ND	Battery voltage
84 (V)	Ground	Headlamp LO (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 2ND	Battery voltage
86 (W)	Ground	Front fog lamp (RH)	Output	Lighting switch 2ND	Front fog lamp switch OFF	0 V
					<ul style="list-style-type: none"> • Front fog lamp switch ON • Daytime running light activated (Only for Canada) 	
87 (L)	Ground	Front fog lamp (LH)	Output	Lighting switch 2ND	Front fog lamp switch OFF	0 V
					<ul style="list-style-type: none"> • Front fog lamp switch ON • Daytime running light activated (Only for Canada) 	
88 (GR)	Ground	Washer pump power supply	Output	Ignition switch ON		Battery voltage

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

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
89 (BR)	Ground	Headlamp HI (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					<ul style="list-style-type: none"> • Lighting switch HI • Lighting switch PASS 	Battery voltage
90 (P)	Ground	Headlamp HI (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					<ul style="list-style-type: none"> • Lighting switch HI • Lighting switch PASS 	Battery voltage
91 (P)	Ground	Parking lamp (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
92 (BG)	Ground	Parking lamp (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
97 (V)	Ground	Cooling fan control	Output	Engine idling		0 – 5 V
104 (LG)	Ground	Hood switch	Input	Close the hood		Battery voltage
				Open the hood		0 V
105 (SB)	Ground	Daytime running light relay control	Output	Daytime running light system is not operated.		Battery voltage
				Daytime running light system is operated.		0 V

*: Only for the models with ICC system

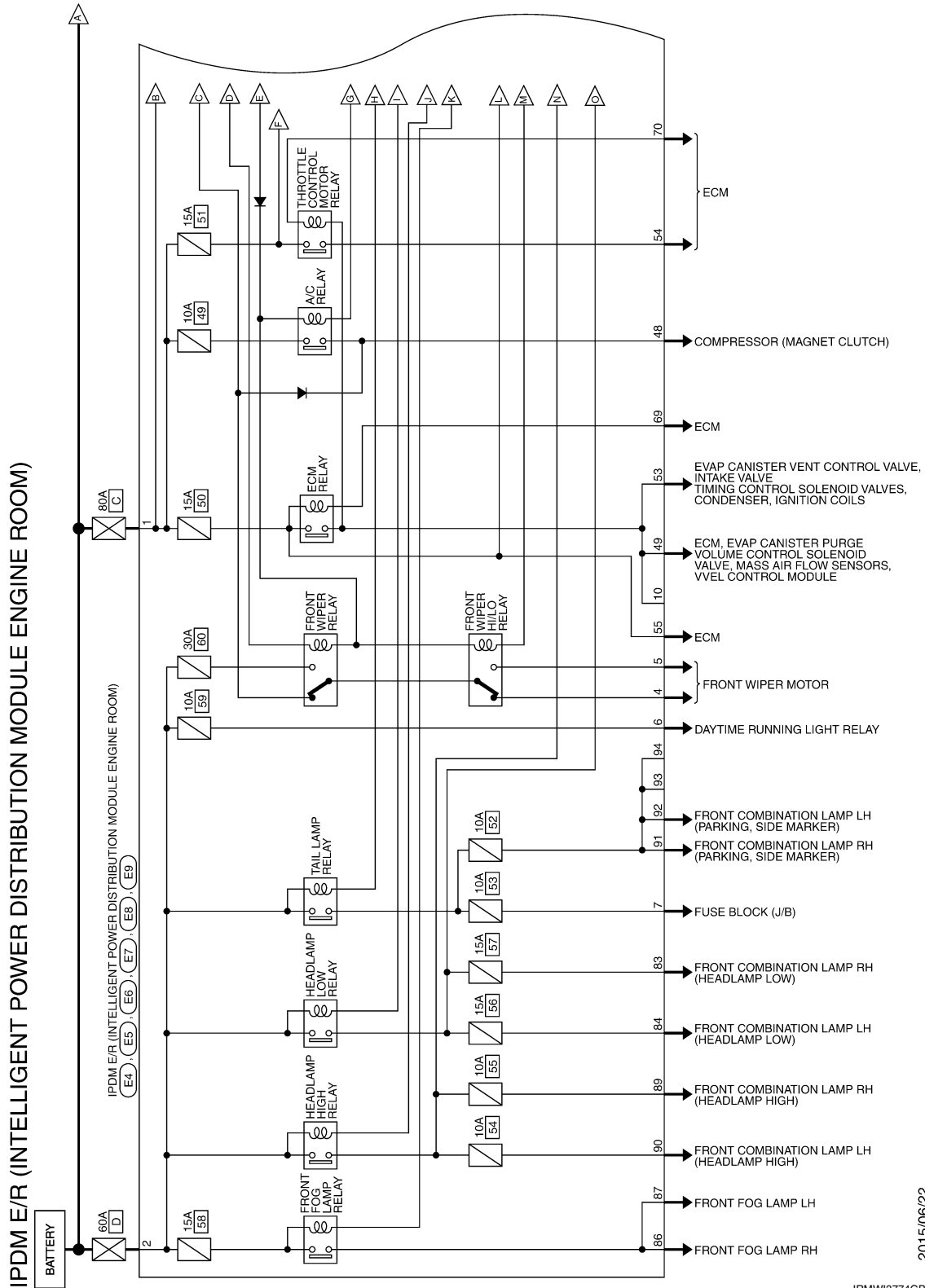
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Wiring Diagram - IPDM E/R -

INFOID:000000012750583



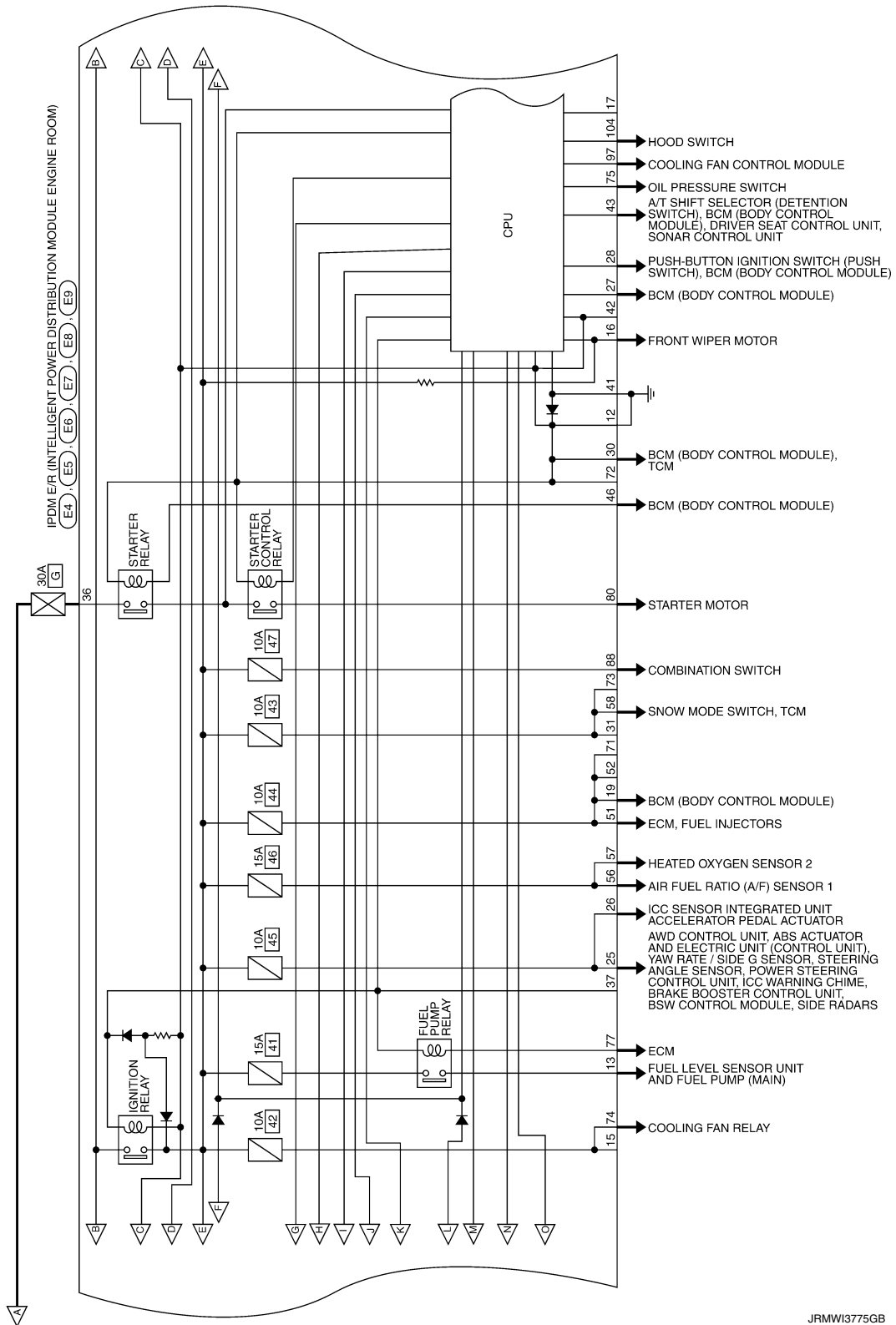
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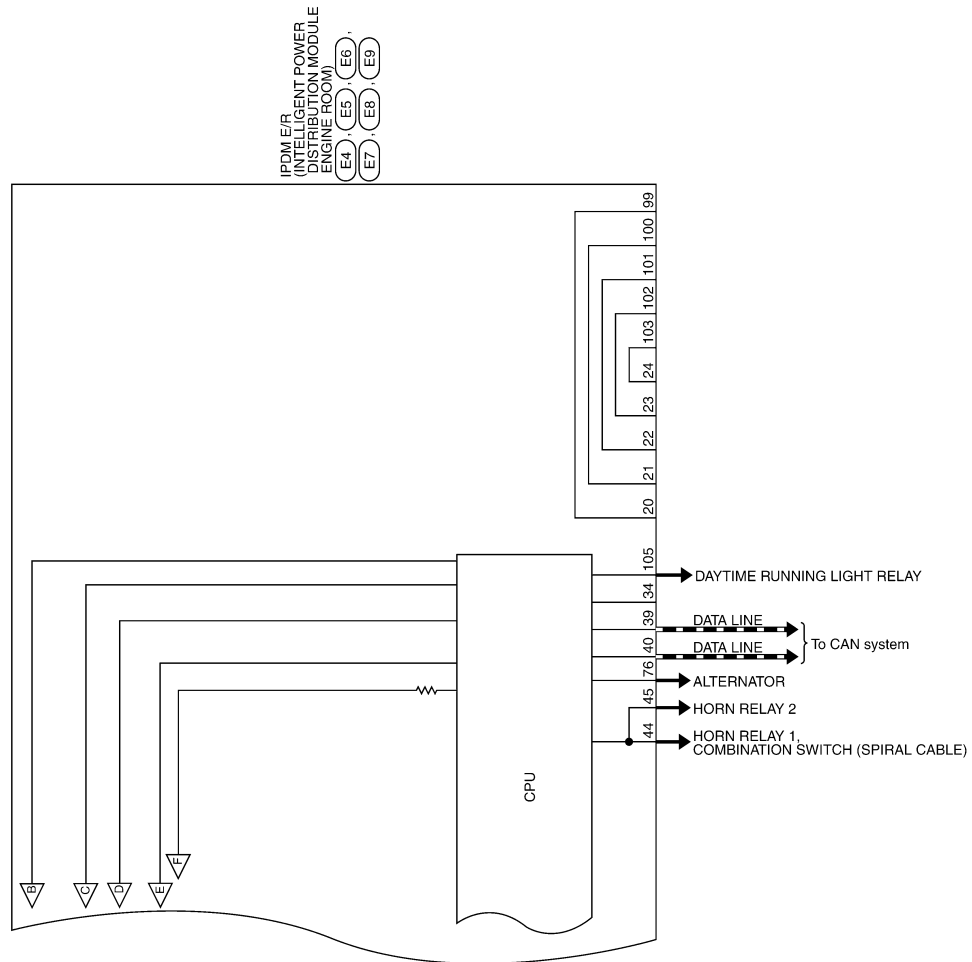
JRMW13774GB

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

< ECU DIAGNOSIS INFORMATION > [XENON TYPE]



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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)		
Connector No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	L	-
Connector No. E5		
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)		
Connector Type TH20FW-CS12-MM-1V		
Terminal No. 1		
Color Of Wire W		
Signal Name [Specification] -		
Terminal No. 2		
Color Of Wire L		
Signal Name [Specification] -		
Terminal No. 3		
Color Of Wire P		
Signal Name [Specification] -		
Terminal No. 4		
Color Of Wire B/W		
Signal Name [Specification] -		
Terminal No. 41		
Color Of Wire B/W		
Signal Name [Specification] -		
Terminal No. 43		
Color Of Wire SB		
Signal Name [Specification] -		
Terminal No. 44		
Color Of Wire BR		
Signal Name [Specification] -		
Terminal No. 45		
Color Of Wire G		
Signal Name [Specification] -		
Terminal No. 46		
Color Of Wire R		
Signal Name [Specification] -		
Terminal No. 47		
Color Of Wire P		
Signal Name [Specification] -		
Terminal No. 48		
Color Of Wire L		
Signal Name [Specification] -		
Terminal No. 49		
Color Of Wire BG		
Signal Name [Specification] -		
Terminal No. 51		
Color Of Wire W		
Signal Name [Specification] -		
Terminal No. 52		
Color Of Wire B		
Signal Name [Specification] -		
Terminal No. 53		
Color Of Wire P		
Signal Name [Specification] -		
Terminal No. 54		
Color Of Wire SB		
Signal Name [Specification] -		
Terminal No. 55		
Color Of Wire LG		
Signal Name [Specification] -		
Terminal No. 56		
Color Of Wire LG		
Signal Name [Specification] -		
Terminal No. 57		
Color Of Wire G		
Signal Name [Specification] -		
Terminal No. 58		
Color Of Wire V		
Signal Name [Specification] -		
Terminal No. 69		
Color Of Wire BR		
Signal Name [Specification] -		
Terminal No. 70		
Color Of Wire BG		
Signal Name [Specification] -		
Terminal No. 74		
Color Of Wire P		
Signal Name [Specification] -		

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)		
Connector No.	Color Of Wire	Signal Name [Specification]
75	SB	-
76	Y	-
77	R	-
80	W	-
Connector No. E8		
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)		
Connector Type TH16FW-NH		
Terminal No. 83		
Color Of Wire BG		
Signal Name [Specification] -		
Terminal No. 84		
Color Of Wire V		
Signal Name [Specification] -		
Terminal No. 86		
Color Of Wire W		
Signal Name [Specification] -		
Terminal No. 87		
Color Of Wire L		
Signal Name [Specification] -		
Terminal No. 88		
Color Of Wire GR		
Signal Name [Specification] -		
Terminal No. 89		
Color Of Wire BR		
Signal Name [Specification] -		
Terminal No. 90		
Color Of Wire P		
Signal Name [Specification] -		

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)		
Connector No.	Color Of Wire	Signal Name [Specification]
91	P	-
92	BG	-
97	V	-
104	LG	-
105	SB	-
Connector No. E9		
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)		
Connector Type TH16FW-NH		
Terminal No. 97		
Color Of Wire V		
Signal Name [Specification] -		
Terminal No. 92		
Color Of Wire BG		
Signal Name [Specification] -		
Terminal No. 104		
Color Of Wire LG		
Signal Name [Specification] -		
Terminal No. 105		
Color Of Wire SB		
Signal Name [Specification] -		

Fail-safe

CAN COMMUNICATION CONTROL

When CAN communication with ECM and BCM is impossible, IPDM E/R performs fail-safe control. After CAN communication recovers normally, it also returns to normal control.

If No CAN Communication Is Available With ECM

JRMW13777GB

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

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Control part	Fail-safe operation
Cooling fan	<ul style="list-style-type: none"> • Outputs the pulse duty signal (PWM signal) 100% when the ignition switch is turned ON • Outputs the pulse duty signal (PWM signal) 0% when the ignition switch is turned OFF
A/C compressor	A/C relay OFF
Alternator	Outputs the power generation command signal (PWM signal) 0%

If No CAN Communication Is Available With BCM

Control part	Fail-safe operation
Headlamp	<ul style="list-style-type: none"> • Turns ON the headlamp low relay when the ignition switch is turned ON • Turns OFF the headlamp low relay when the ignition switch is turned OFF • Headlamp high relay OFF
<ul style="list-style-type: none"> • Parking lamps • License plate lamps • Side maker lamps • Illuminations • Tail lamps 	<ul style="list-style-type: none"> • Turns ON the tail lamp relay when the ignition switch is turned ON • Turns OFF the tail lamp relay when the ignition switch is turned OFF
Front wiper	<ul style="list-style-type: none"> • The status just before activation of fail-safe control is maintained until the ignition switch is turned OFF while the front wiper is operating at LO or HI speed. • The wiper is operated at LO speed until the ignition switch is turned OFF if the fail-safe control is activated while the front wiper is set in the INT mode and the front wiper motor is operating.
Front fog lamps	Front fog lamp relay OFF
Horn	Horn relay OFF
Ignition relay	The status just before activation of fail-safe is maintained.
Daytime running light	Daytime running light relay OFF
Starter motor	Starter control relay OFF

IGNITION RELAY MALFUNCTION DETECTION FUNCTION

- IPDM E/R monitors the voltage at the contact circuit and excitation coil circuit of the ignition relay inside it.
- IPDM E/R judges the ignition relay error if the voltage differs between the contact circuit and the excitation coil circuit.
- If the ignition relay cannot turn OFF due to contact seizure, it activates the tail lamp relay for 10 minutes to alert the user to the ignition relay malfunction when the ignition switch is turned OFF.

Voltage judgment		IPDM E/R judgment	Operation
Ignition relay contact side	Ignition relay excitation coil side		
ON	ON	Ignition relay ON normal	—
OFF	OFF	Ignition relay OFF normal	—
ON	OFF	Ignition relay ON stuck	<ul style="list-style-type: none"> • Detects DTC "B2098: IGN RELAY ON" • Turns ON the tail lamp relay for 10 minutes
OFF	ON	Ignition relay OFF stuck	Detects DTC "B2099: IGN RELAY OFF"

FRONT WIPER CONTROL

IPDM E/R detects front wiper stop position by a front wiper stop position signal.

When a front wiper stop position signal is in the conditions listed below, IPDM E/R stops power supply to wiper after repeating a front wiper 10 seconds activation and 20 seconds stop five times.

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

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Ignition switch	Front wiper switch	Front wiper stop position signal
ON	OFF	The front wiper stop position signal (stop position) cannot be input for 10 seconds.
	ON	The front wiper stop position signal does not change for 10 seconds.

NOTE:

This operation status can be confirmed on the IPDM E/R “Data Monitor” that displays “BLOCK” for the item “WIP PROT” while the wiper is stopped.

STARTER MOTOR PROTECTION FUNCTION

IPDM E/R turns OFF the starter control relay to protect the starter motor when the starter control relay remains active for 90 seconds.

DTC Index

INFOID:000000012750585

NOTE:

- The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.
- IGN counter is displayed on FFD (Freeze Frame data).
- The number is 0 when is detected now.
- The number increases like 1 → 2 … 38 → 39 after returning to the normal condition whenever IGN OFF → ON.
- The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.

×: Applicable

CONSULT display	Fail-safe	Reference
No DTC is detected. Further testing may be required.	—	—
U1000: CAN COMM CIRCUIT	×	PCS-14
B2098: IGN RELAY ON CIRC	×	PCS-15
B2099: IGN RELAY OFF CIRC	—	PCS-17
B210B: STR CONT RLY ON CIRC	—	SEC-77
B210C: STR CONT RLY OFF CIRC	—	SEC-78
B210D: STARTER RLY ON CIRC	—	SEC-80
B210E: STARTER RLY OFF CIRC	—	SEC-82
B210F: INTRLCK/PNP SW ON	—	SEC-84
B2110: INTRLCK/PNP SW OFF	—	SEC-86

AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

AFS CONTROL UNIT

Reference Value

INFOID:000000012172072

VALUES ON THE DIAGNOSIS TOOL

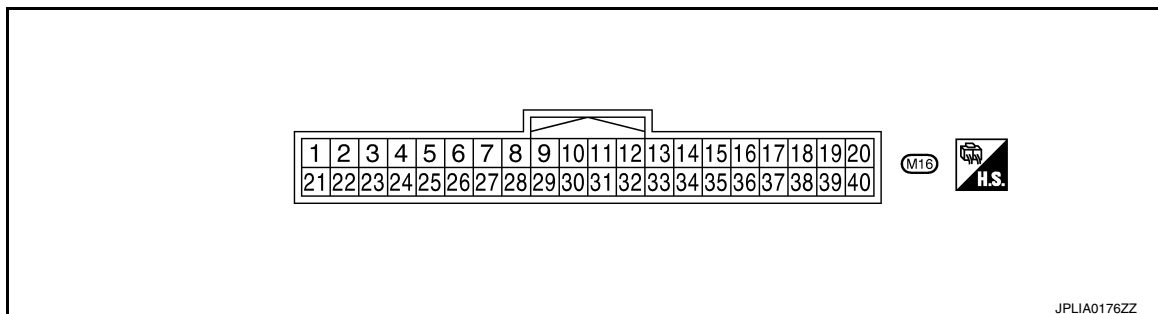
NOTE:

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

CONSULT MONITOR ITEM

Monitor Item	Condition		Value/Status
STR ANGLE SIG	Steering	Straight-forward	Approx. 0°
		Steering	Approx. -900° - +900°
VHCL SPD	Driving at 40 km/h (25 MPH)		40 km/h
SLCT LVR POSI	Selector lever operation		P - 1
HEAD LAMP	Light switch	2ND	On
		Other than 2ND	Off
AFS SW	NOTE: The item is indicated, but not monitored.		On
HI SEN OTP RR	Vehicle rear height	Unloaded vehicle condition	Approx. 2.5 V
		Low (Leveling operation downward edge)	Approx. 1.6 V
LEV ACTR VLTG	Headlamp leveling	Unloaded vehicle condition	Approx. 70.0%
		Low (Leveling operation downward edge)	Approx. 36.1%
SWVL SEN RH	Right headlamp swivel activation	Standard position	Approx. 0°
		Activation	Positive degree (+°)
SWVL SEN LH	Left headlamp swivel activation	Standard position	Approx. 0°
		Activation	Positive degree (+°)
SWVL ANGLE RH	Right headlamp swivel activation	Standard position	Approx. 0°
		Activation	Positive degree (+°)
SWVL ANGLE LH	Left headlamp swivel activation	Standard position	Approx. 0°
		Activation	Positive degree (+°)

TERMINAL LAYOUT



PHYSICAL VALUES

AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

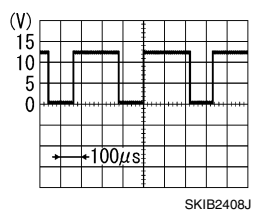
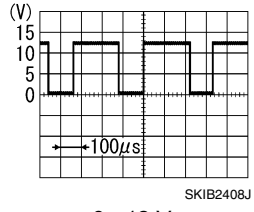
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ output			
1 (W)	Ground	Ignition power supply	Input	The ignition switch ON		Battery voltage
2 (LG)	Ground	Right swivel position sensor ground	Input	The ignition switch ON		0 V
4 (Y)	Ground	Right swivel position sensor power supply	Output	The ignition switch ON		5 V
6 (W)	Ground	Height sensor power supply	Output	The ignition switch ON		5 V
7 (P)	Ground	CAN-L	Input/ output	—		—
8 (B)	Ground	Height sensor ground	Input	The ignition switch ON		0 V
9 (GR)	Ground	Right swivel position sensor signal	Output	Right headlamp swivel angle	0°	0.7 V
					15°	2.8 V
11 (R)	Ground	Right swivel motor 1-phase (-)	Output	Right headlamp swivel	Activation	<p style="text-align: center;">Reference waveform</p> <p style="text-align: center;">8 - 12 V</p>
						9.5 - 11.5 V
13 (B)	Ground	Right swivel motor 2-phase (-)	Output	Right headlamp swivel	Stopped	9.5 - 11.5 V
15 (G)	Ground	Left swivel motor 1-phase (+)	Output	Left headlamp swivel	Activation	<p style="text-align: center;">Reference waveform</p> <p style="text-align: center;">8 - 12 V</p>
						9.5 - 11.5 V
17 (W)	Ground	Left swivel motor 2-phase (+)	Output	Left headlamp swivel	Stopped	9.5 - 11.5 V
19 (SB)	Ground	Right levelizer signal	Output	Right headlamp leveling	Unloaded vehicle condition	8.8 V
					Leveling operation downward edge	4.5 V
24 (V)	Ground	Left swivel position sensor power supply	Output	The ignition switch ON		5 V
25 (B)	Ground	Ground	—	The ignition switch ON		0 V
27 (BR)	Ground	Left swivel position sensor ground	Input	The ignition switch ON		0 V

AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ output			
28 (BG)	Ground	Height sensor signal	Output	Vehicle rear height	Unloaded vehicle condition	2.5 V
					Low (Leveling operation downward edge)	1.6 V
29 (BG)	Ground	Left swivel position sensor signal	Output	Left headlamp swivel angle	0°	0.7 V
					17°	3.0 V
30 (L)	Ground	CAN-H	Input/ output	—		—
32 (G)	Ground	Right swivel motor 2-phase (+)	Output	Right headlamp swivel	Activation	Reference waveform  SKIB2408J 8 - 12 V
						9.5 - 11.5 V
34 (W)	Ground	Right swivel motor 1-phase (+)	Output	Right headlamp swivel	Stopped	9.5 - 11.5 V
36 (R)	Ground	Left swivel motor 2-phase (-)	Output	Left headlamp swivel	Activation	Reference waveform  SKIB2408J 8 - 12 V
						9.5 - 11.5 V
38 (B)	Ground	Left swivel motor 1-phase (-)	Output	Left headlamp swivel	Stopped	9.5 - 11.5 V
40 (L)	Ground	Left levelizer signal	Output	Right headlamp leveling	Unloaded vehicle condition	8.8 V
					Leveling operation downward edge	4.5 V

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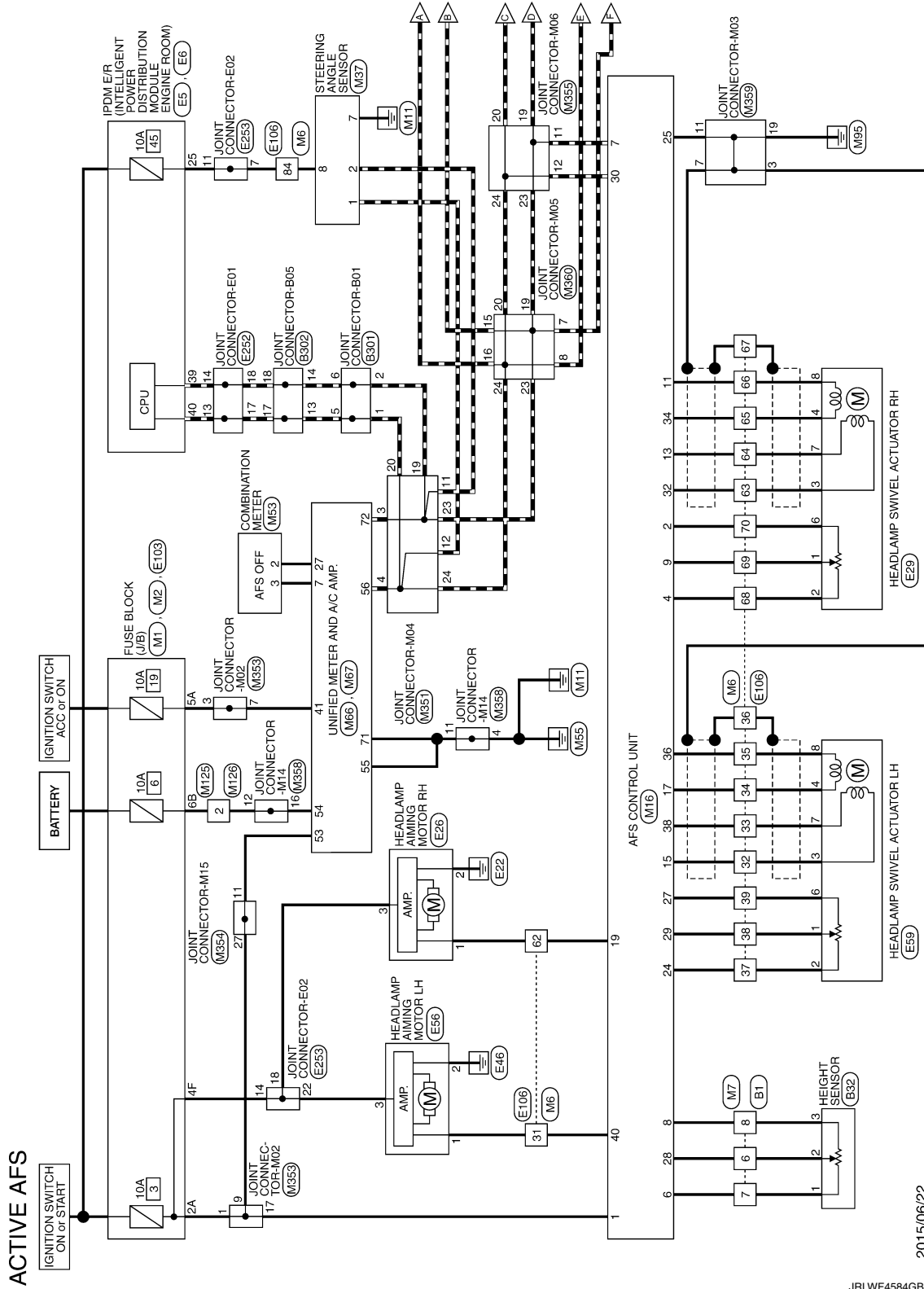
AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Wiring Diagram - ACTIVE AFS -

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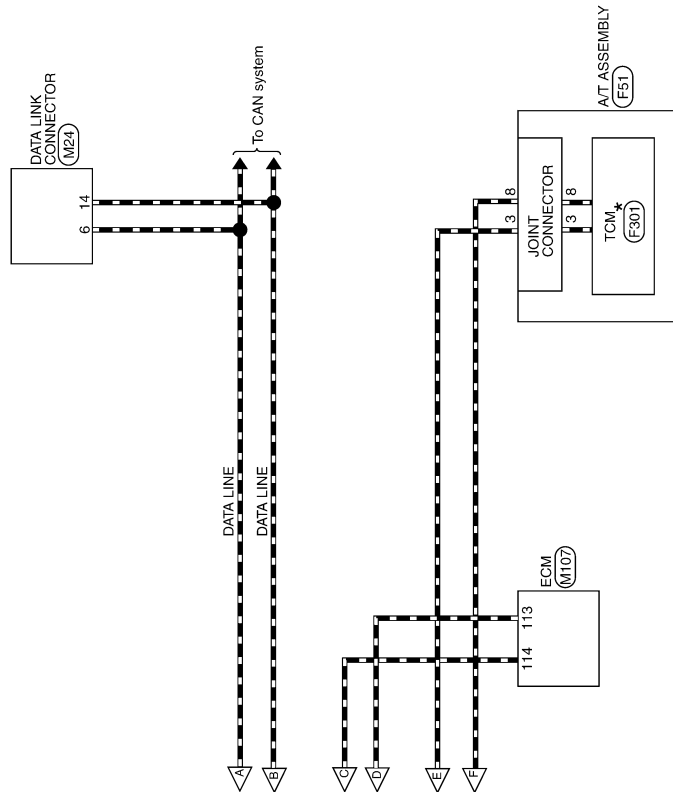
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JRLWF4584GB

AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]



*: This connector is not shown in "Harness Layout".

JRLWF4585GB

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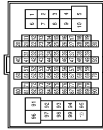
AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

ACTIVE AFS

Connector No.	B31
Connector Name	WIRE TO WIRE
Connector Type	TF480FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-
5	G	-
6	SB	-
7	V	-
8	L	-
11	V	-
12	SB	-
13	LG	-
14	GR	-
15	LG	-
16	R	-
17	W	-
18	B	-
19	GR	-
20	BR	-
21	SHIELD	-
22	Y	-
24	P	-
25	G	-
26	Y	-
27	B	- [With NAVI]
27	BR	- [Without NAVI]
28	R	- [With NAVI]
28	W	- [Without NAVI]
29	L	- [With NAVI]
29	L	- [Without NAVI]
29	SHIELD	- [With neutral view monitor]
31	SHIELD	- [Without second view monitor]
32	P	- [With NAVI] [Without Blind Spot Warning]
32	W	- [Without NAVI] [Without Blind Spot Warning]
32	Y	- [With NAVI] [With Blind Spot Warning]
33	SB	-
34	L	-
35	P	-

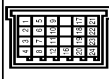
36	L	-
37	P	-
38	P	-
39	Y	-
40	SB	-
44	Y	-
45	GR	-
46	LG	-
47	SB	-
48	BG	-
49	R	-
50	L	-
60	P	-
61	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	W	-
67	V	-
69	SB	-
69	SHIELD	-
70	W	-
73	SB	-
74	L	-
75	W	-
76	GR	-
76	P	-
78	GR	-
83	BG	-
85	V	-
86	LG	-
87	Y	-
89	R	-
89	B	-
90	BG	-
91	G	-
92	BR	-
93	G	-
94	SB	-
95	G	-
96	P	-
98	W	-
99	GR	-

Connector No.	B32
Connector Name	HEIGHT SENSOR
Connector Type	RH03RE



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

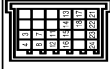
Connector No.	B301
Connector Name	JOINT CONNECTOR-B01
Connector Type	IN24RE-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	SB	-
4	LG	-
5	L	-
6	P	-
7	SB	-
8	LG	-
9	L	-
10	P	-
11	SB	-
12	LG	-
16	SB	-
17	R	-
18	Y	-
19	B	-

20	SB	-
21	R	-
22	Y	-
23	B	-
24	SB	-

Connector No.	B302
Connector Name	JOINT CONNECTOR-B05
Connector Type	IN24E3Y-J



Terminal No.	Color Of Wire	Signal Name [Specification]
3	Y	-
4	L	-
7	Y	-
8	L	-
11	Y	-
12	L	-
14	P	-
15	Y	-
16	L	-
17	L	-
18	P	-
21	L	-
22	P	-
23	Y	-
24	L	-

JRLWF4586GB

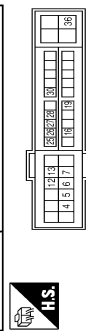
AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

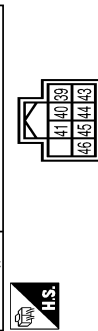
ACTIVE AFS

Connector No.	E53
Connector Name	SPAL E8 INTELLIGENT POWER DISTRIBUTION MOBILE ENGINE RECOIL
Connector Type	TR40DFW-CS12-AM4-1V



Terminal No.	Color Of Wire	Signal Name [Specification]
4	V	-
5	L	-
6	R	-
7	R	-
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	BG	-
28	L	-
30	GR	-
30	G	-

Connector No.	E53
Connector Name	SPAL E8 INTELLIGENT POWER DISTRIBUTION MOBILE ENGINE RECOIL
Connector Type	TR40DFW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-

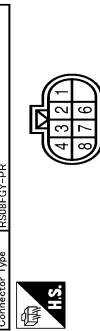
46	R	-
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Connector No.	E26
Connector Name	HEADLAMP AIMING MOTOR RH
Connector Type	HS2CFEY



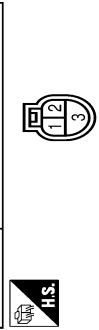
Terminal No.	Color Of Wire	Signal Name [Specification]
1	SB	-
2	B	-
3	G	-

Connector No.	E29
Connector Name	HEADLAMP SWIVEL ACTUATOR RH
Connector Type	HS2BFGY-PR



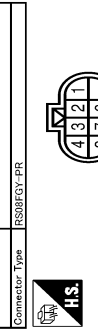
Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	Y	-
3	W	-
4	G	-
7	W	-
8	R	-

Connector No.	E58
Connector Name	HEADLAMP AIMING MOTOR LH
Connector Type	HS2CFEY



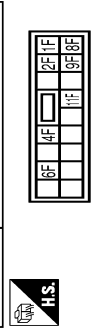
Terminal No.	Color Of Wire	Signal Name [Specification]
1	BG	-
2	B	-
3	G	-

Connector No.	E59
Connector Name	HEADLAMP SWIVEL ACTUATOR LH
Connector Type	HS2BFGY-PR



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	V	-
3	W	-
4	R	-
6	BG	-
7	B	-
8	G	-

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS18FV-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
11F	W	-
11F	SB	-
2F	W	-
4F	G	-
6F	BR	-
8F	L	-
9F	R	-

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TR48DFW-CS15-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	GR	-
5	GR	-
6	G	-
7	Y	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-
13	L	-

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AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

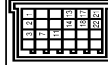
[XENON TYPE]

ACTIVE AFS

14	R	-
15	P	- [With LCC]
16	V	- [With LCC]
17	SB	- [Without LCC]
18	V	- [With LCC]
20	BG	- [Without LCC]
21	L	- [With LCC]
22	V	- [Without LCC]
23	G	- [With LCC]
24	P	-
25	V	-
26	W	-
27	G	-
31	BG	-
32	W	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-
41	W	-
42	G	-
43	BR	-
44	V	-
46	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
63	W	-
64	B	-
65	G	-
66	SHIELD	-
67	Y	-
68	LG	-
70	W	-
71	R	-
72	Y	-
73	B	- [With LCC]
74	BR	- [Without LCC]
74	L	- [Without LCC]
75	G	- [With LCC]

75	W	- [Without LCC]
76	W	- [With LCC]
76	Y	- [Without LCC]
77	P	- [Without LCC]
77	R	- [With LCC]
78	BR	- [Without LCC]
78	L	- [With LCC]
79	L	- [Without LCC]
79	Y	- [With LCC]
80	SB	-
81	R	-
82	SB	-
83	BG	-
83	G	-
85	L	-
88	P	-
87	V	-
89	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-
95	BG	-
96	P	-
97	SHIELD	-
98	E	-
99	P	-
100	P	-

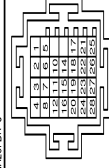
Connector No.	E232
Connector Name	JOINT CONNECTOR-E01
Connector Type	IN424FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	GR	-
7	GR	-
11	GR	-

13	L	-
14	P	-
17	L	-
18	P	-
21	L	-
22	P	-

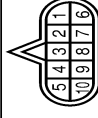
Connector No.	E253
Connector Name	JOINT CONNECTOR-E02
Connector Type	SGA28FBR-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	G	-
4	Y	-
6	L	-
7	G	-
8	Y	-
10	L	-
11	G	-
12	W	- [Without BOSE system]
14	P	- [With BOSE system]
15	SHIELD	-
16	R	-
17	W	-
18	G	-
19	GR	-
20	B	-
21	B	-
22	SHIELD	-
23	SHIELD	-
24	R	-
25	B	-
26	G	- [Without BOSE system]
26	P	- [With BOSE system]
27	SHIELD	-
28	G	- [With NAVI]

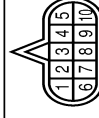
28	L	-	- [Without NAVI]
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Connector No.	F31
Connector Name	A/T ASSEMBLY
Connector Type	RK10FC-D5Y



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	IGNITION POWER SUPPLY
2	BR	BATTERY POWER SUPPLY
3	O	CAN-H
4	V	K-LINE
5	B	GROUND
6	Y	IGNITION POWER SUPPLY
7	R	BACK-UP LAMP RELAY
8	LG	CAN-L
9	GR	STARTER RELAY
10	B	GROUND

Connector No.	F301
Connector Name	TCM
Connector Type	SPI0FG



Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	IGNITION POWER SUPPLY
2	-	BATTERY POWER SUPPLY
3	-	CAN-H
4	-	K-LINE
5	-	GROUND
6	-	IGNITION POWER SUPPLY
7	-	BACK-UP LAMP RELAY

AFS CONTROL UNIT

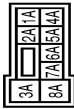
< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

ACTIVE AFS

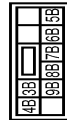
8	CAN-L
9	STARTER RELAY
10	GROUND

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-M2



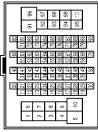
Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	- [With NAVI]
2A	G	- [Without NAVI]
3A	L	- [With NAVI]
4A	R	- [Without NAVI]
5A	V	- [With NAVI]
6A	Y	- [Without NAVI]
7A	R	- [With NAVI]
8A	L	- [Without NAVI]

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
3B	P	- [With NAVI]
4B	G	- [Without NAVI]
5B	BG	- [With NAVI]
6B	Y	- [Without NAVI]
7B	P	- [With NAVI]
8B	R	- [Without NAVI]
9B	SB	- [With NAVI]

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

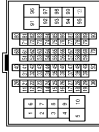


Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	- [With NAVI]
2	B	- [Without NAVI]
3	R	- [With NAVI]
4	G	- [Without NAVI]
5	G	- [With NAVI]
6	R	- [Without NAVI]
7	W	- [With NAVI]
8	Y	- [Without NAVI]
9	BR	- [With NAVI]
10	R	- [Without NAVI]
11	BR	- [With NAVI]
12	BG	- [Without NAVI]
13	G	- [With NAVI]
14	L	- [Without NAVI]
15	V	- [With NAVI]
16	P	- [Without NAVI]
17	SB	- [With NAVI]
18	V	- [Without NAVI]
20	BG	- [With NAVI]
21	L	- [Without NAVI]
22	W	- [With NAVI]
23	P	- [Without NAVI]
24	BR	- [With NAVI]
25	V	- [Without NAVI]
26	G	- [With NAVI]
28	L	- [Without NAVI]
31	L	- [With NAVI]
32	G	- [Without NAVI]
33	B	- [With NAVI]
34	W	- [Without NAVI]
35	R	- [With NAVI]
36	SHIELD	- [Without NAVI]

Terminal No.	Color Of Wire	Signal Name [Specification]
37	V	- [With NAVI]
38	BG	- [Without NAVI]
39	BR	- [With NAVI]
41	W	- [Without NAVI]
42	BG	- [With NAVI]
43	BG	- [Without NAVI]
45	W	- [With NAVI]
49	L	- [Without NAVI]
50	P	- [With NAVI]
51	BR	- [Without NAVI]
54	Y	- [With NAVI]
57	G	- [Without NAVI]
59	W	- [With NAVI]
60	L	- [Without NAVI]
62	G	- [With NAVI]
63	G	- [Without NAVI]
64	B	- [With NAVI]
65	W	- [Without NAVI]
66	R	- [With NAVI]
67	SHIELD	- [Without NAVI]
68	Y	- [With NAVI]
69	GR	- [Without NAVI]
70	LG	- [With NAVI]
71	LG	- [Without NAVI]
72	Y	- [With NAVI]
73	SB	- [Without NAVI]
74	BR	- [With NAVI]
75	G	- [Without NAVI]
76	GR	- [With NAVI]
77	P	- [Without NAVI]
78	R	- [With NAVI]
79	L	- [Without NAVI]
80	BG	- [With NAVI]
81	SB	- [Without NAVI]
82	Y	- [With NAVI]
83	SHIELD	- [Without NAVI]
84	V	- [With NAVI]
85	G	- [Without NAVI]
86	P	- [With NAVI]
87	W	- [Without NAVI]
89	GR	- [With NAVI]
90	SHIELD	- [Without NAVI]
91	W	- [With NAVI]
92	Y	- [Without NAVI]

93	BR	- [With NAVI]
94	P	- [Without NAVI]
95	GR	- [With NAVI]
96	W	- [Without NAVI]
97	L	- [With NAVI]
98	SHIELD	- [Without NAVI]
99	V	- [With NAVI]
100	SB	- [Without NAVI]

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MH-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	SB	- [With automatic drive positioner]
3	W	- [Without automatic drive positioner]
5	G	- [With NAVI]
6	BR	- [Without NAVI]
7	W	- [With NAVI]
8	B	- [Without NAVI]
11	V	- [With NAVI]
12	SB	- [Without NAVI]
13	LG	- [With NAVI]
14	Y	- [Without NAVI]
15	G	- [With NAVI]
16	R	- [Without NAVI]
17	W	- [With NAVI]
18	SB	- [Without NAVI]
19	LG	- [With NAVI]
20	BR	- [Without NAVI]
21	SHIELD	- [With NAVI]
24	V	- [Without NAVI]
25	G	- [With NAVI]
26	Y	- [Without NAVI]
27	B	- [With NAVI]
27	R	- [Without NAVI]
28	W	- [With NAVI]
29	B	- [Without NAVI]
29	R	- [With NAVI]

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AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

ACTIVE AFS

30	SHIELD	-	-	-	-
31	SHIELD	-	-	-	-
32	P	-	-	-	-
33	Y	-	-	-	-
34	L	-	-	-	-
35	P	-	-	-	-
36	L	-	-	-	-
37	P	-	-	-	-
38	P	-	-	-	-
39	Y	-	-	-	-
40	SB	-	-	-	-
41	SB	-	-	-	-
42	GR	-	-	-	-
43	GR	-	-	-	-
44	LG	-	-	-	-
45	LG	-	-	-	-
46	SB	-	-	-	-
47	SB	-	-	-	-
48	BG	-	-	-	-
49	R	-	-	-	-
50	L	-	-	-	-
60	P	-	-	-	-
61	L	-	-	-	-
62	SHIELD	-	-	-	-
63	R	-	-	-	-
64	G	-	-	-	-
65	SHIELD	-	-	-	-
66	SB	-	-	-	-
67	LG	-	-	-	-
68	SHIELD	-	-	-	-
69	W	-	-	-	-
70	W	-	-	-	-
73	G	-	-	-	-
74	R	-	-	-	-
75	W	-	-	-	-
76	W	-	-	-	-
77	B	-	-	-	-
78	P	-	-	-	-
79	GR	-	-	-	-
83	BG	-	-	-	-
85	LG	-	-	-	-
86	Y	-	-	-	-
87	W	-	-	-	-
88	BR	-	-	-	-
89	BG	-	-	-	-
91	G	-	-	-	-
92	V	-	-	-	-
93	BR	-	-	-	-
94	V	-	-	-	-
95	G	-	-	-	-
96	Y	-	-	-	-

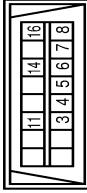
98	W	-	-
88	R	-	-

Connector No.	M16
Connector Name	AFS CONTROL UNIT
Connector Type	TH40FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	IGN
2	LG	PSG-R
4	W	HSV-R
7	P	CAN-L
8	B	HSG-R
9	GR	PS-R
11	R	SMS-1 (-)
12	B	SMS-1 (+)
13	G	SMS-1 (A)
14	W	SMS-2 (+)
15	W	AMDS-R
18	SB	PSV-L
24	V	GROUND
25	B	GROUND
27	BR	PSG-L
28	BG	HS-R
29	BG	PS-L
30	L	CAN-H
32	G	SMS-2 (+)
34	W	SMS-1 (+)
36	R	SMS-2 (-)
38	B	SMS-1 (-)
40	L	AMDS-L

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD18FW



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
7	V	-
8	G	-
11	SB	-
14	P	-
16	Y	-

Connector No.	M37
Connector Name	STEERING ANGLE SENSOR
Connector Type	TH08FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	CAN-H
2	B	GROUND
8	G	IGN

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BATTERY POWER SUPPLY
2	LG	COMMUNICATION SIGNAL (METER->AMP)
3	GR	COMMUNICATION SIGNAL (AMP->METER)
5	B	GROUND
6	P	ALTERNATOR SIGNAL
7	BR	AIR BAG SIGNAL
10	G	SECURITY SIGNAL
15	B	GROUND
16	B	METER CONTROL SWITCH GROUND
19	B	ILL. GND
20	R	ILL
21	BG	IGNITION SIGNAL
22	BR	COMMUNICATION SIGNAL (LCD->AMP)
23	Y	COMMUNICATION SIGNAL (AMP->LCD)
25	V	VEHICLE SPEED SIGNAL (8-PULSES)
26	R	PARKING BRAKE SWITCH SIGNAL
27	V	BRAKE FLUID LEVEL SWITCH SIGNAL
28	W	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
29	SB	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
30	G	WASHER LEVEL SWITCH SIGNAL
31	L	ILLUMINATION CONTROL SIGNAL
33	B	SELECT SWITCH SIGNAL
36	LG	ENTER SWITCH SIGNAL
37	SB	TRIP A/B RESET SWITCH SIGNAL
38	L	ILLUMINATION CONTROL SWITCH SIGNAL (C)
39	P	ILLUMINATION CONTROL SWITCH SIGNAL (C)
40	BG	ILLUMINATION CONTROL SWITCH SIGNAL (C)

AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

ACTIVE AFS

Connector No.	M66
Connector Name	UNIFIED METER AND A. C. AMP.
Connector Type	TH40FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
5	L	MANUAL MODE SHIFT UP SIGNAL
6	L	MANUAL MODE SHIFT DOWN SIGNAL
7	GR	COMMUNICATION SIGNAL (AMP->METER)
8	L	VEHICLE SPEED SIGNAL (P-PULSE)
9	SB	SEAT BELT BRAGLE SWITCH SIGNAL (DRIVER SIDE)
10	W	MANUAL MODE SIGNAL
11	G	NON-MANUAL MODE SIGNAL
14	BR	COMMUNICATION SIGNAL (LCD->AMP)
20	L	ION ON/OFF SIGNAL
23	Y	AT SNOW SWITCH SIGNAL
25	V	MANUAL MODE SHIFT DOWN SIGNAL
27	LG	COMMUNICATION SIGNAL (METER->AMP)
28	R	VEHICLE SPEED SIGNAL (P-PULSE)
30	Y	WARNING BRAKE SWITCH SIGNAL
31	Y	COMMUNICATION SIGNAL (AMP->METER)
38	P	BLOWER MOTOR CONTROL SIGNAL

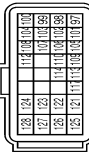
Connector No.	M67
Connector Name	UNIFIED METER AND A. C. AMP.
Connector Type	TH42FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	ACC POWER SUPPLY
42	Y	FUEL LEVEL SENSOR SIGNAL
43	R	INTAKE SENSOR SIGNAL
44	LG	IN-VEHICLE SENSOR SIGNAL
45	P	AMBIENT SENSOR SIGNAL

Terminal No.	Color Of Wire	Signal Name [Specification]
46	BG	SUN/GAS SENSOR SIGNAL
47	G	EXHAUST GAS CONVERSION DEFECTIVE SENSOR SIGNAL
53	G	IGNITION POWER SUPPLY
54	Y	BATTERY POWER SUPPLY
55	B	GROUND
56	L	CAN-H
57	W	BRAKE FLUID LEVEL SWITCH SIGNAL
58	BR	FUEL LEVEL SENSOR GROUND
59	GR	INTAKE SENSOR GROUND
60	L	IN-VEHICLE SENSOR GROUND
61	BR	AMBIENT SENSOR GROUND
62	SB	SUNLOAD SENSOR GROUND
63	R	EVY SIGNAL
64	RD	A. C. LAN SIGNAL
65	B	GROUND
71	B	EACH DOOR MOTOR POWER SUPPLY
72	P	CAN-L

Connector No.	M107
Connector Name	ECM
Connector Type	RH2F0Y-R28-R-LH-Z



Terminal No.	Color Of Wire	Signal Name [Specification]
97	R	ACCELERATOR PEDAL POSITION SENSOR 1
98	P	ACCELERATOR PEDAL POSITION SENSOR 2 (Without ICC)
99	G	SENSOR POWER SUPPLY (With ICC)
100	L	SENSOR POWER SUPPLY (Without ICC)
101	W	SENSOR GROUND
102	SB	EVAP/ICC STEERING SWITCH
103	G	SENSOR POWER SUPPLY (Without ICC)
104	L	SENSOR POWER SUPPLY (With ICC)
104	BR	SENSOR GROUND (Without ICC)
105	L	REFRIGERANT PRESS SENSOR
106	W	FUEL TANK TEMPERATURE SENSOR
107	BG	SENSOR POWER SUPPLY
108	Y	SENSOR GROUND

Terminal No.	Color Of Wire	Signal Name [Specification]
109	G	IMP SIGNAL
110	R	ENGINE SPEED OUTPUT SIGNAL
112	V	SENSOR GROUND
113	P	CAN COMMUNICATION LINE
114	L	CAN COMMUNICATION LINE
117	V	DATA LINK CONNECTOR
121	LG	EVAP CANISTER VENT CONTROL VALVE
122	P	STOP LAMP SWITCH
123	B	INTAKE SENSOR GROUND
124	B	ECM GROUND
125	R	POWER SUPPLY FOR ECM
126	BR	ASCD/ICC BRAKE SWITCH
127	B	ECM GROUND
128	B	ECM GROUND

Connector No.	M125
Connector Name	WIRE TO WIRE
Connector Type	M03FW-LC



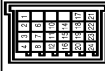
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03MW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M431
Connector Name	JOINT CONNECTOR-M04
Connector Type	RH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BIG	-
2	B	-
3	P	-
4	L	-
5	B	-
6	B	-
7	P	-
8	L	-
10	W	-
11	P	-
12	L	-
14	B	-
15	P	-
16	L	-
17	V	-
18	B	-
19	P	-
20	L	-
21	V	-
22	B	-
23	P	-
24	L	-

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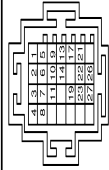
AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

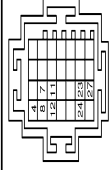
ACTIVE AFS

Connector No.	M353
Connector Name	JOINT CONNECTOR-M02
Connector Type	SGA28FDG-Y-J



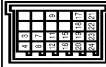
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	R	- [Without BOSE system] - [With BOSE system]
3	V	-
4	BG	-
5	G	-
6	R	-
7	V	-
8	BG	-
9	G	-
10	R	-
11	W	-
12	L	-
13	B	-
14	B	-
17	W	-
19	V	-
21	W	-
22	R	-
23	V	-
26	R	-
27	G	-

Connector No.	M354
Connector Name	JOINT CONNECTOR-M15
Connector Type	SGA28FDG-Y-J



Terminal No.	Color Of Wire	Signal Name [Specification]
4	B	-
7	W	-
8	B	-
11	G	-
12	B	-
23	W	-
24	B	-
27	G	-

Connector No.	M355
Connector Name	JOINT CONNECTOR-M06
Connector Type	M124FW-J



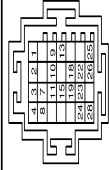
Terminal No.	Color Of Wire	Signal Name [Specification]
3	P	-
4	P	-
8	L	-
9	L	-
11	P	-
12	L	-
15	P	-
16	L	-
17	P	-
18	V	-
19	P	-

Connector No.	M358
Connector Name	JOINT CONNECTOR-M14
Connector Type	SGA28FSB-J



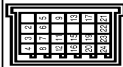
Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
1	V	- [Without BOSE system] - [With BOSE system]
2	LG	- [Without BOSE system] - [With BOSE system]
3	B	-
4	BR	-
5	V	- [Without BOSE system] - [With BOSE system]
6	LG	- [Without BOSE system] - [With BOSE system]
7	B	-
8	B	-
9	L	-
10	W	-
11	B	-
12	Y	-
13	L	-
14	W	-
15	BR	-
16	L	-
17	L	-
18	W	-
19	BR	-
20	BR	-
21	L	-
22	W	-
24	BR	-
28	BR	-

Connector No.	M359
Connector Name	JOINT CONNECTOR-M03
Connector Type	SGA28FDG-Y-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	R	-
3	SHIELD	-
4	BG	-
7	SHIELD	-
8	BG	-
9	V	-
10	P	-
11	B	-
13	V	-
15	B	-
18	L	-
22	B	-
23	B	-
24	BG	-
25	V	-
26	L	-
28	BR	-

Connector No.	M360
Connector Name	JOINT CONNECTOR-M05
Connector Type	M124FW-J



JRLWF4592GB

AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

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ACTIVE AFS

Terminal No.	Color of Wire	Signal Name [Specification]
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-
8	L	-
9	BR	-
11	P	-
12	L	-
13	BR	-
14	L	-
15	L	-
16	L	-
17	V	-
18	V	-
19	P	-
20	L	-
21	V	-
22	G	-
23	P	-
24	L	-

JRLWF4593GB

AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Fail-safe

INFOID:000000012172074

DTC	Fail-safe	AFS OFF indicator lamp	Cancellation
CAN COMM CIRCUIT [U1000]	<ul style="list-style-type: none"> Right and left swivel motors stop at the position when DTC is detected. Right and left aiming motors stop at the position when DTC is detected. 	Blinks 1 second each.	Ignition switch OFF
CONTROL UNIT (CAN) [U1010]	<ul style="list-style-type: none"> Right and left swivel motors stop at the position when DTC is detected. Right and left aiming motors stop at the position when DTC is detected. 	Blinks 1 second each.	Ignition switch OFF
SWIVEL ACTUATOR [RH, LH] [B2503, B2504]	<ul style="list-style-type: none"> Right and left swivel motors stop at the position when DTC is detected. The signal, approximately 2 V decreased from the levelizer signal when DTC detected, is output. 	Blinks 1 second each.	Ignition switch OFF
HI SEN UNUSUAL [RR] [B2514]	<ul style="list-style-type: none"> Right and left aiming motors stop at the position when DTC is detected. 	—	Ignition switch OFF
ST ANG SEN SIG [C0126]	<ul style="list-style-type: none"> Right and left swivel motor swivel angle returns to 0° and fixed. 	Blinks 1 second each.	Ignition switch OFF
SHIFT SIG [P, R] [B2516]	<ul style="list-style-type: none"> Right and left swivel motor swivel angle returns to 0° and fixed. 	Blinks 1 second each.	Ignition switch OFF
VEHICLE SPEED SIG [B2517]	<ul style="list-style-type: none"> Right and left swivel motor swivel angle returns to 0° and fixed. Right and left aiming motors stop at the position when DTC is detected. 	Blinks 1 second each.	Ignition switch OFF
LEVELIZER CALIB [B2519]	<ul style="list-style-type: none"> Right and left aiming motors stop at the position when DTC is detected. 	—	When the levelizer adjustment is completed.
ST ANGLE SEN CALIB [C0428]	<ul style="list-style-type: none"> Right and left swivel motor swivel angle returns to 0° and fixed. 	Blinks 1 second each.	When the steering angle sensor neutral position registration is completed
ECU CIRC [B2521]	<ul style="list-style-type: none"> Right and left swivel motors stop at the position when DTC is detected. Right and left aiming motors stop at the position when DTC is detected. 	Blinks 1 second each.	Ignition switch OFF

DTC Inspection Priority Chart

INFOID:000000012172075

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

NOTE:

- If DTC U1000 is displayed with other DTC, first perform the trouble diagnosis for DTC U1000.
- If DTC U1010 is displayed with other DTC, first perform the trouble diagnosis for DTC U1010.

Priority	Detected items (DTC)
1	<ul style="list-style-type: none"> U1000 CAN COMM CIRCUIT U1010 CONTROL UNIT (CAN)
2	<ul style="list-style-type: none"> B2519 LEVELIZER CALIB B2521 ECU CIRC C0428 ST ANG SEN CALIB
3	<ul style="list-style-type: none"> B2503 SWIVEL ACTUATOR [RH] B2504 SWIVEL ACTUATOR [LH] B2514 HI SEN UNUSUAL [RR] B2516 SHIFT SIG [P, R] B2517 VEHICLE SPEED SIG C0126 ST ANG SEN SIG

AFS CONTROL UNIT

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

DTC Index

INFOID:000000012172076

×: Applicable

CONSULT indication	Fail-safe	AFS OFF indicator lamp	Reference
U1000: CAN COMM CIRCUIT	×	×	EXL-62. "DTC Logic"
U1010: CONTROL UNIT (CAN)	×	×	EXL-63. "DTC Logic"
B2503, B2504: SWIVEL ACTUATOR [RH, LH]	×	×	EXL-45. "DTC Logic"
B2514: HI SEN UNUSUAL [RR]	×		EXL-51. "DTC Logic"
B2516: SHIFT SIG [P, R]	×	×	EXL-54. "DTC Logic"
B2517: VEHICLE SPEED SIG	×	×	EXL-55. "DTC Logic"
B2519: LEVELIZER CALIB	×		EXL-56. "DTC Logic"
B2521: ECU CIRC	×	×	EXL-57. "DTC Logic"
C0126: ST ANG SEN SIG	×	×	EXL-60. "DTC Logic"
C0428: ST ANGLE SEN CALIB	×	×	EXL-61. "DTC Logic"

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EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

SYMPTOM DIAGNOSIS

EXTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:000000012172077

CAUTION:

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

Symptom		Possible cause	Inspection item
Headlamp (HI) is not turned ON.	One side	<ul style="list-style-type: none"> • Fuse • Halogen bulb (HI) • Harness between IPDM E/R and the headlamp high • IPDM E/R 	Headlamp (HI) circuit Refer to EXL-67 .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON" Refer to EXL-224 .	
Headlamp (HI) is not turned OFF.	When ignition switch is turned ON.	IPDM E/R	
	When ignition switch is turned OFF.	—	
High beam indicator lamp is not turned ON. [The headlamp (HI) is turned ON.]		Combination meter	<ul style="list-style-type: none"> • Combination meter • Data monitor "HI-BEAM IND" • BCM (HEAD LAMP) • Active test "HEADLAMP"
Headlamp (LO) is not turned ON.	One side	<ul style="list-style-type: none"> • Fuse • Xenon bulb (LO) • Harness between IPDM E/R and the headlamp low • IPDM E/R 	Headlamp (LO) circuit Refer to EXL-69 .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer to EXL-225 .	
Headlamp (LO) is not turned OFF.	When ignition switch is turned ON.	IPDM E/R	
	When ignition switch is turned OFF.	—	
Headlamp is not turned ON/OFF with the lighting switch AUTO.		<ul style="list-style-type: none"> • Combination switch • Harness between the combination switch and BCM • BCM 	Combination switch Refer to BCS-93 .
		<ul style="list-style-type: none"> • Optical sensor • Harness between the optical sensor and BCM • BCM 	Optical sensor Refer to EXL-85 .
Daytime running light is not turned ON.		<ul style="list-style-type: none"> • Fuse • Daytime running light relay • Daytime running light relay power supply/control signal circuit • Daytime running light power supply/ground circuit • Daytime running light • IPDM E/R • BCM • ECM • Unified meter and A/C amp. 	<ul style="list-style-type: none"> • Daytime running light circuit Refer to EXL-74. • BCM (HEAD LAMP) • Data monitor "ENGINE STATE" • Unified meter and A/C amp. • Data monitor "PKB SW"

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

Symptom		Possible cause	Inspection item
Front fog lamp is not turned ON.	One side	<ul style="list-style-type: none"> • Front fog lamp bulb • Harness between IPDM E/R and the front combination lamp • Front combination lamp • IPDM E/R 	Front fog lamp circuit Refer to EXL-77 .
	Both side	Symptom diagnosis "BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON" Refer to EXL-227 .	
Front fog lamp indicator lamp is not turned ON. (Front fog lamp is turned ON.)		<ul style="list-style-type: none"> • Combination meter • Unified meter and A/C amp 	<ul style="list-style-type: none"> • Unified meter and A/C amp Data monitor "FR FOG IND" • BCM (HEAD LAMP) Active test "FR FOG LAMP"
Parking lamp is not turned ON.		<ul style="list-style-type: none"> • Fuse • Parking lamp bulb • Harness between IPDM E/R and the front combination lamp • Front combination lamp • IPDM E/R 	Parking lamp circuit Refer to EXL-79 .
Tail lamp is not turned ON.		<ul style="list-style-type: none"> • Harness between IPDM E/R and the rear combination lamp • Rear combination lamp 	Tail lamp circuit Refer to EXL-90 .
License plate lamp is not turned ON.		<ul style="list-style-type: none"> • Harness between IPDM E/R and the license plate lamp • License plate lamp 	License plate lamp circuit Refer to EXL-92 .
Tail lamp and the license plate lamp are not turned ON.		<ul style="list-style-type: none"> • Fuse • Harness between IPDM E/R and the rear combination lamp • IPDM E/R 	Tail lamp circuit Refer to EXL-90 .
<ul style="list-style-type: none"> • Parking lamp, the tail lamp and the license plate lamp are not turned ON. • Parking lamp, the tail lamp and the license plate lamp are not turned OFF. (Each illumination is turned ON/OFF.)		Symptom diagnosis "PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON" Refer to EXL-226 .	
Turn signal lamp does not blink.	Indicator lamp is normal. (The applicable side performs the high flasher activation.)	<ul style="list-style-type: none"> • Harness between BCM and each turn signal lamp • Front turn signal lamp bulb • Side turn signal lamp • Rear turn signal lamp 	Turn signal lamp circuit Refer to EXL-81 .
	Indicator lamp is included	<ul style="list-style-type: none"> • Combination switch • Harness between the combination switch and BCM • BCM 	Combination switch Refer to BCS-93 .
Turn signal indicator lamp does not blink. (The turn signal indicator lamp is normal.)	One side	Combination meter	—
	Both sides (Always)	<ul style="list-style-type: none"> • Turn signal indicator lamp signal - Unified meter and A/C amp. - BCM • Combination meter 	<ul style="list-style-type: none"> • Unified meter and A/C amp. Data monitor "TURN IND" • BCM (FLASHER) Active test "FLASHER"
	Both sides (Only when activating the hazard warning lamp with the ignition switch OFF)	<ul style="list-style-type: none"> • The combination meter power supply and the ground circuit • Combination meter 	Combination meter Power supply and the ground circuit Refer to MWI-52 .
<ul style="list-style-type: none"> • Hazard warning lamp does not activate. • Hazard warning lamp continues activating. (Turn signal is normal.)		<ul style="list-style-type: none"> • Hazard switch • Harness between the hazard switch and BCM • BCM 	Hazard switch Refer to EXL-88 .

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EXL

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

Symptom	Possible cause	Inspection item
Headlamp auto aiming does not activate. (AFS is normal.)	<ul style="list-style-type: none">• Harness between AFS control unit and aiming motor• Front combination lamp (Aiming motor)• AFS control unit	Headlamp levelizer circuit Refer to EXL-72 .
AFS OFF indicator lamp is not turned ON.	<ul style="list-style-type: none">• AFS OFF indicator lamp signal- Unified meter and A/C amp.- AFS control unit• Combination meter	Unified meter and A/C amp. Data monitor "AFS OFF IND"

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

NORMAL OPERATING CONDITION

Description

INFOID:000000012172078

XENON HEADLAMP

- Brightness and the color of light may change slightly immediately after turning the headlamp ON until the xenon bulb becomes stable. This is normal.
- Illumination time lag may occur between right and left. This is normal.

AUTO LIGHT SYSTEM

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

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BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON

Description

INFOID:000000012172079

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

Diagnosis Procedure

INFOID:000000012172080

1.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-93, "Symptom Table"](#).

Is the combination 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. With operating the lighting switch, check the monitor status.

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

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-97, "Exploded View"](#).

3.HEADLAMP (HI) CIRCUIT INSPECTION

Check the headlamp (HI) circuit. Refer to [EXL-67, "Component Function Check"](#).

Is the headlamp (HI) circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

Description

INFOID:000000012172081

The headlamps (both sides) are not turned ON in any condition.

Diagnosis Procedure

INFOID:000000012172082

1. CHECK COMBINATION SWITCH

Check the combination switch. Refer to [BCS-93. "Symptom Table"](#).

Is the combination 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. With operating the lighting switch, check the monitor status.

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

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM.

3. HEADLAMP (LO) CIRCUIT INSPECTION

Check the headlamp (LO) circuit. Refer to [EXL-69. "Description"](#).

Is the headlamp (LO) circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

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EXL

PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON

Description

INFOID:000000012172083

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

Diagnosis Procedure

INFOID:000000012172084

1.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-93, "Symptom Table"](#).

Is the combination switch normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

2.CHECK TAIL LAMP RELAY REQUEST SIGNAL INPUT

ⓅCONSULT DATA MONITOR

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

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

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM.

3.TAIL LAMP CIRCUIT INSPECTION

Check the tail lamp circuit. Refer to [EXL-90, "Component Function Check"](#).

Is the tail lamp circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

Description

INFOID:000000012172085

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

Diagnosis Procedure

INFOID:000000012172086

1.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-93. "Symptom Table"](#).

Is the combination 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 (Lighting switch 2ND)	ON	On
		OFF	Off

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM.

3.FRONT FOG LAMP CIRCUIT INSPECTION

Check the front fog lamp circuit. Refer to [EXL-77. "Component Function Check"](#).

Is the front fog lamp circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

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PRECAUTION

PRECAUTIONS

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

INFOID:000000012172087

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.
- Improper repair, 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 "SRS AIR BAG".
- Never 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:

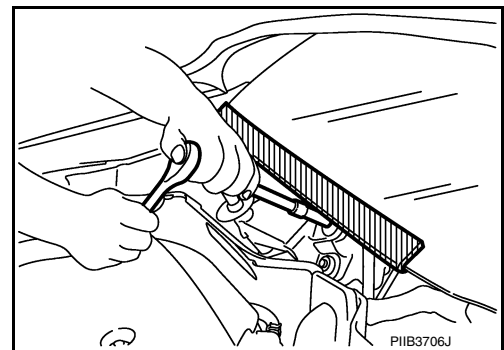
Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never 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 or batteries, and wait at least 3 minutes before performing any service.

Precaution for Procedure without Cowl Top Cover

INFOID:000000012172088

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



Precautions For Xenon Headlamp Service

INFOID:000000012703733

WARNING:

Comply with the following warnings to prevent any serious accident.

- Disconnect the battery cable (negative terminal) or the power supply fuse before installing, removing, or touching the xenon headlamp (bulb included). The xenon headlamp contains high-voltage generated parts.
- Never work with wet hands.
- Check the xenon headlamp ON-OFF status after assembling it to the vehicle. Never turn the xenon headlamp ON in other conditions. Connect the power supply to the vehicle-side connector.

PRECAUTIONS

< PRECAUTION >

[XENON TYPE]

(Turning it ON outside the lamp case may cause fire or visual impairments.)

- Never touch the bulb glass immediately after turning it OFF. It is extremely hot.

CAUTION:

Comply with the following cautions to prevent any error and malfunction.

- Install the xenon bulb securely. (Insufficient bulb socket installation may melt the bulb, the connector, the housing, etc. by high-voltage leakage or corona discharge.)
- Never perform HID circuit inspection with a tester.
- Never touch the xenon bulb glass with hands. Never put oil and grease on it.
- Dispose of the used xenon bulb after packing it in thick vinyl without breaking it.
- Never wipe out dirt and contamination with organic solvent (thinner, gasoline, etc.).

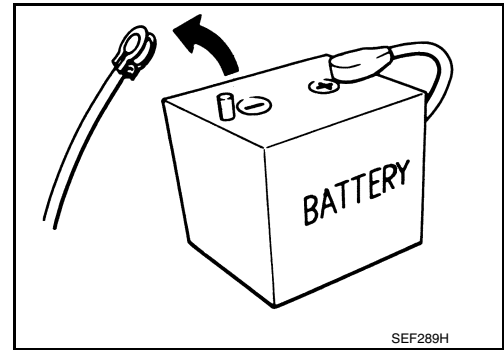
Precautions for Removing Battery Terminal

INFOID:000000012703734

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

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

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



NOTE:

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

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

NOTE:

- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
 - Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
 - Driving for 30 minutes or more on a steep slope.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:

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

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

NOTE:

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

HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[XENON TYPE]

PERIODIC MAINTENANCE

HEADLAMP AIMING ADJUSTMENT

Description

INFOID:000000012172091

PREPARATION BEFORE ADJUSTING

NOTE:

- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the headlamp assembly has been replaced.

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the trunk room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

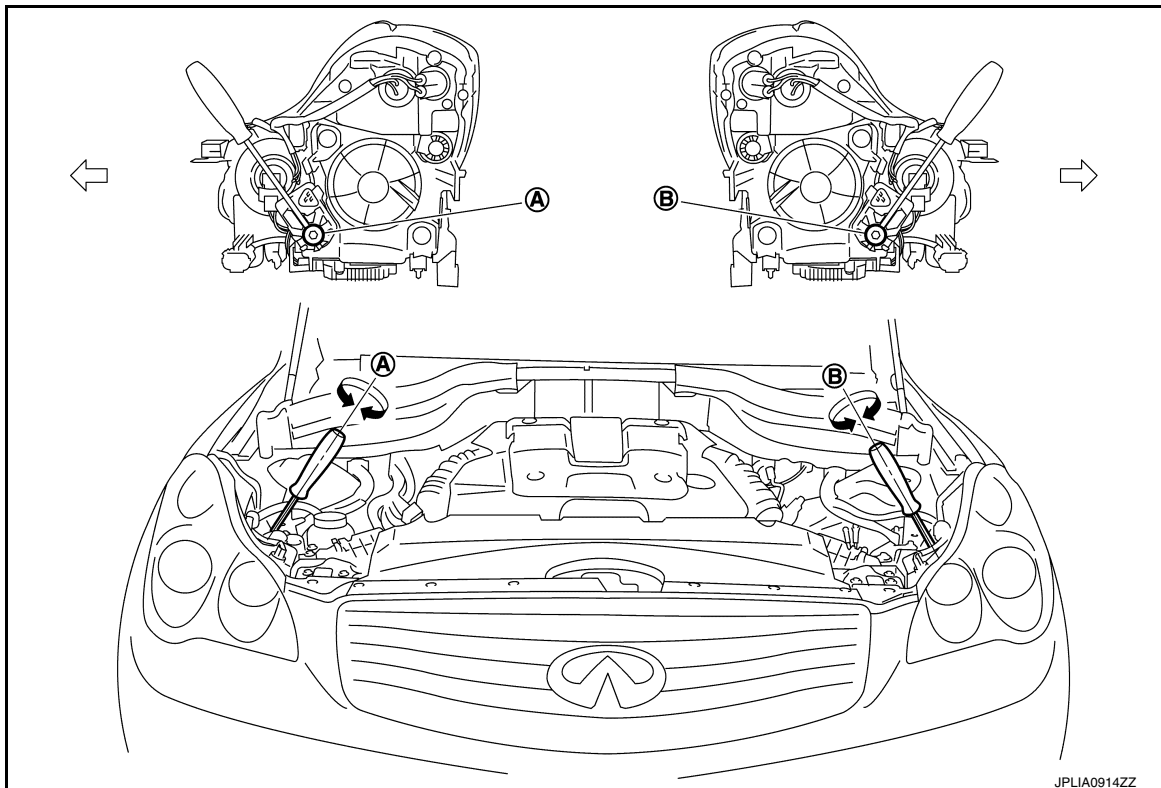
- Wipe out dirt on the headlamp.

CAUTION:

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

- Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW



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

↔ : Vehicle center

NOTE:

The figure is the vehicle without AFS. Each adjustment screw is applied to the vehicle with AFS.

HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[XENON TYPE]

Adjustment screw	Screw driver rotation	Facing direction
A Headlamp RH (UP/DOWN)	Clockwise	UP
	Counterclockwise	DOWN
B Headlamp LH (UP/DOWN)	Clockwise	UP
	Counterclockwise	DOWN

For aiming adjustment procedure, refer to [EXL-231, "Aiming Adjustment Procedure"](#).

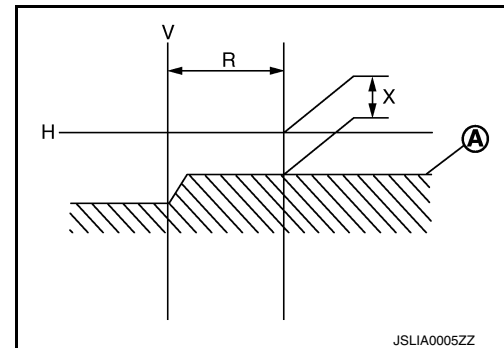
Aiming Adjustment Procedure

INFOID:000000012172092

- Place the screen.
 - NOTE:**
 - Stop the vehicle facing the wall.
 - Place the board on a plain road vertically.
- Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the headlamp center and the screen.
- Start the engine. Turn the headlamp (LO) ON.
 - CAUTION:**
Never cover the lens surface with a tape etc. The lens is made of resin.
 - NOTE:**
Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.
- Measure the distance (X) between the horizontal center line of headlamp (H) and the cutoff line (A) within the light axis measurement range (R) from the vertical center line ahead of headlamp (V).

Light axis measurement range (R) : 350 ± 175 mm (13.78 ± 6.89 in)

Low beam distribution on the screen

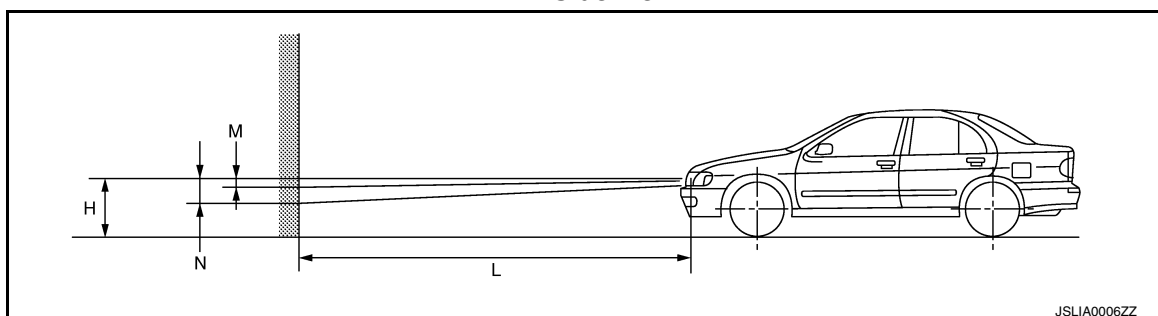


- Adjust the cutoff line height (X) with the aiming adjustment screw so as to enter in the adjustment range (M–N) according to the horizontal center line of headlamp (H).

unit: mm (in)

Horizontal center line of headlamp (H)	Highest cutoff line height (M)	Lowest cutoff line height (N)
700 (27.56) or less	4 (0.16)	30 (1.18)
701 (27.60) – 800 (31.50)	4 (0.16)	30 (1.18)
801 (31.54) or more	17 (0.67)	44 (1.73)

Side view



Distance between the headlamp center and the screen (L) : 10 m (32.8 ft)

FRONT FOG LAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[XENON TYPE]

FRONT FOG LAMP AIMING ADJUSTMENT

Description

INFOID:000000012172093

PREPARATION BEFORE ADJUSTING

NOTE:

- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the headlamp assembly has been replaced.

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the trunk room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

- Wipe out dirt on the headlamp.

CAUTION:

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

- Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW

- Turn the aiming adjusting screw for adjustment.

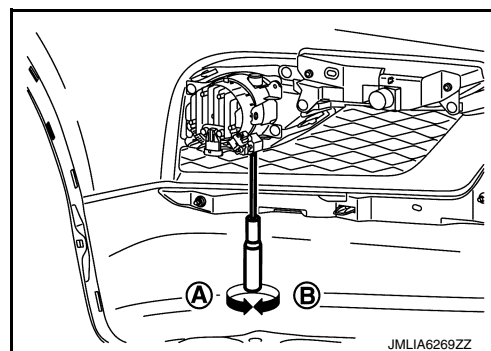
A: DOWN

B: UP

- For the position and direction of the adjusting screw, refer to the figure.

NOTE:

A screwdriver or hexagonal wrench [6 mm (0.24 in)] can be used for adjustment.



For aiming adjustment procedure, refer to [EXL-232, "Aiming Adjustment Procedure"](#).

Aiming Adjustment Procedure

INFOID:000000012172094

1. Place the screen.

NOTE:

- Stop the vehicle facing the wall.
- Place the board on a plain road vertically.

2. Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the front fog lamp center and the screen.
3. Start the engine. Turn the front fog lamp ON.

CAUTION:

Never cover the lens surface with a tape etc. The lens is made of resin.

NOTE:

Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.

4. 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).

NOTE:

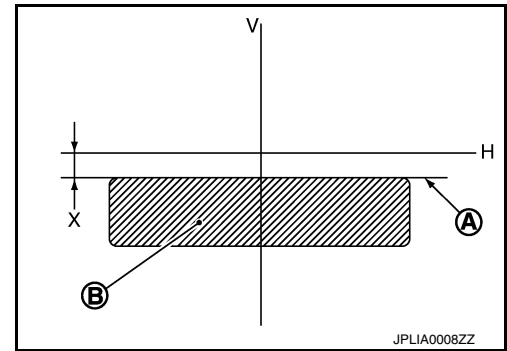
FRONT FOG LAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[XENON TYPE]

Front fog lamp light distribution on the screen

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



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FRONT COMBINATION LAMP

< REMOVAL AND INSTALLATION >

[XENON TYPE]

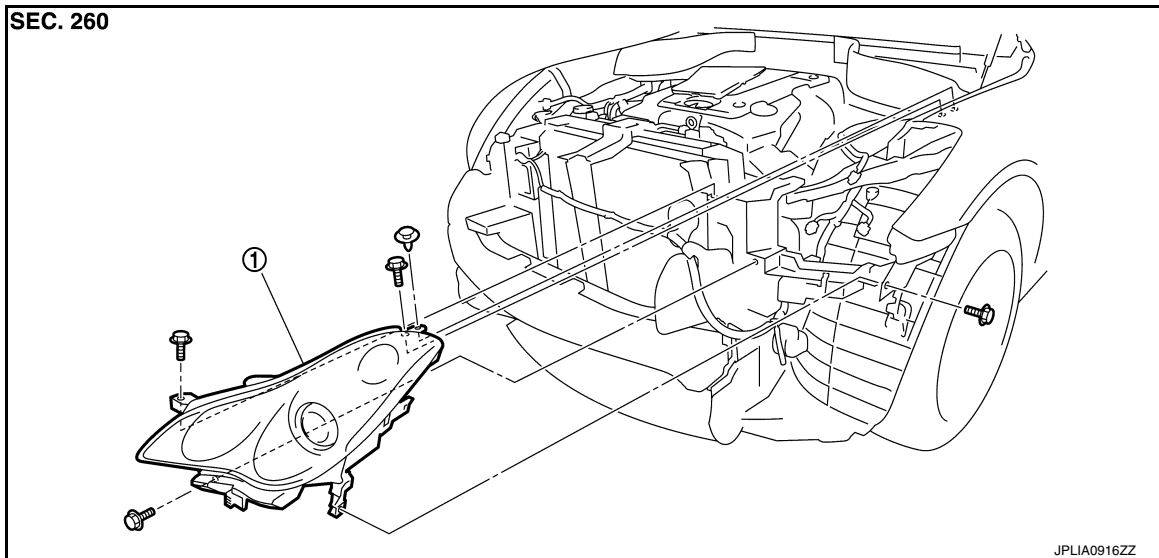
REMOVAL AND INSTALLATION

FRONT COMBINATION LAMP

Exploded View

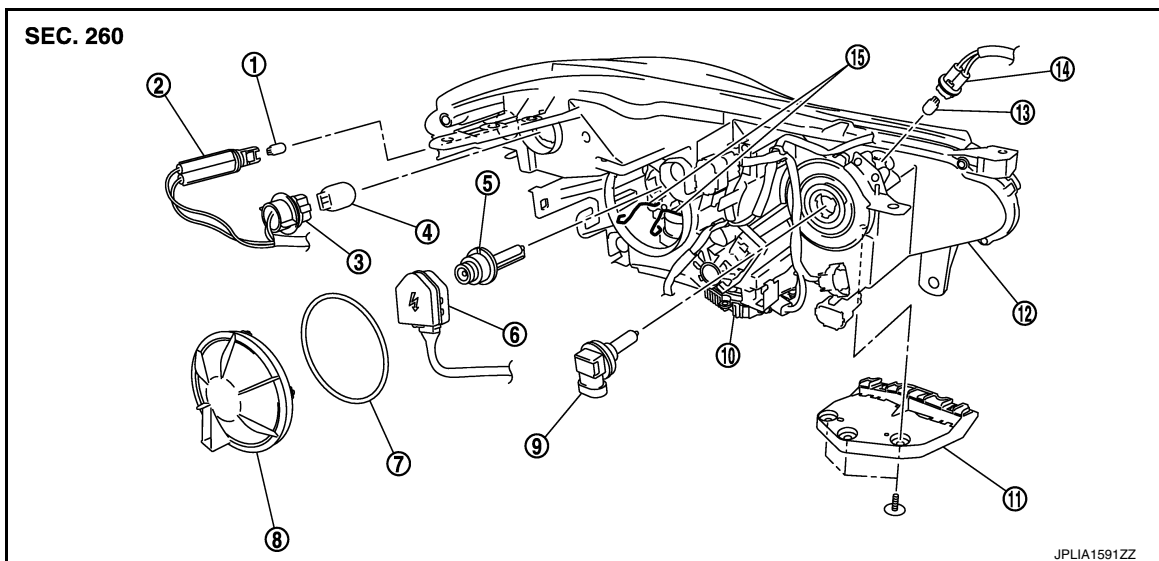
INFOID:000000012172095

REMOVAL



1. Front combination lamp

DISASSEMBLY



- | | | |
|--------------------------------|---------------------------------------|---------------------------------------|
| 1. Front side marker lamp bulb | 2. Front side marker lamp bulb socket | 3. Front turn signal lamp bulb socket |
| 4. Front turn signal lamp bulb | 5. Xenon bulb | 6. Xenon bulb socket |
| 7. Seal packing | 8. Resin cap | 9. Headlamp (HI) bulb |
| 10. HID control unit | 11. Bumper bracket | 12. Headlamp housing assembly |
| 13. Parking lamp bulb | 14. Parking lamp bulb socket | 15. Retaining spring |

CAUTION:
HID control unit and xenon bulb socket cannot be disassembled.

FRONT COMBINATION LAMP

< REMOVAL AND INSTALLATION >

[XENON TYPE]

Removal and Installation

INFOID:000000012172096

REMOVAL

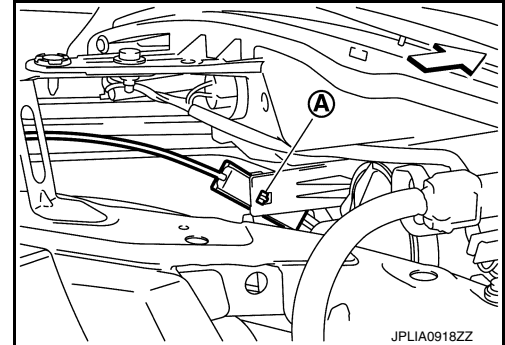
CAUTION:

Disconnect the battery negative terminal or remove the fuse.

1. Remove the front bumper fascia. Refer to [EXT-13. "Removal and Installation"](#).
2. Remove the headlamp mounting bolts and clips.
3. Remove the harness clip and the holding clip (A)*.
*: Left side only.

← : Vehicle front

4. Pull out the headlamp assembly forward the vehicle.
5. Disconnect the connector before removing the headlamp assembly.



INSTALLATION

Note the following item, and then install in the reverse order of removal.

NOTE:

After installation, perform aiming adjustment. Refer to [EXL-230. "Description"](#).

Replacement

INFOID:000000012172097

CAUTION:

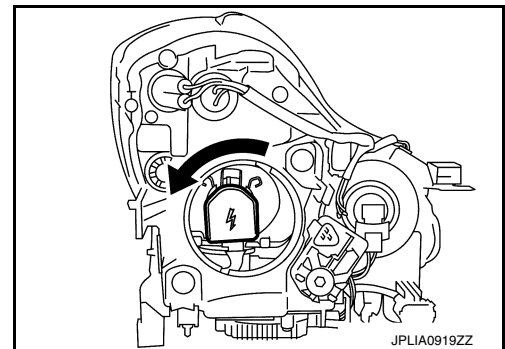
- Disconnect the battery negative terminal or remove the fuse.
- After installing the bulb, install the resin cap and the bulb socket securely for watertightness.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it. Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

HEADLAMP BULB (LO)

1. Remove the fender rubber protector in the engine room. Keep a service area.
2. Rotate the resin cap counterclockwise and unlock it.
3. Rotate the bulb socket counterclockwise and unlock it.
4. Remove the retaining spring lock. And then remove the bulb from the headlamp housing assembly.

CAUTION:

Never break the xenon bulb ceramic tube when replacing the bulb.



HEADLAMP BULB (HI)

1. Remove the washer tank inlet*. Refer to [WW-114. "Exploded View"](#).
*:When replace a right.
2. Disconnect the headlamp (HI) bulb connector.
3. Rotate the bulb socket counterclockwise and unlock it.
4. Remove the bulb socket from the headlamp housing assembly.

PARKING LAMP BULB

1. Rotate the bulb socket counterclockwise and unlock it.

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FRONT COMBINATION LAMP

[XENON TYPE]

< REMOVAL AND INSTALLATION >

2. Remove the bulb from the bulb socket.

FRONT TURN SIGNAL LAMP BULB

1. Remove the fender rubber protector in the engine room. Keep a service area.
2. Rotate the bulb socket counterclockwise and unlock it.
3. Remove the bulb from the bulb socket.

FRONT SIDE MARKER LAMP BULB

1. Remove the fender rubber protector in the engine room. Keep a service area.
2. Rotate the bulb socket counterclockwise and unlock it.
3. Remove the bulb from the bulb socket.

Disassembly and Assembly

INFOID:000000012172098

CAUTION:

HID control unit and xenon bulb socket cannot be disassembled.

DISASSEMBLY

1. Rotate the resin cap counterclockwise and unlock it.
2. Rotate the xenon bulb socket counterclockwise and unlock it.
3. Remove the retaining spring lock. Remove the xenon bulb.
4. Remove the bumper bracket.
5. Rotate the parking lamp bulb socket counterclockwise and unlock it.
6. Remove the bulb from the parking lamp bulb socket.
7. Rotate the front turn signal lamp bulb socket counterclockwise and unlock it.
8. Remove the bulb from the front turn signal lamp bulb socket.
9. Rotate the front side marker lamp bulb socket counterclockwise and unlock it.
10. Remove the bulb from the front side marker lamp bulb socket.
11. Rotate the headlamp (HI) bulb socket counterclockwise and unlock it.
12. Remove the bulb socket from the headlamp housing assembly.

ASSEMBLY

Assemble in the reverse order of disassembly.

CAUTION:

After installing the bulb, install the resin cap and the bulb socket securely for watertightness.

DAYTIME RUNNING LIGHT

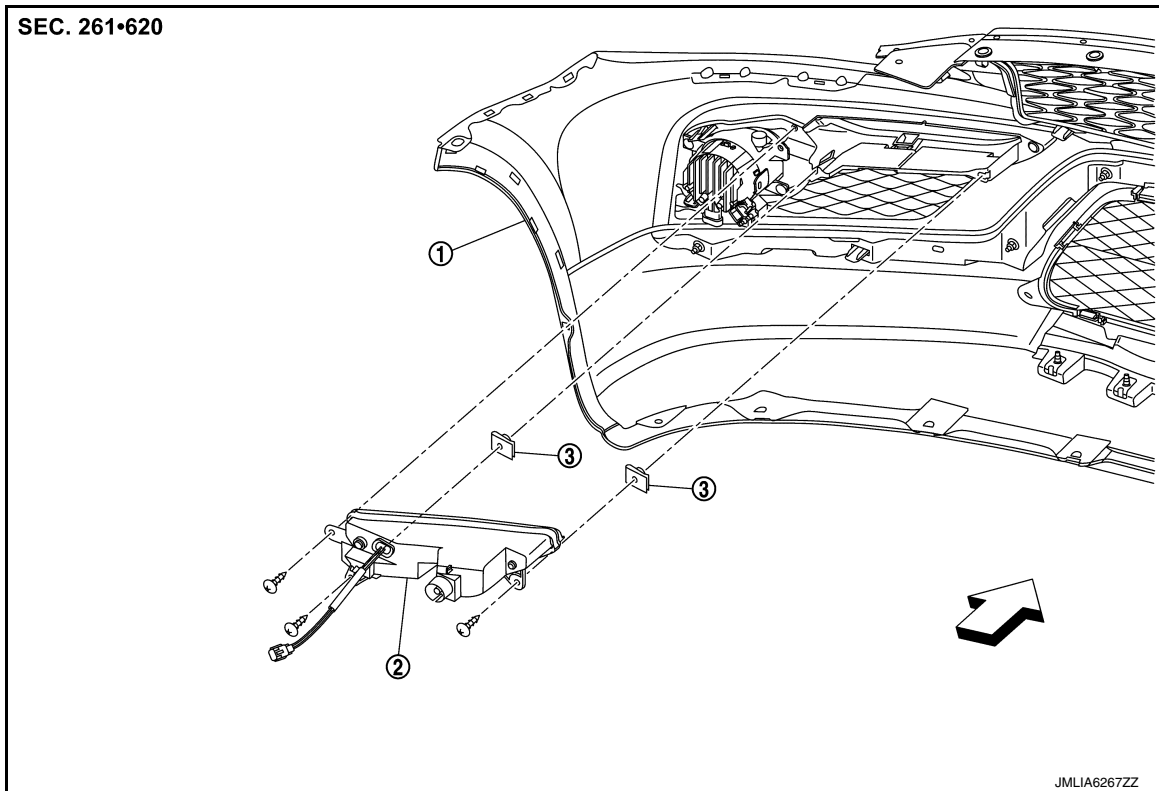
< REMOVAL AND INSTALLATION >

[XENON TYPE]

DAYTIME RUNNING LIGHT

Exploded View

INFOID:000000012738502



1. Front bumper fascia

2. Daytime running light

3. Spring nut

⇐ : Vehicle front

Removal and Installation

INFOID:000000012738503

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the front fender protector. Keep a service area. Refer to [EXT-25. "FENDER PROTECTOR : Removal and Installation"](#).
2. Remove the daytime running light connector.
3. Remove the screws. And then remove the daytime running light.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:000000012738504

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

DAYTIME RUNNING LIGHT

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front fog lamp as a set. Refer to [EXL-237. "Removal and Installation"](#).

FRONT FOG LAMP

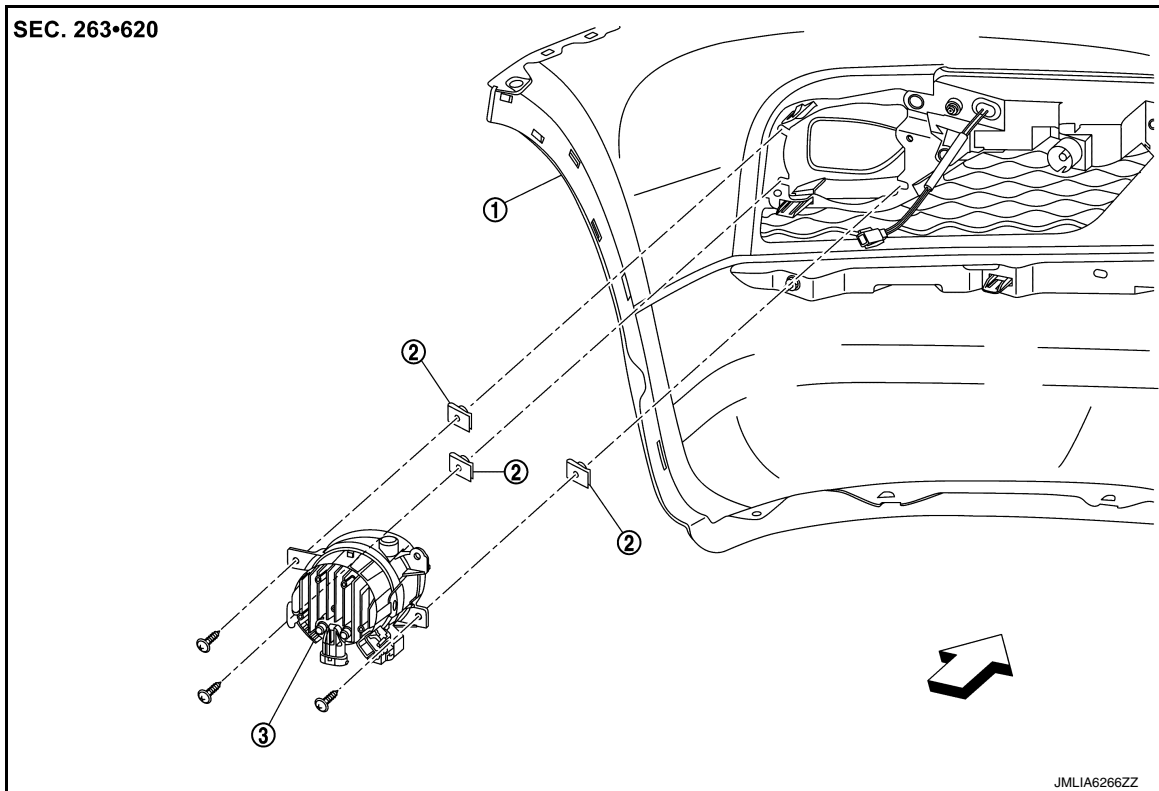
< REMOVAL AND INSTALLATION >

[XENON TYPE]

FRONT FOG LAMP

Exploded View

INFOID:000000012172099



1. Front bumper fascia

2. Spring nut

3. Front fog lamp

⇐ : Vehicle front

Removal and Installation

INFOID:000000012172100

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the front fender protector. Keep a service area. Refer to [EXT-25. "FENDER PROTECTOR : Exploded View"](#).
2. Remove the front fog lamp connector.
3. Remove the screw. And then remove the front fog lamp.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

NOTE:

After installation, perform aiming adjustment. Refer to [EXL-232. "Description"](#).

Replacement

INFOID:000000012172101

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

FRONT FOG LAMP BULB

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front fog lamp as a set. Refer to [EXL-238. "Removal and Installation"](#).

OPTICAL SENSOR

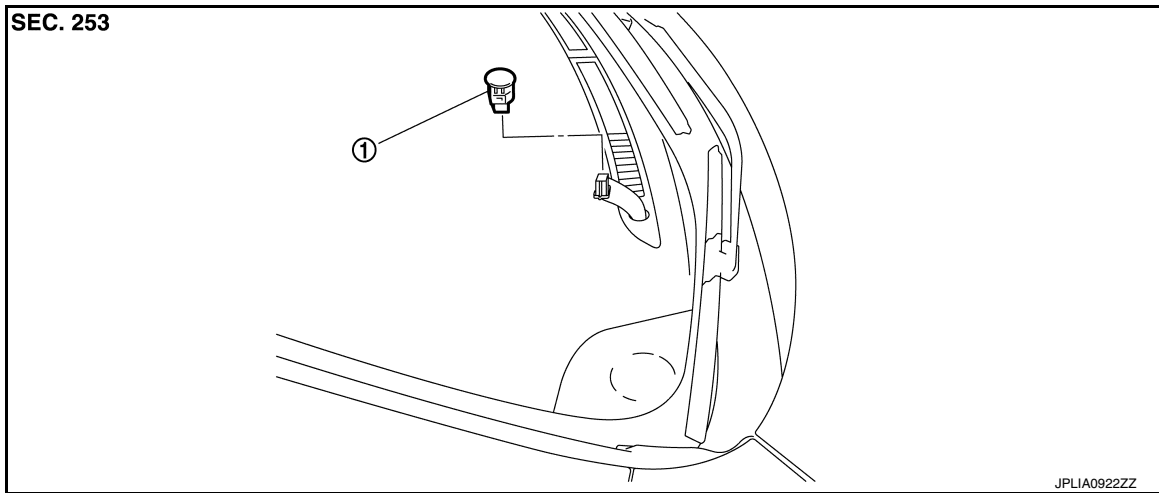
< REMOVAL AND INSTALLATION >

[XENON TYPE]

OPTICAL SENSOR

Exploded View

INFOID:000000012172102



1. Optical sensor

Removal and Installation

INFOID:000000012172103

REMOVAL

1. Insert an appropriate tool between the optical sensor and the instrument upper panel. Pull out the optical sensor upward.
2. Disconnect the optical sensor connector. And then remove the optical sensor.

INSTALLATION

Install in the reverse order of removal.

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LIGHTING AND TURN SIGNAL SWITCH

< REMOVAL AND INSTALLATION >

[XENON TYPE]

LIGHTING AND TURN SIGNAL SWITCH

Exploded View

INFOID:000000012172104

Lighting and turn signal switch is integrated in the combination switch. [BCS-98. "Exploded View"](#).

HAZARD SWITCH

< REMOVAL AND INSTALLATION >

[XENON TYPE]

HAZARD SWITCH

Exploded View

INFOID:000000012172105

The hazard warning switch is integrated in the multifunction switch. Refer to [AV-133. "Exploded View"](#).

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SIDE TURN SIGNAL LAMP

< REMOVAL AND INSTALLATION >

[XENON TYPE]

SIDE TURN SIGNAL LAMP

Exploded View

INFOID:000000012741318

For exploded view of side turn signal lamp, refer to [MIR-126, "Exploded View"](#).

Removal and Installation

INFOID:000000012741319

For removal and installation procedures of side turn signal lamp, refer to [MIR-127, "DOOR MIRROR ASSEMBLY : Disassembly and Assembly"](#).

Replacement

INFOID:000000012741320

CAUTION:

Disconnect battery negative terminal or remove the fuse.

SIDE TURN SIGNAL LAMP

CAUTION:

Replace of a single part is not possible due to the adoption of LED. For replacement, replace side turn signal lamp as a set. Refer to [MIR-127, "DOOR MIRROR ASSEMBLY : Disassembly and Assembly"](#).

AFS CONTROL UNIT

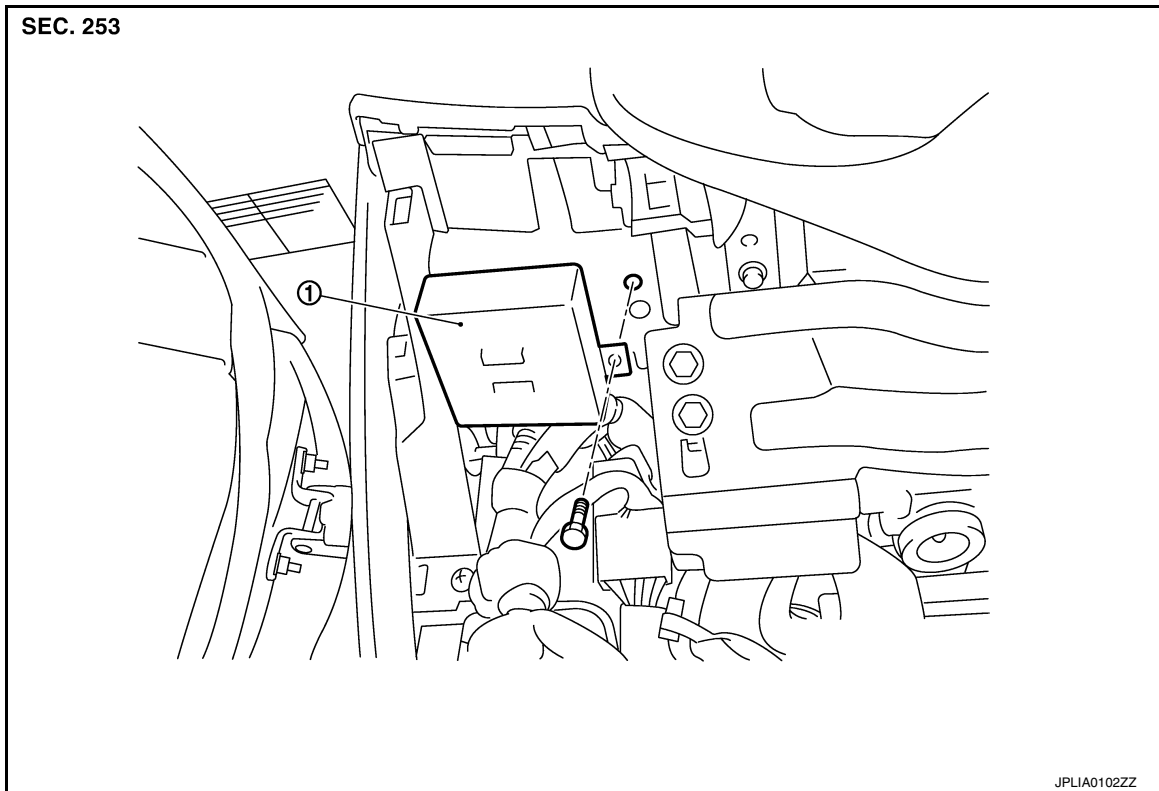
< REMOVAL AND INSTALLATION >

[XENON TYPE]

AFS CONTROL UNIT

Exploded View

INFOID:000000012172106



1. AFS control unit

Removal and Installation

INFOID:000000012172107

CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- Before replacing AFS control unit, perform "READ CONFIGURATION" to save or print current vehicle specification. Refer to [EXL-10, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT \(AFS CONTROL UNIT\) : Description"](#).

REMOVAL

1. Remove the instrument lower panel LH. Refer to [IP-12, "Exploded View"](#).
2. Remove the AFS control unit mounting bolt.
3. Disconnect the AFS control unit connector.
4. Remove the AFS control unit.

INSTALLATION

Note the following items, and then install in the reverse order of removal.

CAUTION:

- Be sure to perform "WRITE CONFIGURATION" when replacing AFS control unit. Or not doing so, AFS control function does not operate normally. Refer to [EXL-10, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT \(AFS CONTROL UNIT\) : Description"](#).
- Be sure to perform "SENSOR INITIALIZE" when replacing AFS control unit. Refer to [EXL-10, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT \(AFS CONTROL UNIT\) : Description"](#).

STEERING ANGLE SENSOR

< REMOVAL AND INSTALLATION >

[XENON TYPE]

STEERING ANGLE SENSOR

Removal and Installation

INFOID:000000012172108

For removal and installation procedures of steering angle sensor, refer to [SR-14. "Removal and Installation"](#).

HEIGHT SENSOR

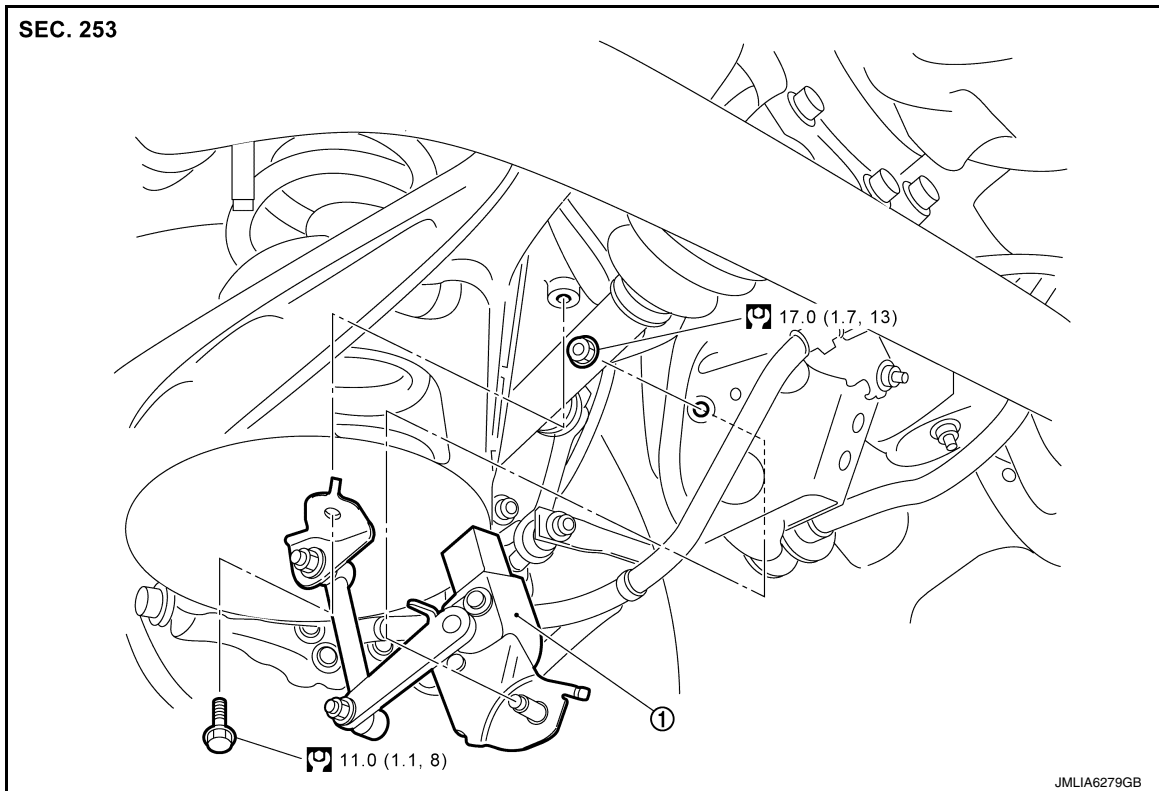
< REMOVAL AND INSTALLATION >

[XENON TYPE]


HEIGHT SENSOR

Exploded View

INFOID:000000012172109



1. Height sensor

 : N·m (kg-m, ft-lb)

Removal and Installation

INFOID:000000012172110

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the height sensor mounting nut and bolt.
2. Disconnect the height sensor connector.
3. Remove the height sensor.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Perform the levelizer adjustment when removing the height sensor. Refer to [EXL-10, "ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT \(HEIGHT SENSOR\) : Description"](#).

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REAR COMBINATION LAMP

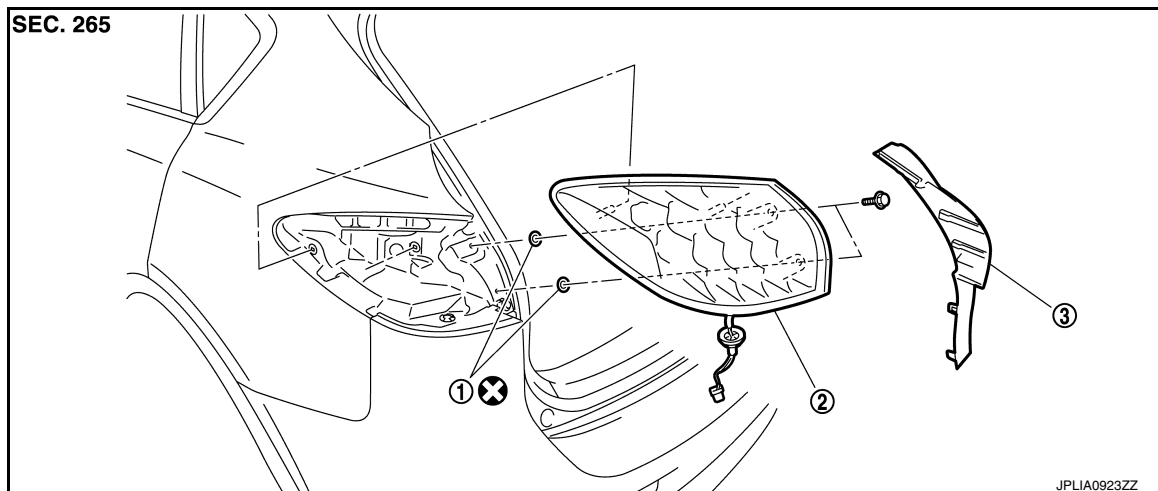
< REMOVAL AND INSTALLATION >

[XENON TYPE]

REAR COMBINATION LAMP

Exploded View

INFOID:000000012172111



1. Seal packing

2. Rear combination lamp

3. Rear combination lamp finisher

⊗ : Always replace after every disassembly.

Removal and Installation

INFOID:000000012172112

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the luggage side finisher lower. Refer to [INT-33, "Exploded View"](#).
2. Remove the rear combination lamp finisher.
3. Remove the rear combination lamp mounting bolts.
4. Disconnect the rear combination lamp connector.
5. Pull the rear combination lamp toward outside of the vehicle. Remove the rear combination lamp.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Seal packing cannot be reused.

REAR TURN SIGNAL LAMP

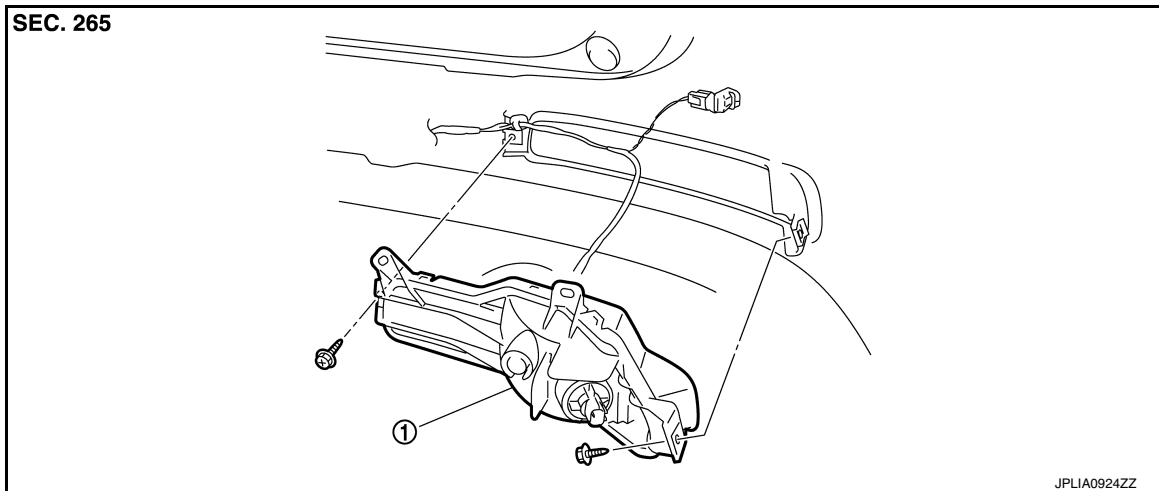
< REMOVAL AND INSTALLATION >

[XENON TYPE]

REAR TURN SIGNAL LAMP

Exploded View

INFOID:0000000012172113



1. Rear turn signal lamp

Removal and Installation

INFOID:0000000012172114

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the rear bumper fascia. Refer to [EXT-17, "Removal and Installation"](#).
2. Remove the rear turn signal lamp.

INSTALLATION

Install in the reverse order of removal.

Replacement

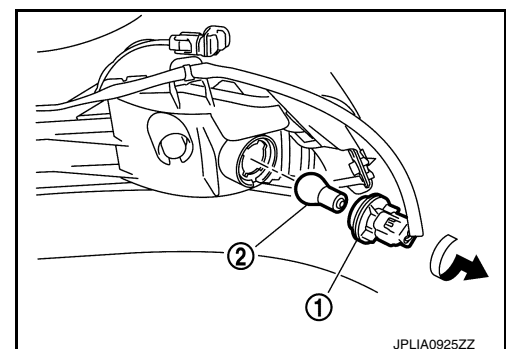
INFOID:0000000012172115

CAUTION:

- **Disconnect the battery negative terminal or remove the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it. Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

REAR TURN SIGNAL LAMP BULB

1. Turn the bulb socket (1) counterclockwise and unlock it.
2. Remove the bulb (2) from the socket.



HIGH-MOUNTED STOP LAMP

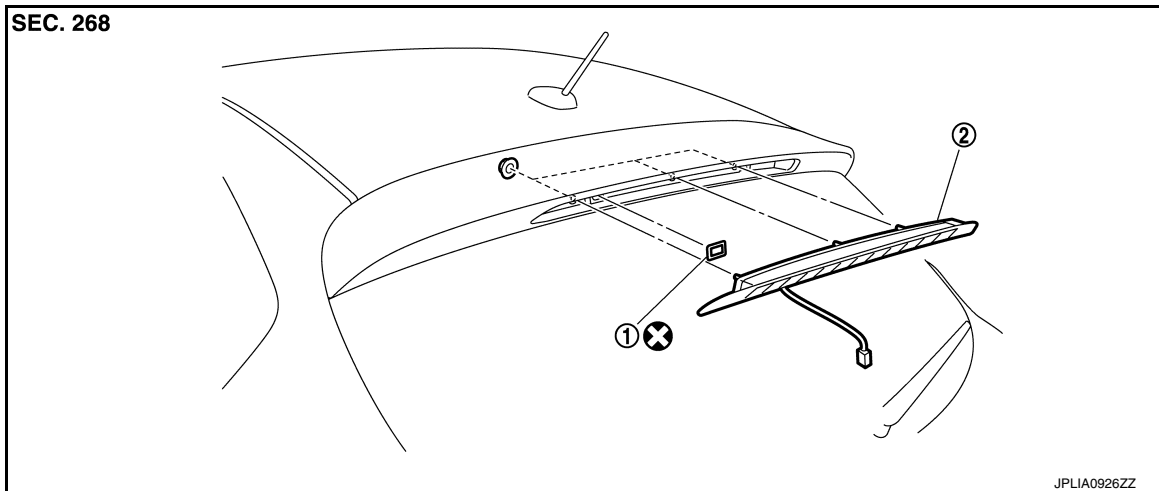
< REMOVAL AND INSTALLATION >

[XENON TYPE]


HIGH-MOUNTED STOP LAMP

Exploded View

INFOID:000000012172116



1. Seal packing
2. High-mounted stop lamp

 : Always replace after every disassembly.

Removal and Installation

INFOID:000000012172117

REMOVAL

1. Remove the back door finisher inner. Refer to [INT-37, "Exploded View"](#).
2. Remove the high-mounted stop lamp mounting nuts.
3. Disconnect the high-mounted stop lamp connector. And then remove the rear washer tube.
4. Pull the high-mounted stop lamp toward rear of the vehicle.
5. Remove the high-mounted stop lamp.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Seal packing cannot be reused.

BACK-UP LAMP

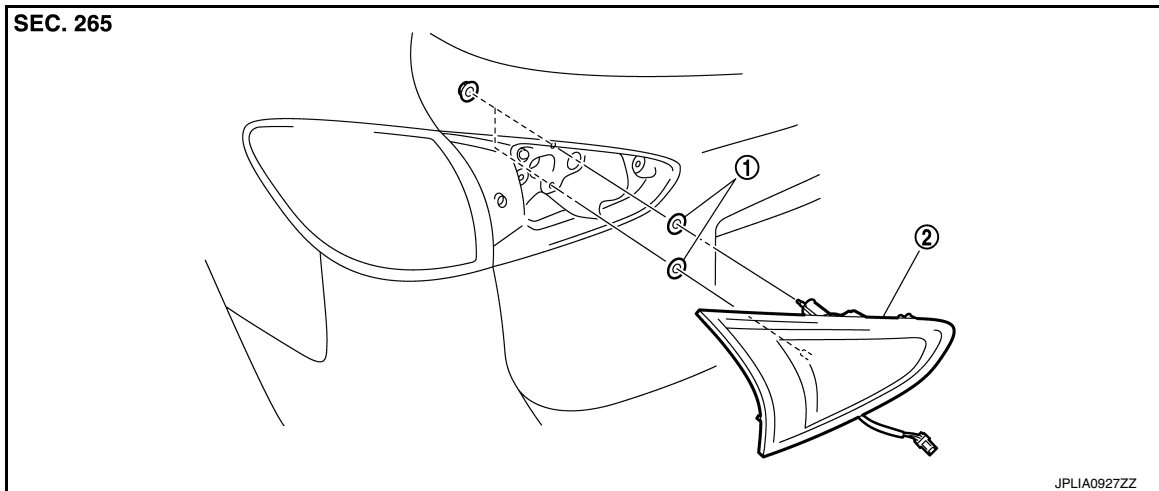
< REMOVAL AND INSTALLATION >

[XENON TYPE]

BACK-UP LAMP

Exploded View

INFOID:0000000012172118



1. Seal packing
2. Back-up lamp

Removal and Installation

INFOID:0000000012172119

CAUTION:
Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the back door finisher inner. Refer to [INT-37, "Exploded View"](#).
2. Remove the back-up lamp mounting nuts.
3. Disconnect the back-up lamp connector. And then remove the back-up lamp.

INSTALLATION

Install in the reverse order of removal.

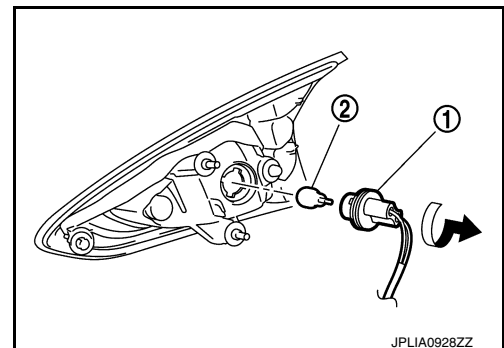
Replacement

INFOID:0000000012172120

- CAUTION:**
- Disconnect the battery negative terminal or remove the fuse.
 - Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it. Never touch bulb by hand while it is lit or right after being turned off.
 - Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

BACK-UP LAMP BULB

1. Remove the back-up lamp. Refer to [EXL-249, "Exploded View"](#).
2. Turn the bulb socket (1) counterclockwise and unlock it.
3. Remove the bulb (2) from the socket.



LICENSE PLATE LAMP

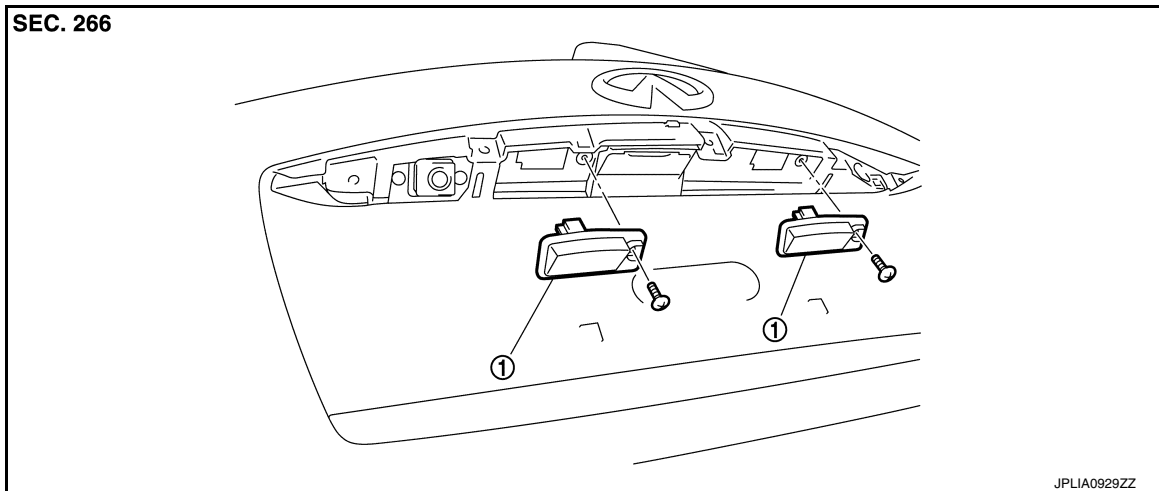
< REMOVAL AND INSTALLATION >

[XENON TYPE]

LICENSE PLATE LAMP

Exploded View

INFOID:000000012172121



1. License plate lamp

Removal and Installation

INFOID:000000012172122

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the door handle cover. Refer to [EXT-50, "Exploded View"](#).
2. Remove the screw. And then remove the license plate lamp.
3. Disconnect the license plate lamp connector.

INSTALLATION

Install in the reverse order of removal.

Replacement

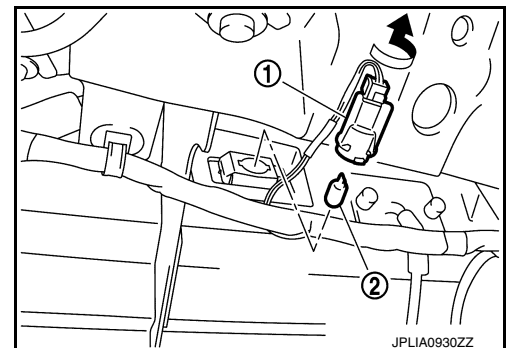
INFOID:000000012172123

CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it. Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

LICENSE PLATE LAMP BULB

1. Remove the back door finisher inner. Refer to [INT-37, "Exploded View"](#).
2. Turn the bulb socket (1) counterclockwise and unlock it.
3. Remove the bulb (2) from the socket.



SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

[XENON TYPE]

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000012172124

Item	Type	Wattage (W)	
Front combination lamp	Headlamp (HI)	H9 (Halogen) 65	
	Headlamp (LO)	D2S (XENON) 35	
	Front turn signal lamp	W21W 21	
	Parking lamp	W5W 5	
	Front side marker lamp	W5W 5	
Daytime running light	LED	—	
Front fog lamp	LED	—	
Side turn signal lamp (built in door mirror)	LED	—	
Rear combination lamp	Stop lamp/Tail lamp	LED	—
	Rear side marker lamp	LED	—
Rear turn signal lamp	PY21W (Amber)	21	
Back-up lamp	W16W	16	
License plate lamp	W5W	5	
High-mounted stop lamp	LED	—	

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[HALOGEN TYPE]

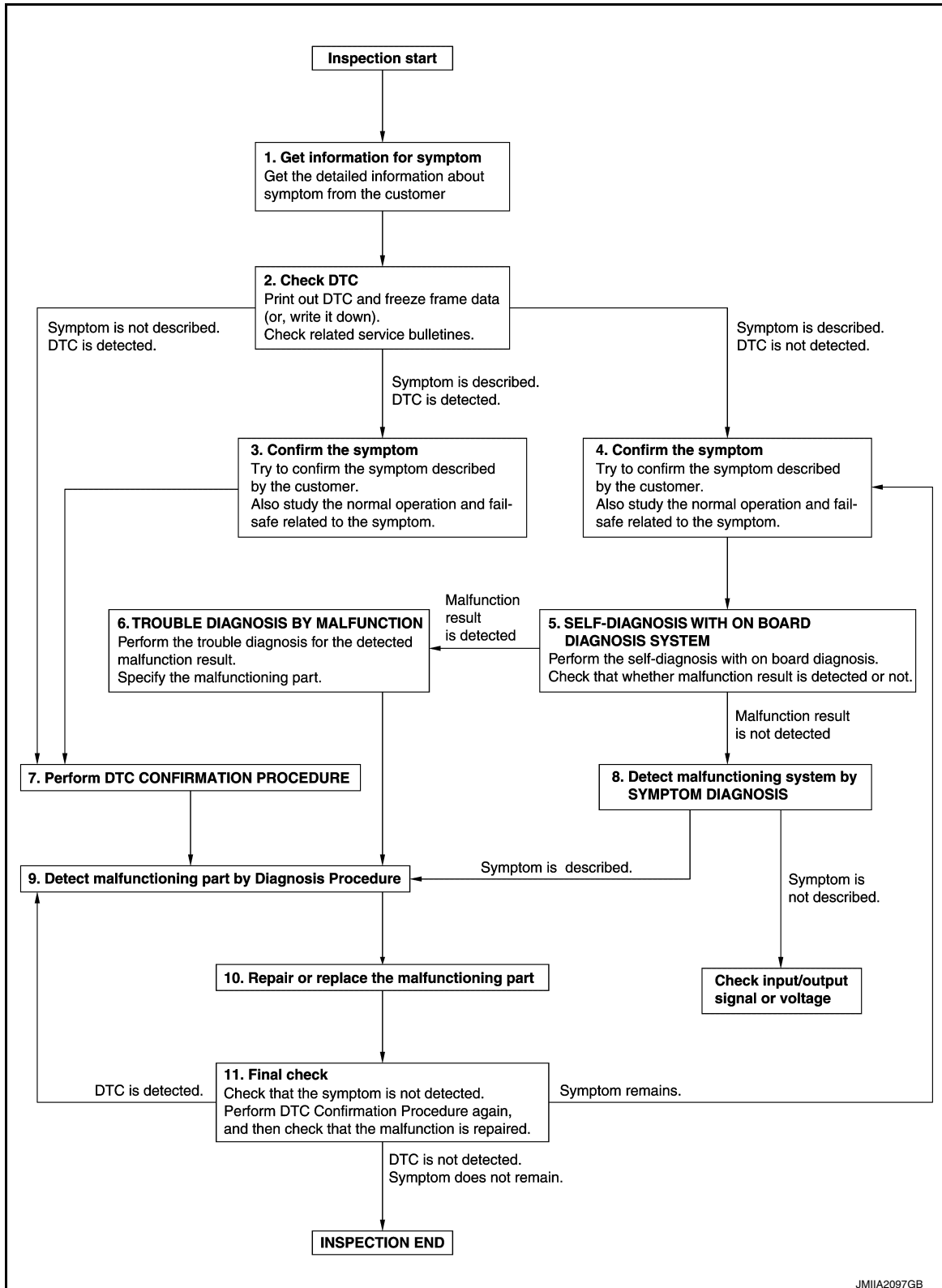
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000012172125

OVERALL SEQUENCE



JMIIA2097GB

DETAILED FLOW

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

[HALOGEN TYPE]

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

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

Are any symptoms described and any DTC detected?

- Symptom is described, DTC is detected>>GO TO 3.
- Symptom is described, DTC is not detected>>GO TO 4.
- Symptom is not described, DTC is detected>>GO TO 7.

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Also study the normal operation and fail-safe related to the symptom.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 7.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Also study the normal operation and fail-safe related to the symptom.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

5.SELF-DIAGNOSIS WITH ON BOARD DIAGNOSIS SYSTEM

Perform the self-diagnosis with on board diagnosis. Check that whether malfunction result is detected or not.

Is malfunction result detected?

- YES >> GO TO 6.
- NO >> GO TO 8.

6.TROUBLE DIAGNOSIS BY MALFUNCTION

Perform the trouble diagnosis for the detected malfunction result. Specify the malfunctioning part.

>> GO TO 9.

7.PERFORM DTC CONFIRMATION PROCEDURE

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

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIRMATION PROCEDURE.

Is DTC detected?

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DIAGNOSIS AND REPAIR WORK FLOW

[HALOGEN TYPE]

< BASIC INSPECTION >

YES >> GO TO 9.

NO >> Check according to [GI-42, "Intermittent Incident"](#).

8. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

Is the symptom described?

YES >> GO TO 9.

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

9. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 10.

NO >> Check according to [GI-42, "Intermittent Incident"](#).

10. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 11.

11. FINAL CHECK

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

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

Is DTC detected and does symptom remain?

YES-1 >> DTC is detected: GO TO 9.

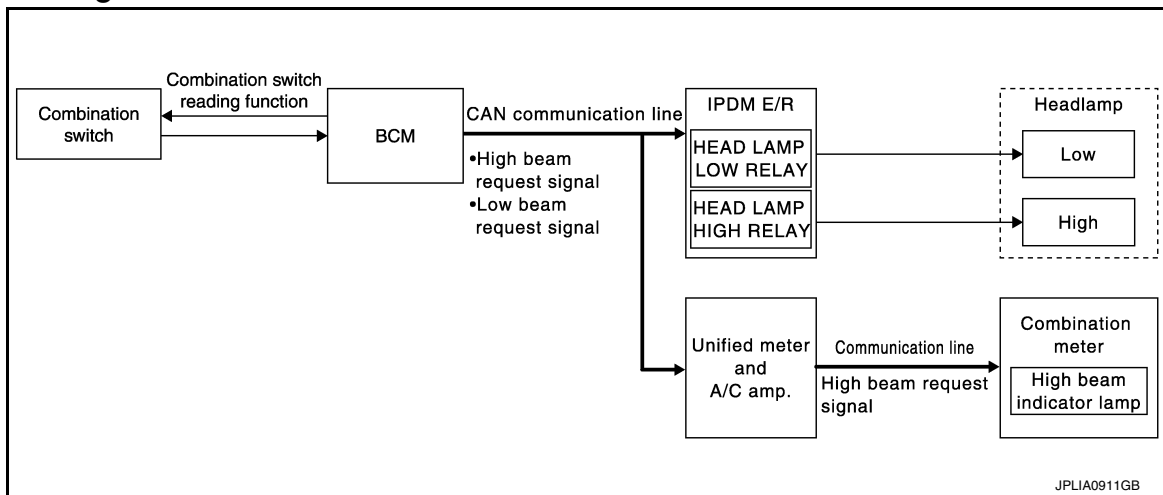
YES-2 >> Symptom remains: GO TO 4.

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

SYSTEM DESCRIPTION

HEADLAMP SYSTEM

System Diagram



System Description

INFOID:0000000012172127

OUTLINE

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

HEADLAMP (LO) OPERATION

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

Headlamp (LO) ON condition

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

HEADLAMP (HI) OPERATION

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

Headlamp (HI) ON condition

- Lighting switch HI with the lighting switch 2ND
- Lighting switch PASS
- Combination meter turns the high beam indicator lamp ON according to the high beam request signal.
- IPDM E/R turns the integrated headlamp high relay ON, and turns the headlamp ON according to the high beam request signal.

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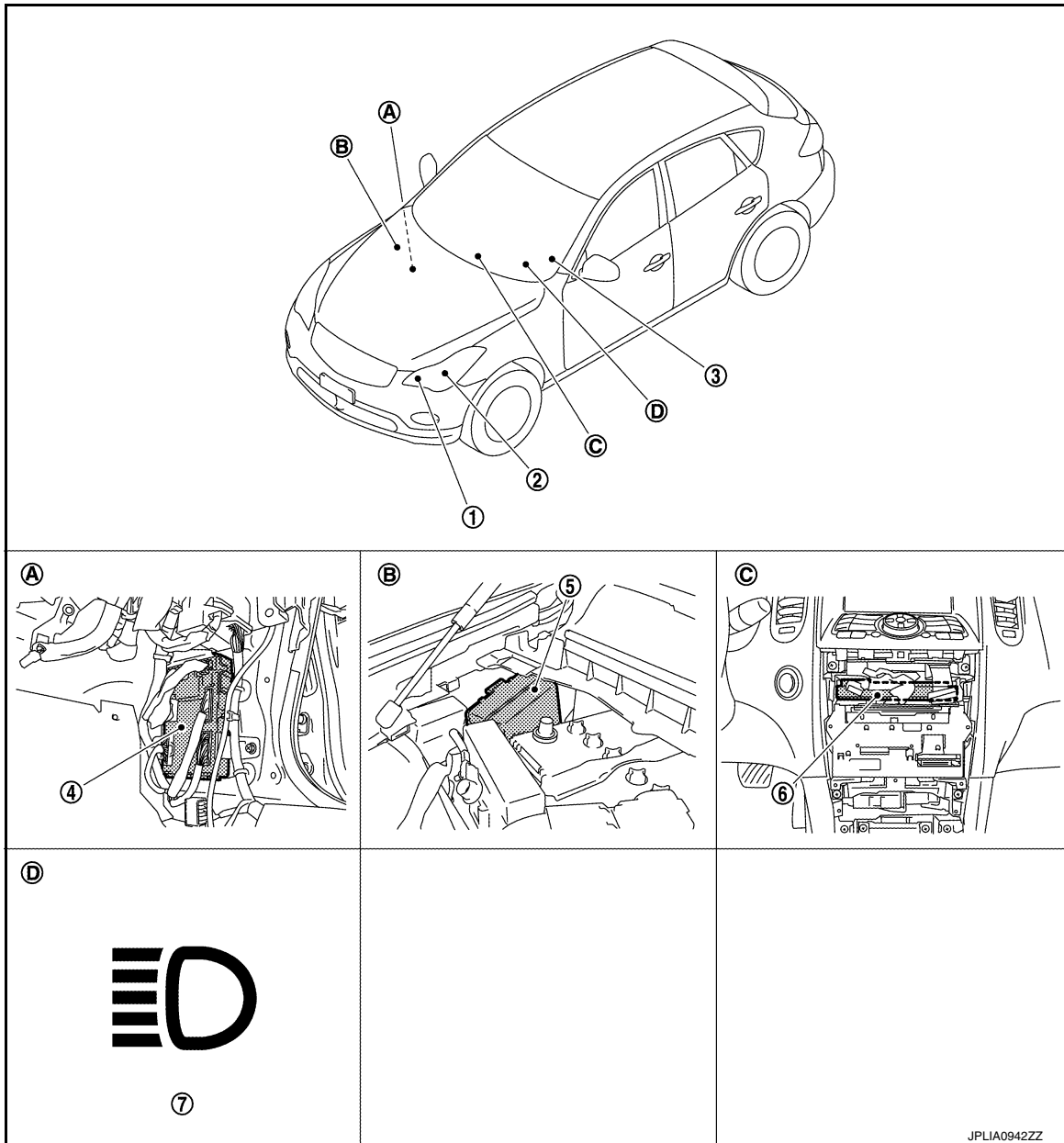
HEADLAMP SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Component Parts Location

INFOID:000000012172128



- | | | |
|-------------------------------------|--------------------------------|-------------------------------|
| 1. Headlamp (HI) | 2. Headlamp (LO) | 3. Combination switch |
| 4. BCM | 5. IPDM E/R | 6. Unified meter and A/C amp. |
| 7. High beam indicator lamp | | |
| A. Dash side lower (Passenger side) | B. Engine room dash panel (LH) | C. Behind the cluster lid c |
| D. On the combination meter | | |

HEADLAMP SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Component Description

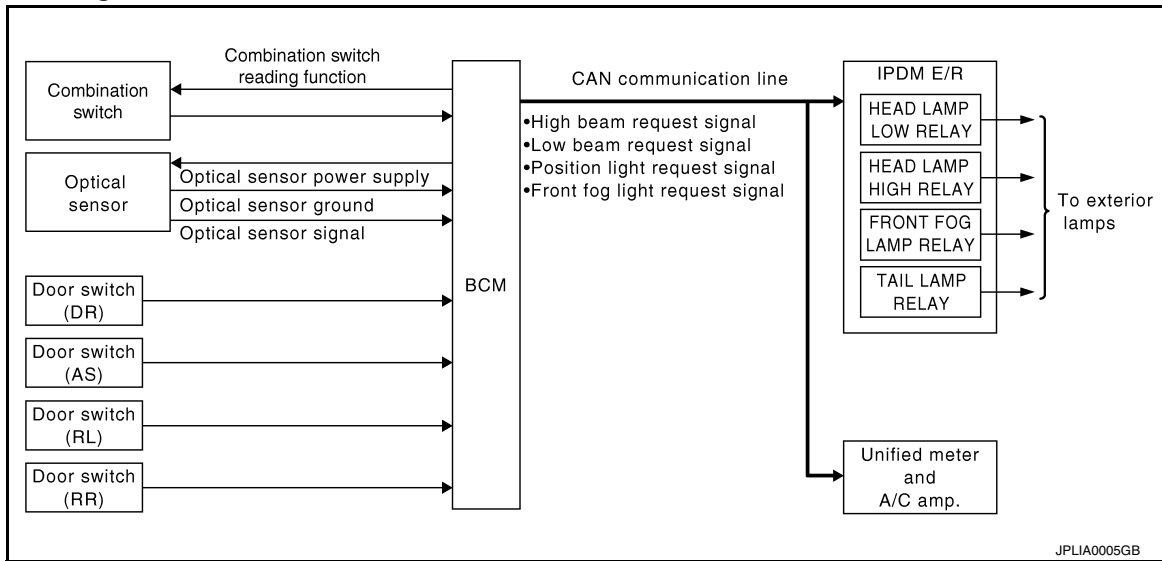
INFOID:000000012172129

Part	Description
BCM	<ul style="list-style-type: none">• Detects each switch condition by the combination switch reading function.• Judges that the headlamp is turned ON according to the vehicle condition.- Requests the headlamp relay (HI/LO) ON to IPDM E/R (with CAN communication).- Requests the high beam indicator lamp ON to the combination meter (with CAN communication).
IPDM E/R	Controls the integrated relay, and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .
Combination meter (High beam indicator lamp)	Turns the high beam indicator lamp ON according to the request from BCM [(with CAN communication (through unified meter and A/C amp.))].

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AUTO LIGHT SYSTEM

System Diagram



System Description

INFOID:000000012172131

OUTLINE

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

Control by BCM

- Combination switch reading function
- Headlamp control function
- Auto light function
- Delay timer function

Control by IPDM E/R

- Relay control function
- Auto light system has the auto light function and the delay timer function.
- Auto light function turns the exterior lamps* and each illumination ON/OFF automatically according to the outside brightness.
- When auto light system turns the exterior lamps ON with the ignition switch OFF, delay timer function turns the exterior lamps OFF depending on the vehicle condition with the auto light function after a certain period of time.

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

NOTE:

Headlamp HI and front fog lamp depend on the combination switch condition.

AUTO LIGHT FUNCTION

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

NOTE:

ON/OFF timing differs based on the sensitivity from the setting. The setting can be set by CONSULT. Refer to [EXL-273, "HEADLAMP : CONSULT Function \(BCM - HEAD LAMP\) \(Halogen Type\)"](#).

DELAY TIMER FUNCTION

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

- Turns the exterior lamp OFF 5 minutes after detecting that any door opens (Door switch ON).

AUTO LIGHT SYSTEM

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

- Turns the exterior lamp OFF a certain period of time* after closing all doors (Door switch ON→OFF).
- Turns the exterior lamp OFF with the ignition switch ACC or the light switch OFF.

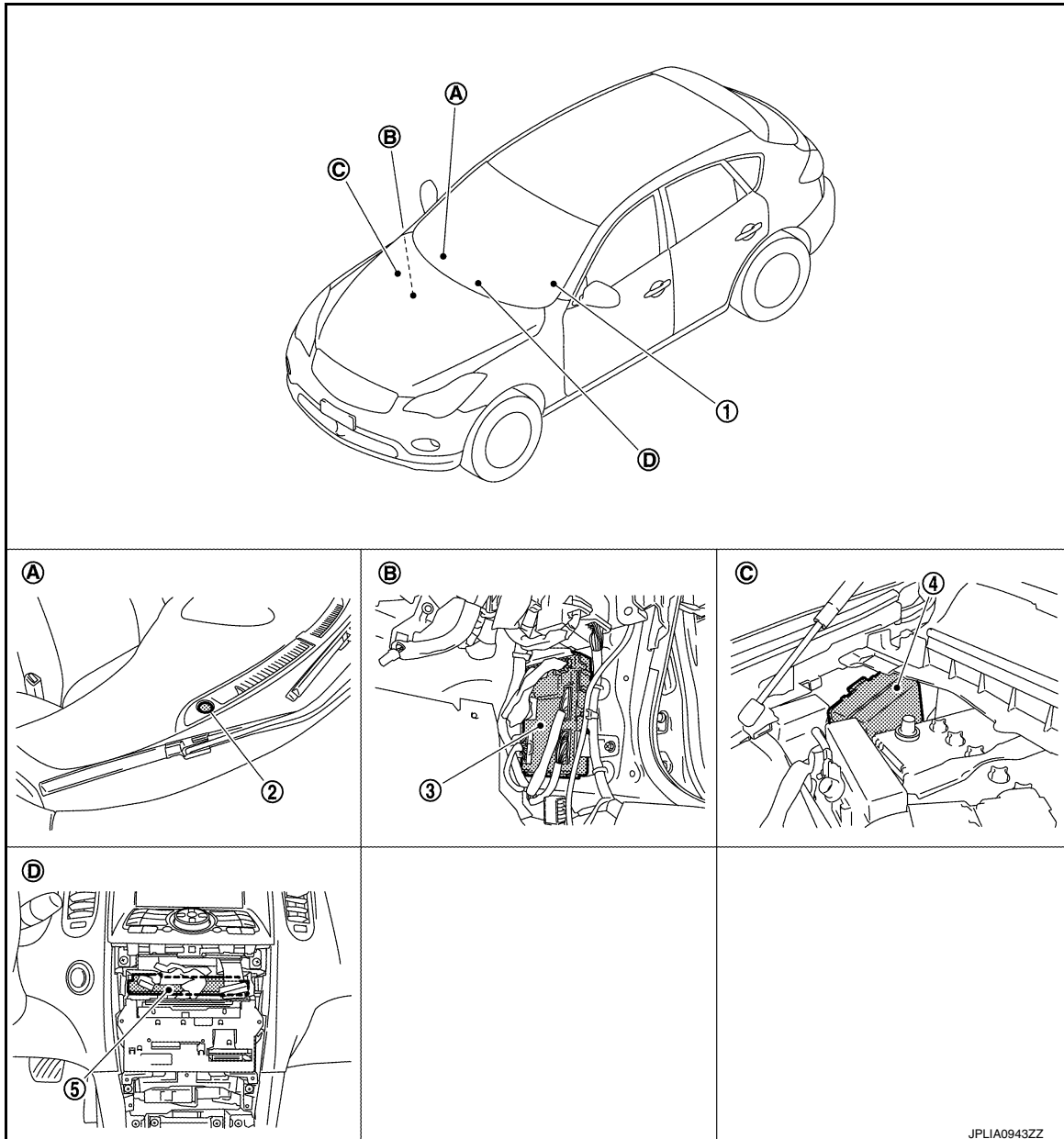
*: The preset time is 45 seconds. The timer operating time can be set by CONSULT. Refer to [EXL-273](#), "[HEADLAMP : CONSULT Function \(BCM - HEAD LAMP\) \(Halogen Type\)](#)".

NOTE:

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

Component Parts Location

INFOID:000000012172132



- | | | |
|--------------------------------|-------------------------------------|--------------------------------|
| 1. Combination switch | 2. Optical sensor | 3. BCM |
| 4. IPDM E/R | 5. Unified meter and A/C amp. | |
| A. Instrument upper panel (RH) | B. Dash side lower (Passenger side) | C. Engine room dash panel (RH) |
| D. Behind the cluster lid C | | |

AUTO LIGHT SYSTEM

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

Component Description

INFOID:000000012172133

Part	Description
BCM	<ul style="list-style-type: none">• Judges each switch condition by the combination switch reading function.• Judges the outside brightness from the optical sensor signal.• Judges the OFF timing according to the vehicle condition.• Judges the ON/OFF status of the exterior lamp and each illumination according to the outside brightness and the vehicle condition. Requests ON/OFF of each relay to IPDM E/R (with CAN communication).
IPDM E/R	Controls the integrated relay, and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .
Optical sensor	Refer to EXL-299, "Description" .

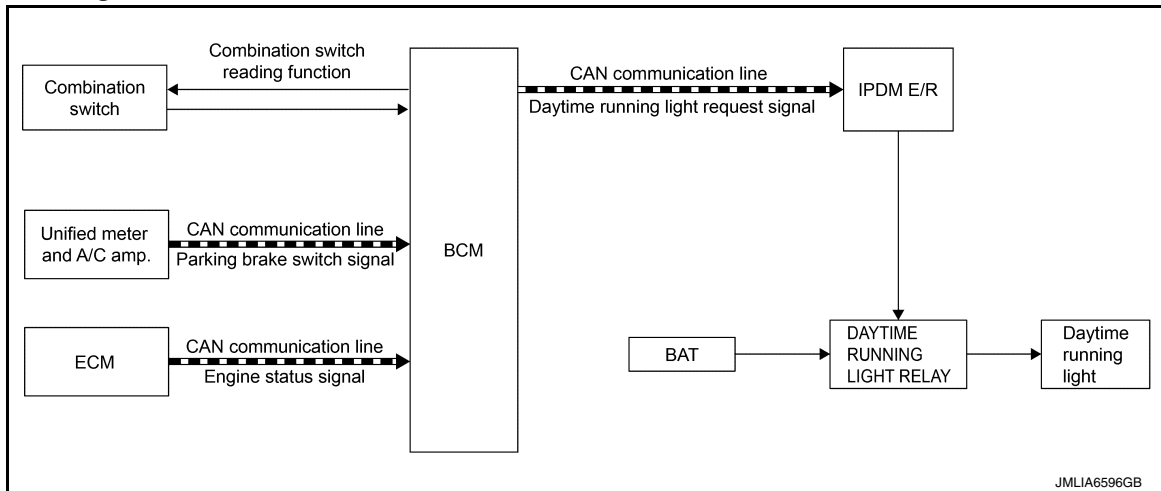
DAYTIME RUNNING LIGHT SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

System Diagram



System Description

INFOID:000000012172135

OUTLINE

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

DAYTIME RUNNING LIGHT OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM detects the vehicle condition depending on the following signals.
 - Engine status signal (received from ECM with CAN communication)
 - Parking brake switch signal (received from unified meter and A/C amp. with CAN communication)
- BCM transmits the daytime running light request signal to IPDM E/R via CAN communication according to the daytime running light ON condition.

Daytime running light ON condition

- Engine running with the parking brake released and any following conditions are satisfied.
 - Lighting switch OFF
 - Lighting switch AUTO (Only when the illumination judgment by auto light system is OFF. For details, refer to [EXL-258. "System Description"](#)).
- IPDM E/R turns the daytime running light relay ON, and turns the daytime running light ON according to the daytime running light request signal.

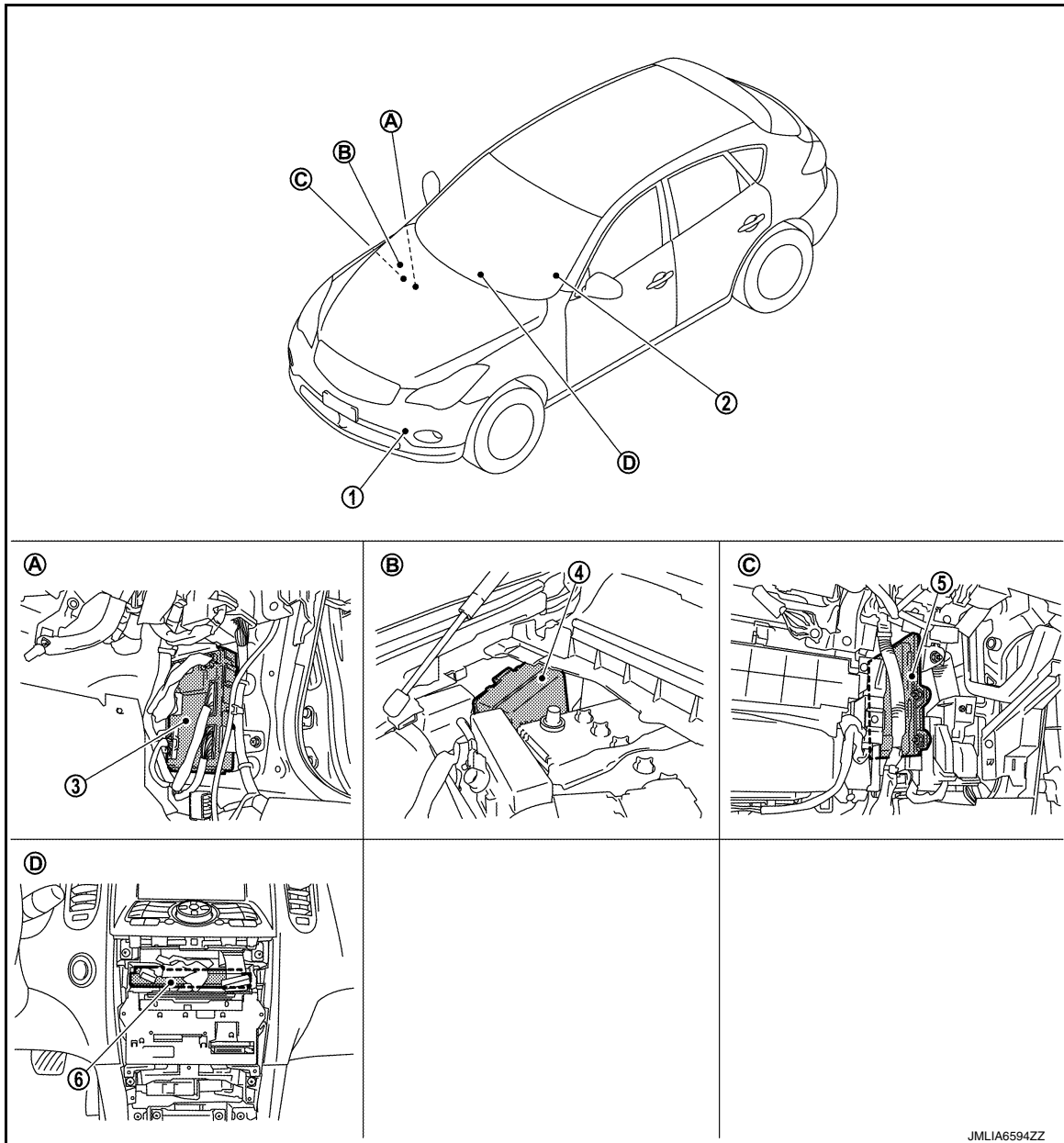
DAYTIME RUNNING LIGHT SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Component Parts Location

INFOID:000000012172136



- | | | |
|-------------------------------------|--------------------------------|-------------------------------|
| 1. Daytime running light | 2. Combination switch | 3. BCM |
| 4. IPDM E/R | 5. ECM | 6. Unified meter and A/C amp. |
| A. Dash side lower (Passenger side) | B. Engine room dash panel (RH) | C. Behind the glove box |
| D. Behind the cluster lid C | | |

Component Description

INFOID:000000012172137

Part	Description
BCM	<ul style="list-style-type: none"> Judges each switch condition with the combination switch reading function. Judges the daytime running light ON/OFF status according to the vehicle condition. Requests the daytime running light relay ON to IPDM E/R (with CAN communication).
IPDM E/R	Controls the daytime running light relay and supplies voltage to the load according to the request from BCM (with CAN communication).

DAYTIME RUNNING LIGHT SYSTEM

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

Part	Description
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .
ECM	Transmits the engine status signal to BCM with CAN communication.
Unified meter and A/C amp.	Transmits the parking brake switch signal to BCM with CAN communication.

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FRONT FOG LAMP SYSTEM

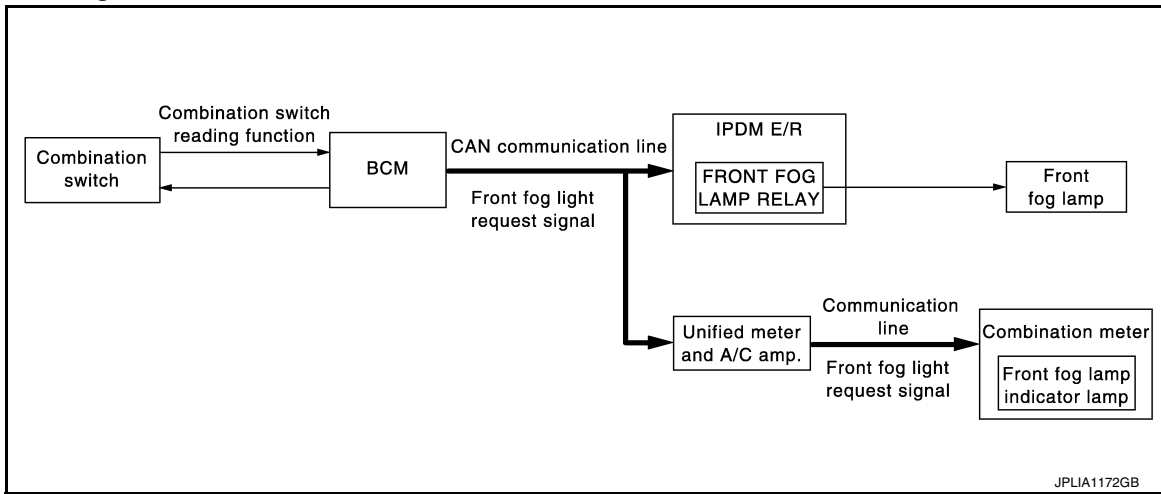
< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

FRONT FOG LAMP SYSTEM

System Diagram

INFOID:000000012172138



System Description

INFOID:000000012172139

OUTLINE

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

FRONT FOG LAMP OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits the front fog light request signal to IPDM E/R and the combination meter (through the unified meter and A/C amp.) with CAN communication according to the front fog lamp ON condition.

Front fog lamp ON condition

- Front fog lamp switch ON and any of the followings
 - Lighting switch 1ST
 - Lighting switch 2ND
 - Lighting switch AUTO and the ignition switch ON
- IPDM E/R turns the integrated front fog lamp relay ON, and turns the front fog lamp ON according to the front fog light request signal.
- Combination meter turns the front fog lamp indicator lamp ON according to the front fog light request signal.

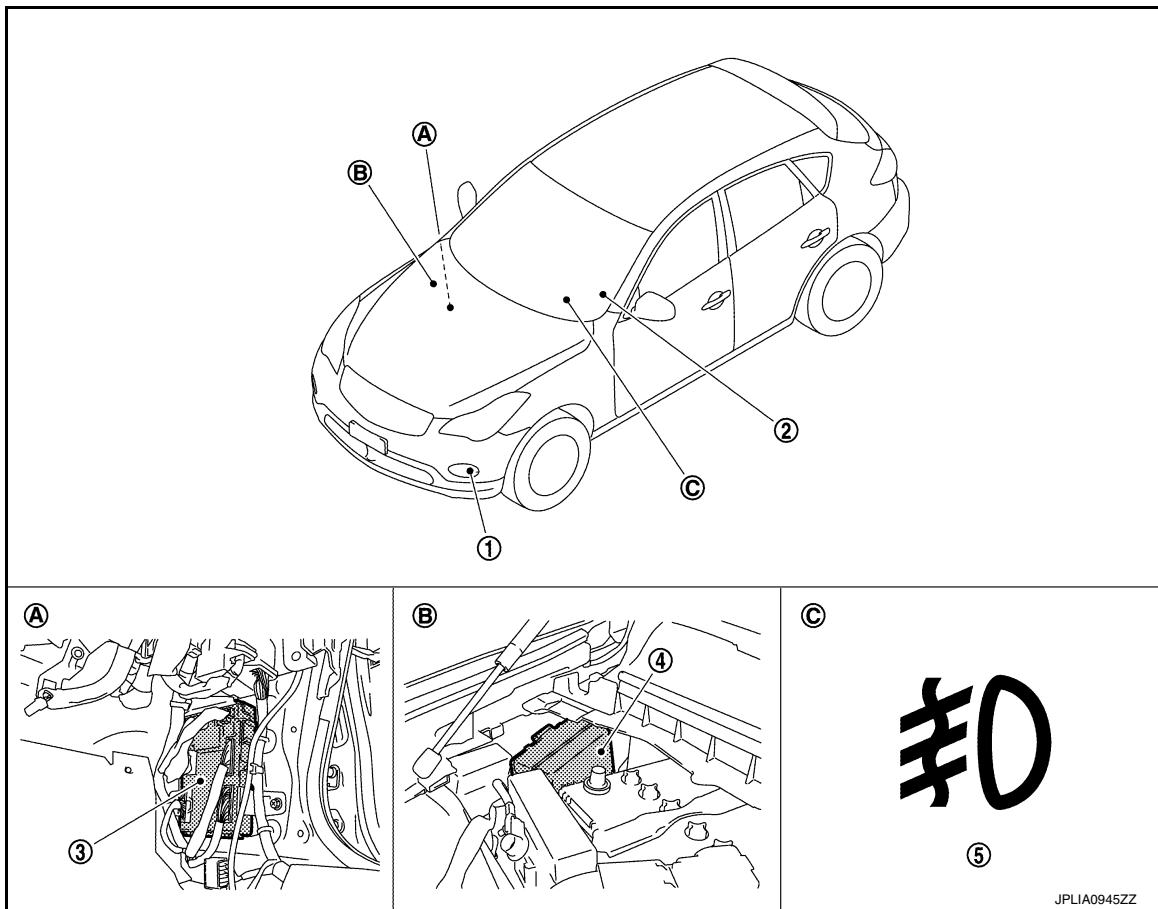
FRONT FOG LAMP SYSTEM

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000012172140



- | | | |
|-------------------------------------|----------------------------------|-----------------------------|
| 1. Front fog lamp | 2. Combination switch | 3. BCM |
| 4. IPDM E/R | 5. Front fog lamp indicator lamp | |
| A. Dash side lower (Passenger side) | B. Engine room dash panel (RH) | C. On the combination meter |

Component Description

INFOID:000000012172141

Part	Description
BCM	<ul style="list-style-type: none"> Judges each switch condition by the combination switch reading function. Judges the front fog lamp ON/OFF status according to the vehicle condition. Requests the front fog lamp relay ON to IPDM E/R (with CAN communication).
IPDM E/R	Controls the integrated relay and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .
Combination meter (Front fog lamp indicator lamp)	Turns the front fog lamp indicator lamp ON according to the request from BCM [with CAN communication (through the unified meter and A/C amp.)].

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

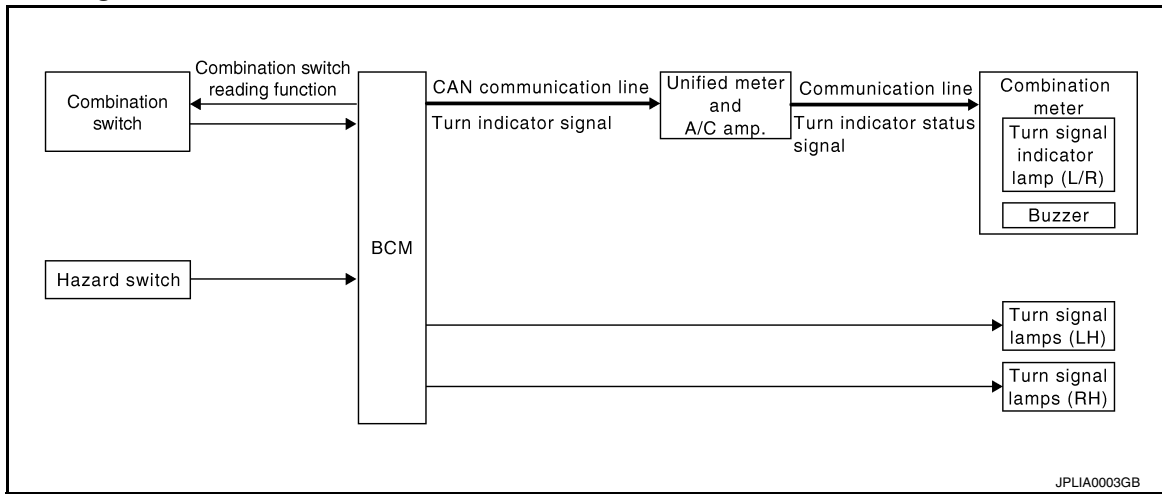
< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

System Diagram

INFOID:000000012172142



System Description

INFOID:000000012172143

OUTLINE

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

TURN SIGNAL LAMP OPERATION

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

HAZARD WARNING LAMP OPERATION

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

TURN SIGNAL INDICATOR LAMP AND TURN SIGNAL SOUND OPERATION

- BCM transmits the turn signal indicator lamp signal to the combination meter (through the unified meter and A/C amp.) with CAN communication while the turn signal lamp and the hazard warning lamp operating.
- Combination meter outputs the turn signal sound with the integrated buzzer while blinking the turn signal indicator lamp according to the turn signal indicator lamp signal.

HIGH FLASHER OPERATION (FAIL-SAFE)

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

NOTE:

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

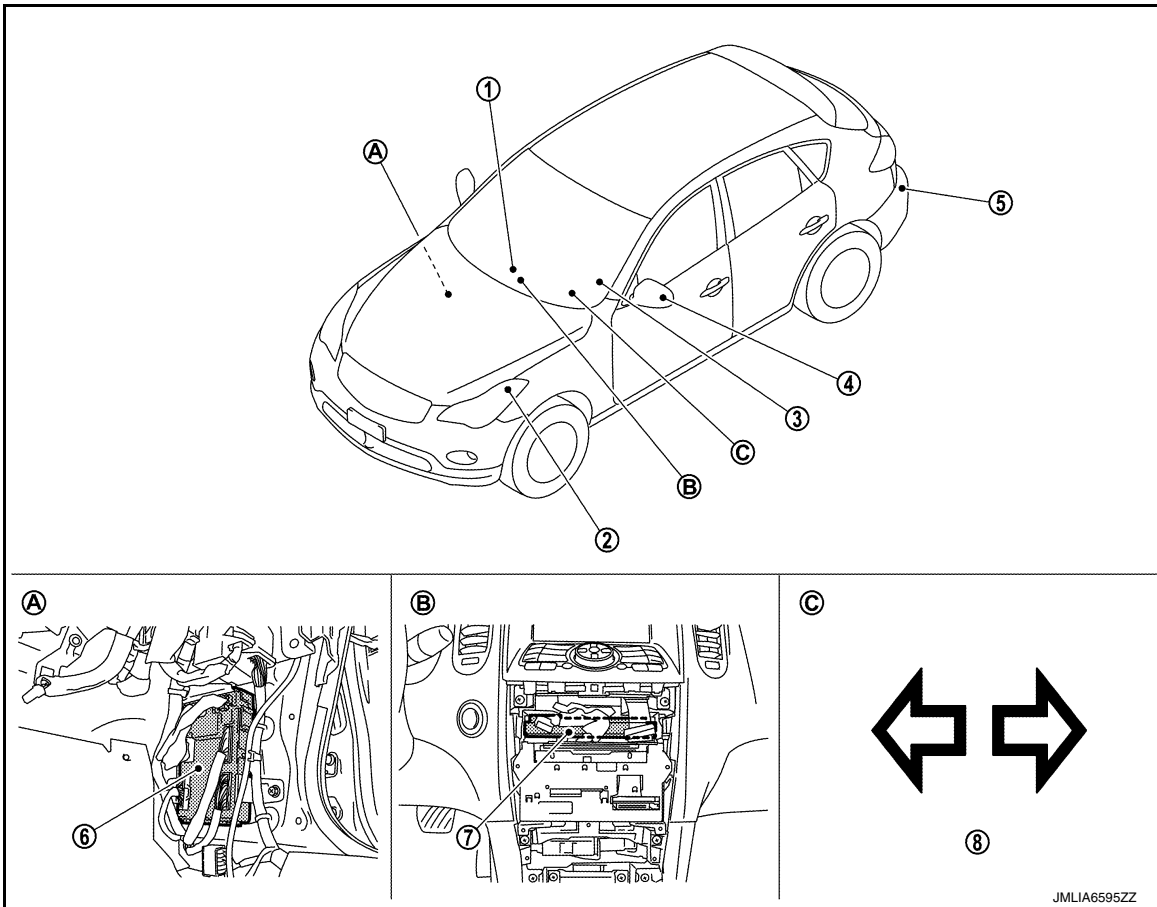
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Component Parts Location

INFOID:000000012172144



- | | | |
|-------------------------------------|-------------------------------|-----------------------------|
| 1. Hazard warning switch | 2. Front turn signal lamp | 3. Combination switch |
| 4. Side turn signal lamp | 5. Rear turn signal lamp | 6. BCM |
| 7. Unified meter and A/C amp. | 8. Turn signal indicator lamp | |
| A. Dash side lower (Passenger side) | B. Behind the cluster lid C | C. On the combination meter |

Component Description

INFOID:000000012172145

Part	Description
BCM	<ul style="list-style-type: none"> Judges each switch condition by the combination switch reading function. Judges the blinks of the turn signal lamp and the hazard warning lamp from each switch status. The applicable turn signal lamp blinks. Requests the turn signal indicator lamp blink to the combination meter (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .
Hazard switch (Multifunction switch)	Refer to EXL-302, "Description" .
Combination meter (Turn signal indicator lamp & buzzer)	Blinks the turn signal indicator lamp and outputs the turn signal operating sound with integrated buzzer according to the request from BCM [with CAN communication (through unified meter and A/C amp.)].

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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

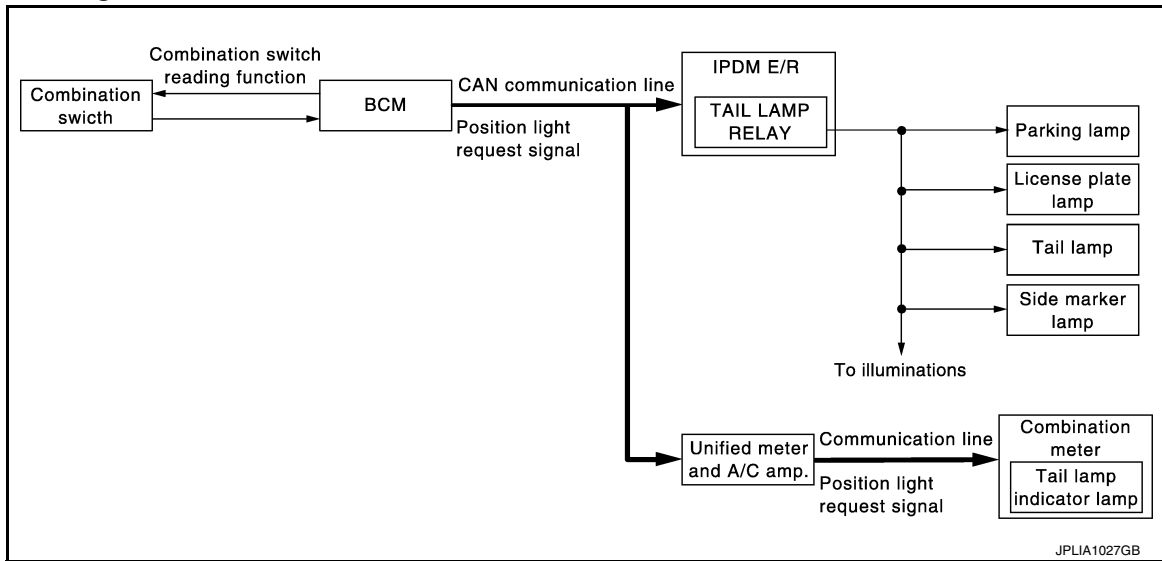
< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

System Diagram

INFOID:000000012172146



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System Description

INFOID:000000012172147

OUTLINE

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

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits the position light request signal to IPDM E/R with CAN communication according to the ON/OFF condition of the parking, license plate, side marker and tail lamps.

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

- Lighting switch 1ST
- Lighting switch 2ND
- Lighting switch AUTO, and the auto light function ON judgment
- IPDM E/R turns the integrated tail lamp relay ON and turns the parking lamp, the license plate, side marker and tail lamps ON according to the position light request signal.
- Combination meter turns the tail lamp indicator lamp ON according to the position light request signal.

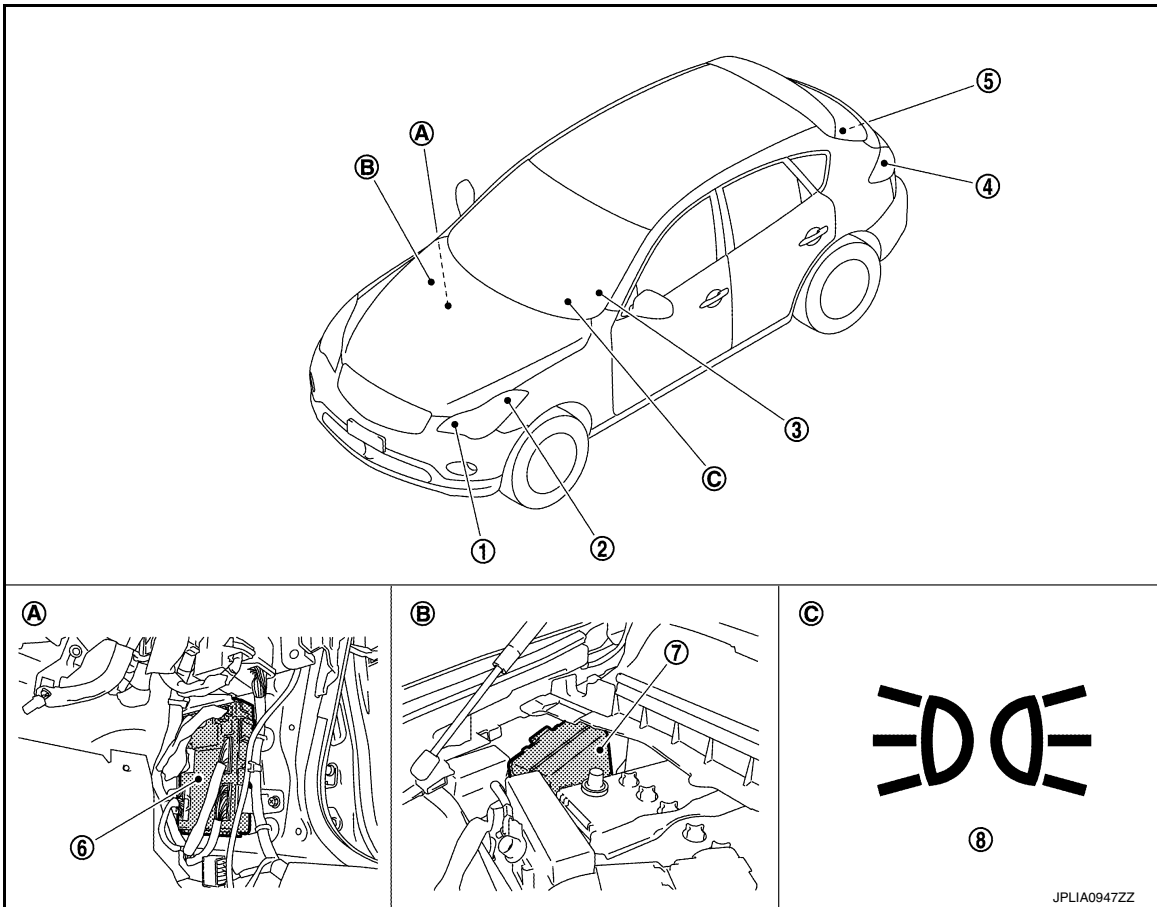
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Component Parts Location

INFOID:000000012172148



- | | | |
|-------------------------------------|--------------------------------|-----------------------------|
| 1. Parking lamp | 2. Side marker lamp | 3. Combination switch |
| 4. Tail lamp and side marker lamp | 5. License plate lamp | 6. BCM |
| 7. IPDM E/R | 8. Tail lamp indicator lamp | |
| A. Dash side lower (Passenger side) | B. Engine room dash panel (RH) | C. On the combination meter |

Component Description

INFOID:000000012172149

Part	Description
BCM	<ul style="list-style-type: none"> Judges each switch condition by the combination switch reading function. Judges the ON/OFF status of the clearance, license plate, side marker and tail lamps according to the vehicle condition. Requests the tail lamp relay ON to IPDM E/R (with CAN communication).
IPDM E/R	Controls the integrated relay and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .
Combination meter (Tail lamp indicator lamp)	Turns the tail lamp indicator lamp ON according to the request from BCM [with CAN communication (through the unified meter and A/C amp.)].

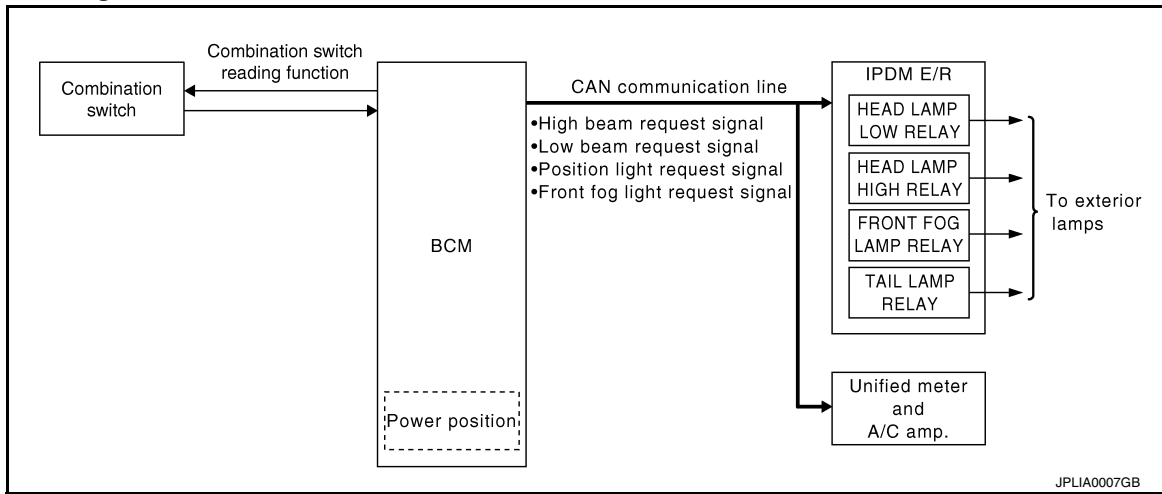
EXTERIOR LAMP BATTERY SAVER SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

EXTERIOR LAMP BATTERY SAVER SYSTEM

System Diagram



System Description

INFOID:000000012172151

OUTLINE

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

Control by BCM

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

Control by IPDM E/R

- Relay control function
- BCM turns the exterior lamp* OFF after a period of time to prevent the battery from over-discharge when the ignition switch is turned OFF with the exterior lamp ON.

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

NOTE:

When the lighting switch is turned AUTO, the exterior lamp battery saver switches to the auto light system. Refer to [EXL-258. "System Description"](#).

EXTERIOR LAMP BATTERY SAVER ACTIVATION

BCM activates the timer and turns the exterior lamp OFF 45 seconds after the ignition switch is turned from ON → OFF with the exterior lamps ON.

NOTE:

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

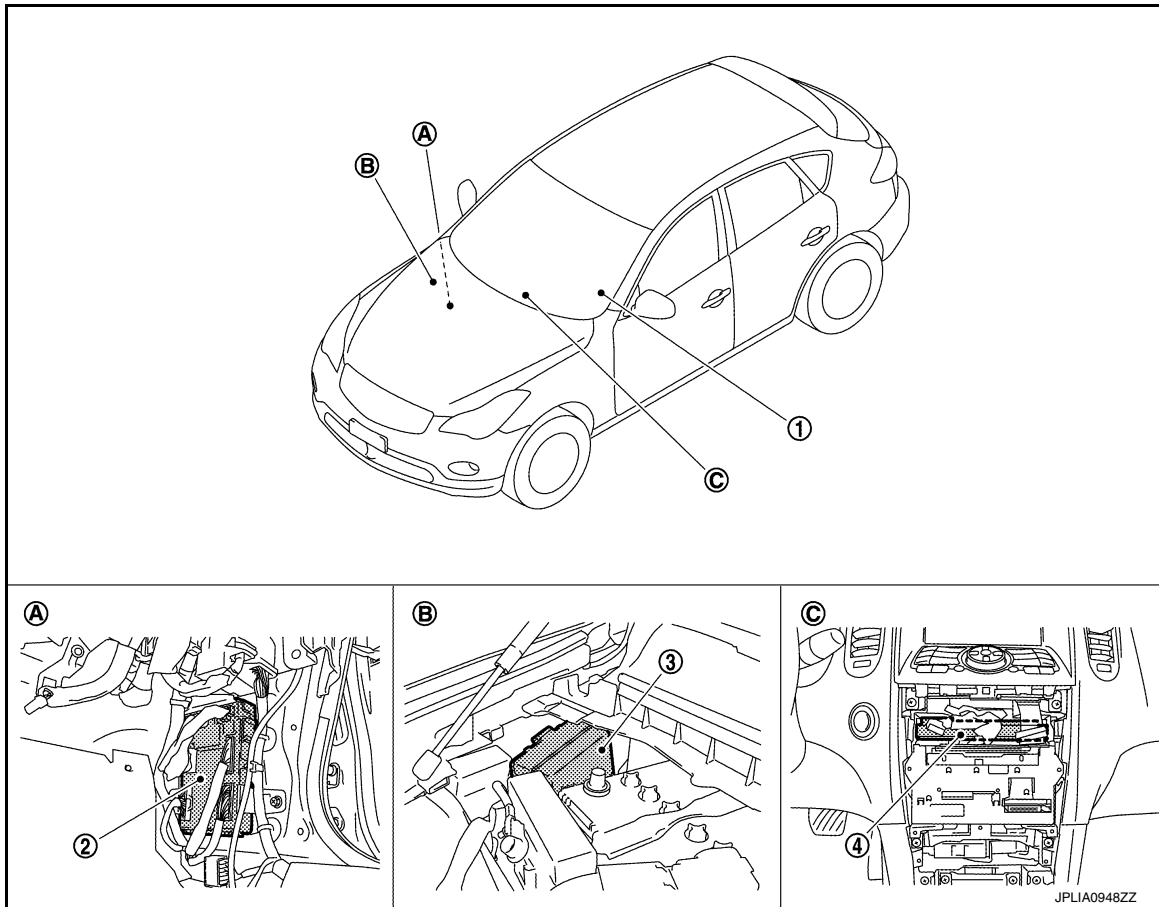
EXTERIOR LAMP BATTERY SAVER SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Component Parts Location

INFOID:000000012172152



- | | | |
|-------------------------------------|--------------------------------|-----------------------------|
| 1. Combination switch | 2. BCM | 3. IPDM E/R |
| 4. Unified meter and A/C amp. | | |
| A. Dash side lower (Passenger side) | B. Engine room dash panel (RH) | C. Behind the cluster lid C |

Component Description

INFOID:000000012172153

Part	Description
BCM	<ul style="list-style-type: none"> Judges each switch condition by the combination switch reading function. Judges the exterior lamp OFF according to the vehicle condition. Requests each relay OFF to IPDM E/R (with CAN communication).
IPDM E/R	Controls the integrated relay according to the request from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-10, "System Diagram" .

DIAGNOSIS SYSTEM (BCM)

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000012750609

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	<ul style="list-style-type: none"> Read and save the vehicle specification. Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
—	AIR CONDITONER*			
<ul style="list-style-type: none"> Intelligent Key system Engine start system 	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
IVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	AIR PRESSURE MONITOR	×	×	×

NOTE:

*: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

DIAGNOSIS SYSTEM (BCM)

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	A
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	B
Vehicle Condition	SLEEP>LOCK	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)	B
	SLEEP>OFF	While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)	C
	LOCK>ACC	While turning power supply position from "LOCK"* to "ACC"	D
	ACC>ON	While turning power supply position from "ACC" to "IGN"	D
	RUN>ACC	While turning power supply position from "RUN" to "ACC" (Except emergency stop operation)	E
	CRANK>RUN	While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)	E
	RUN>URGENT	While turning power supply position from "RUN" to "ACC" (Emergency stop operation)	F
	ACC>OFF	While turning power supply position from "ACC" to "OFF"	F
	OFF>LOCK	While turning power supply position from "OFF" to "LOCK"*	G
	OFF>ACC	While turning power supply position from "OFF" to "ACC"	G
	ON>CRANK	While turning power supply position from "IGN" to "CRANKING"	H
	OFF>SLEEP	While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode	H
	LOCK>SLEEP	While turning BCM status from normal mode (Power supply position is "LOCK"*.) to low power consumption mode	I
	LOCK	Power supply position is "LOCK"*	I
	OFF	Power supply position is "OFF" (Ignition switch OFF)	J
	ACC	Power supply position is "ACC" (Ignition switch ACC)	J
	ON	Power supply position is "IGN" (Ignition switch ON with engine stopped)	K
ENGINE RUN	Power supply position is "RUN" (Ignition switch ON with engine running)	K	
CRANKING	Power supply position is "CRANKING" (At engine cranking)	K	
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 	EXL

NOTE:

*: Power supply position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position, and any of the following conditions are met.

- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

The power supply position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

HEADLAMP

HEADLAMP : CONSULT Function (BCM - HEAD LAMP) (Halogen Type)

INFOID:000000012172155

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

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

*: Initial setting

DATA MONITOR

NOTE:

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

Monitor item [Unit]	Description
PUSH SW [On/Off]	Indicates [ON/OFF] condition of push-button ignition switch.
ENGINE STATE [Stop/Stall/Crank/Run]	Indicates [STOP/START/CRANK/RUN] condition of engine states.
VEH SPEED 1 [km/h]	Display the vehicle speed signal received from unified meter and A/C amp. by numerical value [Km/h].
KEY SW-SLOT [On/Off]	Indicates [ON/OFF] condition of key slot.
TURN SIGNAL R [On/Off]	Each switch status that BCM judges from the combination switch reading function
TURN SIGNAL L [On/Off]	
TAIL LAMP SW [On/Off]	
HI BEAM SW [On/Off]	
HEAD LAMP SW1 [On/Off]	
HEAD LAMP SW2 [On/Off]	
PASSING SW [On/Off]	
AUTO LIGHT SW [On/Off]	
FR FOG SW [On/Off]	

DIAGNOSIS SYSTEM (BCM)

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
RR FOG SW [On/Off]	NOTE: The item is indicated, but not monitored.
DOOR SW-DR [On/Off]	Indicated [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS [On/Off]	Indicated [ON/OFF] condition of front door switch (passenger side).
DOOR SW-RR [On/Off]	Indicated [ON/OFF] condition of rear door switch RH.
DOOR SW- RL [On/Off]	Indicated [ON/OFF] condition of rear door switch LH.
DOOR SW-BK [On/Off]	Indicated [ON/OFF] condition of back door switch.
OPTICAL SENSOR [V]	The value of exterior brightness voltage input from the optical sensor

ACTIVE TEST

Test item	Operation	Description
TAIL LAMP	On	Transmits the position light request signal to IPDM E/R with CAN communication to turn the tail lamp ON.
	Off	Stops the position light request signal transmission.
HEAD LAMP	Hi	Transmits the high beam request signal with CAN communication to turn the headlamp (HI).
	Low	Transmits the low beam request signal with CAN communication to turn the headlamp (LO).
	Off	Stops the high & low beam request signal transmission.
FR FOG LAMP	On	Transmits the front fog light request signal to IPDM E/R with CAN communication to turn the front fog lamp ON.
	Off	Stops the front fog light request signal transmission.
RR FOG LAMP	On	NOTE: The item is indicated, but cannot be tested.
	Off	
DAYTIME RUNNING LIGHT	On	Transmits the daytime running light request signal with CAN communication to turn the daytime running light ON.
	Off	Stops the daytime running light request signal transmission.
CORNERING LAMP	RH	NOTE: The item is indicated, but cannot be tested.
	LH	
	Off	
ILL DIM SIGNAL	On	NOTE: The item is indicated, but cannot be tested.
	Off	

FLASHER

FLASHER : CONSULT Function (BCM - FLASHER) (Halogen Type)

INFOID:000000012172156

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

Service item	Setting item	Setting	
HAZARD ANSWER BACK	Lock Only*	With locking only	Sets the hazard warning lamp answer back function when the door is lock/unlock with the request switch or the key fob.
	Unlk Only	With unlocking only	
	Lock/Unlk	With locking/unlocking	
	Off	Without the function	

*: Initial setting

DATA MONITOR

NOTE:

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

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	Indicated [ON/OFF] condition of door request switch (driver side).
REQ SW-AS [On/Off]	Indicated [ON/OFF] condition of door request switch (passenger side).
PUSH SW [On/Off]	Indicates [ON/OFF] condition of push-button ignition switch.
TURN SIGNAL R [On/Off]	Each switch condition that BCM judges from the combination switch reading function
TURN SIGNAL L [On/Off]	
HAZARD SW [On/Off]	The switch status input from the hazard switch
RKE-LOCK [On/Off]	Indicates [ON/OFF] condition of LOCK signal from Intelligent Key.
RKE-UNLOCK [On/Off]	Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key.
RKE-PANIC [On/Off]	Indicates [ON/OFF] condition of PANIC button of Intelligent Key.

ACTIVE TEST

Test item	Operation	Description
FLASHER	RH	Outputs the voltage to blink the right side turn signal lamps.
	LH	Outputs the voltage to blink the left side turn signal lamps.
	Off	Stops the voltage to turn the turn signal lamps OFF.

DIAGNOSIS SYSTEM (IPDM E/R)

Diagnosis Description

INFOID:000000012750610

AUTO ACTIVE TEST

Description

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

- Oil pressure warning lamp
- Front wiper (LO, HI)
- Parking lamps
- License plate lamps
- Side maker lamps
- Tail lamps
- Front fog lamps
- Daytime running light
- Headlamps (LO, HI)
- A/C compressor (magnet clutch)
- Cooling fan (cooling fan control module)

Operation Procedure

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 front door switch (driver side) 10 times. Then turn the ignition switch OFF.
CAUTION:
Close passenger door.
4. Turn the ignition switch ON within 10 seconds. After that the horn sounds once and the auto active test starts.
5. The oil pressure warning lamp starts blinking when the auto active test starts.
6. After a series of the following operations is repeated 3 times, auto active test is completed.

NOTE:

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

CAUTION:

- **If auto active test mode cannot be actuated, check door switch system. Refer to [DLK-65](#), "[Component Function Check](#)".**
- **Do not start the engine.**

Inspection in Auto Active Test Mode

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

Operation sequence	Inspection location	Operation
1	Oil pressure warning lamp	Blinks continuously during operation of auto active test
2	Front wiper	LO for 5 seconds → HI for 5 seconds
3	<ul style="list-style-type: none"> • Parking lamps • License plate lamps • Side maker lamps • Tail lamps • Front fog lamps • Daytime running light 	10 seconds
4	Headlamps	<ul style="list-style-type: none"> • LO 10 seconds • HI ON ⇔ OFF 5 times
5	A/C compressor (magnet clutch)	ON ⇔ OFF 5 times
6*	Cooling fan	MID for 5 seconds → HI for 5 seconds

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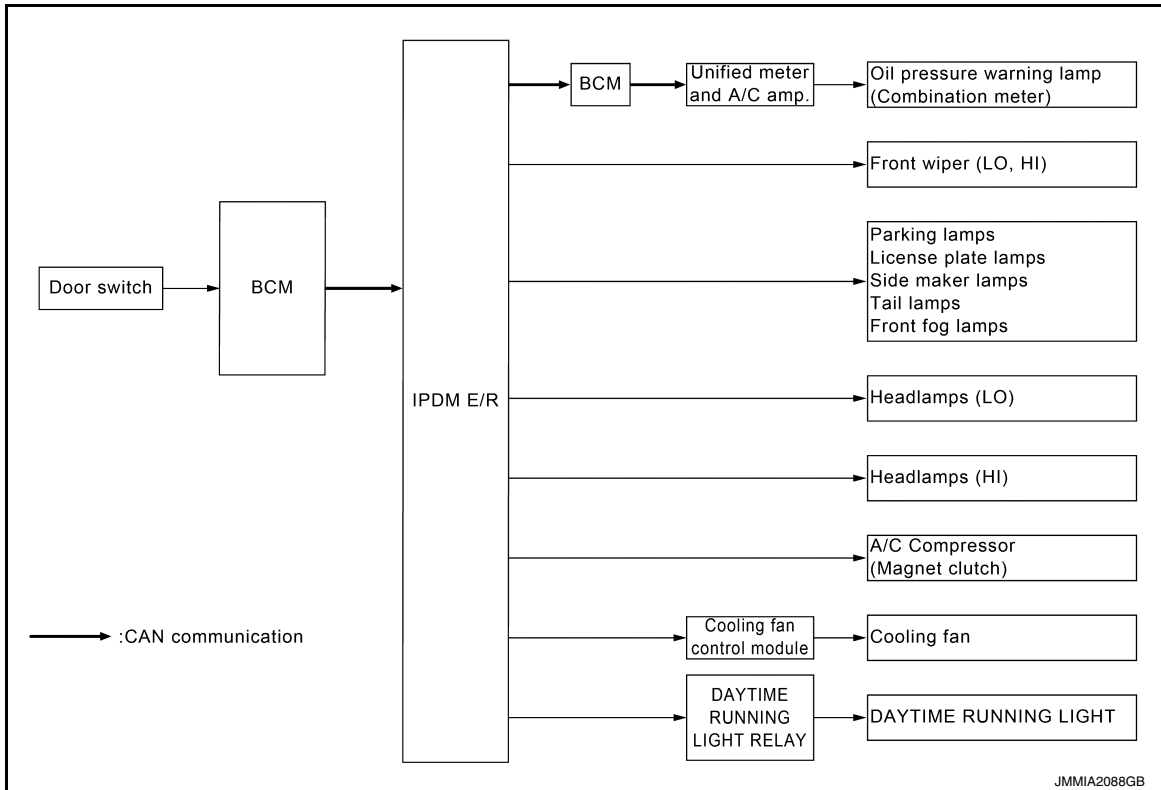
DIAGNOSIS SYSTEM (IPDM E/R)

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

*: Outputs duty ratio of 50% for 5 seconds → duty ratio of 100% for 5 seconds on the cooling fan control module.

Concept of auto active test



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

Diagnosis chart in auto active test mode

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

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Symptom	Inspection contents	Possible cause
Oil pressure warning lamp does not operate	Perform auto active test. Does the oil pressure warning lamp blink?	YES <ul style="list-style-type: none"> • Harness or connector between IPDM E/R and oil pressure switch • Oil pressure switch • IPDM E/R
		NO <ul style="list-style-type: none"> • CAN communication signal between IPDM E/R and BCM • CAN communication signal between BCM and unified meter and A/C amp. • Combination meter
Cooling fan does not operate	Perform auto active test. Does the cooling fan operate?	YES <ul style="list-style-type: none"> • ECM signal input circuit • CAN communication signal between ECM and IPDM E/R
		NO <ul style="list-style-type: none"> • Cooling fan • Harness or connector between cooling fan and cooling fan control module • Cooling fan control module • Harness or connector between IPDM E/R and cooling fan control module • Cooling fan relay • Harness or connector between IPDM E/R and cooling fan relay • IPDM E/R

CONSULT Function (IPDM E/R)

INFOID:0000000012750611

APPLICATION ITEM

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

Diagnosis mode	Description
Ecu Identification	Allows confirmation of IPDM E/R part number.
Self Diagnostic Result	Displays the diagnosis results judged by IPDM E/R.
Data Monitor	Displays the real-time input/output data from IPDM E/R input/output data.
Active Test	IPDM E/R can provide a drive signal to electronic components to check their operations.
CAN Diag Support Monitor	The results of transmit/receive diagnosis of CAN communication can be read.

SELF DIAGNOSTIC RESULT

Refer to [EXL-418, "DTC Index"](#).

DATA MONITOR

NOTE:

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

Monitor Item [Unit]	MAIN SIGNALS	Description
RAD FAN REQ [%]	×	Displays the value of the cooling fan speed signal received from ECM via CAN communication.
AC COMP REQ [Off/On]	×	Displays the status of the A/C compressor request signal received from ECM via CAN communication.
TAIL&CLR REQ [Off/On]	×	Displays the status of the position light request signal received from BCM via CAN communication.

DIAGNOSIS SYSTEM (IPDM E/R)

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

Monitor Item [Unit]	MAIN SIG- NALS	Description
HL LO REQ [Off/On]	×	Displays the status of the low beam request signal received from BCM via CAN communication.
HL HI REQ [Off/On]	×	Displays the status of the high beam request signal received from BCM via CAN communication.
FR FOG REQ [Off/On]	×	Displays the status of the front fog light request signal received from BCM via CAN communication.
FR WIP REQ [Stop/1LOW/Low/Hi]	×	Displays the status of the front wiper request signal received from BCM via CAN communication.
WIP AUTO STOP [STOP P/ACT P]	×	Displays the status of the front wiper auto stop signal judged by IPDM E/R.
WIP PROT [Off/BLOCK]	×	Displays the status of the front wiper fail-safe operation judged by IPDM E/R.
IGN RLY1 -REQ [Off/On]		Displays the status of the ignition switch ON signal received from BCM via CAN communication.
IGN RLY [Off/On]	×	Displays the status of the ignition relay judged by IPDM E/R.
PUSH SW [Off/On]		Displays the status of the push-button ignition switch judged by IPDM E/R.
INTER/NP SW [Off/On]		Displays the status of the shift position judged by IPDM E/R.
ST RLY CONT [Off/On]		Displays the status of the starter relay status signal received from BCM via CAN communication.
IHBT RLY -REQ [Off/On]		Displays the status of the starter control relay signal received from BCM via CAN communication.
ST/INH RLY [Off/ ST ON/INH ON/UNKWN]		Displays the status of the starter relay and starter control relay judged by IPDM E/R.
DETENT SW [Off/On]		Displays the status of the A/T shift selector (detention switch) judged by IPDM E/R.
S/L RLY -REQ [Off/On]		NOTE: The item is indicated, but not monitored.
S/L STATE [LOCK/UNLOCK/UNKWN]		NOTE: The item is indicated, but not monitored.
DTRL REQ [Off/On]		Displays the status of the daytime running light request signal received from BCM via CAN communication.
OIL P SW [Open/Close]		Displays the status of the oil pressure switch judged by IPDM E/R.
HOOD SW [Off/On]		Displays the status of the hood switch judged by IPDM E/R.
HL WASHER REQ [Off/On]		NOTE: The item is indicated, but not monitored.
THFT HRN REQ [Off/On]		Displays the status of the theft warning horn request signal received from BCM via CAN communication.
HORN CHIRP [Off/On]		Displays the status of the horn reminder signal received from BCM via CAN communication.
CRNRNG LMP REQ [Off/On]		NOTE: The item is indicated, but not monitored.

ACTIVE TEST

Test item

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Test item	Operation	Description
CORNERING LAMP	Off	NOTE: The item is indicated, but cannot be tested.
	LH	
	RH	
HORN	On	Operates horn relay 1 and horn relay 2 for 20 ms.
FRONT WIPER	Off	OFF
	Lo	Operates the front wiper relay.
	Hi	Operates the front wiper relay and front wiper high relay.
MOTOR FAN	1	OFF
	2	Outputs 50% pulse duty signal (PWM signal) to the cooling fan control module.
	3	Outputs 80% pulse duty signal (PWM signal) to the cooling fan control module.
	4	Outputs 100% pulse duty signal (PWM signal) to the cooling fan control module.
HEAD LAMP WASHER	On	NOTE: The item is indicated, but cannot be tested.
EXTERNAL LAMPS	Off	OFF
	TAIL	Operates the tail lamp relay.
	Lo	Operates the headlamp low relay.
	Hi	Operates the headlamp low relay and ON/OFF the headlamp high relay at 1 second intervals.
	Fog	Operates the front fog lamp relay.

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EXL

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:000000012750692

1. CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown (open).

Signal name	Fuse and fusible link No.
Battery power supply	K
	10

Is the fuse or fusible link is blown (open)?

YES >> Replace the blown (open) fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown (open).

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

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

Terminals		Voltage (Approx.)
(+)	(-)	
BCM		Ground Battery voltage
Connector	Terminal	
M118	1	
M119	11	

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

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

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

INFOID:000000012750622

1. CHECK FUSES AND FUSIBLE LINK

Check that the following IPDM E/R fuses or fusible links are not blown (open).

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

Signal name	Fuses and fusible link No.
Battery power supply	C
	50
	51

Is the fuse blown (open)?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect IPDM E/R connector.
3. Check voltage between IPDM E/R harness connector and the ground.

Terminals		Voltage (Approx.)
(+)	(-)	
IPDM E/R		Battery voltage
Connector	Terminal	
E4	1	

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair the harness or connector.

3.CHECK GROUND CIRCUIT

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
E5	12		Existed
E6	41		

Does continuity exist?

YES >> INSPECTION END

NO >> Repair the harness or connector.

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EXL

HEADLAMP (HI) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

HEADLAMP (HI) CIRCUIT

Component Function Check

INFOID:000000012172161

1. CHECK HEADLAMP (HI) OPERATION

IPDM E/R AUTO ACTIVE TEST

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

CONSULT ACTIVE TEST

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

Hi : Headlamp (HI) ON

Off : Headlamp (HI) OFF

NOTE:

ON/OFF is repeated 1 second each.

Is the headlamp (HI) turned ON?

- YES >> Headlamp (HI) circuit is normal.
NO >> Refer to [EXL-284, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172162

1. CHECK HEADLAMP (HI) OUTPUT VOLTAGE

CONSULT ACTIVE TEST

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

Terminals			Condition	Voltage (Approx.)
(+)	(-)			
IPDM E/R			External lamp	
Connector	Terminal			
RH	E8	89	Hi	Battery voltage
		90	Off	0 V
LH	E8		Hi	Battery voltage
		Off	0 V	

Is the measurement value normal?

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

2. CHECK HEADLAMP (HI) OPEN CIRCUIT

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

HEADLAMP (HI) CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

IPDM E/R		Front combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E8	E28	7	Existed
LH		90	E58	

Does continuity exist?

YES >> GO TO 5.

NO >> Repair the harnesses or connectors.

3. CHECK HEADLAMP (HI) FUSE

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

Unit	Location	Fuse No.	Capacity
Headlamp HI (RH)	IPDM E/R	#55	10 A
Headlamp HI (LH)	IPDM E/R	#54	10 A

Is the fuse blown (open)?

YES >> GO TO 4.

NO >> Replace IPDM E/R.

4. CHECK HEADLAMP (HI) SHORT CIRCUIT

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
RH	E8	Ground	Not existed
LH			

Does continuity exist?

YES >> Repair the harnesses or connectors. And then replace the fuse.

NO >> Replace the fuse. (Replace IPDM E/R if the fuse is blown again.)

5. CHECK HEADLAMP (HI) GROUND OPEN CIRCUIT

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

Front combination lamp		Ground	Continuity
Connector	Terminal		
RH	E28	Ground	Existed
LH	E58		

Does continuity exist?

YES >> Replace the headlamp (HI) bulb. (Bulb socket is abnormally.)

NO >> Repair the harnesses or connectors.

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HEADLAMP (LO) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

HEADLAMP (LO) CIRCUIT

Component Function Check

INFOID:000000012172163

1. CHECK HEADLAMP (LO) OPERATION

IPDM E/R AUTO ACTIVE TEST

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

CONSULT ACTIVE TEST

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

Lo : Headlamp (LO) ON

Off : Headlamp (LO) OFF

Is the headlamp (LO) turned ON?

YES >> Headlamp (LO) is normal.

NO >> Refer to [EXL-286, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172164

1. CHECK HEADLAMP (LO) OUTPUT VOLTAGE

CONSULT ACTIVE TEST

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

Terminals			Test item	Voltage (Approx.)
(+)	(-)			
IPDM E/R			External lamp	
Connector	Terminal			
RH	E8	83	Lo	Battery voltage
				Off
LH		84	Lo	Battery voltage
			Off	0 V

Is the measurement value normal?

YES >> GO TO 2.

NO >> GO TO 3.

2. CHECK HEADLAMP (LO) OPEN CIRCUIT

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

IPDM E/R		Front combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E8	E28	5	Existed
LH		84	E58	

Does continuity exist?

HEADLAMP (LO) CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

- YES >> GO TO 5.
NO >> Repair the harnesses or connectors.

3. CHECK HEADLAMP (LO) FUSE

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

Unit	Location	Fuse No.	Capacity
Headlamp LO (RH)	IPDM E/R	#57	15 A
Headlamp LO (LH)	IPDM E/R	#56	15 A

Is the fuse blown (open)?

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

4. CHECK HEADLAMP (LO) SHORT CIRCUIT

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
RH	E8	83	Not existed
LH		84	

Does continuity exist?

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

5. CHECK HEADLAMP (LO) GROUND OPEN CIRCUIT

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

Front combination lamp		Ground	Continuity
Connector	Terminal		
RH	E28	3	Existed
LH	E58	3	

Does continuity exist?

- YES >> Replace the headlamp (LO) bulb. (Bulb socket is abnormally.)
NO >> Repair the harnesses or connectors.

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DAYTIME RUNNING LIGHT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT CIRCUIT

Component Function Check

INFOID:000000012751057

1. CHECK DAYTIME RUNNING LIGHT OPERATION

Ⓟ With CONSULT

1. Turn ignition switch ON.
2. Select "HEAD LAMP" of "BCM" using CONSULT.
3. Select "DAYTIME RUNNING LIGHT" in "Active Test" mode.
4. With operating the test items, check that the daytime running light is turned ON.

On : Daytime running light ON

Off : Daytime running light OFF

Is the inspection result normal?

- YES >> Daytime running light circuit is normal.
NO >> Refer to [EXL-288, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012751058

1. CHECK DAYTIME RUNNING LIGHT RELAY FUSES

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

Unit	Location	Fuse No.	Capacity
Daytime running light relay (Switch side)	Fuse block (J/B)	#6	10 A
Daytime running light relay (Coil side)	IPDM E/R	#59	

Is the inspection result normal?

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

2. CHECK DAYTIME RUNNING LIGHT RELAY POWER SUPPLY

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

+		Terminal	-	Voltage
Daytime running light relay				
Connector				
Switch side	E123	3	Ground	Battery voltage
Coil side		1		

Is the inspection result normal?

- YES >> GO TO 4.
NO-1 >> Switch side: Check battery power supply circuit. Refer to [PG-6, "Wiring Diagram - BATTERY POWER SUPPLY -"](#).
NO-2 >> Coil side: GO TO 3.

3. CHECK DAYTIME RUNNING LIGHT RELAY (COIL SIDE) POWER SUPPLY CIRCUIT

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

DAYTIME RUNNING LIGHT CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

Daytime running light relay		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
E12	1	E5	6	Existed

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-35, "Removal and Installation"](#).
- NO >> Repair or replace harness.

4.CHECK DAYTIME RUNNING LIGHT RELAY

Check daytime running light relay. Refer to [EXL-290, "Component Inspection"](#).

Is the inspection result normal?

- YES >> GO TO 5.
- NO >> Replace daytime running light relay.

5.CHECK DAYTIME RUNNING LIGHT RELAY CONTROL SIGNAL

Ⓜ With CONSULT

1. Install daytime running light relay.
2. Turn ignition switch ON.
3. Select "HEAD LAMP" of "BCM" using CONSULT.
4. Select "DAYTIME RUNNING LIGHT" in "Active Test" mode.
5. With operating the test item, check voltage between IPDM E/R harness connector and ground.

+		-	Test item	Voltage (Approx.)	
IPDM E/R					
Connector	Terminal				
E9	105	Ground	DAYTIME RUNNING LIGHT	On	0 V
				Off	Battery voltage

Is the inspection result normal?

- YES >> GO TO 8.
- NO-1 >> Fixed at 0 V: GO TO 7.
- NO-2 >> Fixed at battery voltage: GO TO 6.

6.CHECK DAYTIME RUNNING LIGHT REQUEST SIGNAL

Ⓜ With CONSULT

1. Select "DTRL REQ" in "Data Monitor" mode of "IPDM E/R" using CONSULT.
2. With operating the daytime running light ON condition, check the monitor status.

Monitor item	Condition	Monitor status	
DTRL REQ	Daytime running light	ON condition	On
		OFF condition	Off

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-35, "Removal and Installation"](#).
- NO >> Replace BCM. Refer to [BCS-97, "Removal and Installation"](#).

7.CHECK DAYTIME RUNNING LIGHT RELAY CONTROL SIGNAL CIRCUIT

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

DAYTIME RUNNING LIGHT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

Daytime running light relay		IPDM E/R		Continuity
Connector	Terminal	Connector	Terminal	
E123	2	E9	105	Existed

Is the inspection result normal?

- YES >> Replace IPDM E/R. Refer to [PCS-35, "Removal and Installation"](#).
- NO >> Repair or replace harness.

8. CHECK DAYTIME RUNNING LIGHT POWER SUPPLY CIRCUIT

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

Daytime running light relay		Daytime running light		Continuity	
Connector	Terminal	Connector	Terminal		
RH	E123	5	E121	1	Existed
LH			E122		

Is the inspection result normal?

- YES >> GO TO 9.
- NO >> Repair or replace harness.

9. CHECK DAYTIME RUNNING LIGHT GROUND CIRCUIT

Check continuity between daytime running light harness connector and ground.

Daytime running light		Terminal	—	Continuity
Connector	Terminal			
RH	E121	2	Ground	Existed
LH	E122			

Is the inspection result normal?

- YES >> Replace the corresponding daytime running light. Refer to [EXL-435, "Removal and Installation"](#).
- NO >> Repair or replace harness.

Component Inspection

INFOID:000000012751059

1. CHECK DAYTIME RUNNING LIGHT RELAY

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

Daytime running light relay		Condition		Continuity
Terminal				
3	5	Battery voltage	Apply	Existed
			Not apply	Not existed

Is the inspection result normal?

- YES >> INSPECTION END
- NO >> Replace daytime running light relay.

FRONT FOG LAMP CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

FRONT FOG LAMP CIRCUIT

Component Function Check

INFOID:000000012172165

1. CHECK FRONT FOG LAMP OPERATION

IPDM E/R AUTO ACTIVE TEST

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

CONSULT ACTIVE TEST

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

Fog : Front fog lamp ON
Off : Front fog lamp OFF

Is the front fog lamp turned ON?

- YES >> Front fog lamp circuit is normal.
NO >> Refer to [EXL-291, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172166

1. CHECK FRONT FOG LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
Front fog lamp	IPDM E/R	#58	15 A

Is the fuse blown (open)?

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

2. CHECK FRONT FOG LAMP SHORT CIRCUIT

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
RH	E8	86	Not existed
LH		87	

Does continuity exist?

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

3. CHECK FRONT FOG LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

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

4. CHECK FRONT FOG LAMP OUTPUT VOLTAGE

CONSULT ACTIVE TEST

1. Disconnect the front fog lamp connector.
2. Turn the ignition switch ON.
3. Select "EXTERNAL LAMPS" of IPDM E/R active test item.

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FRONT FOG LAMP CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

- With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

Terminals			Test item	Voltage (Approx.)
(+)		(-)		
IPDM E/R			EXTERNAL LAMP	Battery voltage
Connector	Terminal			
RH	E8	86	Fog	0 V
LH		87	Off	Battery voltage
			Off	0 V

Is the measurement value normal?

YES >> GO TO 5.

NO >> Replace IPDM E/R.

5. CHECK FRONT FOG LAMP OPEN CIRCUIT

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

IPDM E/R			Front fog lamp		Continuity
Connector	Terminal		Connector	Terminal	
RH	E8	86	E34	1	Existed
LH		87	E64	1	

Does continuity exist?

YES >> GO TO 6.

NO >> Repair the harnesses or connectors.

6. CHECK FRONT FOG LAMP GROUND CIRCUIT OPEN CIRCUIT

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

Front fog lamp			Ground	Continuity
Connector	Terminal			
RH	E34	2	Ground	Existed
LH	E64	2		

Does continuity exist?

YES >> Replace the front fog lamp.

NO >> Repair the harnesses or connectors.

PARKING LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

PARKING LAMP CIRCUIT

Component Function Check

INFOID:000000012172167

1. CHECK PARKING LAMP OPERATION

IPDM E/R AUTO ACTIVE TEST

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

CONSULT ACTIVE TEST

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

TAIL : Parking lamp ON
Off : Parking lamp OFF

Is the parking lamp turned ON?

- YES >> Parking lamp circuit is normal.
NO >> Refer to [EXL-293, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172168

1. CHECK PARKING LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
Parking lamp	IPDM E/R	#52	10 A

Is the fuse blown (open)?

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

2. CHECK PARKING LAMP SHORT CIRCUIT

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

IPDM E/R		Ground	Continuity
Connector	Terminal		
RH	E9	91	Not existed
LH		92	

Does continuity exist?

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

3. CHECK PARKING LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

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

4. CHECK PARKING LAMP OUTPUT VOLTAGE

CONSULT ACTIVE TEST

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

PARKING LAMP CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

4. With operating the test items, check the voltage between the IPDM E/R harness connector and the ground.

Terminals			Test item	Voltage (Approx.)
(+)		(-)		
IPDM E/R			EXTERNAL LAMP	Battery voltage
Connector	Terminal			
RH	E9	91	TAIL	0 V
LH		92	TAIL	Battery voltage
			Off	0 V

Is the measurement value normal?

- YES >> GO TO 5.
 NO >> Replace IPDM E/R.

5. CHECK PARKING LAMP OPEN CIRCUIT

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

IPDM E/R		Front combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E9	E28	8	Existed
LH		92	E58	

Does continuity exist?

- YES >> GO TO 6.
 NO >> Repair the harnesses or connectors.

6. CHECK PARKING LAMP GROUND OPEN CIRCUIT

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

Front combination lamp			Ground	Continuity
Connector	Terminal			
RH	E28	4	Ground	Existed
LH	E58	4		

Does continuity exist?

- YES >> Replace the front combination lamp.
 NO >> Repair the harnesses or connectors.

TURN SIGNAL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL LAMP CIRCUIT

Description

INFOID:0000000012172169

BCM performs the high 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:0000000012172170

1. CHECK TURN SIGNAL LAMP

Ⓜ CONSULT ACTIVE TEST

1. Select "FLASHER" of BCM (FLASHER) active test item.
2. With operating the test items, check that the turn signal 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-295. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000012172171

1. CHECK TURN SIGNAL LAMP BULB

Check the applicable lamp bulb.

NOTE:

Except side turn signal lamp.

Is the bulb normal?

YES >> GO TO 2.

NO >> Replace the bulb.

2. CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

Ⓜ CONSULT ACTIVE TEST

1. Turn the ignition switch OFF.
2. Disconnect the following connectors.
 - Front combination lamp
 - Door mirror
 - Rear combination lamp
3. Turn the ignition switch ON.
4. Select "FLASHER" of BCM (FLASHER) active test item.
5. With operating the turn signal switch, check the voltage between the BCM harness connector and the ground.

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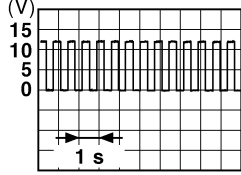
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TURN SIGNAL LAMP CIRCUIT

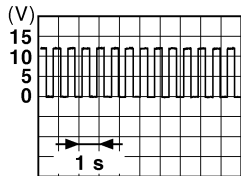
[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

Front turn signal lamp and side turn signal lamp

Terminals			Test item	Voltage (Approx.)
(+)	(-)			
BCM			FLASHER	
Connector	Terminal			
RH	M119	17	RH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
		Ground	Off	0 V
LH	M119		18	LH
		Ground	Off	0 V

Rear turn signal lamp

Terminals			Test item	Voltage (Approx.)
(+)	(-)			
BCM			FLASHER	
Connector	Terminal			
RH	M120	20	RH	 <p style="text-align: right; font-size: small;">PKID0926E</p>
		Ground	Off	0 V
LH	M120		25	LH
		Ground	Off	0 V

Is the measurement value normal?

- YES >> GO TO 3.
- NO >> Replace BCM.

3. CHECK TURN SIGNAL LAMP OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect the BCM connector.
3. Check the continuity between the BCM harness connector and the each turn signal lamp harness connector.

TURN SIGNAL LAMP CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

Front turn signal lamp

BCM			Front combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	M119	17	E28	6	Existed
LH		18	E58		

Side turn signal lamp

BCM			Door mirror		Continuity
Connector		Terminal	Connector	Terminal	
RH	M119	17	D33	1	Existed
LH		18	D3		

Rear turn signal lamp

BCM			Rear combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	M120	20	B261	1	Existed
LH		25	B260		

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4. CHECK TURN SIGNAL LAMP SHORT CIRCUIT

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

Front turn signal lamp and side turn signal lamp

BCM			Ground	Continuity
Connector		Terminal		
RH	M119	17		Not existed
LH		18		

Rear turn signal lamp

BCM			Ground	Continuity
Connector		Terminal		
RH	M120	20		Not existed
LH		25		

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 5.

5. CHECK TURN SIGNAL LAMP GROUND OPEN CIRCUIT

Check the continuity between the each turn signal lamp harness connector and the ground.

Front turn signal lamp

Front combination lamp			Ground	Continuity
Connector		Terminal		
RH	E28	4		Existed
LH	E58			

Side turn signal lamp

Door mirror			Ground	Continuity
Connector		Terminal		
RH	D33	19		Existed
LH	D3			

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TURN SIGNAL LAMP CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

Rear turn signal lamp

Rear combination lamp		Terminal	Ground	Continuity
Connector				Existed
RH	B261	2		
LH	B260			

Does continuity exist?

- YES >> Replace the front combination lamp, door mirror or the rear combination lamp.
- NO >> Repair the harnesses or connectors.

OPTICAL SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

OPTICAL SENSOR

Description

INFOID:000000012172172

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

Component Function Check

INFOID:000000012172173

1.CHECK OPTICAL SENSOR SIGNAL BY CONSULT

CONSULT DATA MONITOR

1. Turn the ignition switch ON.
2. Select "OPTICAL SENSOR" of BCM (HEADLAMP) data monitor item.
3. Turn the lighting switch AUTO.
4. With the optical sensor illuminating, check the monitor status.

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

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

Is the item status normal?

- YES >> Optical sensor is normal.
 NO >> Refer to [EXL-299, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172174

1.CHECK OPTICAL SENSOR POWER SUPPLY INPUT

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

Terminals		Ground	Voltage (Approx.)
(+)	(-)		
Optical sensor		Ground	5 V
Connector	Terminal		
M94	1		

Is the measurement value normal?

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

2.CHECK OPTICAL SENSOR GROUND INPUT

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

Terminals		Ground	Voltage (Approx.)
(+)	(-)		
Optical sensor		Ground	0 V
Connector	Terminal		
M94	3		

Is the measurement value normal?

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

3.CHECK OPTICAL SENSOR SIGNAL OUTPUT

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OPTICAL SENSOR

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

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

Terminals		Condition	Voltage (Approx.)
(+)	(-)		
Optical sensor		Optical sensor	3.1 V or more *
Connector	Terminal		
M94	2	When illuminating	3.1 V or more *
		When shutting off light	0.6 V or less

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

Is the measurement value normal?

YES >> GO TO 7.

NO >> Replace the optical sensor.

4.CHECK OPTICAL SENSOR OPEN CIRCUIT

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M94	1	M123	138	Existed

Does continuity exist?

YES >> GO TO 5.

NO >> Repair the harnesses or connectors.

5.CHECK OPTICAL SENSOR SHORT CIRCUIT

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

Optical sensor		Ground	Continuity
Connector	Terminal		
M94	1		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM.

6.CHECK OPTICAL SENSOR GROUND OPEN CIRCUIT

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M94	3	M123	137	Existed

Does continuity exist?

YES >> Replace BCM.

NO >> Repair the harnesses or connectors.

7.CHECK OPTICAL SENSOR SIGNAL OPEN CIRCUIT

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

OPTICAL SENSOR

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M94	2	M123	113	Existed

Does continuity exist?

YES >> GO TO 8.

NO >> Repair the harnesses or connectors.

8.CHECK OPTICAL SENSOR SHORT CIRCUIT

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

Optical sensor		Ground	Continuity
Connector	Terminal		
M94	2		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM.

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HAZARD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

HAZARD SWITCH

Description

INFOID:000000012172175

Hazard switch is integrated in the multifunction switch. Hazard switch inputs the signals to BCM when pressing the switch.

Component Function Check

INFOID:000000012172176

1. CHECK HAZARD SWITCH SIGNAL BY CONSULT

CONSULT DATA MONITOR

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

Monitor item	Condition		Monitor status
HAZARD SW	Hazard switch	While pressing the switch	On
		While not pressing the switch	Off

Is the item status normal?

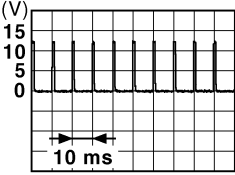
- YES >> Hazard switch circuit is normal.
NO >> Refer to [EXL-302, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172177

1. CHECK HAZARD SWITCH SIGNAL INPUT

With operating the hazard switch, check the voltage between the BCM harness connector and the ground.

Terminals		Condition	Voltage (Approx.)
(+)	(-)		
BCM		Hazard switch	0 V
Connector	Terminal		
M122	110	While pressing the switch	
		While not pressing the switch	
	Ground		

JPMIA0012GB

Is the measurement value normal?

- YES >> Replace BCM.
NO >> GO TO 2.

2. CHECK HAZARD SWITCH SIGNAL OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect the multifunction switch connector and BCM connector.
3. Check continuity between the multifunction switch harness connector and the BCM harness connector.

HAZARD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

Multifunction switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M72	16	M122	110	Existed

Does continuity exist?

YES >> GO TO 3.

NO >> Repair the harnesses or connectors.

3.CHECK HAZARD SWITCH SIGNAL SHORT CIRCUIT

Check continuity between the multifunction switch harness connector and the ground.

Multifunction switch		Ground	Continuity
Connector	Terminal		
M72	16		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 4.

4.CHECK HAZARD SWITCH GROUND OPEN CIRCUIT

Check continuity between the multifunction switch harness connector and the ground.

Multifunction switch		Ground	Continuity
Connector	Terminal		
M72	1		Existed

Does continuity exist?

YES >> Replace the hazard switch (multifunction switch).

NO >> Repair the harnesses or connectors.

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TAIL LAMP CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

TAIL LAMP CIRCUIT

Component Function Check

INFOID:000000012172178

1. CHECK TAIL LAMP OPERATION

IPDM E/R AUTO ACTIVE TEST

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

CONSULT ACTIVE TEST

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

TAIL : Tail lamp ON

Off : Tail lamp OFF

Is the tail lamp turned ON?

- YES >> Tail lamp circuit is normal.
NO >> Refer to [EXL-304, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172179

1. CHECK TAIL LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
<ul style="list-style-type: none">• Tail lamp• Rear side marker lamp• License plate lamp	IPDM E/R	#53	10 A

Is the fuse blown (open)?

- YES >> Repair the malfunctioning part before replacing the fuse.
NO >> GO TO 2.

2. CHECK TAIL LAMP OUTPUT VOLTAGE

CONSULT ACTIVE TEST

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

Terminals		Test item	Voltage (Approx.)
(+)	(-)		
IPDM E/R		EXTERNAL LAMP	Battery voltage
Connector	Terminal		
E5	7	TAIL	Battery voltage
		Off	0 V

Is the measurement value normal?

- YES >> GO TO 3.
NO >> Replace IPDM E/R.

3. CHECK TAIL LAMP OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect IPDM E/R connector.

TAIL LAMP CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

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

IPDM E/R		Rear combination lamp		Continuity	
Connector	Terminal	Connector	Terminal		
RH	E5	7	B232	1	Existed
LH			B60	1	

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4. CHECK TAIL LAMP GROUND OPEN CIRCUIT

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

Rear combination lamp			Ground	Continuity
Connector	Terminal			
RH	B232	4		Existed
LH	B60	4		

Does continuity exist?

YES >> Replace the rear combination lamp.

NO >> Repair the harnesses or connectors.

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LICENSE PLATE LAMP CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

LICENSE PLATE LAMP CIRCUIT

Component Function Check

INFOID:000000012172180

NOTE:

Check the tail lamp circuit if the tail lamp and the license plate lamp are not turned ON.

1. CHECK LICENSE PLATE LAMP OPERATION

⊗ IPDM E/R AUTO ACTIVE TEST

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

Ⓟ CONSULT ACTIVE TEST

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

TAIL : License plate lamp ON

Off : License plate lamp OFF

Is the license plate lamp turned ON?

- YES >> License plate lamp circuit is normal.
NO >> Refer to [EXL-306, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012172181

1. CHECK LICENSE PLATE LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

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

2. CHECK LICENSE PLATE LAMP OPEN CIRCUIT

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

IPDM E/R		License plate lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E5	D117	1	Existed
LH		D112	1	

Does continuity exist?

- YES >> GO TO 3.
NO >> Repair the harnesses or connectors.

3. CHECK LICENSE PLATE LAMP GROUND OPEN CIRCUIT

Check continuity between the license plate lamp harness connector and the ground.

License plate lamp			Ground	Continuity
Connector	Terminal			
RH	D117	2	Existed	
LH	D112	2		

Does continuity exist?

- YES >> Replace the license plate lamp.
NO >> Repair the harnesses or connectors.

HEADLAMP SYSTEM

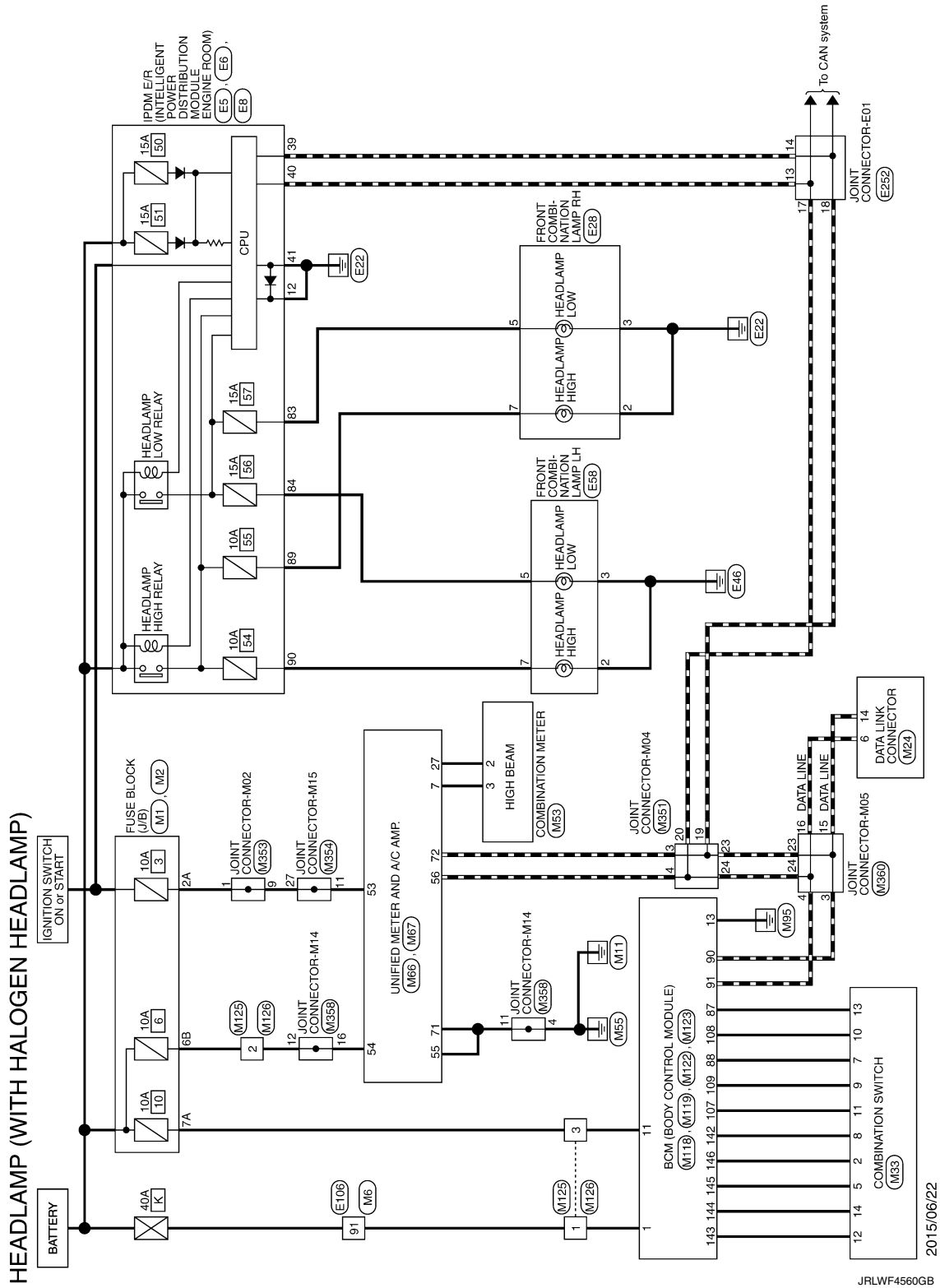
[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

HEADLAMP SYSTEM

Wiring Diagram - HEADLAMP -

INFOID:000000012751047



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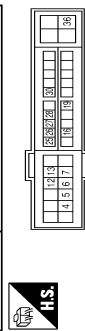
HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

HEADLAMP (WITH HALOGEN HEADLAMP)

Connector No.	E53
Connector Name	FROM E-F INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH42DFW-CS12-AM4-1V

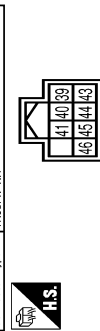


Connector No.	E8
Connector Name	FROM E-F INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	NS58FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	V	-
5	L	-
6	R	-
7	R	-
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	BG	-
28	GR	-
30	G	-

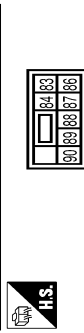
Connector No.	E6
Connector Name	FROM E-F INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH8BEFW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-

45	G	-
46	R	-

Connector No.	E8
Connector Name	FROM E-F INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	NS58FW-CS



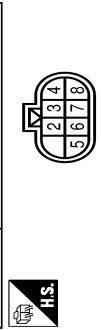
Terminal No.	Color Of Wire	Signal Name [Specification]
83	BG	-
84	V	-
86	W	-
87	L	-
88	GR	-
89	BR	-
90	P	-

Connector No.	E28
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS08FEB-PR



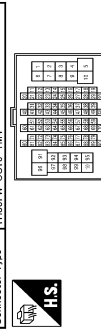
Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
5	BG	-
6	V	-
7	BR	-
8	P	-

Connector No.	E58
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS08FEB-PR



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

Connector No.	E108
Connector Name	WIRE TO WIRE
Connector Type	TH88PTW-CS15-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	GR	-
5	G	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-

13	L	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	V	-
23	G	-
24	P	-
25	Y	-
27	W	-
28	G	-
31	BG	-
32	W	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-
41	W	-
42	G	-
43	BR	-
44	Y	-
49	V	-
50	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
63	W	-
64	B	-
65	G	-
67	SHIELD	-
68	V	-
69	LG	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	-

[With ICC]

HEADLAMP SYSTEM

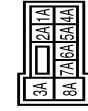
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[HALOGEN TYPE]

HEADLAMP (WITH HALOGEN HEADLAMP)

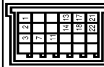
Terminal No.	Color Of Wire	Signal Name [Specification]
74	L	- [Without ICC]
75	G	- [With ICC]
76	W	- [Without ICC]
77	Y	- [With ICC]
78	BR	- [Without ICC]
79	L	- [With ICC]
80	SB	- [With ICC]
81	G	-
82	EG	-
83	EG	-
84	GS	-
85	L	-
86	P	-
87	V	-
88	GR	-
89	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-
95	EG	-
96	R	-
97	SHIELD	-
98	L	-
99	L	-
100	P	-

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NSSEPW-M2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	R	-
4A	V	-
5A	Y	-
6A	V	-
7A	R	-
8A	L	-

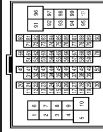
Connector No.	E33Z
Connector Name	JOINT CONNECTOR-E01
Connector Type	NH4ZFW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	GR	-

Terminal No.	Color Of Wire	Signal Name [Specification]
3B	P	-
4B	G	-
5B	EG	-
6B	Y	-
7B	P	-
8B	R	-
9B	SB	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	HT8BMP-CSI2-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	- [With NAVI]
2	B	- [Without NAVI]
3	B	- [With NAVI]
4	G	- [Without NAVI]
5	G	- [With NAVI]
6	R	- [Without NAVI]
7	SHIELD	-
8	R	-
9	Y	-
10	R	-
11	BR	-
12	EG	-
13	L	-
14	V	-
15	R	-
16	V	-
17	SB	-
18	V	-
19	BG	-
20	BG	-
21	L	-
22	W	-
23	P	-

Terminal No.	Color Of Wire	Signal Name [Specification]
24	BR	-
25	Y	-
26	V	-
27	G	-
28	G	-
31	L	-
32	G	-
33	B	-
34	W	-
35	R	-
36	SHIELD	-
37	V	-
38	EG	-
39	W	-
40	W	-
41	W	-
42	EG	-
43	EG	-
44	W	-
45	W	-
49	L	-
50	P	-
51	BR	-
54	Y	-
57	G	-
59	W	-
60	L	-
61	G	-
62	SB	-
63	G	-
64	G	-
65	W	-
66	R	-
67	SHIELD	-
68	Y	-
69	GR	-
70	LG	-
71	LG	-
72	Y	-
73	SB	-
74	BR	-
75	L	- [With ICC]
76	G	- [Without ICC]
77	W	- [With ICC]
78	R	- [Without ICC]
79	W	- [Without ICC]
80	SB	- [With ICC]

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HEADLAMP SYSTEM

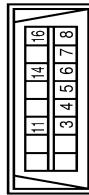
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[HALOGEN TYPE]

HEADLAMP (WITH HALOGEN HEADLAMP)

81	SB	-	-	-
82	SB	-	-	-
83	V	-	-	-
84	G	-	-	-
85	L	-	-	-
86	P	-	-	-
87	W	-	-	-
88	GR	-	-	-
89	SHIELD	-	-	-
90	W	-	-	-
91	W	-	-	-
92	Y	-	-	-
93	BR	-	-	-
94	GR	-	-	-
95	GR	-	-	-
96	W	-	-	-
97	L	-	-	-
98	SHIELD	-	-	-
99	V	-	-	-
100	SB	-	-	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD1EFW



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
7	V	-
8	SB	-
11	SB	-
14	P	-
18	Y	-

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH4FEW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	SB	OUTPUT 4
3	GR	FR WASHER(+)
4	G	IGN
5	L	OUTPUT 3
6	B	GROUND
7	V	INPUT 3
8	BIG	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	OUTPUT 1
12	P	OUTPUT 1
13	BR	OUTPUT 2
14	G	OUTPUT 2

Connector No.	M33
Connector Name	COMBINATION METER
Connector Type	TH4GFW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BATTERY POWER SUPPLY
2	LG	COMMUNICATION SIGNAL (METER->AMP.)
3	GR	COMMUNICATION SIGNAL (AMP->METER)
5	B	GROUND
6	P	ALTERNATOR SIGNAL
7	BR	AIR BAG SIGNAL

10	G	SECURITY SIGNAL
15	B	GROUND
16	B	METER CONTROL SWITCH GROUND
19	B	ILL GND
20	R	ILL
21	BG	IGNITION SIGNAL
22	BG	GROUND
24	BR	COMMUNICATION SIGNAL (LCD->AMP.)
25	Y	COMMUNICATION SIGNAL (AMP->LCD)
26	R	VEHICLE SPEED SIGNAL (8-PULSE)
27	V	PARKING BRAKE SWITCH SIGNAL
28	W	BRAKE FLUID LEVEL SWITCH SIGNAL
29	SB	WASHER FLUID LEVEL SWITCH SIGNAL (WASHER)
30	G	SWAY BAR LOCK SWITCH SIGNAL (WASHER)
31	L	WASHER FLUID LEVEL SWITCH SIGNAL (WASHER)
33	B	ILLUMINATION CONTROL SIGNAL
36	LG	SELECT SWITCH SIGNAL
37	SB	ENTER SWITCH SIGNAL
38	L	TRIP A/B RESET SWITCH SIGNAL
39	P	ILLUMINATION CONTROL SWITCH SIGNAL (-)
40	BIG	ILLUMINATION CONTROL SWITCH SIGNAL (+)



Terminal No.	Color Of Wire	Signal Name [Specification]
10	G	SECURITY SIGNAL
15	B	GROUND
16	B	METER CONTROL SWITCH GROUND
19	B	ILL GND
20	R	ILL
21	BG	IGNITION SIGNAL
22	BG	GROUND
24	BR	COMMUNICATION SIGNAL (LCD->AMP.)
25	Y	COMMUNICATION SIGNAL (AMP->LCD)
26	R	VEHICLE SPEED SIGNAL (8-PULSE)
27	V	PARKING BRAKE SWITCH SIGNAL
28	W	BRAKE FLUID LEVEL SWITCH SIGNAL
29	SB	WASHER FLUID LEVEL SWITCH SIGNAL (WASHER)
30	G	SWAY BAR LOCK SWITCH SIGNAL (WASHER)
31	L	WASHER FLUID LEVEL SWITCH SIGNAL (WASHER)
33	B	ILLUMINATION CONTROL SIGNAL
36	LG	SELECT SWITCH SIGNAL
37	SB	ENTER SWITCH SIGNAL
38	L	TRIP A/B RESET SWITCH SIGNAL
39	P	ILLUMINATION CONTROL SWITCH SIGNAL (-)
40	BIG	ILLUMINATION CONTROL SWITCH SIGNAL (+)

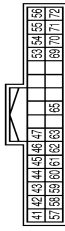
Connector No.	M36
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH4GPTW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
5	L	MANUAL MODE SHIFT UP SIGNAL
7	GR	COMMUNICATION SIGNAL (AMP->METER)
8	L	VEHICLE SPEED SIGNAL (2-PULSE)
9	SB	SEAT BELT SWITCH SIGNAL (DRIVER SIDE)
10	W	MANUAL MODE SIGNAL
11	G	NON-MANUAL MODE SIGNAL
14	BR	COMMUNICATION SIGNAL (LCD->AMP.)
20	L	IGN ON/OFF SIGNAL
23	Y	AT SNOW SWITCH SIGNAL
25	V	MANUAL MODE SHIFT DOWN SIGNAL
27	LG	COMMUNICATION SIGNAL (METER->AMP.)
28	R	VEHICLE SPEED SIGNAL (8-PULSE)
30	V	PARKING BRAKE SWITCH SIGNAL

34	Y	COMMUNICATION SIGNAL (AMP->LCD)
38	P	BLOWER MOTOR CONTROL SIGNAL

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH3ZPW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	ACC POWER SUPPLY
42	Y	FUEL LEVEL SENSOR SIGNAL
43	R	INTAKE SENSOR SIGNAL
44	LG	IN-VEHICLE SENSOR SIGNAL
45	P	AMBIENT SENSOR SIGNAL
46	BG	SUNLOAD SENSOR SIGNAL
47	G	DRUMST GAST OUTSIDE COOLING SENSOR SIGNAL
53	G	IGNITION POWER SUPPLY
54	V	IGNITION POWER SUPPLY
55	B	BATTERY GROUND
56	B	CAN-H
57	W	BRAKE FLUID LEVEL SWITCH SIGNAL
58	BR	FUEL LEVEL SENSOR GROUND
59	GR	INTAKE SENSOR GROUND
60	L	IN-VEHICLE SENSOR GROUND
61	BR	AMBIENT SENSOR GROUND
62	SB	SUNLOAD SENSOR GROUND
63	R	-
65	EG	ECV SIGNAL
69	L	A/C LAN SIGNAL
70	R	EACH DOOR MOTOR POWER SUPPLY
71	B	GROUND
72	P	CAN-L

HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

HEADLAMP (WITH HALOGEN HEADLAMP)

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (E/L)
2	W	POWER WINDOW POWER SUPPLY(BAT)
3	Y	POWER WINDOW POWER SUPPLY(BAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (RUSE)
13	B	GROUND
14	Y	PUSH-BUTTON (IGNITION SW ILL GND)
15	W	ACC IND
17	W	TURN SIGNAL (RH FRONT)
18	BG	TURN SIGNAL (LH FRONT)
19	V	INT ROOM LAMP CONT

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	E	ROOM ANT2 -
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	DRIVER DOOR ANT-
76	V	DRIVER DOOR ANT+
77	LG	ROOM ANT1 -
78	Y	ROOM ANT1 +
79	BR	ROOM ANT1 -
80	GR	NATS ANT AMP
81	W	NATS ANT AMP
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 3
88	P	CAN-H
89	L	CAN-H
92	LG	KEY SLOT ILL CONT
93	V	ON IND
94	Y	Puddle LAMP CONT
95	BG	ACC RELAY CONT
96	GR	A/T SHIFT SELECTOR POWER SUPPLY
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 1
109	X	COMBI SW INPUT 2
110	G	HAZARD SW

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FC-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
113	SB	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	W	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	BG	RECEIVER SENSOR GND
138	Y	RECEIVER SENSOR POWER SUPPLY
139	L	THE PRESSURE RECEIVER COMM
140	GR	SECURITY IND LAMP CONT
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M125
Connector Name	WIRE TO WIRE
Connector Type	M03FW-LC



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

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03MM-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

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EXL

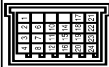
HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

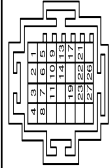
HEADLAMP (WITH HALOGEN HEADLAMP)

Connector No.	M351
Connector Name	JOINT CONNECTOR-M04
Connector Type	NH24FW-J



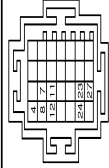
Terminal No.	Color Of Wire	Signal Name [Specification]
1	BG	-
2	B	-
3	P	-
4	L	-
6	B	-
7	P	-
8	L	-
10	W	-
11	P	-
12	L	-
14	B	-
16	P	-
17	V	-
18	B	-
19	P	-
20	L	-
21	V	-
22	B	-
23	P	-
24	L	-

Connector No.	M353
Connector Name	JOINT CONNECTOR-M02
Connector Type	SGA28FDG7-J



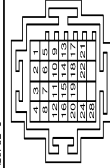
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	R	-
3	V	-
4	BG	-
5	G	-
6	R	-
7	V	-
8	BG	-
9	G	-
10	R	-
11	V	-
12	W	-
13	W	-
14	W	-
17	W	-
18	V	-
21	W	-
22	R	-
23	V	-
26	R	-
27	G	-

Connector No.	M354
Connector Name	JOINT CONNECTOR-M15
Connector Type	SGA28FDG7-J



Terminal No.	Color Of Wire	Signal Name [Specification]
4	B	-
7	W	-
8	B	-
11	G	-
12	B	-
23	W	-
24	B	-
27	G	-

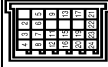
Connector No.	M355
Connector Name	JOINT CONNECTOR-M14
Connector Type	SGA28FSB-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	- [Without BOSE system]
1	V	- [With BOSE system]
2	LG	- [Without BOSE system]
2	B	- [With BOSE system]
3	B	-
4	B	-
5	BR	- [Without BOSE system]
5	V	- [With BOSE system]
6	LG	- [Without BOSE system]
6	R	- [With BOSE system]
7	B	-
8	B	-

9	L	-
10	W	-
11	B	-
12	Y	-
13	L	-
14	W	-
15	BR	-
16	Y	-
17	L	-
18	W	-
19	BR	-
20	BR	-
22	W	-
24	BR	-
28	BR	-

Connector No.	M360
Connector Name	JOINT CONNECTOR-M05
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-
8	L	-
9	BR	-
11	P	-
12	L	-
13	BR	-
15	P	-
16	L	-
17	V	-
19	P	-
20	L	-
21	V	-
22	G	-

HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

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HEADLAMP (WITH HALOGEN HEADLAMP)

23	P	L
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JRLWF4566GB

AUTO LIGHT SYSTEM

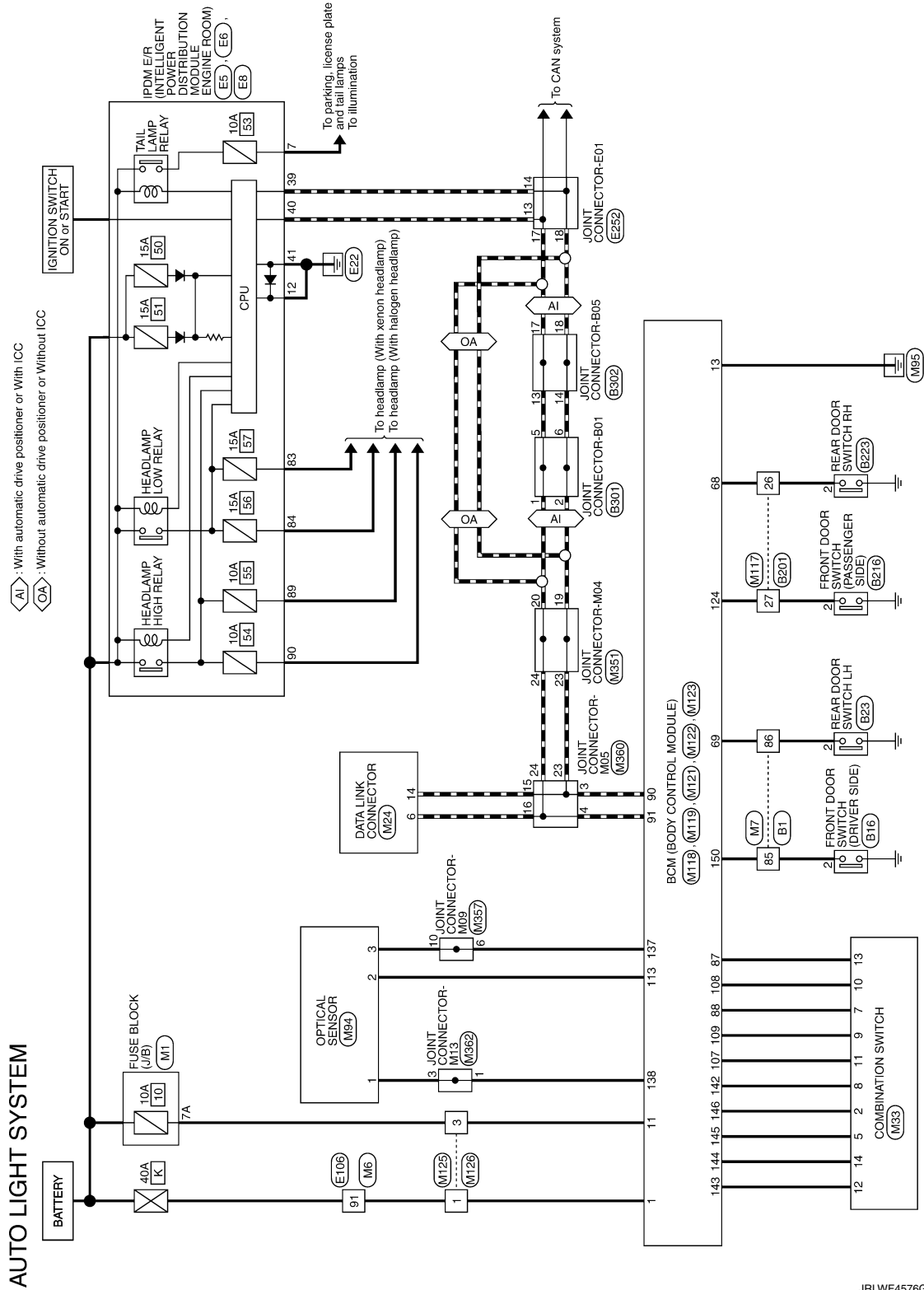
< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

AUTO LIGHT SYSTEM

Wiring Diagram - AUTO LIGHT SYSTEM -

INFOID:000000012751048



2015/06/22

JRLWF4576GB

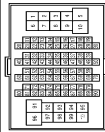
AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

AUTO LIGHT SYSTEM

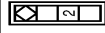
Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-
4	G	-
5	SB	-
6	Y	-
7	V	-
8	L	-
11	V	-
12	SB	-
13	LG	-
14	GR	-
15	LG	-
16	R	-
17	W	-
18	SB	-
19	BR	-
20	BR	-
21	SHIELD	-
22	Y	-
24	P	-
25	G	-
26	Y	-
27	BR	- [With NAVI]
28	R	- [Without NAVI]
28	W	- [With NAVI]
28	L	- [Without NAVI]
29	W	- [With NAVI]
30	SHIELD	- [With NAVI]
31	SHIELD	- [With NAVI]
32	W	- [With NAVI]
32	Y	- [Without NAVI]
33	SB	- [With NAVI]
34	L	- [With NAVI]
35	P	- [With NAVI]

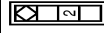
36	L	-
37	P	-
38	P	-
39	Y	-
40	SB	-
44	Y	-
45	GR	-
46	LG	-
47	SB	-
48	BG	-
49	R	-
50	L	-
60	P	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	W	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
73	SB	-
74	L	-
75	W	-
76	BR	-
77	R	-
78	P	-
79	GR	-
83	BG	-
85	V	-
86	LG	-
87	Y	-
88	R	-
89	B	-
90	BG	-
91	G	-
92	BR	-
93	G	-
94	SB	-
95	G	-
96	W	-
98	W	-
99	GR	-

Connector No.	B16
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



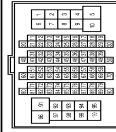
Terminal No.	Color Of Wire	Signal Name [Specification]
2	Y	-

Connector No.	B23
Connector Name	REAR DOOR SWITCH-LH
Connector Type	A03FW



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

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	GR	-
4	BG	-
7	LG	-
10	W	-
15	SB	-
16	V	-
17	BR	-
18	GR	-
19	P	-
20	BR	-
21	BR	-
28	Y	-
29	Y	-
30	GR	-
31	R	-
32	BR	-
33	G	-
51	R	-
55	G	-
56	R	-
57	W	-
58	B	-
59	SHIELD	-
60	LG	-
61	V	-
62	BR	-
63	P	-
64	L	-
65	G	-
66	P	-
67	L	-
68	SHIELD	-
69	V	-
70	Y	-
71	SB	-
72	W	-
73	GR	-
74	V	-
80	V	-
81	SB	-
82	LG	-
83	P	-
84	R	-
85	L	-
86	BG	-

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AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

AUTO LIGHT SYSTEM

87	L	-
88	P	-
91	V	-
92	R	-
94	R	-
95	SB	-
96	G	-
97	G	-
98	R	-
99	P	-
100	L	-

Connector No.	B216
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



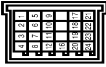
Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-

Connector No.	B223
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



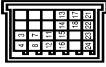
Terminal No.	Color Of Wire	Signal Name [Specification]
2	BR	-

Connector No.	B301
Connector Name	JOINT CONNECTOR-B01
Connector Type	NH24FB-J



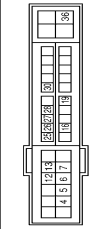
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	SB	-
4	LG	-
5	L	-
6	P	-
7	SB	-
8	LG	-
9	L	-
10	P	-
11	SB	-
12	LG	-
13	SB	-
14	R	-
15	Y	-
16	B	-
17	Y	-
18	B	-
20	SB	-
21	R	-
22	Y	-
23	B	-
24	SB	-

Connector No.	B302
Connector Name	JOINT CONNECTOR-B05
Connector Type	NH24FCY-J



Terminal No.	Color Of Wire	Signal Name [Specification]
3	Y	-
4	L	-
7	Y	-
8	L	-
11	Y	-
12	L	-
13	L	-
14	P	-
15	Y	-
16	L	-
17	L	-
18	P	-
20	B	-
21	Y	-
22	Y	-
23	Y	-
24	L	-

Connector No.	E5
Connector Name	IPM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE (ROOM)
Connector Type	TH20PW-CS12-M-TV



Terminal No.	Color Of Wire	Signal Name [Specification]
4	V	-
5	L	-
6	R	-
7	R	-

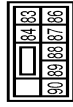
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	EG	-
28	L	-
30	GR	-
36	G	-

Connector No.	E6
Connector Name	IPM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE (ROOM)
Connector Type	TH08FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
36	P	-
40	P	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-
46	R	-

Connector No.	E8
Connector Name	IPM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE (ROOM)
Connector Type	NS08FW-CS



AUTO LIGHT SYSTEM

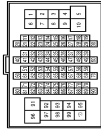
< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

AUTO LIGHT SYSTEM

Terminal No.	Color Of Wire	Signal Name [Specification]
83	BG	-
84	V	-
86	W	-
87	L	-
88	GR	-
89	BR	-
90	P	-

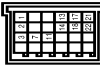
Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	T180FW-C516-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
4	GR	-
5	GR	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	EG	-
13	L	-
14	R	-
15	P	-
16	SB	-
18	SB	-
20	BG	-
21	BG	-
22	V	-
23	G	-
24	P	-
25	Y	-
26	V	-

27	W	-
28	G	-
31	BG	-
32	W	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-
41	W	-
42	GR	-
43	GR	-
45	W	-
50	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
63	W	-
64	B	-
65	G	-
66	B	-
68	Y	-
68	LG	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	- [With DCC]
74	L	- [Without DCC]
75	G	- [With DCC]
75	W	- [Without DCC]
76	W	- [With DCC]
76	L	- [Without DCC]
77	P	- [With DCC]
77	R	- [Without DCC]
78	BR	- [With DCC]
78	L	- [Without DCC]
79	L	- [With DCC]
79	Y	- [Without DCC]
80	SB	-
81	R	-
82	SB	-

Connector No.	E252
Connector Name	JOINT CONNECTOR-E01
Connector Type	IR124FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	GR	-
7	GR	-
11	GR	-
13	L	-
14	P	-
17	L	-
18	P	-
21	L	-
22	P	-

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS26FW-W2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	T180MH-C516-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	- [With NAVI]
1	W	- [Without NAVI]
2	B	- [With NAVI]
2	B	- [Without NAVI]
3	B	- [With NAVI]
3	B	- [Without NAVI]
4	SHIELD	-
5	G	-
6	R	-
7	W	-
8	Y	-
9	BR	-

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EXL

AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

AUTO LIGHT SYSTEM

10	R	-	-	-	-
11	BR	-	-	-	-
12	BG	-	-	-	-
13	L	-	-	-	-
14	R	-	-	-	-
15	P	-	-	-	-
16	V	-	-	-	-
17	SB	-	-	-	-
18	V	-	-	-	-
20	BG	-	-	-	-
21	L	-	-	-	-
22	W	-	-	-	-
23	W	-	-	-	-
24	BR	-	-	-	-
25	Y	-	-	-	-
26	V	-	-	-	-
27	G	-	-	-	-
28	G	-	-	-	-
31	L	-	-	-	-
32	G	-	-	-	-
33	B	-	-	-	-
34	W	-	-	-	-
35	R	-	-	-	-
36	SHIELD	-	-	-	-
37	V	-	-	-	-
38	BG	-	-	-	-
41	BR	-	-	-	-
42	BG	-	-	-	-
43	BG	-	-	-	-
45	W	-	-	-	-
46	L	-	-	-	-
49	P	-	-	-	-
50	L	-	-	-	-
51	BR	-	-	-	-
54	Y	-	-	-	-
57	G	-	-	-	-
59	W	-	-	-	-
60	L	-	-	-	-
61	G	-	-	-	-
62	SB	-	-	-	-
63	G	-	-	-	-
64	B	-	-	-	-
65	W	-	-	-	-
66	R	-	-	-	-
67	SHIELD	-	-	-	-
68	Y	-	-	-	-
69	GR	-	-	-	-
70	LG	-	-	-	-
71	LG	-	-	-	-
72	Y	-	-	-	-

73	SB	-	-	-	-
74	BR	- [With ICC]	- [Without ICC]	-	-
75	L	- [With ICC]	- [Without ICC]	-	-
76	GR	- [With ICC]	- [Without ICC]	-	-
77	W	- [With ICC]	- [Without ICC]	-	-
78	R	- [With ICC]	- [Without ICC]	-	-
79	W	- [With ICC]	- [Without ICC]	-	-
80	SB	- [With ICC]	- [Without ICC]	-	-
81	SB	-	-	-	-
82	SB	-	-	-	-
83	V	-	-	-	-
84	G	-	-	-	-
85	L	-	-	-	-
86	P	-	-	-	-
87	W	-	-	-	-
89	GR	-	-	-	-
90	SHIELD	-	-	-	-
91	W	-	-	-	-
92	Y	-	-	-	-
93	BR	-	-	-	-
94	P	-	-	-	-
95	GR	-	-	-	-
97	L	-	-	-	-
98	SHIELD	-	-	-	-
99	V	-	-	-	-
100	SB	-	-	-	-

Connector No. M7
 Connector Name WIRE TO WIRE
 Connector Type TH80MW-CS1E-TM4

Terminal No.	Color Of Wire	Signal Name [Specification]
3	SB	- [With automatic drive positioner] - [Without automatic drive positioner]
5	G	-
6	BG	-
7	W	-
8	B	-
11	V	-
12	SB	-
13	LG	-
14	Y	-
15	G	-
16	B	-
17	W	-
18	SB	-
19	LG	-
20	BR	-
21	SHIELD	-
22	Y	-
24	V	-
25	G	-
26	Y	-
27	B	- [With NAVI] - [Without NAVI]
28	W	-
29	B	- [With NAVI] - [Without NAVI]
30	R	- [With NAVI]
31	L	-
32	P	- [Without Blind Spot Warning] - [With Blind Spot Warning]
33	Y	-
34	L	-
35	P	-
36	L	-
37	P	-
38	P	-
39	Y	-
40	SB	-
41	SB	-
42	GR	-
43	GR	-
44	LG	-
45	LG	-
46	LG	-
47	SB	-
48	BG	-
49	R	-
50	L	-
60	P	-
61	L	-
62	SHIELD	-

63	R	-
64	G	-
65	SHIELD	-
66	SB	-
67	V	-
68	LG	-
69	SHIELD	-
70	W	-
73	G	-
74	R	-
75	W	-
76	W	-
77	B	-
78	B	-
79	GR	-
83	BG	-
85	LG	-
86	R	-
87	Y	-
88	W	-
89	BR	-
90	BG	-
91	G	-
92	V	-
93	BR	-
94	V	-
95	Q	-
96	Q	-
98	W	-
99	R	-

Connector No. M24
 Connector Name DATA LINK CONNECTOR
 Connector Type BDI6FW

Terminal Color Of Wire Signal Name [Specification]

No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-

AUTO LIGHT SYSTEM

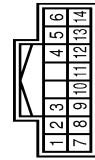
< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

AUTO LIGHT SYSTEM

7	V	-
8	G	-
11	SB	-
14	P	-
16	Y	-

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH18FW-NH



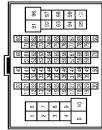
Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	SB	OUTPUT 4
3	GR	FR WASHER(+)
4	G	IGN
5	L	OUTPUT 3
7	V	GROUND
8	BG	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	INPUT 1
12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

Connector No.	M84
Connector Name	OPTICAL SENSOR
Connector Type	TM03FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	POWER
2	P	OUTPUT
3	B	GROUND

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CS18-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	GR	-
4	SB	-
7	W	-
10	W	-
15	SB	-
16	GR	-
18	W	-
26	BR	-
27	LG	-
28	Y	-
29	Y	-
30	V	-
31	R	-

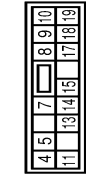
32	BR	-
33	G	-
51	R	-
55	W	-
56	B	-
57	R	-
58	G	-
59	SHIELD	-
60	V	-
61	LG	-
62	BR	-
63	L	-
64	LG	-
65	B	-
66	W	-
67	W	-
68	SHIELD	-
69	V	-
70	Y	-
71	SB	-
72	W	-
73	G	-
75	W	-
80	V	-
81	SB	-
82	V	-
83	R	-
84	R	-
85	L	-
86	BG	-
87	L	-
88	P	-
91	V	-
92	G	-
94	G	-
95	W	-
96	G	-
97	Y	-
98	BR	-
99	P	-
99	V	-
100	SB	-

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (E/L)
2	W	POWER WINDOW POWER SUPPLY(BAT)
3	Y	POWER WINDOW POWER SUPPLY(VRAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS18FW-DS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID LOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (FUSE)
12	B	GROUND
13	V	GROUND
14	V	GROUND
15	V	PUSH-BUTTON ON SW L11 GND
16	V	PUSH-BUTTON ON SW L12 GND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT

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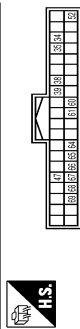
AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

AUTO LIGHT SYSTEM

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
34	SB	LUGGAGE ROOM ANT+
35	V	LUGGAGE ROOM ANT-
38	B	BACK DOOR ANT+
39	W	BACK DOOR ANT-
47	Y	IGN RELAY (P/D/L/R) CONT
52	SB	STARTER RELAY CONT
60	BR	PUSH SW
61	W	BACK DOOR OPENER REQUEST SW
64	V	T-KEY WARN BUZZER (ENG ROOM)
65	EG	REAR WIPER STOP POSITION
66	R	BACK DOOR SW
67	GR	BACK DOOR OPENER SW
68	BR	REAR TR L DOOR SW
69	R	REAR TR R DOOR SW

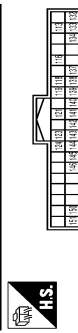
Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 -
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+

78	Y	ROOM ANT1 -
79	BR	ROOM ANT1 +
80	GR	MATS ANT AMP
81	W	MATS ANT AMP
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL CONT
93	V	IGN IND CONT
94	Y	PURGE RELAY CONT
95	EG	ACC RELAY CONT
96	GR	A/T SHIFT SELECTOR POWER SUPPLY
88	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

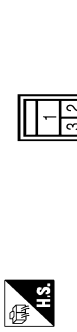
Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
113	SB	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND

137	BG	RECEIVER/SENSOR GND
138	Y	RECEIVER/SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SHIFT N/P
141	G	SECURITY IND LAMP CONT
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M125
Connector Name	WIRE TO WIRE
Connector Type	M03FW-LC



Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03MW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	
2	Y	
3	R	

Connector No.	M351
Connector Name	JOINT CONNECTOR-M04
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	EG	
2	B	
3	P	
4	L	
6	B	
7	P	
8	L	
10	W	
11	P	
12	L	
14	B	
15	P	
17	V	
18	B	
19	P	
20	L	
21	V	
22	B	
23	P	
24	L	

AUTO LIGHT SYSTEM

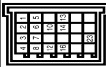
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[HALOGEN TYPE]

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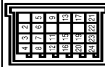
AUTO LIGHT SYSTEM

Connector No.	M351
Connector Name	JOINT CONNECTOR-M09
Connector Type	NH24FG-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	BG	-
3	B	-
4	L	-
5	R	-
6	BG	-
7	B	-
8	L	-
10	B	-
12	L	-
13	BR	-
14	BG	-
16	G	-
23	B	-

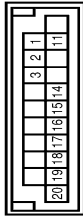
Connector No.	M360
Connector Name	JOINT CONNECTOR-M05
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-

8	L	-
9	BR	-
11	P	-
12	L	-
13	BR	-
15	P	-
16	L	-
17	V	-
19	P	-
20	L	-
21	V	-
22	G	-
23	P	-
24	L	-

Connector No.	M382
Connector Name	JOINT CONNECTOR-M13
Connector Type	NH26FW-DC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	Y	-
3	Y	-
11	B	-
14	B	-
15	B	-
16	SHIELD	-
17	SHIELD	-
18	SHIELD	-
19	B	-
20	SHIELD	-

DAYTIME RUNNING LIGHT SYSTEM

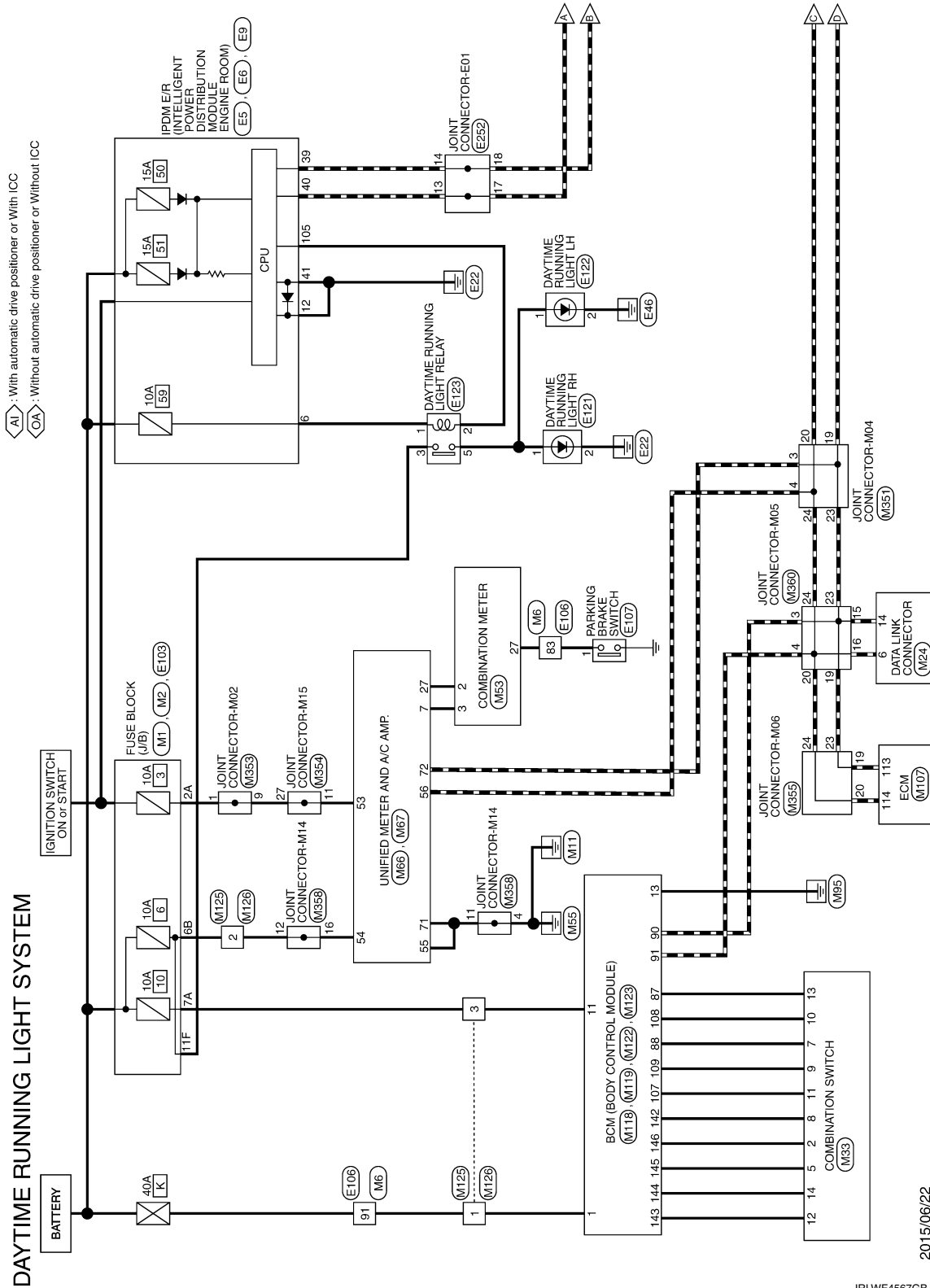
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[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Wiring Diagram - DAYTIME LIGHT SYSTEM -

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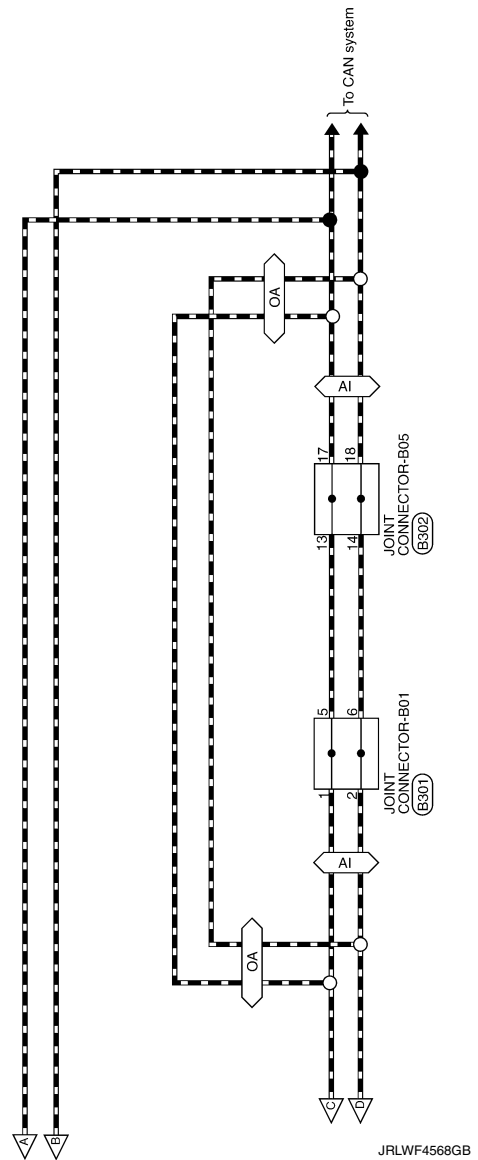
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DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]



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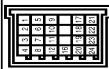
DAYTIME RUNNING LIGHT SYSTEM

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[HALOGEN TYPE]

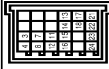
DAYTIME RUNNING LIGHT SYSTEM

Connector No.	E301
Connector Name	JOINT CONNECTOR-B01
Connector Type	NH24FB-J



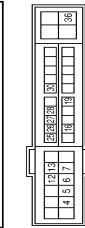
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	SB	-
4	LG	-
5	L	-
6	P	-
7	SB	-
8	LG	-
9	L	-
10	P	-
11	SB	-
12	LG	-
13	L	-
14	P	-
15	SB	-
16	Y	-
17	B	-
18	Y	-
19	B	-
20	SB	-
21	R	-
22	Y	-
23	B	-
24	SB	-

Connector No.	B302
Connector Name	JOINT CONNECTOR-B05
Connector Type	NH24FG-J



Terminal No.	Color Of Wire	Signal Name [Specification]
3	Y	-
4	L	-
7	Y	-
8	L	-
11	Y	-
12	L	-
13	L	-
14	P	-
15	Y	-
16	L	-
17	L	-
18	L	-
19	L	-
20	P	-
21	L	-
22	P	-
23	Y	-
24	L	-

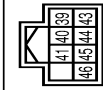
Connector No.	E5
Connector Name	IPM E: INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20PW-CS12-IM-1V



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

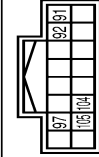
7	R	-
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	BG	-
28	L	-
30	GR	-
36	G	-

Connector No.	E6
Connector Name	IPM E: INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20PW-NH



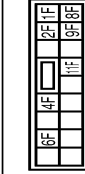
Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-
46	R	-

Connector No.	E9
Connector Name	IPM E: INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH18FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
81	P	-
82	BG	-
97	V	-
104	LG	-
105	SB	-

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
11F	W	-
1F	SB	-
2F	W	-
4F	G	-
8F	BR	-
9F	R	-

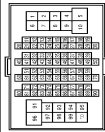
DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TR80FW-C516-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BE	-
2	W	-
3	B	-
4	GR	-
5	G	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-
13	L	-
14	B	-
15	P	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	V	-
23	G	-
24	P	-
25	Y	-
26	V	-
27	W	-
28	G	-
29	W	-
30	M	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-

41	W	-
42	G	-
43	BR	-
45	W	-
46	L	-
50	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
63	W	-
64	B	-
65	G	-
66	R	-
67	SHIELD	-
68	Y	-
69	LG	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	-
74	L	- [Without LCC]
75	G	- [With LCC]
75	W	- [Without LCC]
76	W	- [With LCC]
76	Y	- [Without LCC]
77	P	-
77	R	- [With LCC]
78	BR	- [Without LCC]
78	L	- [With LCC]
79	L	- [Without LCC]
79	Y	- [With LCC]
80	SB	-
81	R	-
82	SB	-
83	BG	-
84	G	-
85	L	-
86	F	-
87	V	-
88	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-

95	BG	-
96	P	-
97	R	-
98	SHIELD	-
99	L	-
100	P	-

Connector No.	E107
Connector Name	PARKING BRAKE SWITCH
Connector Type	TB01FW



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

Connector No.	E121
Connector Name	DAYTIME RUNNING LIGHT RH
Connector Type	FR02FB



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

Connector No.	E122
Connector Name	DAYTIME RUNNING LIGHT LH
Connector Type	FR02FB



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

Connector No.	E123
Connector Name	DAYTIME RUNNING LIGHT RELAY
Connector Type	MS02FL-M2-LG



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	SB	-
3	W	-
5	BG	-

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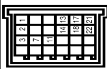
DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	E232
Connector Name	JOINT CONNECTOR-ED
Connector Type	NH4ZFW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	GR	-
7	GR	-
11	GR	-
13	L	-
14	P	-
17	L	-
18	P	-
21	L	-
22	P	-

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



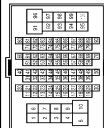
Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
3B	P	-
4B	G	-
5B	BG	-
6B	Y	-
7B	P	-
8B	R	-
9B	SB	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TR80MR-CS (E-TM)

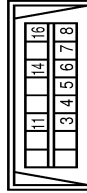


Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	- [With NAVI]
1	Y	- [Without NAVI]
2	B	- [Without NAVI]
3	R	- [Without NAVI]
3	B	- [With NAVI]
3	G	- [Without NAVI]
4	SHIELD	-
5	G	-
6	R	-
7	W	-
8	Y	-
9	BR	-
10	R	-

11	BR	-
12	BG	-
13	L	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	Y	-
23	P	-
24	BR	-
25	SB	-
26	V	-
27	G	-
28	G	-
31	L	-
32	G	-
33	B	-
34	W	-
35	R	-
36	SHIELD	-
37	V	-
38	BG	-
39	BR	-
40	Y	-
42	BG	-
43	BG	-
45	W	-
46	L	-
50	P	-
51	BR	-
54	Y	-
57	G	-
59	W	-
60	L	-
61	G	-
62	SB	-
63	G	-
64	B	-
65	W	-
66	R	-
67	SHIELD	-
68	Y	-
69	GR	-
70	LG	-
71	LG	-
72	Y	-
73	SB	-

74	BR	- [With LCC]
74	L	- [Without LCC]
75	G	-
76	GR	- [Without LCC]
76	W	- [With LCC]
77	P	- [Without LCC]
77	R	- [With LCC]
78	L	- [Without LCC]
78	R	- [With LCC]
79	W	- [Without LCC]
79	Y	- [With LCC]
80	SB	-
81	SB	-
82	SB	-
83	V	-
84	G	-
85	L	-
86	P	-
87	W	-
89	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	BR	-
94	P	-
95	GR	-
97	Y	-
88	SHIELD	-
89	V	-
100	SB	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-

DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	TH4QFW-NH



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
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Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BATTERY POWER SUPPLY
2	LG	COMMUNICATION SIGNAL (METER->METER)
3	GR	COMMUNICATION SIGNAL (METER->METER)
4	GR	GROUND
5	P	ALTERNATOR SIGNAL
6	BR	AIR BAG SIGNAL
7	GR	SECURITY SIGNAL
10	G	GROUND
15	B	GROUND
16	B	METER CONTROL SWITCH GROUND
19	B	ILL GND
20	R	ILL
21	BG	GROUND
22	B	GROUND
23	BR	COMMUNICATION SIGNAL (METER->METER)
24	X	COMMUNICATION SIGNAL (METER->LCD)
25	R	VEHICLE SPEED SIGNAL (R-PULSE)
26	V	PARKING BRAKE SWITCH SIGNAL
27	R	VEHICLE SPEED SIGNAL
28	W	SEAT BELT SWITCH SIGNAL (DRIVER SIDE)
29	SB	SEAT BELT SWITCH SIGNAL (PASSENGER SIDE)
30	G	WASHER LEVEL SWITCH SIGNAL
31	L	ILLUMINATION CONTROL SIGNAL
33	B	SELECT SWITCH SIGNAL
36	LG	ENTER SWITCH SIGNAL
37	SB	ENTER SWITCH SIGNAL
38	L	TRIP A/B RESET SWITCH SIGNAL
39	P	ILLUMINATION CONTROL SWITCH SIGNAL (C)
40	BG	ILLUMINATION CONTROL SWITCH SIGNAL (D)

Connector No.	M66
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH4QFW-NH



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
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Terminal No.	Color Of Wire	Signal Name [Specification]
5	GR	MANUAL MODE SHIFT UP SIGNAL
7	GR	COMMUNICATION SIGNAL (AMP->METER)
8	L	VEHICLE SPEED SIGNAL (2-PULSE)
9	SB	SEAT BELT SWITCH SIGNAL (DRIVER SIDE)
10	W	MANUAL MODE SIGNAL
11	G	NON-MANUAL MODE SIGNAL
14	BR	COMMUNICATION SIGNAL (LCD->AMP)
20	L	IGN ON/OFF SIGNAL
23	Y	AT SNOW SWITCH SIGNAL
25	V	MANUAL MODE SHIFT DOWN SIGNAL
27	LG	COMMUNICATION SIGNAL (METER->AMP)
28	R	VEHICLE SPEED SIGNAL (R-PULSE)
30	V	PARKING BRAKE SWITCH SIGNAL
34	Y	COMMUNICATION SIGNAL (AMP->METER)
35	P	BLOWER MOTOR CONTROL SIGNAL

46	BG	SUNLOAD SENSOR SIGNAL
47	G	EMERGENCY flasher indicator sensor signal
53	G	IGNITION POWER SUPPLY
54	Y	BATTERY POWER SUPPLY
55	B	GROUND
56	L	CAN-H
57	W	BRAKE FLUID LEVEL SWITCH SIGNAL
58	BR	FUEL LEVEL SENSOR GROUND
59	GR	INTAKE SENSOR GROUND
60	L	IN-VEHICLE SENSOR GROUND
61	BR	AMBIENT SENSOR GROUND
62	SB	SUNLOAD SENSOR GROUND
63	R	ECV SIGNAL
64	BG	A/C CAN SIGNAL
69	R	EACH DOOR MOTOR POWER SUPPLY
70	R	GROUND
71	B	CAN-L
72	P	GROUND

Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	SB	OUTPUT 4
3	GR	FR WASHER(+)
4	G	IGN
8	B	OUTPUT 3
9	V	INPUT 3
10	BG	OUTPUT 5
11	Y	INPUT 2
12	LG	INPUT 1
13	BR	OUTPUT 1
14	G	OUTPUT 2

Connector No.	M107
Connector Name	ECM
Connector Type	Br24FGY-R2R-R-LH-Z



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
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Terminal No.	Color Of Wire	Signal Name [Specification]
97	R	ACCELERATOR PEDAL POSITION SENSOR 1
98	P	ACCELERATOR PEDAL POSITION SENSOR 2 (With ICC)
98	Y	ACCELERATOR PEDAL POSITION SENSOR 2 (Without ICC)
99	O	SENSOR POWER SUPPLY (With ICC)
99	L	SENSOR POWER SUPPLY (Without ICC)
100	W	SENSOR GROUND
101	SB	ASD/DO STEERING SWITCH
102	CG	SENSOR POWER SUPPLY (With ICC)
103	O	SENSOR POWER SUPPLY (Without ICC)
104	BR	SENSOR GROUND (With ICC)
104	GR	SENSOR GROUND (Without ICC)
105	L	REFRIGERANT PRESS SENSOR
106	W	FUEL TANK TEMPERATURE SENSOR
107	BG	SENSOR POWER SUPPLY
108	Y	SENSOR GROUND

Connector No.	M67
Connector Name	UNIFIED METER AND A/C AMP.
Connector Type	TH3ZPW-NH



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
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Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	ACC POWER SUPPLY
42	Y	FUEL LEVEL SENSOR SIGNAL
43	R	INTAKE SENSOR SIGNAL
44	LG	IN-VEHICLE SENSOR SIGNAL
45	P	AMBIENT SENSOR SIGNAL

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DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM


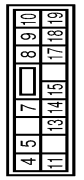
Terminal No.	Color Of Wire	Signal Name [Specification]
109	G	PMP SIGNAL
110	R	ENGINE SPEED OUTPUT SIGNAL
112	V	SENSOR GROUND
113	P	CAN COMMUNICATION LINE
114	L	CAN COMMUNICATION LINE
117	V	DATA LINK CONNECTOR
121	LG	EVAP CANISTER VENT CONTROL VALVE
122	P	STOP LAMP SWITCH
123	B	ECM GROUND
124	B	ECM GROUND
125	R	POWER SUPPLY FOR ECM
126	BR	ASCD/EC BRAKE SWITCH
127	P	ECM GROUND
128	B	ECM GROUND

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC






Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	W	POWER WINDOW POWER SUPPLY(BAT)
3	Y	POWER WINDOW POWER SUPPLY(BRAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	H01BFW-CS

Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GROUND
14	W	PUSH-BUTTON IGNITION SW ILL OND
15	V	ACD IND
16	W	TURNSIGNAL LH (FRONT)
18	BG	TURNSIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT



Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANTZ -
73	G	ROOM ANTZ +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	WATS ANT AMP
81	W	WATS ANT
82	R	IGN RELAY (F/L) CONT
83	X	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL CONT
93	V	ON IND
94	Y	PUDDLE LAMP CONT

95	BG	ACC RELAY CONT
98	GR	A/T SHIFT SELECTOR POWER SUPPLY
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
112	B	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	W	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	BG	RECEIVER SENSOR OND
138	Y	RECEIVED SENSOR POWER SUPPLY
139	L	THE PRESSURE RECEIVER COMM
140	GR	SECURITY IND LAMP CONT
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M125
Connector Name	WIRE TO WIRE
Connector Type	M03FW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03MM-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

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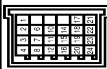
DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

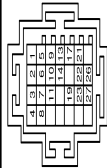
DAYTIME RUNNING LIGHT SYSTEM

Connector No.	M351
Connector Name	JOINT CONNECTOR-M04
Connector Type	NH24FW-J



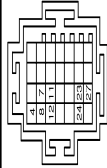
Terminal No.	Color Of Wire	Signal Name [Specification]
1	BG	-
2	B	-
3	P	-
4	L	-
6	B	-
7	P	-
8	L	-
10	W	-
11	P	-
12	L	-
14	B	-
15	P	-
16	V	-
18	B	-
19	P	-
20	L	-
21	V	-
22	B	-
23	P	-
24	L	-

Connector No.	M353
Connector Name	JOINT CONNECTOR-M02
Connector Type	SGA28FDG7-J



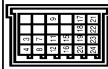
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	R	-
3	V	-
4	BG	-
5	G	-
6	R	-
7	V	-
8	BG	-
9	G	-
10	R	-
11	V	-
13	W	-
14	R	-
15	W	-
16	V	-
21	W	-
22	V	-
23	V	-
26	R	-
27	G	-

Connector No.	M354
Connector Name	JOINT CONNECTOR-M15
Connector Type	SGA28FDG7-J



Terminal No.	Color Of Wire	Signal Name [Specification]
4	W	-
7	W	-
8	B	-
11	G	-
12	B	-
23	W	-
24	B	-
27	G	-

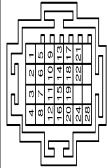
Connector No.	M355
Connector Name	JOINT CONNECTOR-M06
Connector Type	NH24FT-J



Terminal No.	Color Of Wire	Signal Name [Specification]
3	P	-
4	L	-
7	P	-
8	L	-
9	B	-
11	P	-
12	L	-
15	P	-
16	L	-
17	P	-
18	V	-
19	P	-

20	L	-
21	P	-
22	V	-
23	P	-
24	L	-

Connector No.	M358
Connector Name	JOINT CONNECTOR-M14
Connector Type	SGA28FSB-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	- [Without BOSE system]
1	V	- [With BOSE system]
2	LG	- [With BOSE system]
2	R	- [Without BOSE system]
3	B	-
4	B	-
5	BY	- [Without BOSE system]
5	V	- [With BOSE system]
6	LG	- [With BOSE system]
6	R	- [Without BOSE system]
7	B	-
8	B	-
9	L	-
10	W	-
11	B	-
12	Y	-
13	L	-
14	W	-
15	BR	-
16	Y	-
17	W	-
18	W	-
19	BR	-
20	BR	-
21	L	-
22	W	-
24	BR	-
28	BR	-

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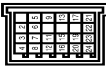
DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	M360
Connector Name	JOINT CONNECTOR-M36
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-
8	L	-
9	BR	-
11	P	-
12	L	-
13	BR	-
18	P	-
17	V	-
19	P	-
20	L	-
21	V	-
22	G	-
23	P	-
24	L	-

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FRONT FOG LAMP SYSTEM

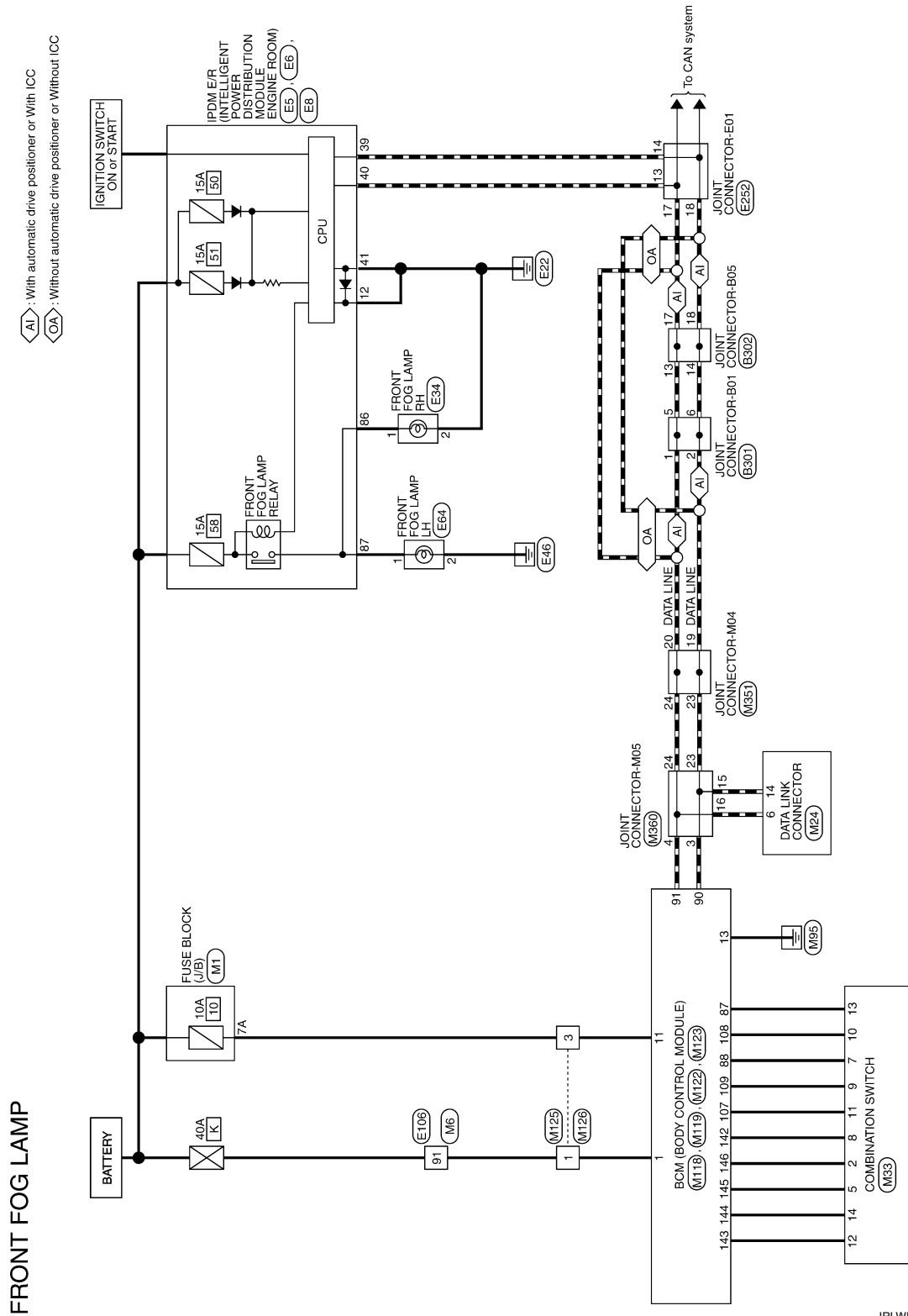
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[HALOGEN TYPE]

FRONT FOG LAMP SYSTEM

Wiring Diagram - FRONT FOG LAMP -

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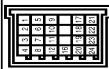
FRONT FOG LAMP SYSTEM

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[HALOGEN TYPE]

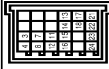
FRONT FOG LAMP

Connector No.	E330
Connector Name	JOINT CONNECTOR-B01
Connector Type	NH24FB-J



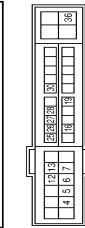
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	SB	-
4	LG	-
5	L	-
6	P	-
7	SB	-
8	LG	-
9	L	-
10	P	-
11	SB	-
12	LG	-
13	L	-
14	P	-
15	SB	-
16	Y	-
17	B	-
18	Y	-
19	B	-
20	SB	-
21	R	-
22	Y	-
23	B	-
24	SB	-

Connector No.	B302
Connector Name	JOINT CONNECTOR-B05
Connector Type	NH24FG-J



Terminal No.	Color Of Wire	Signal Name [Specification]
3	Y	-
4	L	-
7	Y	-
8	L	-
11	Y	-
12	L	-
13	L	-
14	P	-
15	Y	-
16	L	-
17	L	-
18	P	-
19	L	-
20	P	-
21	R	-
22	B	-
23	Y	-
24	L	-

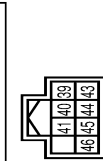
Connector No.	E5
Connector Name	FROM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20PW-CS12-IM-1V



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

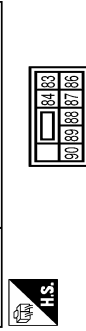
7	R	-
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	BG	-
28	L	-
30	GR	-
36	G	-

Connector No.	E6
Connector Name	FROM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20PW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-
46	R	-

Connector No.	E8
Connector Name	FROM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	NS20FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
83	EG	-
84	V	-
86	W	-
87	L	-
88	GR	-
89	BR	-
90	P	-

Connector No.	E34
Connector Name	FRONT FOG LAMP RH
Connector Type	FH202FB



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

FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

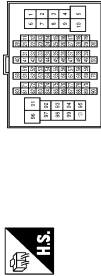
FRONT FOG LAMP

Connector No.	E54
Connector Name	FRONT FOG LAMP LH
Connector Type	FH202FB



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

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-C516-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	GR	-
5	GR	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	SG	-
11	SB	-
12	B/G	-
13	L	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	V	-

20	B/G	-
21	L	-
22	V	-
23	Y	-
24	P	-
25	Y	-
26	V	-
27	W	-
28	G	-
31	B/G	-
32	W	-
33	B	-
34	R	-
35	G	-
37	SHIELD	-
38	V	-
39	BR	-
41	W	-
42	G	-
43	BR	-
45	W	-
49	L	-
50	P	-
51	L	-
54	B/G	-
57	BR	-
60	L	-
61	G	-
62	SB	-
63	W	-
64	B	-
65	G	-
66	R	-
67	SHIELD	-
68	Y	-
69	LG	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	-
75	L	-
76	W	-
77	P	-

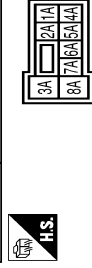
78	BR	-
79	L	-
80	SB	-
81	R	-
82	SB	-
83	B/G	-
84	G	-
85	L	-
86	P	-
87	V	-
88	GR	-
89	SHIELD	-
90	V	-
92	V	-
93	V	-
94	LG	-
95	B/G	-
96	P	-
97	R	-
98	SHIELD	-
99	L	-
100	P	-

Connector No.	E252
Connector Name	JOINT CONNECTOR-E01
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	B	-
3	GR	-
7	GR	-
11	GR	-
13	L	-
14	P	-
17	L	-
18	P	-
21	L	-

Connector No.	MT
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FM-M2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-C516-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	B	-
3	B	-
4	SHIELD	-
5	G	-
6	R	-

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EXL

FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

FRONT FOG LAMP

7	W	-	-	-	-
8	Y	-	-	-	-
9	BR	-	-	-	-
10	R	-	-	-	-
11	BR	-	-	-	-
12	BG	-	-	-	-
13	L	-	-	-	-
14	R	-	-	-	-
15	P	-	-	-	-
16	V	-	-	-	-
17	SB	-	-	-	-
18	V	-	-	-	-
19	BG	-	-	-	-
20	L	-	-	-	-
21	W	-	-	-	-
22	W	-	-	-	-
23	P	-	-	-	-
24	BR	-	-	-	-
25	Y	-	-	-	-
26	V	-	-	-	-
27	G	-	-	-	-
28	G	-	-	-	-
31	L	-	-	-	-
32	G	-	-	-	-
33	B	-	-	-	-
34	W	-	-	-	-
35	SHIELD	-	-	-	-
37	V	-	-	-	-
38	BG	-	-	-	-
39	BR	-	-	-	-
41	W	-	-	-	-
42	BG	-	-	-	-
43	BG	-	-	-	-
45	W	-	-	-	-
49	L	-	-	-	-
50	P	-	-	-	-
51	BR	-	-	-	-
54	Y	-	-	-	-
57	G	-	-	-	-
58	W	-	-	-	-
60	G	-	-	-	-
61	G	-	-	-	-
62	SB	-	-	-	-
63	B	-	-	-	-
64	B	-	-	-	-
65	W	-	-	-	-
66	R	-	-	-	-
67	SHIELD	-	-	-	-
68	Y	-	-	-	-
69	GR	-	-	-	-

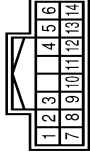
70	LG	-	-	-	-
71	LG	-	-	-	-
72	Y	-	-	-	-
73	SB	-	-	-	-
74	BR	-	-	-	-
75	L	-	-	-	-
76	GR	-	-	-	-
76	W	-	-	-	-
77	P	-	-	-	-
77	R	-	-	-	-
78	L	-	-	-	-
78	R	-	-	-	-
79	W	-	-	-	-
79	X	-	-	-	-
80	SB	-	-	-	-
81	SB	-	-	-	-
82	SB	-	-	-	-
83	V	-	-	-	-
84	G	-	-	-	-
85	L	-	-	-	-
86	P	-	-	-	-
87	W	-	-	-	-
89	GR	-	-	-	-
90	SHIELD	-	-	-	-
91	W	-	-	-	-
92	W	-	-	-	-
93	BR	-	-	-	-
94	P	-	-	-	-
95	GR	-	-	-	-
96	W	-	-	-	-
97	L	-	-	-	-
98	SHIELD	-	-	-	-
99	V	-	-	-	-
100	SB	-	-	-	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD18FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	LG	-
3	LG	-
4	B	-
5	B	-
6	L	-
7	V	-
8	G	-
11	SB	-
14	P	-
16	Y	-

Connector No.	M23
Connector Name	COMBINATION SWITCH
Connector Type	1H18FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	SB	FR WASHER(+)
3	GR	FR WASHER(+)
4	G	IGN
5	L	OUTPUT 3
6	B	GROUND
7	V	INPUT 3
8	BG	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	INPUT 1

12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F.L)
2	W	POWER WINDOW POWER SUPPLY(BAT)
3	Y	POWER WINDOW POWER SUPPLY(RAP)

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS18FP-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GROUND
14	W	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)

FRONT FOG LAMP SYSTEM

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

FRONT FOG LAMP

Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANTZ -
73	G	ROOM ANTZ +
74	SB	PASSENGER DOOR ANTI-
75	GR	PASSENGER DOOR ANTI+
76	V	DRIVER DOOR ANTI-
77	LG	DRIVER DOOR ANTI+
78	Y	ROOM ANTI-
79	BR	ROOM ANTI+
80	GR	HATS ANTI AMP.
81	W	HATS ANTI AMP.
82	Y	IGN RELAY RELAY CONT
83	V	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	CAN-L
90	P	CAN-H
91	L	CAN-H
92	LG	KEY SLOT TILL CONT
93	V	ON IND.
94	Y	PUDDLE LAMP CONT
95	EG	ACC RELAY CONT
96	GR	A/T SHIFT SELECTOR POWER SUPPLY
99	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
112	BF	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND.
137	BG	RECEIVER SENSOR GND
138	Y	RECEIVER SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SECURITY IND LAMP CONT
142	CG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFROGGER RELAY CONT

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03FW-LC

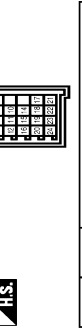


Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	WIRE TO WIRE
2	Y	WIRE TO WIRE
3	R	WIRE TO WIRE



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	WIRE TO WIRE
2	Y	WIRE TO WIRE
3	R	WIRE TO WIRE

Connector No.	M251
Connector Name	JOINT CONNECTOR-M04
Connector Type	MH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	EG	WIRE TO WIRE
2	BF	WIRE TO WIRE
3	P	WIRE TO WIRE
4	L	WIRE TO WIRE
6	B	WIRE TO WIRE
7	P	WIRE TO WIRE
8	L	WIRE TO WIRE
10	W	WIRE TO WIRE
11	P	WIRE TO WIRE
12	L	WIRE TO WIRE
14	B	WIRE TO WIRE
15	P	WIRE TO WIRE
16	L	WIRE TO WIRE
17	B	WIRE TO WIRE
18	B	WIRE TO WIRE
19	P	WIRE TO WIRE
20	L	WIRE TO WIRE
21	V	WIRE TO WIRE
22	B	WIRE TO WIRE
23	P	WIRE TO WIRE
24	L	WIRE TO WIRE

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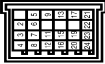

FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

FRONT FOG LAMP

Connector No.	M360
Connector Name	JOINT CONNECTOR-M05
Connector Type	NH24FW-J

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-
8	L	-
9	BR	-
11	P	-
12	L	-
13	BR	-
14	P	-
15	L	-
16	V	-
17	V	-
18	P	-
19	P	-
20	L	-
21	V	-
22	G	-
23	P	-
24	L	-

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TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

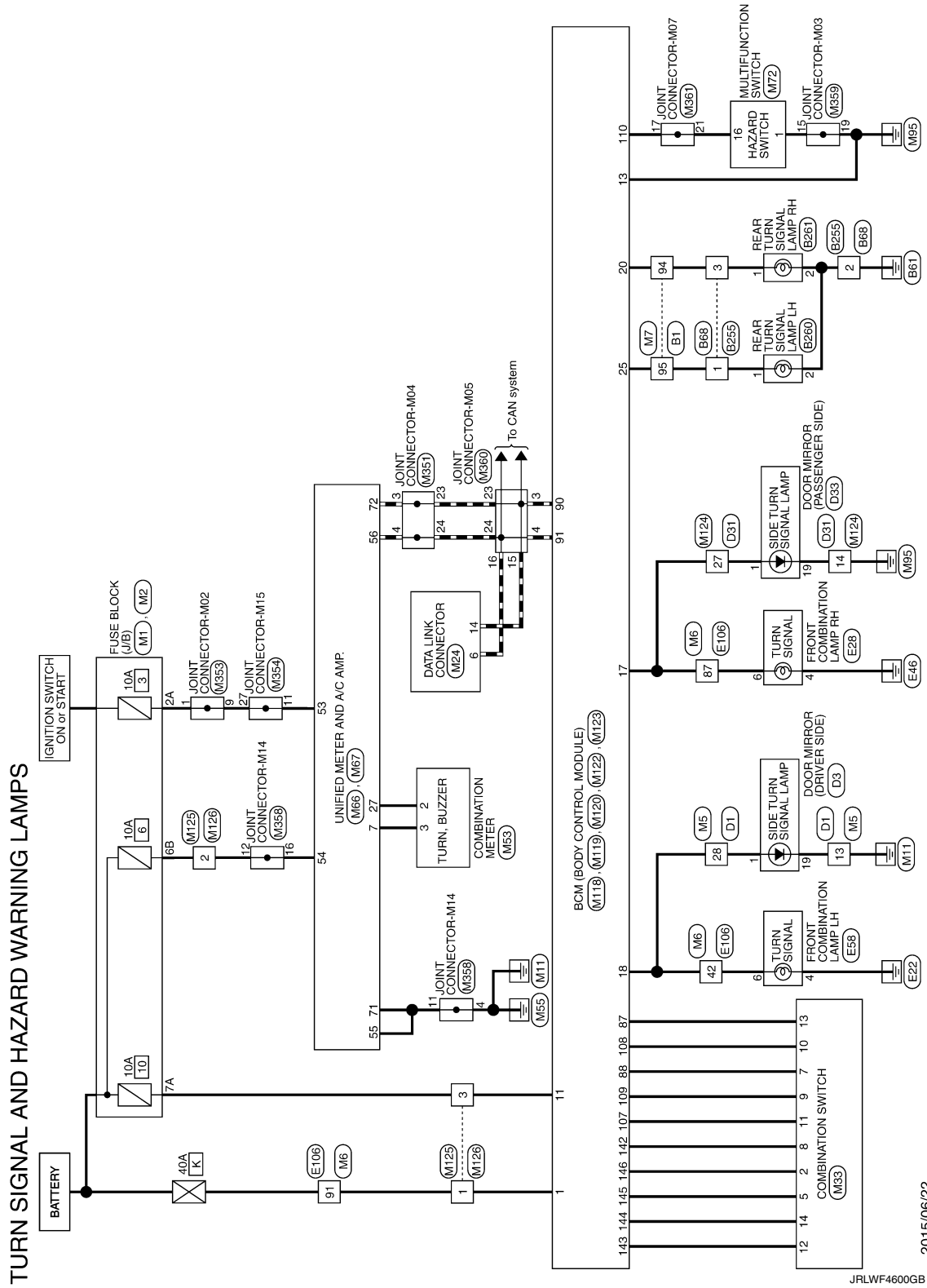
< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

Wiring Diagram - TURN AND HAZARD WARNING LAMPS -

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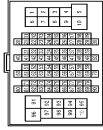
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-
5	G	-
6	SB	-
7	V	-
8	L	-
11	V	-
12	SB	-
13	LG	-
14	GR	-
15	LG	-
16	R	-
17	W	-
18	W	-
19	BR	-
20	BR	-
21	SHIELD	-
22	Y	-
24	P	-
25	G	-
26	Y	-
27	B	- [With NAVI]
27	BR	- [Without NAVI]
28	R	- [With NAVI]
28	W	- [Without NAVI]
29	L	- [With NAVI]
29	L	- [Without NAVI]
30	SHIELD	- [With neutral view monitor]
31	L	- [Without second view monitor]
31	SHIELD	- [With NAVI] [Without Blind Spot Warning]
32	W	- [Without NAVI] [Without Blind Spot Warning]
32	Y	- [With NAVI] [Without Blind Spot Warning]
33	SB	- [With NAVI] [With Blind Spot Warning]
34	L	-
35	P	-

Connector No.	B68
Connector Name	WIRE TO WIRE
Connector Type	RH08MB



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	B	-
3	SB	-
4	R	- [With NAVI]
4	W	- [Without NAVI]
5	Y	-
6	B	-
6	BR	- [With NAVI]
6	BR	- [Without NAVI]
7	L	- [With NAVI]
7	W	- [Without NAVI]
8	G	-

Connector No.	B245
Connector Name	WIRE TO WIRE
Connector Type	RH08FB



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	B	-
3	V	-
4	W	-
5	G	-
6	R	-
7	BR	-
8	BG	-

Connector No.	B260
Connector Name	REAR TURN SIGNAL LAMP LH
Connector Type	HS02FC-W



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

Connector No.	B261
Connector Name	REAR TURN SIGNAL LAMP RH
Connector Type	HS02FC-W



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

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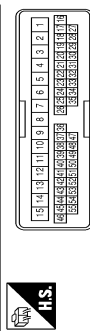
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

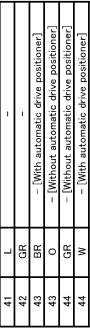
TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	D31
Connector Name	WIRE TO WIRE
Connector Type	TH40FW-CS15



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	—
2	W	—
3	V	—
4	W	—
5	L	—
6	O	—
7	GR	—
8	W	—
9	O	—
10	BR	—
11	P	—
12	LG	—
13	G	—
14	W	—
15	W	—
16	SB	—
17	LG	—
18	SHIELD	—
19	P	—
20	W	—
21	O	—
22	P	—
23	BR	—
24	V	—
25	GR	—
26	V	—
27	BR	—
28	LG	—
29	LG	—
30	G	—
31	W	—
32	G	—
33	L	—
34	SB	—
35	R	—
36	LG	—

37	R	—
38	P	—
39	O	—
40	BR	—
41	L	—
42	GR	—
43	BR	— [With automatic drive positioner]
44	O	— [Without automatic drive positioner]
45	GR	— [With automatic drive positioner]
46	W	— [Without automatic drive positioner]
47	G	— [With automatic drive positioner]
48	V	— [Without automatic drive positioner]
49	V	— [With automatic drive positioner]
50	R	— [Without automatic drive positioner]
51	G	—
52	B	—
53	SB	—
54	O	—
55	Y	—



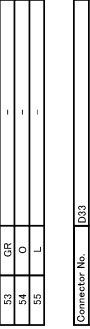
Terminal No.	Color Of Wire	Signal Name [Specification]
7	R	—
8	BR	—
9	V	—
12	P	—
13	P	—
14	B	—
15	B	—
16	BR	—
17	B	—
18	R	—
19	B	—
20	G	— [With around view monitor]
21	BR	— [Without around view monitor]
22	SHIELD	— [With around view monitor]
23	V	— [Without around view monitor]
24	P	—
25	W	—
26	SB	—
27	R	—
28	O	—
33	O	—
34	GR	—
35	G	—
36	R	—
37	G	—
43	Y	—
44	V	—

18	LG	GROUND
19	B	—
21	GR	—
22	BR	—
23	Y	—
24	V	—



Terminal No.	Color Of Wire	Signal Name [Specification]
7	R	—
8	BR	—
9	V	—
12	P	—
13	P	—
14	B	—
15	B	—
16	BR	—
17	B	—
18	R	—
19	B	—
20	G	— [With around view monitor]
21	BR	— [Without around view monitor]
22	SHIELD	— [With around view monitor]
23	V	— [Without around view monitor]
24	P	—
25	W	—
26	SB	—
27	R	—
28	O	—
33	O	—
34	GR	—
35	G	—
36	R	—
37	G	—
43	Y	—
44	V	—

45	P	—
46	W	—
47	SHIELD	—
52	G	—
53	GR	—
54	O	—
55	L	—



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	—
3	W	—
5	G	—
6	R	—
10	G	—
11	GR	—
12	O	—
17	SHIELD	—
18	B	—
19	B	—
21	P	—
22	Y	—
23	W	—
24	V	—

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

EXL

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	E28
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS308FB-PR



Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
5	BG	-
6	V	-
7	BR	-
8	P	-

Connector No.	E28
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS308FB-PR



Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
6	BG	-
7	V	-
8	P	-

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	GR	-
5	GR	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-
13	E	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	V	-
23	G	-
24	P	-
25	Y	-
26	V	-
27	W	-
28	G	-
31	BG	-
32	W	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-

Terminal No.	Color Of Wire	Signal Name [Specification]
41	W	-
42	G	-
43	BR	-
45	W	-
49	L	-
50	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
64	B	-
65	G	-
66	R	-
67	SHIELD	-
68	Y	-
69	LG	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	-
75	L	-
76	W	-
77	P	-
78	BR	-
79	L	-
80	SB	-
81	R	-
82	SB	-
83	BG	-
84	G	-
85	P	-
86	V	-
87	V	-
88	GR	-
89	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-

95	BG	-
96	P	-
97	R	-
98	SHIELD	-
99	L	-
100	P	-

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS361P-M2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	R	-
5A	Y	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS101P-OS



Terminal No.	Color Of Wire	Signal Name [Specification]
3B	P	-
4B	G	-
5B	BG	-
6B	Y	-

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

70	LG	-
71	LG	-
72	Y	-
73	SB	-
74	L	- [With ICC]
75	G	- [Without ICC]
76	GR	- [With ICC]
77	W	- [Without ICC]
78	P	- [With ICC]
79	R	- [Without ICC]
80	SB	- [With ICC]
81	SB	- [Without ICC]
82	SB	-
83	V	-
84	G	-
85	L	-
86	P	-
87	W	-
88	GR	-
89	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	LG	-
94	GR	-
95	GR	-
96	W	-
97	L	-
98	SHIELD	-
99	V	-
100	SB	-

7	W	-
8	Y	-
9	BR	-
10	R	-
11	BR	-
12	BG	-
13	L	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	V	-
19	BG	-
20	BG	-
21	L	-
22	W	-
23	P	-
24	BR	-
25	Y	-
26	V	-
27	G	-
28	G	-
31	L	-
32	G	-
33	B	-
34	W	-
35	R	-
36	SHIELD	-
37	BG	-
38	BG	-
39	BR	-
41	W	-
42	BG	-
43	BG	-
45	W	-
50	P	-
51	BR	-
54	Y	-
57	G	-
59	W	-
60	L	-
61	G	-
62	SB	-
63	G	-
64	B	-
65	W	-
66	R	-
67	SHIELD	-
68	Y	-
69	GR	-

32	BR	-
33	SB	-
34	Y	-
35	P	-
36	LG	-
37	BR	-
38	P	-
39	BG	-
40	SB	-
41	L	-
42	R	-
43	BR	-
44	V	-
45	G	-
46	SB	- [With automatic drive restorer]
47	Y	- [Without automatic drive restorer]
48	R	-
49	P	-
50	SHIELD	-
51	B	-
52	R	-
53	V	-
54	LG	-
55	SB	-

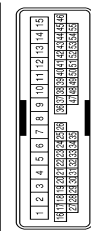
Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MM-CSE(T-M4)



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	- [With NAVI]
2	Y	- [Without NAVI]
3	B	- [With NAVI]
4	R	- [Without NAVI]
5	V	- [With NAVI]
6	G	- [Without NAVI]

76	P	-
86	R	-
96	SB	-

Connector No.	M5
Connector Name	WIRE TO WIRE
Connector Type	TH40MM-CSE15



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	BR	-
4	P	-
5	L	-
6	R	-
7	R	-
8	W	-
9	G	-
10	L	-
11	G	-
12	V	-
13	B	-
14	Y	-
15	W	-
16	R	-
17	B	-
18	SHIELD	-
19	G	-
20	L	-
21	LG	-
22	G	-
23	Y	-
24	GR	-
25	GR	-
26	GR	-
27	W	-
28	V	-
29	Y	-
30	Y	-
31	R	-

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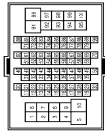
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

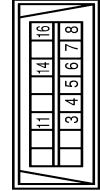
TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS 16-TM4



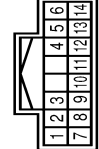
Terminal No.	Color Of Wire	Signal Name [Specification]
3	SB	- [With automatic drive positioner]
4	SB	- [Without automatic drive positioner]
5	G	-
6	BG	-
7	W	-
8	B	-
11	V	-
12	SB	-
13	LG	-
14	Y	-
15	G	-
16	R	-
18	SB	-
19	LG	-
20	BR	-
21	SHIELD	-
22	Y	-
24	V	-
25	G	-
26	Y	-
27	R	- [With NAVI]
27	R	- [Without NAVI]
28	W	-
29	B	- [Without NAVI]
29	B	- [With NAVI]
31	SHIELD	-
32	Y	- [Without Blind Spot Warning]
32	Y	- [With Blind Spot Warning]
33	SB	-
34	L	-
35	P	-
36	L	-
37	P	-
38	P	-

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	BD1BFW



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
7	V	-
8	G	-
11	SB	-
14	P	-
16	Y	-

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH1BFW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	GR	FR WASHER(+)
4	G	IGN
5	L	OUTPUT 3
6	V	GROUND
7	V	INPUT 3
8	BG	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	INPUT 1

12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

Connector No.	M33
Connector Name	COMBINATION METER
Connector Type	TH40FP-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BATTERY POWER SUPPLY
2	LG	COMMUNICATION SIGNAL (METER->AMP)
3	GR	COMMUNICATION SIGNAL (AMP->METER)
5	B	GROUND
6	P	ALTERNATOR SIGNAL
7	BR	AIR BAG SIGNAL
10	G	SECURITY SIGNAL
12	B	TRIP A/B RESET SIGNAL
13	B	METER CONTROL SWITCH GROUND
19	B	ILL GND
20	R	ILL
21	BG	IGNITION SIGNAL
22	B	GROUND
24	BR	COMMUNICATION SIGNAL (LCD->AMP)
25	Y	COMMUNICATION SIGNAL (AMP->LCD)
26	R	VEHICLE SPEED SIGNAL (8-PULSE)
27	V	PARKING BRAKE SWITCH SIGNAL
28	W	BRAKE FLUID LEVEL SWITCH SIGNAL
29	SB	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
30	G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
31	L	WASHER LEVEL SWITCH SIGNAL
32	P	ILLUMINATION CONTROL SWITCH SIGNAL
36	LG	SELECT SWITCH SIGNAL
37	SB	ENTER SWITCH SIGNAL
38	L	TRIP A/B RESET SWITCH SIGNAL
39	P	ILLUMINATION CONTROL SWITCH SIGNAL (-)
40	BG	ILLUMINATION CONTROL SWITCH SIGNAL (+)

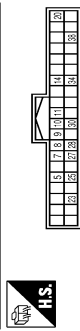
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	M66
Connector Name	UNIFIED METER AND A. C. AMP.
Connector Type	TH40FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
5	L	MANUAL MODE SHIFT UP SIGNAL
7	GR	COMMUNICATION SIGNAL (AMP->METER)
8	L	VEHICLE SPEED SIGNAL (P-PULSE)
9	SB	SEAT BELT BRACKE SWITCH SIGNAL (DRIVER SIDE)
10	W	MANUAL MODE SIGNAL
11	G	NON-MANUAL MODE SIGNAL
14	BR	COMMUNICATION SIGNAL (LCD->AMP.)
20	L	IGN ON/OFF SIGNAL
23	Y	AT SNOW SWITCH SIGNAL
25	V	MANUAL MODE SHIFT DOWN SIGNAL
27	LG	COMMUNICATION SIGNAL (METER->AMP.)
28	R	VEHICLE SPEED SIGNAL (P-PULSE)
30	Y	WARNING BRAKE SWITCH SIGNAL
31	Y	COMMUNICATION SIGNAL (AMP->LCD)
38	P	BLOWER MOTOR CONTROL SIGNAL

Connector No.	M67
Connector Name	UNIFIED METER AND A. C. AMP.
Connector Type	TH42FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	ACC POWER SUPPLY
42	Y	FUEL LEVEL SENSOR SIGNAL
43	R	INTAKE SENSOR SIGNAL
44	LG	IN-VEHICLE SENSOR SIGNAL
45	P	AMBIENT SENSOR SIGNAL

46	BG	SUN/GAS SENSOR SIGNAL
47	G	EXHAUST GAS OXIDIZER DEFECTIVE SENSOR SIGNAL
53	G	IGNITION POWER SUPPLY
54	Y	BATTERY POWER SUPPLY
55	B	GROUND
56	L	CAN-H
57	W	BRAKE FLUID LEVEL SWITCH SIGNAL
58	BR	FUEL LEVEL SENSOR GROUND
59	GR	INTAKE SENSOR GROUND
60	L	IN-VEHICLE SENSOR GROUND
61	BR	AMBIENT SENSOR GROUND
62	SB	SUNLOAD SENSOR GROUND
63	R	EVY SIGNAL
65	LG	A. C. LAN SIGNAL
70	R	EACH DOOR MOTOR POWER SUPPLY
71	B	GROUND
72	P	CAN-L

Connector No.	M7Z
Connector Name	MULTIFUNCTION SWITCH
Connector Type	TH16FW-NH



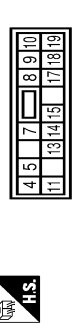
Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
3	V	ACC
4	R	ILL
5	Y	ILL CONT
8	SB	AV COMM (H)
8	LG	AV COMM (L)
9	P	SHF GND
9	Y	DISK SIGNAL
16	G	HAZARD ON

Connector No.	M11B
Connector Name	ECM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (E/L)
2	W	POWER WINDOW POWER SUPPLY (BAT)
3	Y	POWER WINDOW POWER SUPPLY (GRAP)

Connector No.	M119
Connector Name	ECM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS



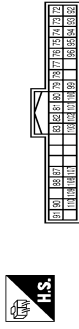
Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	L	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (R/USE)
13	B	GROUND
14	W	ACC IDO
15	W	PUSH-BUTTON ON SW ILL GND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT

Connector No.	M12B
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
20	VY	TURN SIGNAL RH (REAR)
23	G	BACK DOOR OPEN OUTPUT
25	G	TURN SIGNAL LH (REAR)
26	G	REAR WIPER OUTPUT

Connector No.	M12Z
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FE-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	W	ROOM ANT1 -
79	BR	ROOM ANT1 +
80	GR	NAISS ANT AMP
81	W	NAISS ANT AMP
82	R	IGN RELAY (E/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

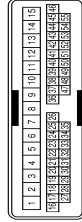
[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

92	LG	KEY SLOT ILL CONT
93	V	ON IND
94	Y	PUDDLE LAMP CONT
95	BG	ACC RELAY CONT
96	GR	A/T SHIFT SELECTOR POWER SUPPLY
98	R	SHIF P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	R	COMBI SW OUTPUT 2
110	G	HAZARD SW

150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFROGGER RELAY CONT

Connector No.	M124
Connector Name	WIRE TO WIRE
Connector Type	TH40MW-CS15



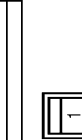
Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND AND
135	GR	RECEIVER SENSOR POWER SUPPLY
137	G	RECEIVER SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SHIF N/P
141	G	SECURITY IND LAMP CONT
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4

52	R	-
53	G	-
54	W	-
55	BG	-

Connector No.	M125
Connector Name	WIRE TO WIRE
Connector Type	MO3FW-LC



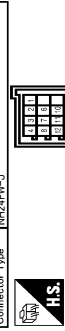
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	MO3MW-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M351
Connector Name	JOINT CONNECTOR-M04
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	EG	-
2	B	-
3	P	-
4	L	-
6	B	-
7	P	-
8	L	-
10	W	-
11	P	-
12	L	-
14	B	-
15	P	-
17	V	-
18	B	-
19	P	-
20	L	-
21	V	-
22	B	-
23	P	-
24	L	-

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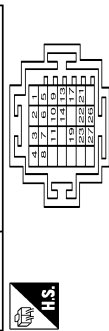
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

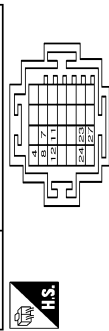
TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	M355
Connector Name	JOINT CONNECTOR-M02
Connector Type	SGA28FD07-J



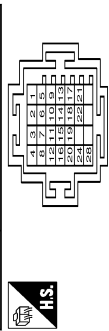
Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	R	-
3	V	-
4	BG	-
5	G	-
6	R	-
7	V	-
8	BG	-
9	G	-
10	R	-
11	V	-
12	R	-
13	B	-
14	W	-
15	W	-
16	W	-
17	W	-
18	W	-
19	W	-
20	R	-
21	V	-
22	R	-
23	V	-
24	R	-
25	R	-
26	R	-
27	G	-

Connector No.	M354
Connector Name	JOINT CONNECTOR-M15
Connector Type	SGA28FD07-J



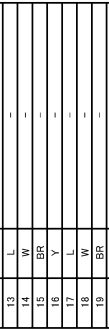
Terminal No.	Color Of Wire	Signal Name [Specification]
4	B	-
7	W	-
8	B	-
11	G	-
12	B	-
23	W	-
24	B	-
27	G	-

Connector No.	M358
Connector Name	JOINT CONNECTOR-M14
Connector Type	SGA28FS8-J

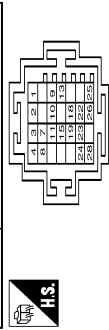


Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	- [Without BOSE system]
1	V	- [With BOSE system]
2	LG	- [Without BOSE system]
2	R	- [With BOSE system]
3	B	-
4	B	-
5	BR	- [Without BOSE system]
5	V	- [With BOSE system]
6	LG	- [Without BOSE system]
6	R	- [With BOSE system]
7	B	-
8	B	-

8	L	-
10	W	-
11	B	-
12	Y	-
13	L	-
14	W	-
15	BR	-
16	Y	-
17	L	-
18	W	-
19	BR	-
20	BR	-
21	L	-
22	W	-
23	BR	-
24	BR	-



Connector No.	M359
Connector Name	JOINT CONNECTOR-M03
Connector Type	SGA28FD07-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	R	-
3	SHIELD	-
4	BG	-
7	SHIELD	-
8	BG	-
9	V	-
10	P	-
11	B	-
12	V	-
13	B	-
18	L	-
19	B	-
22	R	-
23	B	-
24	BG	-
25	V	-
26	L	-

28	BR	-
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Connector No.	M360
Connector Name	JOINT CONNECTOR-M05
Connector Type	NI24EV-J



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-
8	L	-
9	BR	-
11	P	-
12	L	-
13	B	-
14	L	-
16	L	-
17	V	-
19	P	-
20	L	-
21	V	-
22	G	-
23	P	-
24	L	-

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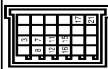
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	M381
Connector Name	JOINT CONNECTOR-M07
Connector Type	NH24FL-J



Terminal No.	Color Of Wire	Signal Name [Specification]
3	B	-
7	B	-
8	R	-
11	B	-
12	R	-
15	R	-
16	Y	-
17	G	-
21	G	-

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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

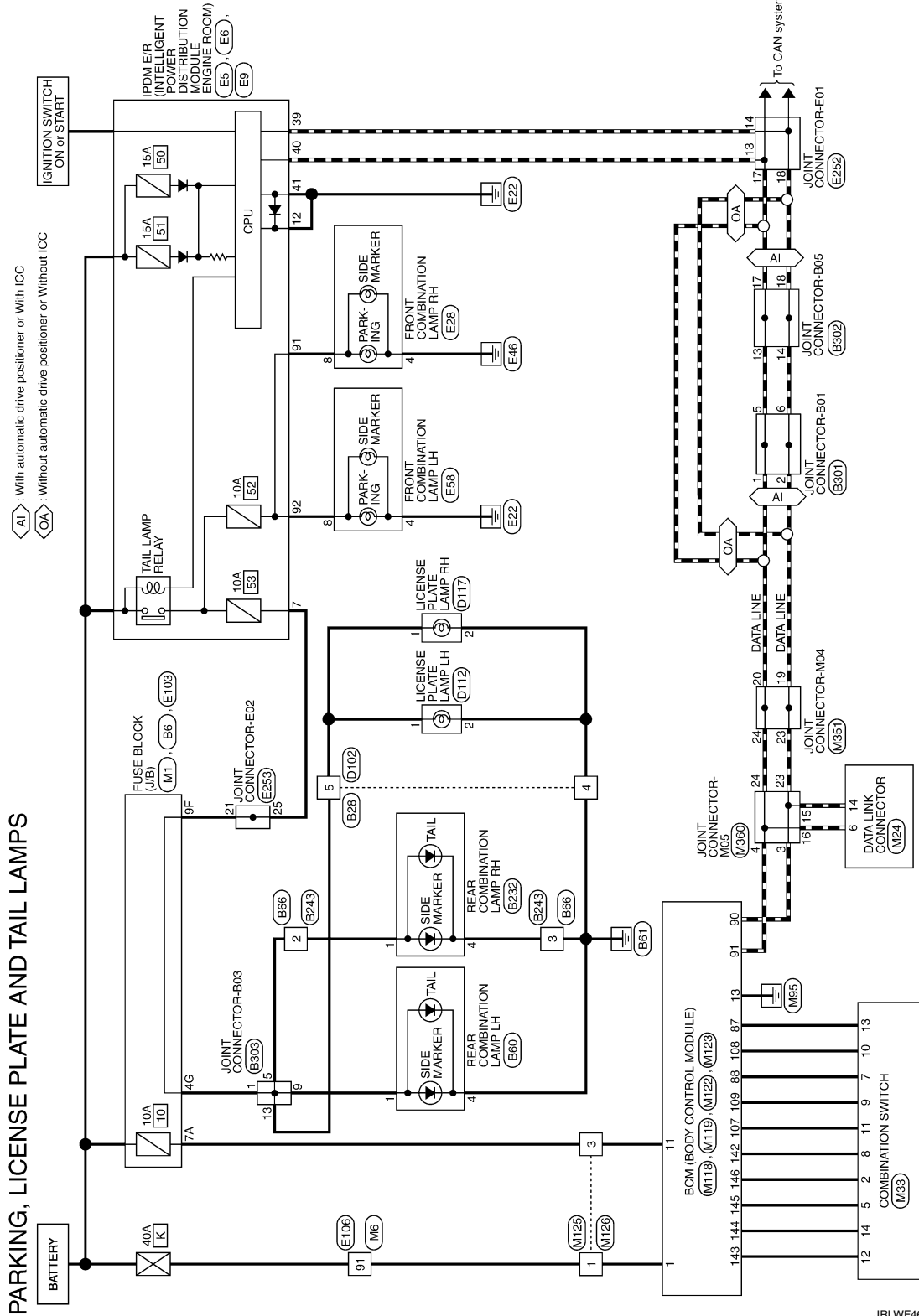
< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

Wiring Diagram - PARKING, LICENSE PLATE AND TAIL LAMPS -

INFOID:000000012751052



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2015/06/22

JRLWF4619GB

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

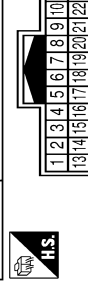
PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	B53
Connector Name	FUSE BLOCK (L/B)
Connector Type	NS1ZFBF-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10G	W	-
11G	W	-
12G	GR	-
4G	R	-
5G	LG	-

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH2MM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
3	W	-
4	B	-
5	R	-
6	LG	-
7	BR	-
8	R	-
14	SHIELD	- [With around view monitor] - [Without around view monitor]
15	B	- [With around view monitor] - [Without around view monitor]
15	Y	- [With around view monitor]
16	W	-
17	L	- [With around view monitor] - [Without around view monitor]
18	SHIELD	-

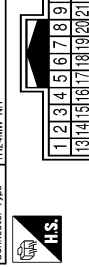
18	LG	-
20	BG	-
21	B	-
22	P	-
23	BR	-
24	R	-

Connector No.	B60
Connector Name	REAR COMBINATION LAMP LH
Connector Type	TH3MM-NH



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

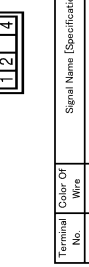
Connector No.	B66
Connector Name	WIRE TO WIRE
Connector Type	TH2MM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	R	-
13	L	-
14	W	-
15	B	-
16	BR	-
17	BG	-

18	P	-
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Connector No.	B232
Connector Name	REAR COMBINATION LAMP RH
Connector Type	TH3MM-NH



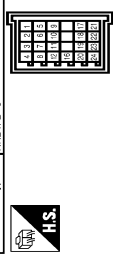
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	LG	-
4	B	-

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH2MM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	B	-
13	L	-
14	W	-
15	GR	-
16	BR	-
17	LG	-
18	L	-

Connector No.	B301
Connector Name	JOINT CONNECTOR-B01
Connector Type	NH24FF-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	P	-
3	SB	-
4	LG	-
5	L	-
6	P	-
7	SB	-
8	LG	-
9	L	-
10	P	-
11	SB	-
12	LG	-
13	SB	-
14	Y	-
18	Y	-
19	B	-
20	SB	-
21	R	-
22	Y	-
23	B	-
24	SB	-

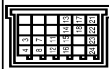
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

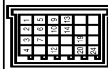
[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	E3292
Connector Name	JOINT CONNECTOR-B03
Connector Type	NH4Z4FG7-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	L	-
3	Y	-
4	L	-
5	Y	-
6	L	-
7	Y	-
8	L	-
9	Y	-
10	L	-
11	Y	-
12	L	-
13	L	-
14	P	-
15	Y	-
16	L	-
17	L	-
18	P	-
21	L	-
22	P	-
23	Y	-
24	L	-



Connector No.	E3303
Connector Name	JOINT CONNECTOR-B03
Connector Type	NH4Z4FG7-J

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

Terminal No.	Color Of Wire	Signal Name [Specification]
5	R	-
6	LG	-
7	BG	-
8	R	-
9	R	-
10	LG	-
12	B	-
13	R	-
14	LG	-
19	V	-
20	B	-
24	B	-

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FEW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	W	-
3	W	-
4	B	-
5	R	-
6	O	-
13	R	-
14	L	- [With around view monitor]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	G	- [With around view monitor]
16	L	- [Without around view monitor]
17	G	- [Without around view monitor]
17	W	- [With around view monitor]
18	SHIELD	- [Without around view monitor]
18	G	- [With around view monitor]
20	G	-
21	V	-
22	P	-
23	BR	-
24	R	-

Connector No.	D112
Connector Name	LICENSE PLATE LAMP LH
Connector Type	TK02FBR



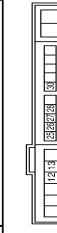
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	B	-

Connector No.	D117
Connector Name	LICENSE PLATE LAMP RH
Connector Type	TK02FBR



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

Connector No.	E5
Connector Name	FROM E IN INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20BFM-CS1Z-M4-1V



Terminal No.	Color Of Wire	Signal Name [Specification]
4	Y	-
5	Y	-
6	R	-
7	R	-
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	BG	-
28	L	-
30	GR	-
36	G	-

Connector No.	E5
Connector Name	FROM E IN INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20BFM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-

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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

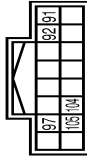
< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

46	R	-
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Connector No.	E9
Connector Name	SMALL INTELLIGENT POWER DISTRIBUTION/MOBILE ENGINE FUSION
Connector Type	TH118FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
91	P	-
92	BG	-
97	V	-
104	LG	-
105	SB	-

Connector No.	E28
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS20FEB-PR



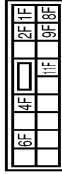
Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
5	BG	-
6	V	-
7	BR	-
8	P	-

Connector No.	E58
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS20FEB-PR



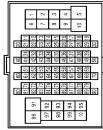
Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
5	V	-
6	G	-
7	P	-
8	BG	-

Connector No.	E103
Connector Name	FUSE BLOCK (L/B)
Connector Type	NS1EFPW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
11F	W	-
1F	SB	-
2F	W	-
4F	BR	-
6F	BR	-
8F	L	-
9F	R	-

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FPW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	B	-
4	GR	-
5	GR	-
6	G	-
7	L	-
8	Y	-
9	BR	-
10	BG	-
11	SB	-
12	BG	-
13	L	-
14	B	-
15	P	-
16	V	-
17	SB	-
18	V	-
20	BG	-
21	L	-
22	V	-
23	G	-
24	P	-
25	Y	-
26	V	-
27	W	-
28	BG	-
32	W	-
33	B	-
34	R	-
35	G	-
36	SHIELD	-
37	V	-
38	BR	-
39	BG	-

41	W	-
42	G	-
43	BR	-
45	W	-
49	L	-
50	P	-
51	L	-
54	BG	-
57	BR	-
59	W	-
60	LG	-
61	G	-
62	SB	-
63	B	-
64	B	-
65	G	-
66	R	-
67	SHIELD	-
68	Y	-
69	LG	-
70	W	-
71	R	-
72	Y	-
73	B	-
74	BR	- [With ICC]
74	L	- [Without ICC]
75	G	- [With ICC]
75	W	- [Without ICC]
76	W	- [With ICC]
76	W	- [Without ICC]
77	P	- [Without ICC]
77	R	- [With ICC]
78	BR	- [Without ICC]
78	L	- [With ICC]
79	L	- [Without ICC]
79	Y	- [With ICC]
80	SB	-
81	R	-
82	SB	-
83	BG	-
84	G	-
85	L	-
86	P	-
87	V	-
89	GR	-
90	SHIELD	-
91	W	-
92	Y	-
93	V	-
94	LG	-

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

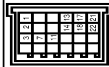
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[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

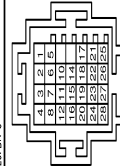
Terminal No.	Color Of Wire	Signal Name [Specification]
65	BG	-
66	P	-
67	R	-
68	SHIELD	-
69	L	-
100	P	-

Connector No. EF52
 Connector Name JOINT CONNECTOR-E01
 Connector Type HZ42FW-J



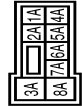
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	P	-
3	GR	-
7	GR	-
11	GR	-
13	P	-
14	P	-
17	L	-
18	P	-
21	L	-
22	P	-

Connector No. EF53
 Connector Name JOINT CONNECTOR-E02
 Connector Type SC428FBR-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	G	-
4	Y	-
5	P	-
6	L	-
7	G	-
8	Y	-
10	L	-
11	G	-
12	W	-
14	B	- [Without BOSE system] - [With BOSE system]
15	SHIELD	-
16	R	-
17	W	-
18	G	-
19	GR	-
20	B	-
21	R	-
22	G	-
23	SHIELD	-
24	B	-
25	R	-
26	G	-
27	SHIELD	-
28	G	-
28	L	-

Connector No. M1
 Connector Name FUSE BLOCK (J/B)
 Connector Type NS5EFPW-M2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-

Terminal No.	Color Of Wire	Signal Name [Specification]
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No. M6
 Connector Name WIRE TO WIRE
 Connector Type TH8DMW-CST1E-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	- [With NAVI]
1	Y	- [Without NAVI]
2	B	- [Without NAVI]
2	R	- [With NAVI]
3	B	- [With NAVI]
3	R	- [Without NAVI]
4	SHIELD	-
5	G	-
6	R	-
7	W	-
8	Y	-
9	BR	-
10	R	-
11	BR	-
12	BG	-
13	L	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	SB	-
20	BG	-
21	L	-
22	W	-
23	P	-
24	BR	-
25	Y	-
26	V	-
27	G	-

Terminal No.	Color Of Wire	Signal Name [Specification]
28	G	-
31	L	-
32	G	-
33	B	-
34	W	-
35	R	-
36	SHIELD	-
37	V	-
38	BG	-
39	BR	-
41	W	-
42	BG	-
43	BG	-
44	W	-
45	Y	-
50	P	-
51	BR	-
54	Y	-
57	G	-
59	W	-
60	L	-
61	G	-
62	SB	-
63	G	-
64	B	-
65	W	-
66	R	-
68	SHIELD	-
69	GR	-
70	LG	-
71	LG	-
72	Y	-
73	SB	-
74	L	- [With LCC] - [Without LCC]
75	G	- [Without LCC]
76	GR	- [Without LCC]
76	W	- [With LCC]
77	P	- [Without LCC]
78	R	- [With LCC]
78	R	- [Without LCC]
78	W	- [Without LCC]
79	Y	- [With LCC]
80	SB	-
81	SB	-
82	SB	-
83	V	-
84	G	-

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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

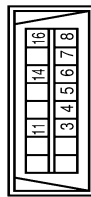
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[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

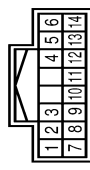
85	L	-	-
86	P	-	-
87	W	-	-
88	GR	-	-
89	SHIELD	-	-
90	W	-	-
91	Y	-	-
92	BR	-	-
93	P	-	-
94	GR	-	-
95	GR	-	-
96	W	-	-
97	SHIELD	-	-
98	Y	-	-
99	SB	-	-
100	SB	-	-

Connector No. M24
 Connector Name DATA LINK CONNECTOR
 Connector Type BDI/EFW



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	B	-
6	L	-
7	V	-
8	G	-
11	SB	-
14	P	-
16	Y	-

Connector No. M33
 Connector Name COMBINATION SWITCH
 Connector Type TH3EFW-NH



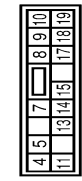
Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	SB	OUTPUT 4
3	GR	FR WASHER(+)
4	G	IGN
5	L	OUTPUT 3
6	B	GROUND
7	V	INPUT 3
8	BIG	OUTPUT 5
9	Y	INPUT 2
10	R	INPUT 4
11	LG	OUTPUT 1
12	P	OUTPUT 2
13	BR	OUTPUT 6
14	G	OUTPUT 2

Connector No. M118
 Connector Name BCM (BODY CONTROL MODULE)
 Connector Type M03FB-LC



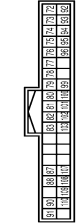
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	W	POWER WINDOW POWER SUPPLY(BAT)
3	Y	POWER WINDOW POWER SUPPLY(RAP)

Connector No. M119
 Connector Name BCM (BODY CONTROL MODULE)
 Connector Type NS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	LG	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GROUND
14	W	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT

Connector No. M122
 Connector Name BCM (BODY CONTROL MODULE)
 Connector Type TH40FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 -
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-

79	BR	ROOM ANT1+
80	GR	MATS ANT AMP
81	W	MATS ANT AMP
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMA
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL CONT
93	V	IGN IND
94	Y	Puddle Lamp Cont
95	BR	DRIVER DOOR LOCK SW
96	GR	A. T SHIFT SELECTOR POWER SUPPLY
99	R	SHEET P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

Connector No. M123
 Connector Name BCM (BODY CONTROL MODULE)
 Connector Type TH40FC-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
118	SB	STOP LAMP SW 2
119	SB	STOP LAMP SW 2
121	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMA
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	BG	RECEIVER/SENSOR GND

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

LAMPS

133	Y	RECEIVER SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SHIELD N/P
141	G	SECURITY IND LAMP CONT
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M125
Connector Name	WIRE TO WIRE
Connector Type	M03PW-LC



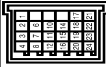
Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	Y	-
3	R	-

Connector No.	M126
Connector Name	WIRE TO WIRE
Connector Type	M03MW-LC



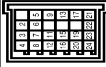
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	R	-

Connector No.	M351
Connector Name	JOINT CONNECTOR-M04
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	BE	-
2	B	-
3	P	-
4	L	-
6	B	-
7	P	-
8	L	-
10	W	-
11	P	-
12	L	-
14	B	-
15	P	-
16	L	-
17	V	-
18	B	-
20	P	-
21	V	-
22	B	-
23	P	-
24	L	-

Connector No.	M360
Connector Name	JOINT CONNECTOR-M05
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
2	GR	-
3	P	-
4	L	-
5	R	-
6	GR	-
7	P	-
8	L	-
9	BR	-
11	P	-
12	L	-
13	BR	-
15	P	-
16	L	-
17	V	-
18	P	-
20	L	-
21	V	-
22	G	-
23	P	-
24	L	-

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STOP LAMP

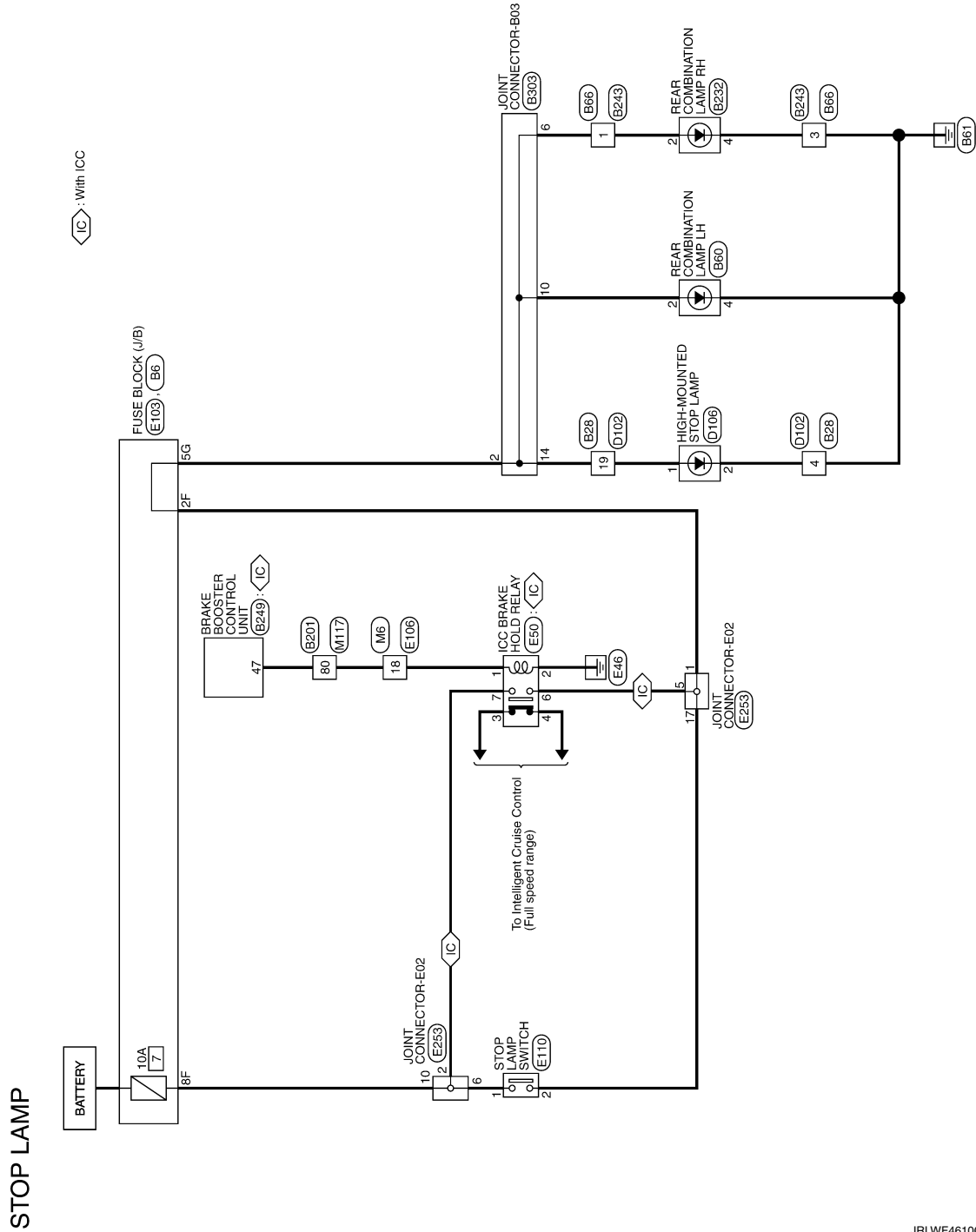
< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

STOP LAMP

Wiring Diagram - STOP LAMP -

INFOID:000000012751053



2015/06/22

JRLWF4610GB

STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

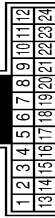
STOP LAMP

Connector No.	B58
Connector Name	FUSE BLOCK (L/B)
Connector Type	NS12FBR-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10G	W	-
11G	W	-
12G	GR	-
4G	R	-
5G	LG	-

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH22MM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
3	W	-
4	B	-
5	R	-
6	BG	-
7	BR	-
13	SHIELD	-
14	SHIELD	-
15	B	-
16	W	-
17	R	-
18	SHIELD	-

18	LG	-
20	BG	-
21	B	-
22	P	-
23	BR	-
24	R	-

Connector No.	B60
Connector Name	REAR COMBINATION LAMP LH
Connector Type	TH65MM-NH



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

Connector No.	B66
Connector Name	WIRE TO WIRE
Connector Type	TH24MM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
2	R	-
3	B	-
13	L	-
14	W	-
15	B	-
16	BR	-
17	BG	-

18	P	-
----	---	---

Connector No.	B201
Connector Name	WIRE TO WIRE
Connector Type	TH80PM-CSE-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	GR	-
4	BG	-
7	LG	-
10	W	-
15	SB	-
16	V	-
17	BR	-
18	GR	-
20	GR	-
22	BR	-
27	Y	-
28	Y	-
29	Y	-
30	GR	-
31	R	-
32	BR	-
33	G	-
51	R	-
55	G	-
56	R	-
57	W	-
58	B	-
60	SHIELD	-
61	LG	-
62	BR	-
63	P	-
64	L	-
65	G	-
66	P	-

67	L	-
68	SHIELD	-
69	V	-
70	Y	-
71	SB	-
72	W	-
73	BR	-
75	Y	-
80	V	-
81	SB	-
82	LG	-
83	P	-
84	R	-
85	L	-
86	BG	-
87	P	-
88	P	-
91	V	-
92	R	-
94	R	-
95	SB	-
96	G	-
97	G	-
98	R	-
99	P	-
100	L	-

Connector No.	B222
Connector Name	REAR COMBINATION LAMP RH
Connector Type	TH65MM-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	-
4	B	-

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STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

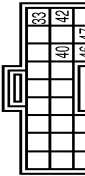
STOP LAMP

Connector No.	B243
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



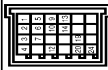
Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	B	-
3	B	-
13	L	-
14	W	-
15	GR	-
16	BR	-
17	LG	-
18	L	-

Connector No.	B249
Connector Name	BRAKE BOOSTER CONTROL UNIT
Connector Type	TK24FGY



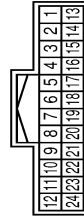
Terminal No.	Color Of Wire	Signal Name [Specification]
39	BR	IGNITION
40	SB	BEHOLD SW
42	SB	IGNITION
46	B	GROUND
47	V	BRAKE HOLD RLY DRIVE SIGNAL

Connector No.	B303
Connector Name	JOINT CONNECTOR-B03
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	LG	-
3	BG	-
4	B	-
5	R	-
6	LG	-
7	BG	-
9	R	-
10	LG	-
12	B	-
13	R	-
14	LG	-
16	V	-
20	B	-
24	B	-

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
3	W	-
4	B	-
5	R	-
6	O	-

Terminal No.	Color Of Wire	Signal Name [Specification]
13	R	-
14	L	- [With around view monitor]
14	SHIELD	- [Without around view monitor]
15	Y	-
16	G	- [With around view monitor]
16	L	- [Without around view monitor]
17	G	- [With around view monitor]
17	W	- [Without around view monitor]
18	SHIELD	-
19	LG	-
20	O	-
21	V	-
22	R	-
23	BR	-
24	R	-

Connector No.	D106
Connector Name	HIGH-MOUNTED STOP LAMP
Connector Type	TB02MW



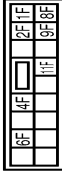
Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	B	-

Connector No.	E50
Connector Name	ICC BRAKE HOLD RELAY
Connector Type	IM65GY-R-US



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	B	-
3	P	-
4	SB	-
6	P	-
7	R	-

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FP-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
11F	W	-
12F	SB	-
13F	W	-
4F	G	-
6F	GR	-
8F	BR	-
9F	R	-

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80PW-CS1E-TM4



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

STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >



[HALOGEN TYPE]

STOP LAMP

4	CR	-	-	-	-
5	GR	-	-	-	-
6	G	-	-	-	-
7	L	-	-	-	-
8	Y	-	-	-	-
9	BR	-	-	-	-
10	BG	-	-	-	-
11	SB	-	-	-	-
12	BG	-	-	-	-
13	L	-	-	-	-
14	R	-	-	-	-
15	P	-	-	-	-
16	Y	-	-	-	-
17	SB	-	-	-	-
18	G	-	-	-	-
19	BR	-	-	-	-
20	BG	-	-	-	-
21	L	-	-	-	-
22	V	-	-	-	-
23	G	-	-	-	-
24	P	-	-	-	-
25	V	-	-	-	-
27	W	-	-	-	-
28	G	-	-	-	-
31	BG	-	-	-	-
32	W	-	-	-	-
33	B	-	-	-	-
34	G	-	-	-	-
35	G	-	-	-	-
36	SHIELD	-	-	-	-
37	V	-	-	-	-
38	BR	-	-	-	-
39	BG	-	-	-	-
41	W	-	-	-	-
42	G	-	-	-	-
43	BR	-	-	-	-
45	W	-	-	-	-
49	L	-	-	-	-
50	P	-	-	-	-
51	L	-	-	-	-
54	BG	-	-	-	-
55	W	-	-	-	-
56	W	-	-	-	-
60	LG	-	-	-	-
61	G	-	-	-	-
62	SB	-	-	-	-
63	W	-	-	-	-
64	B	-	-	-	-
65	G	-	-	-	-
66	R	-	-	-	-

67	SHIELD	-	-	-	-
68	Y	-	-	-	-
69	LG	-	-	-	-
70	W	-	-	-	-
71	R	-	-	-	-
72	Y	-	-	-	-
73	B	-	-	-	-
74	BR	-	-	-	-
75	G	-	-	-	-
76	W	-	-	-	-
77	P	-	-	-	-
78	BR	-	-	-	-
79	L	-	-	-	-
80	SB	-	-	-	-
81	R	-	-	-	-
82	SB	-	-	-	-
83	BG	-	-	-	-
84	G	-	-	-	-
85	L	-	-	-	-
86	P	-	-	-	-
87	V	-	-	-	-
88	CG	-	-	-	-
89	SHIELD	-	-	-	-
90	W	-	-	-	-
92	V	-	-	-	-
93	V	-	-	-	-
94	LG	-	-	-	-
95	BG	-	-	-	-
96	P	-	-	-	-
97	R	-	-	-	-
98	SHIELD	-	-	-	-
99	L	-	-	-	-
100	P	-	-	-	-


Connector No.	E110
Connector Name	STOP LAMP SWITCH
Connector Type	M04FW-LC

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	Y	-
3	Y	-
4	SB	-




Connector No.	E253
Connector Name	JOINT CONNECTOR-E02
Connector Type	SGA28FBR-J



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

18	G	-
19	GR	-
20	B	-
21	R	-
22	G	-
23	SHIELD	-
24	B	-
25	R	-
26	G	-
27	P	-
28	G	-
28	L	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MMV-GS16-TM4




Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	- [With NAVI]
2	B	- [Without NAVI]
3	B	- [With NAVI]
4	G	- [Without NAVI]
5	G	-
6	R	-
7	W	-
8	Y	-
9	L	-
10	BR	-
11	BR	-
12	BG	-
13	L	-
14	R	-
15	P	-
16	V	-
17	SB	-
18	V	-

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STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

STOP LAMP

20	BG	-	-	-	-
21	L	-	-	-	-
22	W	-	-	-	-
23	P	-	-	-	-
24	BR	-	-	-	-
25	Y	-	-	-	-
26	V	-	-	-	-
27	G	-	-	-	-
28	G	-	-	-	-
31	L	-	-	-	-
32	G	-	-	-	-
33	B	-	-	-	-
34	R	-	-	-	-
35	R	-	-	-	-
36	SHIELD	-	-	-	-
37	V	-	-	-	-
38	BG	-	-	-	-
39	BR	-	-	-	-
41	W	-	-	-	-
42	BG	-	-	-	-
43	BG	-	-	-	-
45	W	-	-	-	-
48	L	-	-	-	-
50	P	-	-	-	-
51	BR	-	-	-	-
54	G	-	-	-	-
55	G	-	-	-	-
56	W	-	-	-	-
60	L	-	-	-	-
61	G	-	-	-	-
62	SB	-	-	-	-
63	G	-	-	-	-
64	B	-	-	-	-
65	W	-	-	-	-
66	R	-	-	-	-
67	SHIELD	-	-	-	-
68	Y	-	-	-	-
69	GR	-	-	-	-
70	LG	-	-	-	-
71	G	-	-	-	-
72	SB	-	-	-	-
73	SB	-	-	-	-
74	BR	-	-	-	-
74	L	-	-	-	-
74	L	-	-	-	-
75	G	-	-	-	-
76	GR	-	-	-	-
76	W	-	-	-	-
77	P	-	-	-	-
77	R	-	-	-	-
78	L	-	-	-	-

78	R	-	-	-	-
78	W	-	-	-	-
79	Y	-	-	-	-
80	SB	-	-	-	-
81	SB	-	-	-	-
82	SB	-	-	-	-
83	V	-	-	-	-
84	G	-	-	-	-
85	L	-	-	-	-
86	P	-	-	-	-
87	W	-	-	-	-
88	P	-	-	-	-
89	GR	-	-	-	-
90	SHIELD	-	-	-	-
91	W	-	-	-	-
92	Y	-	-	-	-
93	BR	-	-	-	-
94	P	-	-	-	-
95	GR	-	-	-	-
96	W	-	-	-	-
97	L	-	-	-	-
98	SHIELD	-	-	-	-
99	V	-	-	-	-
100	SB	-	-	-	-

Connector No. M117
 Connector Name WIRE TO WIRE
 Connector Type T180MM-CST6-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	GR	-
4	SB	-
7	W	-
10	W	-
15	SB	-
16	V	-
17	BR	-
18	GR	-
19	W	-

26	BR	-	-	-	-
27	LG	-	-	-	-
28	Y	-	-	-	-
29	Y	-	-	-	-
30	V	-	-	-	-
31	R	-	-	-	-
32	BR	-	-	-	-
33	G	-	-	-	-
51	R	-	-	-	-
55	W	-	-	-	-
56	B	-	-	-	-
57	R	-	-	-	-
58	G	-	-	-	-
59	SHIELD	-	-	-	-
60	V	-	-	-	-
61	LG	-	-	-	-
62	BR	-	-	-	-
63	L	-	-	-	-
64	LG	-	-	-	-
65	B	-	-	-	-
66	R	-	-	-	-
67	W	-	-	-	-
68	SHIELD	-	-	-	-
69	V	-	-	-	-
70	Y	-	-	-	-
71	SB	-	-	-	-
72	R	-	-	-	-
73	G	-	-	-	-
75	W	-	-	-	-
80	V	-	-	-	-
81	SB	-	-	-	-
82	V	-	-	-	-
83	P	-	-	-	-
84	R	-	-	-	-
85	L	-	-	-	-
86	BG	-	-	-	-
87	L	-	-	-	-
88	P	-	-	-	-
91	V	-	-	-	-
92	G	-	-	-	-
94	W	-	-	-	-
96	G	-	-	-	-
97	Y	-	-	-	-
98	BR	-	-	-	-
99	P	-	-	-	-
99	V	-	-	-	-
100	L	-	-	-	-
100	SB	-	-	-	-

BACK-UP LAMP

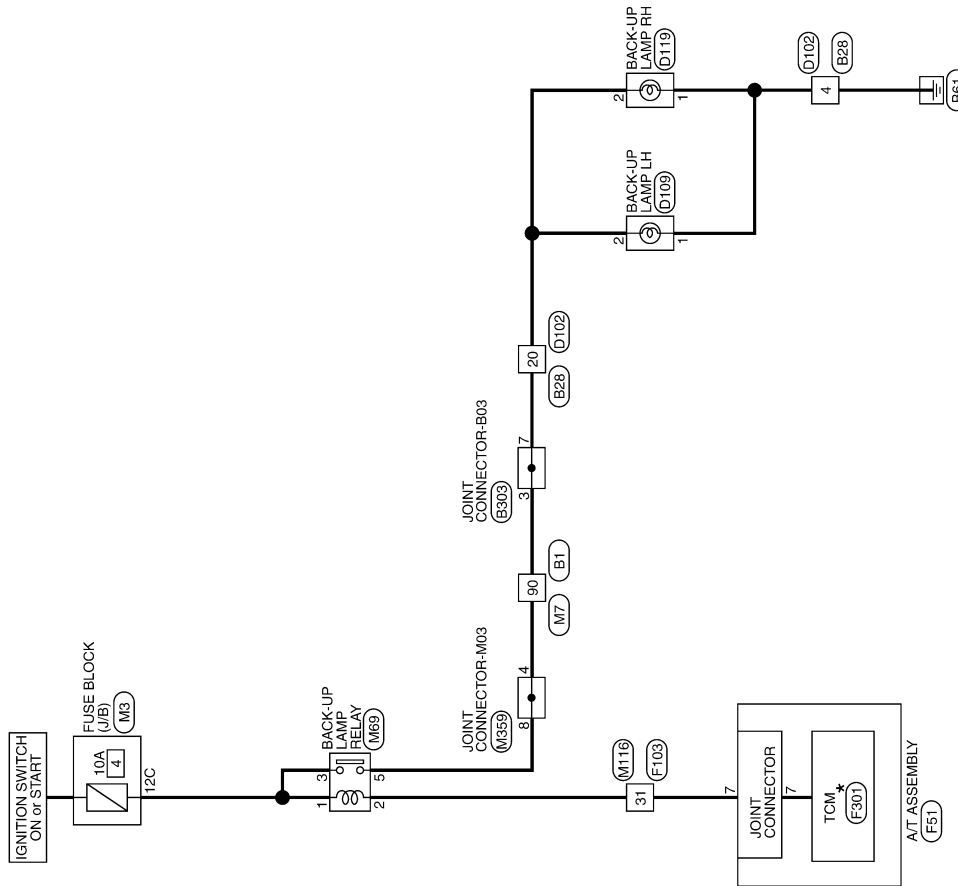
< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

BACK-UP LAMP

Wiring Diagram - BACK-UP LAMP -

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*: This connector is not shown in "Harness Layout".

BACK-UP LAMP

2015/06/22

JRLWF4615GB

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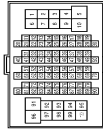
BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

BACK-UP LAMP

Connector No.	B51
Connector Name	WIRE TO WIRE
Connector Type	TH480FW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-
5	G	-
6	SB	-
7	V	-
8	L	-
11	V	-
12	SB	-
13	LG	-
14	GR	-
15	LG	-
16	R	-
17	W	-
18	B	-
19	LG	-
20	BR	-
21	SHIELD	-
22	Y	-
24	P	-
25	G	-
26	Y	-
27	B	- [With NAVI]
27	BR	- [Without NAVI]
28	R	- [With NAVI]
28	W	- [Without NAVI]
29	L	- [With NAVI]
29	BR	- [Without NAVI]
30	SHIELD	- [With around view monitor]
31	SHIELD	- [Without around view monitor]
32	P	- [With NAVI] [Without Blind Spot Warning]
32	W	- [Without NAVI] [Without Blind Spot Warning]
32	Y	- [With NAVI] [Without Blind Spot Warning]
33	SB	- [With NAVI] [Without Blind Spot Warning]
34	L	-
35	P	-

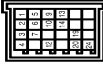
36	L	-
37	P	-
38	P	-
39	Y	-
40	SB	-
44	Y	-
45	GR	-
46	LG	-
47	SB	-
48	BG	-
49	R	-
50	L	-
50	P	-
60	L	-
62	SHIELD	-
63	R	-
64	G	-
65	SHIELD	-
66	W	-
67	V	-
68	SB	-
69	SHIELD	-
70	W	-
73	SB	-
74	L	-
75	W	-
76	GR	-
77	R	-
78	P	-
79	GR	-
83	BG	-
85	V	-
86	LG	-
87	Y	-
89	R	-
89	B	-
90	BG	-
91	G	-
92	BR	-
93	G	-
94	SB	-
95	G	-
96	Y	-
98	W	-
99	GR	-

Connector No.	B28
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
3	W	-
4	B	-
5	R	-
6	BG	-
13	BR	-
14	R	-
14	SHIELD	- [With around view monitor]
15	B	- [Without around view monitor]
15	Y	- [With around view monitor]
16	W	-
17	L	-
17	R	-
17	SHIELD	- [With around view monitor]
18	LG	-
19	LG	-
20	BG	-
21	B	-
22	P	-
23	BR	-
24	R	-

Connector No.	B303
Connector Name	JOINT CONNECTOR-B03
Connector Type	NH24FW-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	LG	-
3	BG	-
4	B	-
5	R	-
6	LG	-
7	BG	-
9	R	-
10	LG	-
12	B	-
13	R	-
14	LG	-
15	V	-
20	B	-
24	B	-

Connector No.	D102
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
3	W	-
4	B	-
5	R	-

JRLWF4616GB

BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

BACK-UP LAMP

6	O	-
13	R	-
14	L	- [With around view monitor] - [Without around view monitor]
15	Y	-
16	G	- [With around view monitor] - [Without around view monitor]
17	G	- [With around view monitor] - [Without around view monitor]
18	W	- [With around view monitor] - [Without around view monitor]
19	SHIELD	-
20	LG	-
21	O	-
22	P	-
23	BR	-
24	R	-

Connector No.	D109
Connector Name	BACK-UP LAMP LH
Connector Type	NS22MM-CS



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

Connector No.	D118
Connector Name	BACK-UP LAMP RH
Connector Type	NS22MM-CS



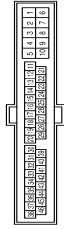
Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	O	-

Connector No.	F51
Connector Name	A/T ASSEMBLY
Connector Type	IRK10FG-DGY



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	IGNITION POWER SUPPLY
2	BR	BATTERY POWER SUPPLY
3	O	CAN-H
4	V	K-LINE
5	B	GROUND
6	Y	IGNITION POWER SUPPLY
7	R	BACK-UP LAMP RELAY
8	LG	CAN-L
9	GR	STARTER RELAY
10	B	GROUND

Connector No.	F102
Connector Name	WIRE TO WIRE
Connector Type	TK38FW-NS10



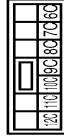
Terminal No.	Color Of Wire	Signal Name [Specification]
2	G	-
3	W	-
4	R	-
5	B	-
6	Y	-
9	Y	-
10	GR	-
19	BG	- [Without ICC] - [With ICC]
20	Y	-
28	B	-
29	LG	-
31	R	-
32	GR	-
33	B	-
34	B	-
35	B	-
36	P	-
37	Y	-
38	G	-
43	LG	-
44	O	-
45	Y	-
46	V	-

Connector No.	F301
Connector Name	TCM
Connector Type	SPT10FG



Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	IGNITION POWER SUPPLY
2	-	BATTERY POWER SUPPLY
3	-	CAN-H
4	-	K-LINE
5	-	GROUND
6	-	IGNITION POWER SUPPLY
7	-	BACK-UP LAMP RELAY
8	-	CAN-L
9	-	STARTER RELAY
10	-	GROUND

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FM-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	L	-
10D	L	-
10E	BG	-
6C	R	-
7C	B	-
8C	G	-
9C	BG	-

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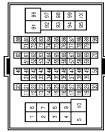
BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

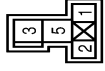
BACK-UP LAMP

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TF480MW-CS16-TM4



Terminal No.	Color Of Wire	Signal Name [Specification]
3	SB	-- [With automatic drive positioner]
3	W	-- [Without automatic drive positioner]
5	G	--
6	BG	--
7	W	--
8	B	--
11	V	--
12	SB	--
13	LG	--
14	Y	--
15	G	--
16	R	--
18	SB	--
19	LG	--
20	BR	--
21	SHIELD	--
22	Y	--
24	V	--
25	G	--
26	Y	--
27	B	-- [With NAV]
27	R	-- [Without NAV]
28	W	--
29	B	-- [Without NAV]
29	G	-- [With NAV]
30	SHIELD	--
31	L	--
32	P	-- [Without Blind Spot Warning]
32	Y	-- [With Blind Spot Warning]
33	SB	--
34	L	--
35	P	--
36	L	--
37	P	--
38	P	--

Connector No.	M68
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS29FL-M2-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	--
2	W	--
3	R	--
5	BG	--

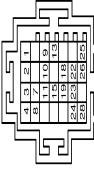
Connector No.	M116
Connector Name	WIRE TO WIRE
Connector Type	TK30MP-NS10



Terminal No.	Color Of Wire	Signal Name [Specification]
2	P	--
3	L	--
4	R	--
5	B	--
9	R	--
10	R	--
10	RG	--
20	B	--
23	B	--
28	LG	--
31	W	--
33	B	--
34	B	--
35	L	--
36	P	--
37	Y	--

38	G	--
43	P	--
44	L	--
45	BR	--
46	BG	--

Connector No.	M359
Connector Name	JOINT CONNECTOR-M03
Connector Type	SGA28FDGY-J



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	--
2	R	--
3	SHIELD	--
4	BG	--
7	SHIELD	--
8	V	--
9	P	--
10	P	--
11	B	--
13	V	--
15	B	--
18	L	--
19	B	--
22	R	--
23	B	--
24	BG	--
25	V	--
26	L	--
28	BR	--

JRLWF4618GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000012750612

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
RR WIPER ON	Other than rear wiper switch ON	Off
	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
TURN SIGNAL R	Other than turn signal switch RH	Off
	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Monitor Item	Condition	Value/Status
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is OFF	Off
	Hazard switch is ON	On
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off
TR/BD OPEN SW	Back door opener switch OFF	Off
	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
REVERSE SW	NOTE: The item is indicated, but not monitored.	Off
RKE-LOCK	LOCK button of the key is not pressed	Off
	LOCK button of the key is pressed	On
RKE-UNLOCK	UNLOCK button of the key is not pressed	Off
	UNLOCK button of the key is pressed	On
RKE-TR/BD	NOTE: The item is indicated, but not monitored.	Off
RKE-PANIC	PANIC button of the key is not pressed	Off
	PANIC button of the key is pressed	On
RKE-P/W OPEN	UNLOCK button of the key is not pressed	Off
	UNLOCK button of the key is pressed and held	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Monitor Item	Condition	Value/Status	
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off	A
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On	B
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V	
	Dark outside of the vehicle	Close to 0 V	
REQ SW -DR	Driver door request switch is not pressed	Off	C
	Driver door request switch is pressed	On	
REQ SW -AS	Passenger door request switch is not pressed	Off	D
	Passenger door request switch is pressed	On	
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	E
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off	
REQ SW -BD/TR	Back door request switch is not pressed	Off	F
	Back door request switch is pressed	On	
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off	G
	Push-button ignition switch (push switch) is pressed	On	
IGN RLY2 -F/B	NOTE: The item is indicated, but not monitored.	Off	H
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off	
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off	I
BRAKE SW 1	The brake pedal is depressed when No. 7 fuse is blown	Off	
	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On	J
BRAKE SW 2	The brake pedal is not depressed	Off	
	The brake pedal is depressed	On	K
DETE/CANCL SW	Selector lever in P position	Off	
	Selector lever in any position other than P	On	
SFT PN/N SW	Selector lever in any position other than P and N	Off	EXL
	Selector lever in P or N position	On	
S/L -LOCK	NOTE: The item is indicated, but not monitored.	Off	M
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off	
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off	N
UNLK SEN -DR	Driver door is unlocked	Off	
	Driver door is locked	On	O
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off	
	Push-button ignition switch (push-switch) is pressed	On	P
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off	
	Ignition switch in ON position	On	
DETE SW -IPDM	Selector lever in any position other than P	Off	
	Selector lever in P position	On	
SFT PN -IPDM	Selector lever in any position other than P and N	Off	
	Selector lever in P or N position	On	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Monitor Item	Condition	Value/Status
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
KEY SW -SLOT	The key is not inserted into key slot	Off
	The key is inserted into key slot	On
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—
CONFIRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	Yet
	The key ID that the key slot receives accords with the third key ID registered to BCM.	Done

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

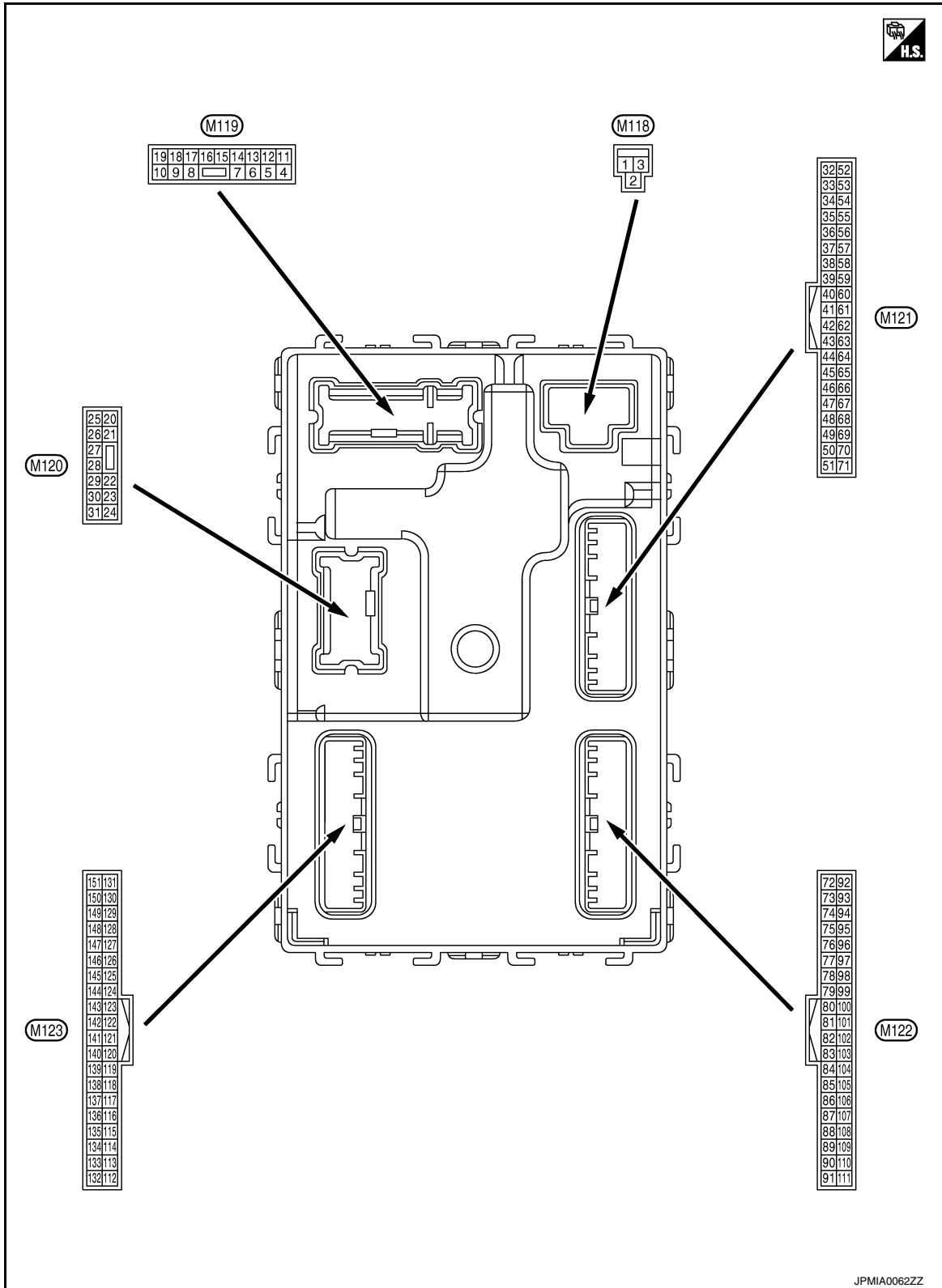
Monitor Item	Condition	Value/Status	
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	Yet	A
	The key ID that the key slot receives accords with the second key ID registered to BCM.	Done	B
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	Yet	C
	The key ID that the key slot receives accords with the first key ID registered to BCM.	Done	
TP 4	The ID of fourth key is not registered to BCM	Yet	D
	The ID of fourth key is registered to BCM	Done	
TP 3	The ID of third key is not registered to BCM	Yet	E
	The ID of third key is registered to BCM	Done	
TP 2	The ID of second key is not registered to BCM	Yet	F
	The ID of second key is registered to BCM	Done	
TP 1	The ID of first key is not registered to BCM	Yet	G
	The ID of first key is registered to BCM	Done	
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire	H
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire	I
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire	J
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire	K
ID REGST FL1	ID of front LH tire transmitter is registered	Done	
	ID of front LH tire transmitter is not registered	Yet	EXL
ID REGST FR1	ID of front RH tire transmitter is registered	Done	
	ID of front RH tire transmitter is not registered	Yet	
ID REGST RR1	ID of rear RH tire transmitter is registered	Done	
	ID of rear RH tire transmitter is not registered	Yet	
ID REGST RL1	ID of rear LH tire transmitter is registered	Done	
	ID of rear LH tire transmitter is not registered	Yet	
WARNING LAMP	Tire pressure indicator OFF	Off	M
	Tire pressure indicator ON	On	
BUZZER	Tire pressure warning alarm is not sounding	Off	N
	Tire pressure warning alarm is sounding	On	O
			P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

TERMINAL LAYOUT

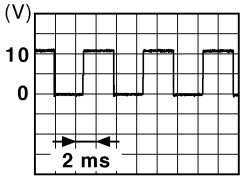


PHYSICAL VALUES

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

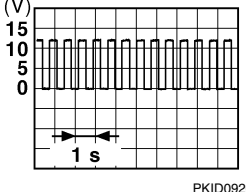
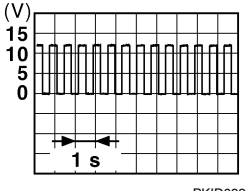
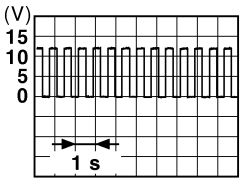
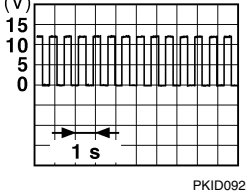
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	-					
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (W)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (Y)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4 (LG)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)		Battery voltage
5 (L)	Ground	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (Y)	Ground	Step lamp	Output	Step lamp	ON	0 V
					OFF	Battery voltage
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door, fuel lid UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
10 (BR)	Ground	Rear RH door and rear LH door UN- LOCK	Output	Rear RH door and rear LH door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	<p>NOTE: When the illumination brightening/dimming level is in the neutral position</p>  <p style="text-align: right; font-size: small;">JSNIA0010GB</p>
15 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF or ON	Battery voltage
					ACC	0 V

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
17 (W)	Ground	Turn signal RH (Front, side)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch RH
				Turn signal switch OFF	0 V
					
					6.5 V
18 (BG)	Ground	Turn signal LH (Front, side)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch LH
				Turn signal switch OFF	0 V
					
					6.5 V
19 (V)	Ground	Room lamp timer control	Output	Interior room lamp	OFF
				ON	Battery voltage
					0 V
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch RH
				Turn signal switch OFF	0 V
					
					6.5 V
23 (G)	Ground	Back door open	Output	Back door	OPEN (Back door opener actuator is activated)
				Other than OPEN (Back door opener actuator is not activated)	Battery voltage
					0 V
25 (G)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch LH
				Turn signal switch OFF	0 V
					
					6.5 V
26 (G)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)
				ON (Operated)	Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

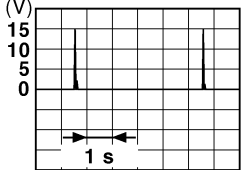
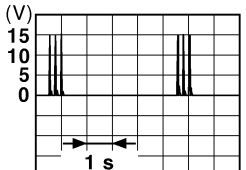
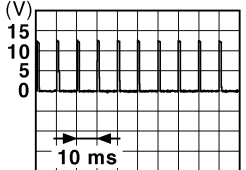
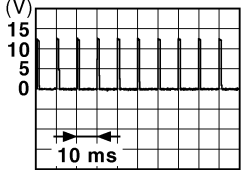
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
34 (SB)	Ground	Luggage room antenna (-)	Output	Ignition switch OFF	<p>JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compartment	<p>JMKIA0063GB</p>
35 (V)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	<p>JMKIA0062GB</p>
				When Intelligent Key is not in the passenger compartment	<p>JMKIA0063GB</p>
38 (B)	Ground	Back door antenna (-)	Output	When the back door opener request switch is operated with ignition switch OFF	<p>JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	<p>JMKIA0063GB</p>

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

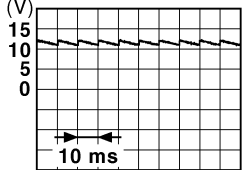
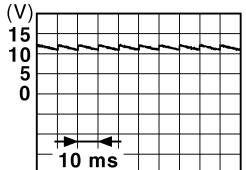
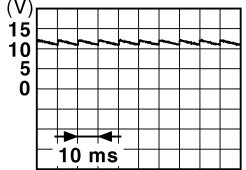
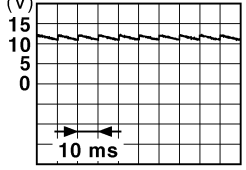
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
39 (W)	Ground	Back door antenna (+)	Output	When the back door opener re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is in the antenna detection area  <small>JMKIA0062GB</small>	
				When Intelligent Key is not in the antenna detection area  <small>JMKIA0063GB</small>		
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
52 (SB)	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position	Battery voltage
					When selector lever is not in P or N position	0 V
60 (BR)	Ground	Push-button ignition switch (Push switch)	Input	Push-button igni- tion switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
61 (W)	Ground	Back door opener re- quest switch	Input	Back door opener request switch	ON (Pressed)	0 V
					OFF (Not pressed)  <small>JPMIA0016GB</small>	1.0 V
64 (V)	Ground	Intelligent Key warn- ing buzzer (Engine room)	Output	Intelligent Key warning buzzer (Engine room)	Sounding	0 V
					Not sounding	Battery voltage
65 (BG)	Ground	Rear wiper stop posi- tion	Input	Rear wiper	In stop position  <small>JPMIA0016GB</small>	1.0 V
					Not in stop position	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
66 (R)	Ground	Back door switch	Input	Back door switch	OFF (Door close)	 11.8 V
					ON (Door open)	0 V
67 (GR)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 11.8 V
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (Door close)	 11.8 V
					ON (Door open)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (Door close)	 11.8 V
					ON (Door open)	0 V

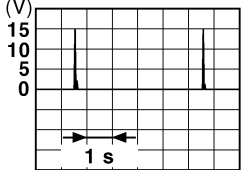
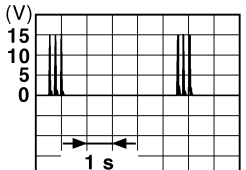
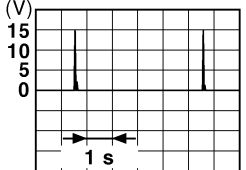
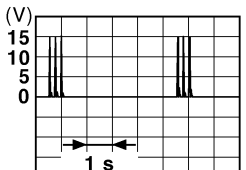
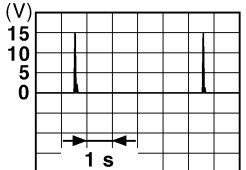
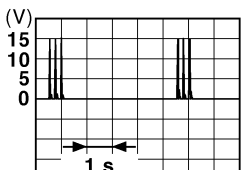
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BCM (BODY CONTROL MODULE)

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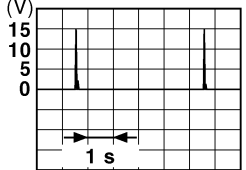
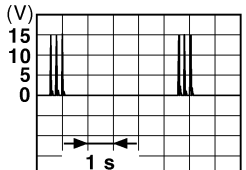
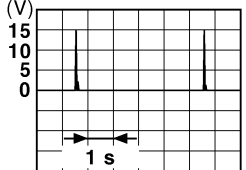
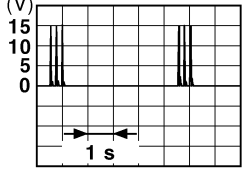
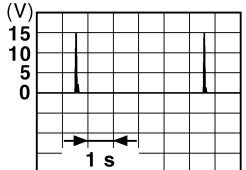
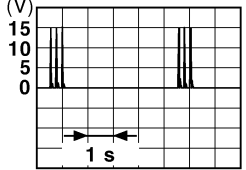
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
72 (R)	Ground	Room antenna 2 (-) (Console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment  <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment  <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
73 (G)	Ground	Room antenna 2 (+) (Console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment  <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment  <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
74 (SB)	Ground	Passenger door an- tenna (-)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is in the antenna detection area  <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				Ignition switch OFF	When Intelligent Key is not in the antenna detection area  <p style="text-align: right; font-size: small;">JMKIA0063GB</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
75 (GR)	Ground	Passenger door antenna (+)	Output	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When the passenger door request switch is operated with ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
76 (V)	Ground	Driver door antenna (-)	Output	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When the driver door request switch is operated with ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>
77 (LG)	Ground	Driver door antenna (+)	Output	When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA0062GB</p>
				When the driver door request switch is operated with ignition switch OFF	 <p style="text-align: right; font-size: small;">JMKIA0063GB</p>

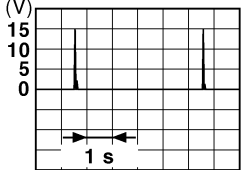
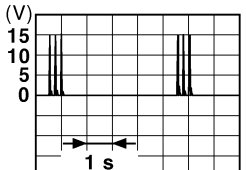
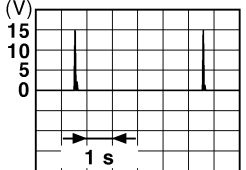
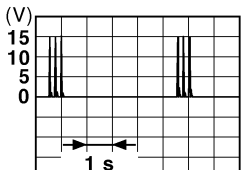
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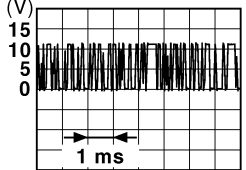
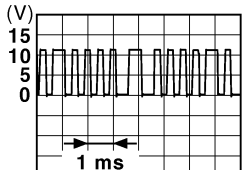
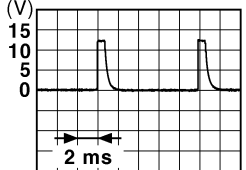
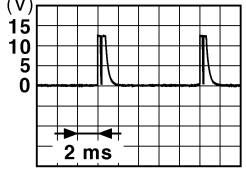

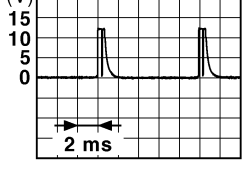
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
78 (Y)	Ground	Room antenna 1 (-) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment  <p style="text-align: right; font-size: small;">JMKIA0062GB</p>	
				Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment  <p style="text-align: right; font-size: small;">JMKIA0063GB</p>	
79 (BR)	Ground	Room antenna 1 (+) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment  <p style="text-align: right; font-size: small;">JMKIA0062GB</p>	
				Ignition switch OFF	When Intelligent Key is not in the passenger compart- ment  <p style="text-align: right; font-size: small;">JMKIA0063GB</p>	
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
				ON	Battery voltage	

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< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

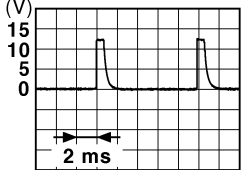
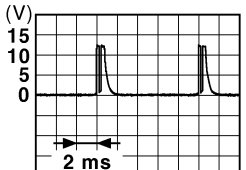

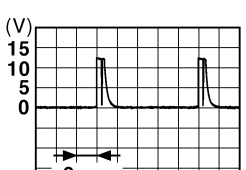
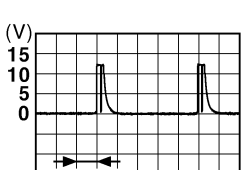
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
83 (Y)	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting	 <p style="text-align: right; font-size: small;">JMKIA0064GB</p>
				When operating either button on the key	 <p style="text-align: right; font-size: small;">JMKIA0065GB</p>
87 (BR)	Ground	Combination switch INPUT 5	Input	All switches OFF (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p>
				Front fog lamp switch ON (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p>
				Rear wiper switch ON (Wiper intermittent dial 4)	 <p style="text-align: right; font-size: small;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p>
				Any of the conditions below with all switches OFF	 <p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p>

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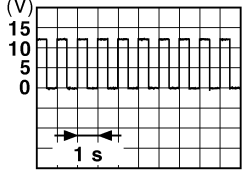
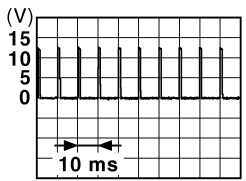
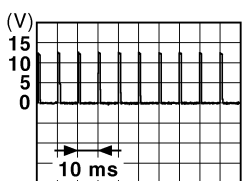
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 1.4 V
				Combination switch	Lighting switch HI (Wiper intermittent dial 4)	 1.3 V
				Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	 1.3 V
				Combination switch	Rear washer switch ON (Wiper intermittent dial 4)	 1.3 V
				Combination switch	Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 	 1.3 V
90 (P)	Ground	CAN-L	Input/ Output	—	—	
91 (L)	Ground	CAN-H	Input/ Output	—	—	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

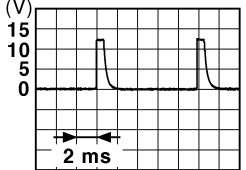

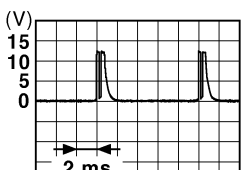
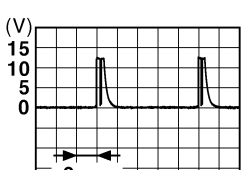
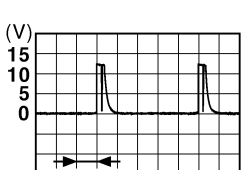
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
92 (LG)	Ground	Key slot illumination	Output	Key slot illumination	OFF	Battery voltage
					Blinking	 <p style="text-align: center;">6.5 V</p>
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
94 (Y)	Ground	Puddle lamp control	Output	Puddle lamp	OFF	Battery voltage
					ON	0 V
95 (BG)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output	—	Battery voltage	
99 (R)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	Battery voltage
100 (G)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <p style="text-align: center;">1.0 V</p>
101 (SB)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 <p style="text-align: center;">1.0 V</p>
102 (BG)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF	Battery voltage	

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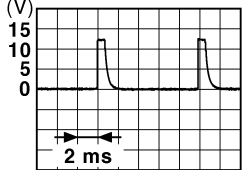
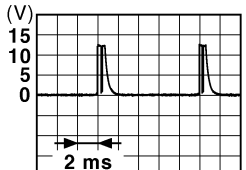

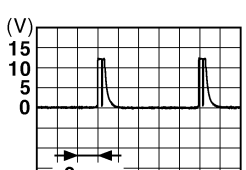

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
107 (LG)	Ground	Combination switch INPUT 1	Input	All switches OFF	 <small>JPMIA0041GB</small> 1.4 V
				Turn signal switch LH	 <small>JPMIA0037GB</small> 1.3 V
				Turn signal switch RH	 <small>JPMIA0036GB</small> 1.3 V
				Front wiper switch LO	 <small>JPMIA0038GB</small> 1.3 V
				Front washer switch ON	 <small>JPMIA0039GB</small> 1.3 V

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[HALOGEN TYPE]

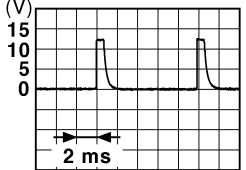

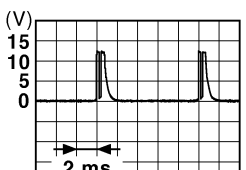
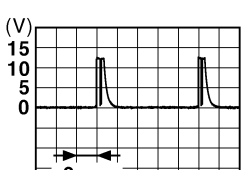
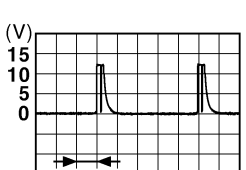
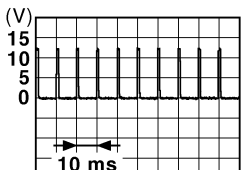
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 <p>1.4 V</p>
					Lighting switch AUTO (Wiper intermittent dial 4)	 <p>1.3 V</p>
					Lighting switch 1ST (Wiper intermittent dial 4)	 <p>1.3 V</p>
					Rear wiper switch INT (Wiper intermittent dial 4)	 <p>1.3 V</p>
					Any of the conditions below with all switches OFF	 <p>1.3 V</p>

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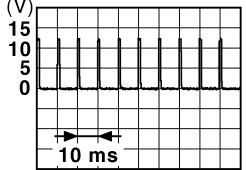
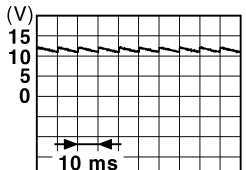
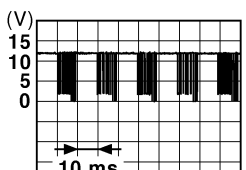
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 <small>JPMIA0041GB</small> 1.4 V
					Lighting switch PASS	 <small>JPMIA0037GB</small> 1.3 V
					Lighting switch 2ND	 <small>JPMIA0036GB</small> 1.3 V
					Front wiper switch INT	 <small>JPMIA0038GB</small> 1.3 V
					Front wiper switch HI	 <small>JPMIA0040GB</small> 1.3 V
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	 <small>JPMIA0012GB</small> 1.1 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	-					
113 (P)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
116 (SB)	Ground	Stop lamp switch 1	Input	—		Battery voltage
118 (P)	Ground	Stop lamp switch 2 (Without ICC)	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is de- pressed)	Battery voltage
		Stop lamp switch 2 (With ICC)		Stop lamp switch OFF (Brake pedal is not de- pressed) and ICC brake hold relay OFF	0 V	
				Stop lamp switch ON (Brake pedal is de- pressed) or ICC brake hold relay ON	Battery voltage	
119 (SB)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 1.1 V
					UNLOCK status (Unlock switch sensor ON)	0 V
121 (BR)	Ground	Key slot switch	Input	When the key is inserted into key slot		Battery voltage
				When the key is not inserted into key slot		0 V
123 (W)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	 11.8 V
					ON (Door open)	0 V
132 (BR)	Ground	Power window switch communication	Input/ Output	Ignition switch ON	 10.2 V	
				Ignition switch OFF or ACC	Battery voltage	

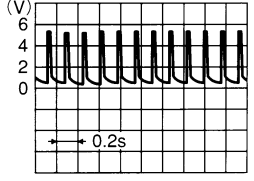
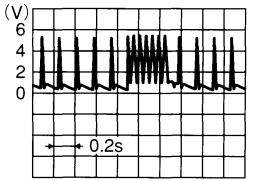
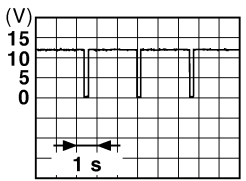
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (Tail lamps OFF)	9.5 V
				ON (Tail lamps ON)	OFF	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF	Battery voltage
					ON	0 V
137 (BG)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (Y)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V
139 (L)	Ground	Tire pressure receiv- er communication	Input/ Output	Ignition switch ON	Standby state	 <p style="text-align: right; font-size: small;">OCC3881D</p>
					When receiving the signal from the transmitter	 <p style="text-align: right; font-size: small;">OCC3880D</p>
140 (GR)	Ground	Selector lever P/N position	Input	Selector lever	P or N position	Battery voltage
					Except P and N positions	0 V
141 (G)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 <p style="text-align: right; font-size: small;">JPMA0014GB</p>
					OFF	Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
142 (BG)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Lighting switch 1ST	
					Lighting switch HI	
					Lighting switch 2ND	
					Turn signal switch RH	
					10.7 V	
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF	
					• Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
					10.7 V	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the conditions below with all switches OFF	
• Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6						
					10.7 V	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front wiper switch INT	
					Front wiper switch LO	
					Lighting switch AUTO	
					10.7 V	

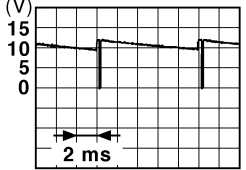
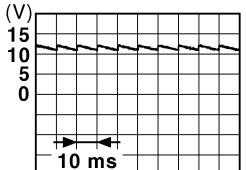
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front fog lamp switch ON	
					Lighting switch 2ND	
					Lighting switch PASS	
					Turn signal switch LH	
150 (LG)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	 11.8 V
					ON (Door open)	0 V
151 (G)	Ground	Rear window defog- ger relay control	Output	Rear window de- fogger	Active	0 V
					Not activated	Battery voltage

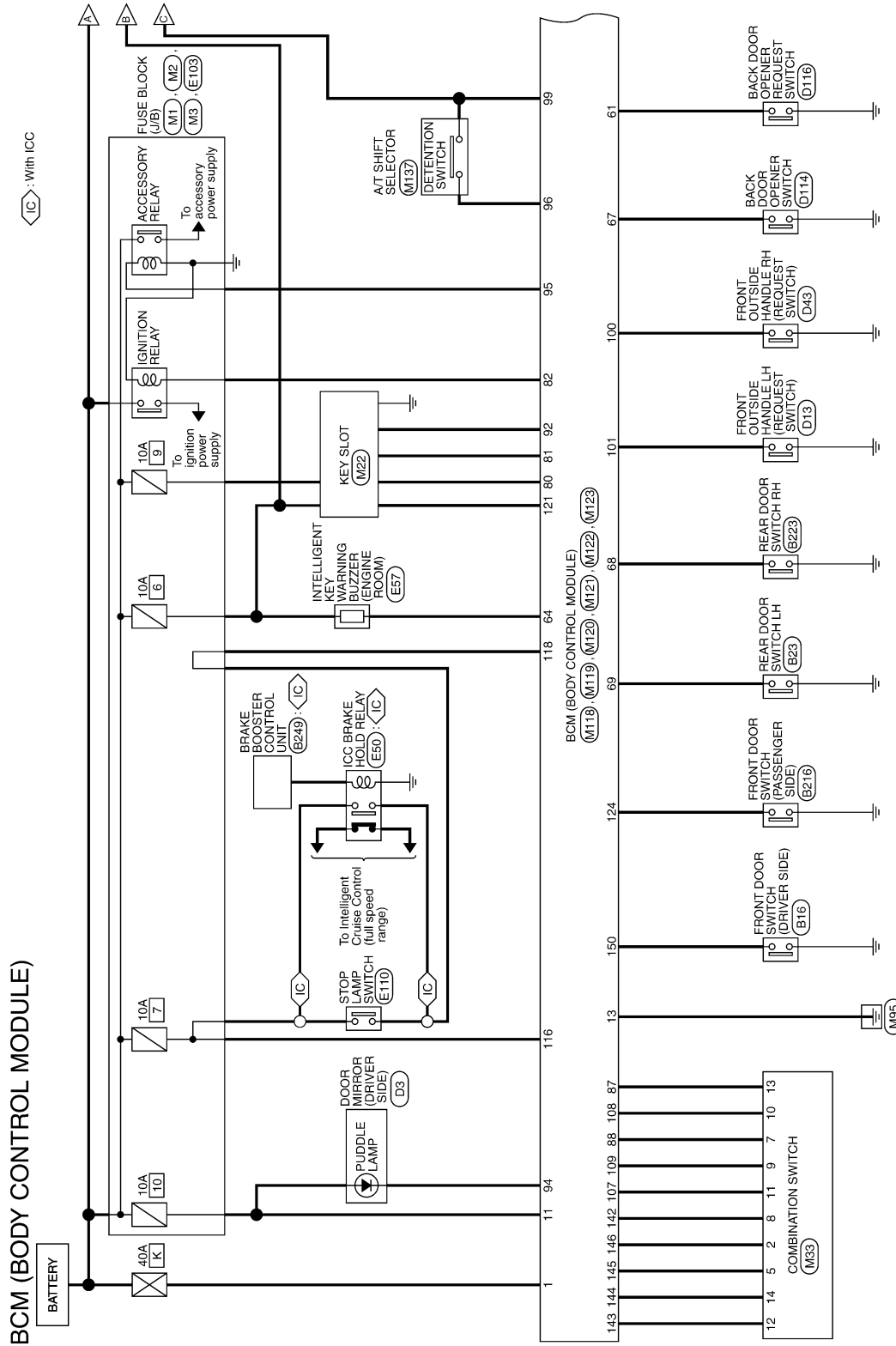
BCM (BODY CONTROL MODULE)

[HALOGEN TYPE]

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - BCM -

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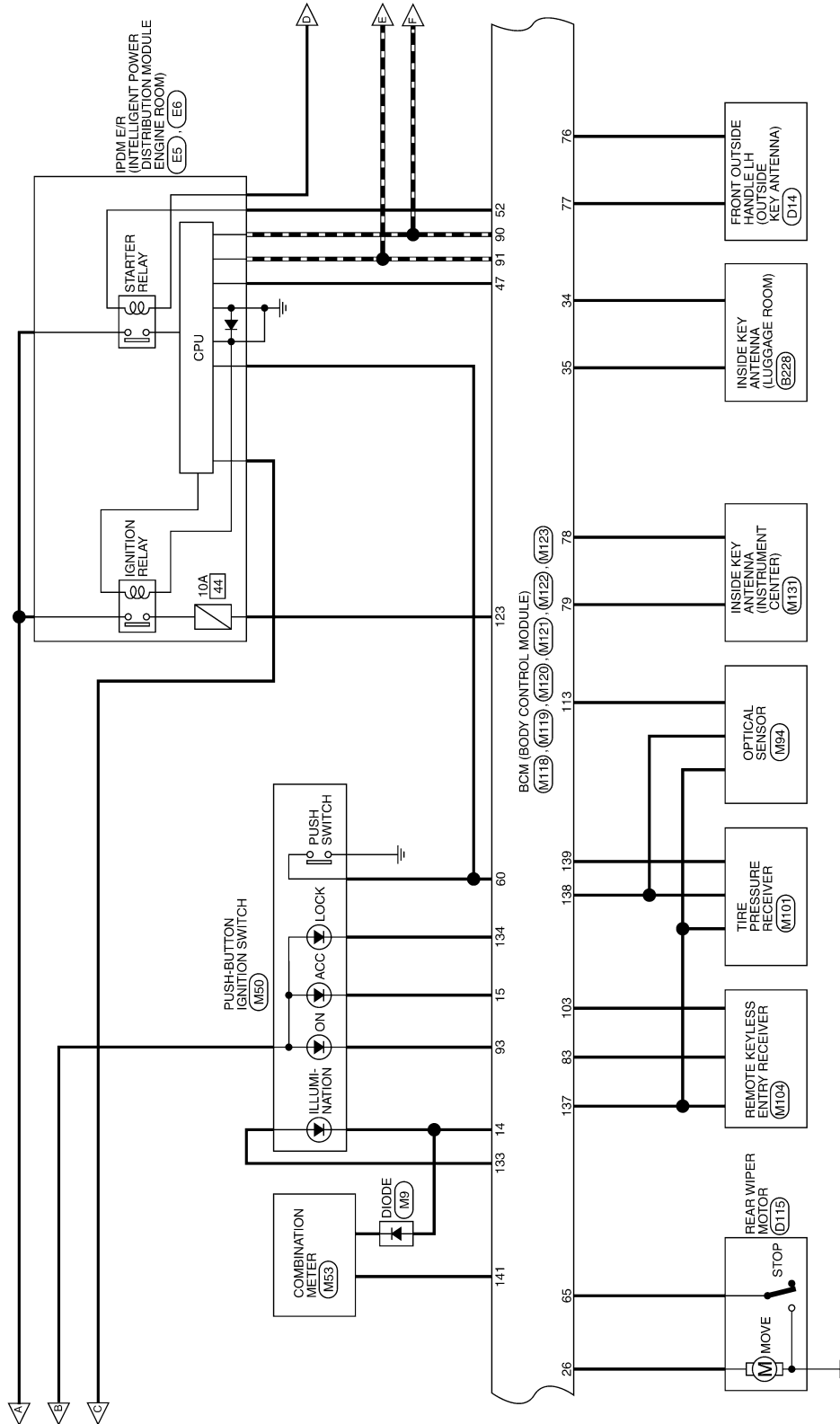
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]



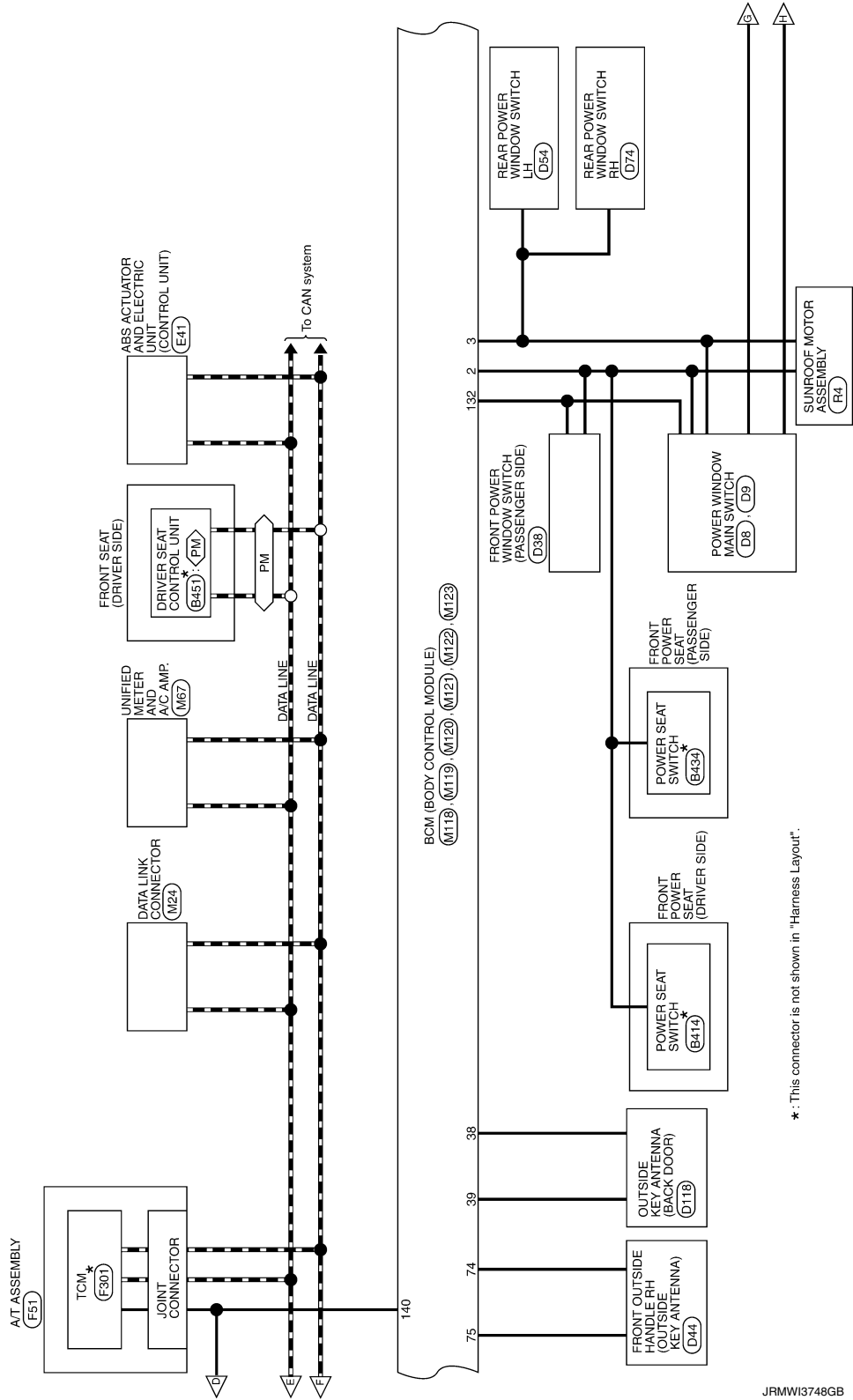
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

◊ (PM) : With automatic drive positioner



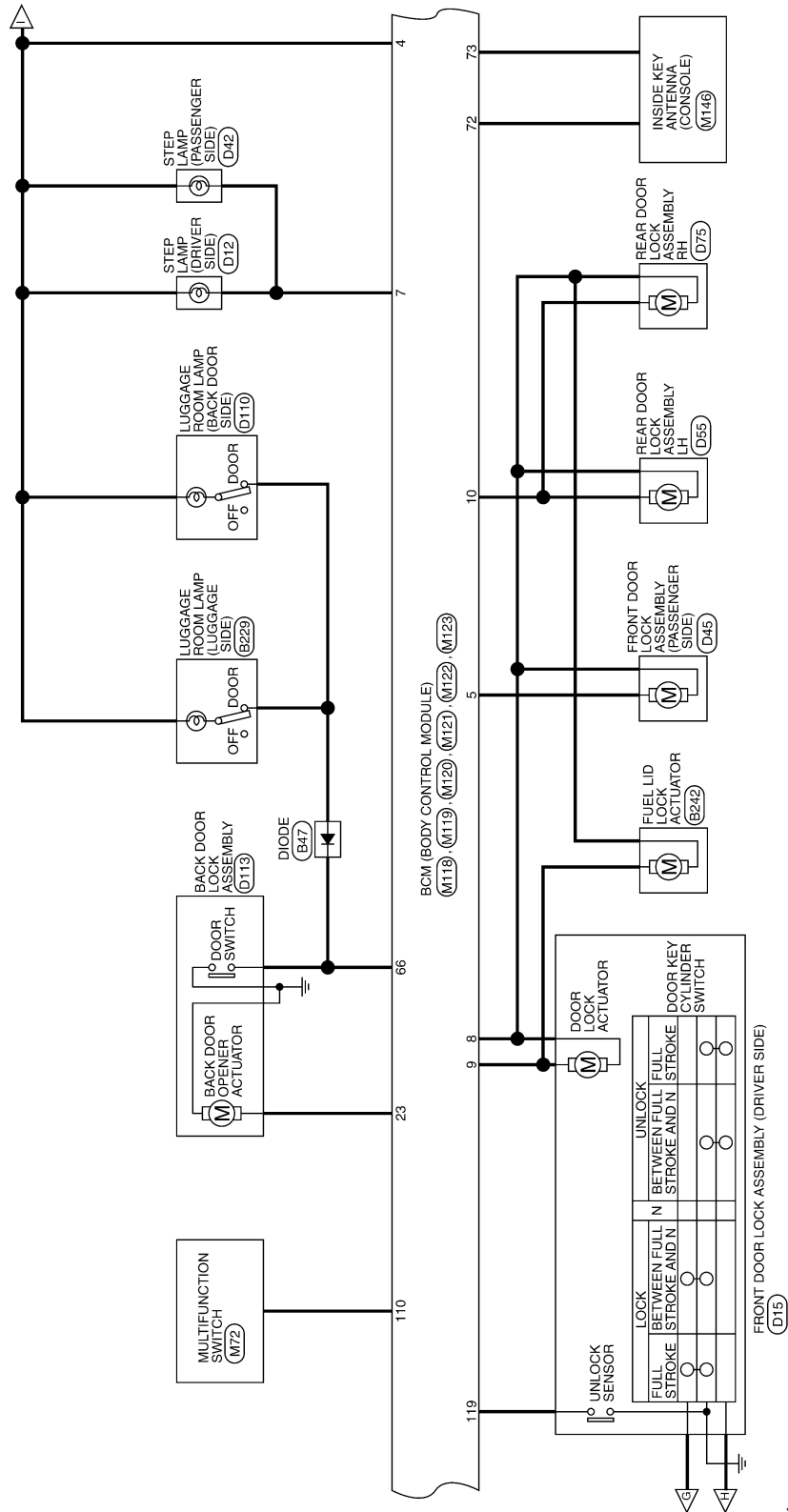
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

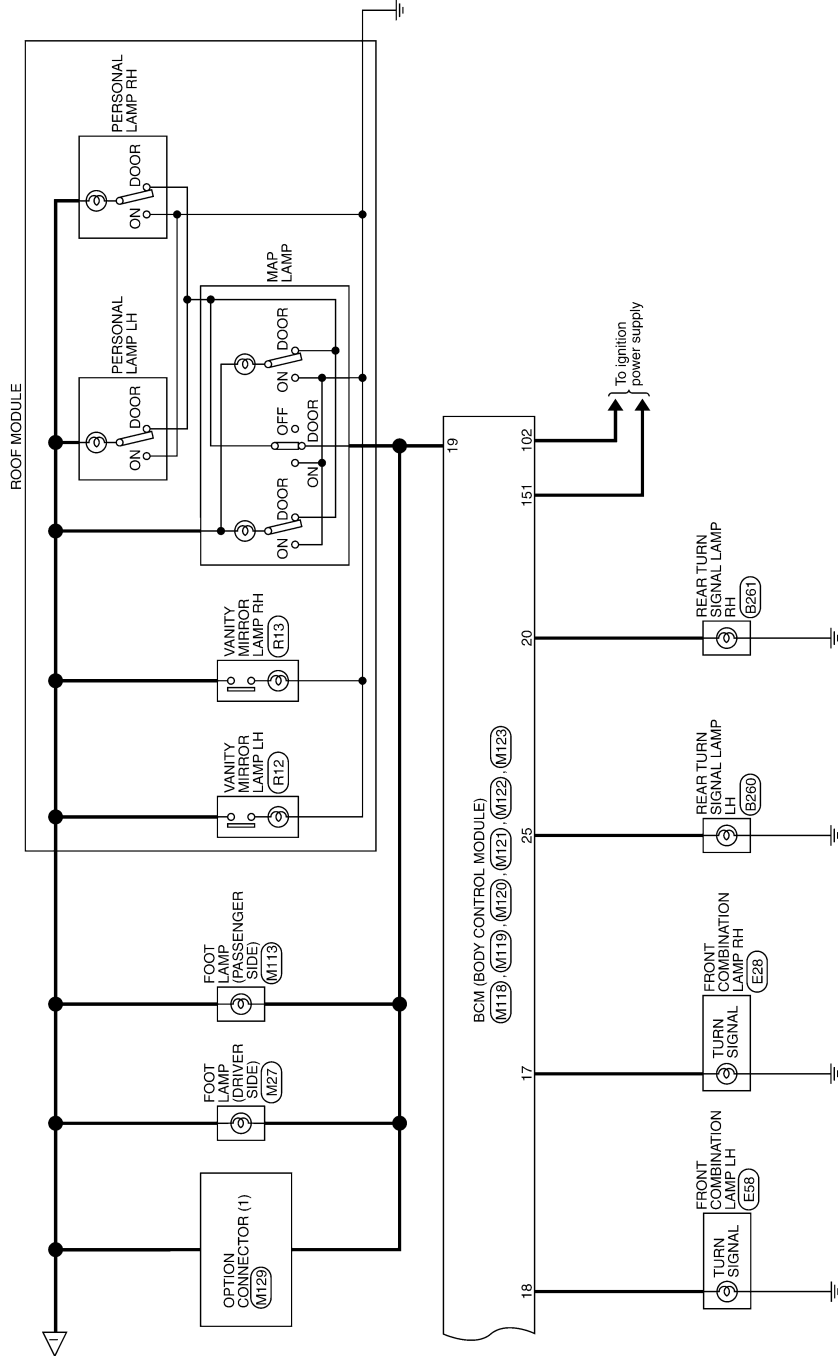


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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]



JRMWI3750GB

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	B16
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



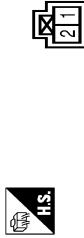
Terminal No.	Color Of Wire	Signal Name [Specification]
2	V	-

Connector No.	B23
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



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

Connector No.	B47
Connector Name	DIODE
Connector Type	Z133Z_C9900



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

Connector No.	B21B
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



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

Connector No.	B223
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



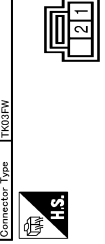
Terminal No.	Color Of Wire	Signal Name [Specification]
2	BR	-

Connector No.	B22B
Connector Name	INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Type	RK02FCY



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

Connector No.	B229
Connector Name	LUGGAGE ROOM LAMP (LUGGAGE SIDE)
Connector Type	TR03FW



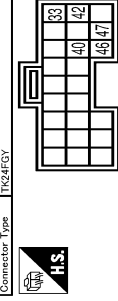
Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	L	-

Connector No.	B24Z
Connector Name	FUEL LID LOCK ACTUATOR
Connector Type	M04FW-LC



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

Connector No.	B249
Connector Name	BRAKE BOOSTER CONTROL UNIT
Connector Type	TR24FGY



Terminal No.	Color Of Wire	Signal Name [Specification]
33	BR	IGNITION
40	SB	BA OFF SW
42	G	IGNITION
46	B	GROUND
47	V	BRAKE HOLD RLY DRIVE SIGNAL

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	B260
Connector Name	REAR TURN SIGNAL LAMP LH
Connector Type	HS32ZFG-W



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

Connector No.	B261
Connector Name	REAR TURN SIGNAL LAMP RH
Connector Type	HS32ZFG-W



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

Connector No.	B414
Connector Name	POWER SEAT SWITCH
Connector Type	NS10FW-CS



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

Connector No.	B454
Connector Name	POWER SEAT SWITCH
Connector Type	NS10FW-CS



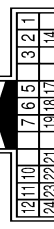
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	G/Y	-
4	P	-
5	W	-
6	V	-
7	L/Y	-
8	L	-
9	L/R	-
10	G/W	-

Connector No.	B451
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH32HW



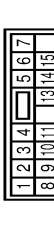
Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	CAN-H
2	-	LIART (TX/RX)
3	-	-
4	-	PULSE (RECLINER)
5	-	PULSE (TELESCOPIC)
6	-	ADDRESS 2
7	-	IND 2
8	-	SLIDE SW (BACKWARD)
9	-	RECLINER SW (BACKWARD)
10	-	FRONT LIFTER SW (DOWNWARD)
11	-	REAR LIFTER SW (DOWNWARD)
12	-	POWER SUPPLY (ENCODER)
13	-	PULSE (LIFT)
14	-	PULSE (REAR LIFTER)
15	-	PULSE (FRONT LIFTER)
16	-	PULSE (LIFT)
17	-	PULSE (LIFT)
18	-	PULSE (LIFT)
19	-	PULSE (LIFT)
20	-	PULSE (LIFT)
21	-	PULSE (LIFT)
22	-	ADDRESS 1
23	-	IND 1
24	-	SLIDE SW (FORWARD)
25	-	RECLINER SW (FORWARD)
26	-	FRONT LIFTER SW (UPWARD)
27	-	REAR LIFTER SW (UPWARD)
28	-	SET SW

Connector No.	B3
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	TH24MW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	O	-
3	BR	COMP+
4	P	COMP+
5	P	COMP+
6	SB	ON
7	W	-
10	G	-
11	P	-
12	O	-
14	LG	-
17	SHIELD	COMP-
18	LG	-
19	B	-
20	GR	-
22	BR	-
23	V	-
24	V	-

Connector No.	B8
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS18FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	REAR POWER WINDOW MOTOR LH UP SIGNAL
2	BR	ENCODER GROUND
3	GR	REAR POWER WINDOW MOTOR LH DOWN SIGNAL

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

4	V	DOOR KEY CYLINDER SWITCH LH LOCK SIGNAL
5	O	REAR POWER WINDOW MOTOR RH/DOWN SIGNAL
6	Y	DOOR KEY CYLINDER SWITCH LH UNLOCK SIGNAL
7	BR	REAR POWER WINDOW MOTOR RH UP SIGNAL
8	L	FRONT POWER WINDOW MOTOR (DRIVER SIDE) UP SIGNAL
9	O	ENCODER PULSE 2
10	Y	RETAINED POWER SIGNAL
11	G	FRONT POWER WINDOW MOTOR (DRIVER SIDE) DOWN SIGNAL
13	P	ENCODER PULSE 1
14	V	POWER WINDOW SERIAL LINK
15	B	ENCODER POWER SUPPLY

Connector No.	D9
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS303FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
17	B	GROUND
19	W	BATTERY POWER SUPPLY

Connector No.	D12
Connector Name	STEP LAMP (DRIVER SIDE)
Connector Type	TB02FW



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

Connector No.	D13
Connector Name	FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)
Connector Type	RK02FL



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

Connector No.	D14
Connector Name	FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA)
Connector Type	RK02MEY



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

Connector No.	D15
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	ED0FGY-RS



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

Connector No.	D38
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Type	NS16FY-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
3	L	ENCODER GROUND
4	O	ENCODER POWER SUPPLY
8	W	POWER WINDOW MOTOR UP SIGNAL
9	G	POWER WINDOW MOTOR DOWN SIGNAL
10	W	BATTERY SUPPLY
11	B	GROUND
12	R	ENCODER PULSE 1
15	O	ENCODER PULSE 2
16	V	POWER WINDOW SERIAL LINK

Connector No.	D42
Connector Name	STEP LAMP (PASSENGER SIDE)
Connector Type	TB02FW



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

Connector No.	D43
Connector Name	FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)
Connector Type	RK02FL



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

JRMW13753GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	D44
Connector Name	FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA)
Connector Type	RK02ZMGY



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

Connector No.	D45
Connector Name	FRONT DOOR LOCK ASSEMBLY PASSENGER SIDE
Connector Type	EB6FGY-RS



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

Connector No.	D54
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	NS02FW-CS



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

Connector No.	D55
Connector Name	REAR DOOR LOCK ASSEMBLY LH
Connector Type	EB6FGY-RS



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

Connector No.	D74
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	NS02FW-CS



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

Connector No.	D75
Connector Name	REAR DOOR LOCK ASSEMBLY RH
Connector Type	EB6FGY-RS



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

Connector No.	D110
Connector Name	LUGGAGE ROOM LAMP (BACK DOOR SIDE)
Connector Type	TK03FW



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

Connector No.	D113
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS04FW-CS



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

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	D114
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	T102ZMR-P



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

Connector No.	D115
Connector Name	REAR WIPER MOTOR
Connector Type	CJ04FW-1V



Terminal No.	Color Of Wire	Signal Name [Specification]
2	G	-
3	O	-
4	B	-

Connector No.	D116
Connector Name	BACK DOOR OPENER REQUEST SWITCH
Connector Type	T102ZMR-P



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

Connector No.	D118
Connector Name	OUTSIDE KEY ANTENNA (BACK DOOR)
Connector Type	IRK02FGY



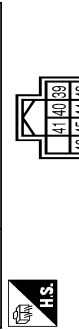
Terminal No.	Color Of Wire	Signal Name [Specification]
1	BR	-
2	R	-

Connector No.	E5
Connector Name	IPM F/R INTELLIGHT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	T120FW-C51Z-M-1V



Terminal No.	Color Of Wire	Signal Name [Specification]
4	V	-
5	L	-
6	R	-
7	R	-
12	B/W	-
13	Y	-
16	LG	-
19	W	-
25	G	-
26	R	-
27	BG	-
28	GR	-
30	G	-

Connector No.	E6
Connector Name	IPM F/R INTELLIGHT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	T100PW-NH



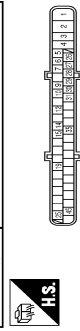
Terminal No.	Color Of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B/W	-
43	SB	-
44	BR	-
45	G	-

Connector No.	-
Connector Name	-
Connector Type	-



Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	-
3	B/Y	-
4	B/W	-
5	BS	-
6	V	-
7	BR	-
8	P	-

Connector No.	E41
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	BAA42FB-AH24-LH



Terminal No.	Color Of Wire	Signal Name [Specification]
2	B	GROUND
3	G	UBV2
4	R	UBV1
5	R	GROUND
6	Y	DS FL
7	BG	DP FL
8	BR	DP FR
9	B	DP FR
10	W	DS FR
12	L	VAC

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

14	P	CON-L
15	SHIELD	GROUND
18	P	LIST
25	Y	BUS-L
26	LG	DP FL
27	GR	DS RL
28	G	LZ
29	LG	DS RR
30	SB	BLS
31	R	VDC OFF SW
33	L	CAN-H
45	B	BUS-H

Connector No.	E50
Connector Name	IGC BRAKE HOLD RELAY
Connector Type	M08FGY-R-JS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	B	-
3	P	-
4	SB	-
6	P	-
7	R	-

Connector No.	E57
Connector Name	INTELLIGENT KEY WARNING BUZZER (ENGINE ROOM)
Connector Type	RM03FBR



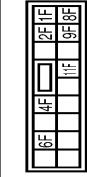
Terminal No.	Color Of Wire	Signal Name [Specification]
1	X	-
3	V	-

Connector No.	E58
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS08FB-PR



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

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS18FHW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
11F	W	-
1F	SB	-
2F	W	-
4F	G	-
6F	BR	-
8F	L	-
9F	R	-

Connector No.	E110
Connector Name	STOP LAMP SWITCH
Connector Type	M04FV-LG



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	W	-
3	Y	-
4	SB	-

Connector No.	E51
Connector Name	A/T ASSEMBLY
Connector Type	FK10FCG-D5Y



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	IGNITION POWER SUPPLY
2	BR	BATTERY POWER SUPPLY
3	O	CAN-H
4	V	K-LINE
5	B	GROUND
6	Y	IGNITION POWER SUPPLY
7	R	BACK-UP LAMP RELAY
8	LG	CAN-L
9	GR	STARTER RELAY
10	B	GROUND

Connector No.	E301
Connector Name	TCM
Connector Type	SP10FG



Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	IGNITION POWER SUPPLY
2	-	BATTERY POWER SUPPLY
3	-	CAN-H
4	-	K-LINE
5	-	GROUND
6	-	IGNITION POWER SUPPLY
7	-	BACK-UP LAMP RELAY
8	-	CAN-L
9	-	STARTER RELAY
10	-	GROUND

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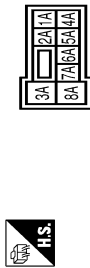
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

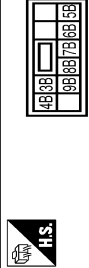
BCM (BODY CONTROL MODULE)

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS08FW-M2



Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	R	-
5A	V	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M2
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS10FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
3B	P	-
4B	G	-
5B	G	-
6B	Y	-
7B	P	-
8B	R	-
9B	SB	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	L	-
11C	R	-
12C	BG	-
6C	R	-
7C	B	-
8C	G	-
9C	BG	-

Connector No.	M9
Connector Name	DIODE
Connector Type	2435 CB960



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

Connector No.	M22
Connector Name	KEY SLOT
Connector Type	TH12FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	BAT
2	GR	CLOCK
3	W	DATA
5	Y	ILL BAT
6	LG	ILL
7	B	GROUND
11	BR	KEY SWITCH SIGNAL

Connector No.	M24
Connector Name	DATA LINK CONNECTOR
Connector Type	ED10FW



Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	B	-
5	V	-
6	B	-
7	Y	-
8	G	-
11	SB	-
14	P	-
16	Y	-

Connector No.	M27
Connector Name	FOOT LAMP (DRIVER SIDE)
Connector Type	A02FW



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

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	P	FR WASHER(-)
2	SB	OUTPUT 4
3	GR	FR WASHER(+)
4	G	IGN
5	L	OUTPUT 3
6	B	GROUND
7	V	INPUT 3
8	BG	OUTPUT 5
9	Y	OUTPUT 2
10	R	INPUT 4
11	LG	INPUT 1
12	P	OUTPUT 1
13	BR	INPUT 5
14	G	OUTPUT 2

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	M53
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FBR



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

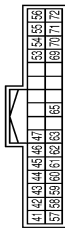
Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	TH46FP-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	BATTERY POWER SUPPLY
2	LG	COMMUNICATION SIGNAL (METER->AMP)
3	GR	COMMUNICATION SIGNAL (AMP->METER)
4	B	ALTERNATOR SIGNAL
5	B	SECURITY SIGNAL
6	B	SECURITY SIGNAL
7	BR	SECURITY SIGNAL
8	B	SECURITY SIGNAL
9	B	SECURITY SIGNAL
10	G	GROUND
11	B	GROUND
12	B	METER CONTROL SWITCH GROUND
13	B	METER CONTROL SWITCH GROUND
14	B	METER CONTROL SWITCH GROUND
15	B	METER CONTROL SWITCH GROUND
16	B	METER CONTROL SWITCH GROUND
17	B	METER CONTROL SWITCH GROUND
18	B	METER CONTROL SWITCH GROUND
19	B	METER CONTROL SWITCH GROUND
20	R	ILL
21	BG	IGNITION SIGNAL

Terminal No.	Color Of Wire	Signal Name [Specification]
22	B	GROUND
23	BR	COMMUNICATION SIGNAL (GDP->AMP)
24	Y	COMMUNICATION SIGNAL (AMP->LCD)
25	Y	COMMUNICATION SIGNAL (AMP->LCD)
26	R	VEHICLE SPEED SIGNAL (B-FULSE)
27	V	PARKING BRAKE SWITCH SIGNAL
28	W	VEHICLE SPEED SIGNAL (B-FULSE)
29	SB	SEAT BELT BRuckle SWITCH SIGNAL (DRIVER SIDE)
30	G	SEAT BELT BRuckle SWITCH SIGNAL (PASSENGER SIDE)
31	L	WASHER LEVEL SWITCH SIGNAL
32	B	ILLUMINATION CONTROL SIGNAL
33	B	ILLUMINATION CONTROL SIGNAL
34	B	ILLUMINATION CONTROL SIGNAL
35	B	ILLUMINATION CONTROL SIGNAL
36	B	ILLUMINATION CONTROL SIGNAL
37	B	ILLUMINATION CONTROL SIGNAL
38	B	ILLUMINATION CONTROL SIGNAL
39	B	ILLUMINATION CONTROL SIGNAL
40	BG	ILLUMINATION CONTROL SWITCH SIGNAL (C)

Connector No.	M67
Connector Name	UNFIED METER AND A. C. AMP.
Connector Type	TH32FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
41	V	ACC POWER SUPPLY
42	Y	FUEL LEVEL SENSOR SIGNAL
43	R	INTAKE SENSOR SIGNAL
44	LG	IN-VEHICLE SENSOR SIGNAL
45	P	AMBIENT SENSOR SIGNAL
46	BG	SUNLOAD SENSOR SIGNAL
47	G	IGNITION POWER SUPPLY
48	G	IGNITION POWER SUPPLY
49	Y	BATTERY POWER SUPPLY
50	B	GROUND
51	W	GROUND
52	W	GROUND
53	W	GROUND
54	W	GROUND
55	W	GROUND
56	W	GROUND

6B	L	A/C CLAN SIGNAL
70	R	EACH DOOR MOTOR POWER SUPPLY
71	B	GROUND
72	P	CAN-L



Connector No.	M101
Connector Name	TIRE PRESSURE RECEIVER
Connector Type	TK04FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
2	BG	GROUND
3	Y	SIGNAL
4	Y	BATTERY

Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
2	V	ACC
3	R	ILL
4	R	ILL
5	Y	ILL CONT
6	SB	AV COMM (H)
7	LG	AV COMM (L)
8	B	AV COMM (L)
9	B	AV COMM (L)
10	Y	DISK SIGNAL
11	G	HAZARD ON

Connector No.	M104
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	JAB04FB



Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	POWER
2	P	OUTPUT
3	B	GROUND



Connector No.	M84
Connector Name	OPTICAL SENSOR
Connector Type	TK03PW

Terminal No.	Color Of Wire	Signal Name [Specification]
1	BG	GROUND
2	Y	SIGNAL OUTPUT
4	LG	BATTERY

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	M113
Connector Name	FOOT LAMP (PASSENGER SIDE)
Connector Type	A02FW



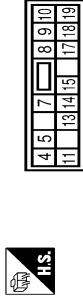
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	BR	-

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M03FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	W	POWER WINDOW POWER SUPPLY(BAT)
3	Y	POWER WINDOW POWER SUPPLY(TRAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS



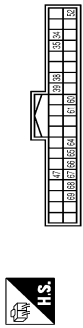
Terminal No.	Color Of Wire	Signal Name [Specification]
4	LG	INTERIOR ROOM LAMP POWER SUPPLY
5	LG	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP CONT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	BR	REAR DOOR UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GROUND
14	W	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT)
18	BG	TURN SIGNAL LH (FRONT)
19	V	INT ROOM LAMP CONT

Connector No.	M120
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS



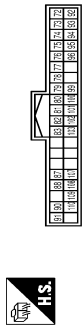
Terminal No.	Color Of Wire	Signal Name [Specification]
20	V	TURN SIGNAL RH (REAR)
23	G	BACK DOOR OPEN OUTPUT
25	G	TURN SIGNAL LH (REAR)
26	G	REAR WIPER OUTPUT

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FCY-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
34	SB	LUGGAGE ROOM ANT-
35	V	LUGGAGE ROOM ANT+
38	B	BACK DOOR ANT-
39	W	BACK DOOR ANT+
47	Y	IGN RELAY (PDM F/R) CONT
52	SB	STARTER RELAY CONT
60	BR	PUSH SW
61	W	BACK DOOR OPENER REQUEST SW
64	V	I-KEY WARN BUZZER (ENG ROOM)
65	BG	REAR WIPER STOP POSITION
66	R	BACK DOOR SW
67	GR	BACK DOOR OPENER SW
68	BR	REAR LH DOOR SW
69	R	REAR LH DOOR SW

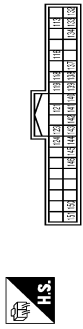
Connector No.	M122
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40PE-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2 -
73	G	ROOM ANT2 +
74	SB	PASSENGER DOOR ANT-
75	GR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+

78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	MATS ANT AMP.
81	W	MATS ANT AMP.
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL CONT
93	V	IGN IND
94	Y	PLUG LOCK CONT
95	BG	ACC RELAY CONT
96	GR	A.T SHIFT SELECTOR POWER SUPPLY
89	R	SHIFT P
100	G	PASSENGER DOOR REQUEST SW
101	SB	DRIVER DOOR REQUEST SW
102	EG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FC-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
111	SB	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	BR	KEY SLOT SW
123	W	IGN F/B
124	LG	PASSENGER DOOR SW
132	BR	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

137	BG	RECEIVER SENSOR GND
138	Y	RECEIVER SENSOR POWER SUPPLY
139	L	TIRE PRESSURE RECEIVER COMM
140	GR	SHIFT N/P
141	G	SECURITY IND LAMP GNDT
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	LG	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M129
Connector Name	OPTION CONNECTOR (1)
Connector Type	TH408MW-NH



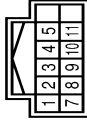
Terminal No.	Color	Wire	Signal Name [Specification]
3	G	-	-
6	R	-	-

Connector No.	M131
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FGY



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

Connector No.	M137
Connector Name	A/T SHIFT SELECTOR
Connector Type	TH12FW-NH



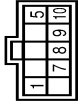
Terminal No.	Color	Wire	Signal Name [Specification]
1	W	-	-
2	V	-	-
3	L	-	-
4	B	-	-
5	G	-	-
7	R	-	-
8	SB	-	-
9	B	-	-
10	GR	-	-
11	R	-	-

Connector No.	M146
Connector Name	INSIDE KEY ANTENNA (CONSOLE)
Connector Type	RK02FGY



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

Connector No.	R4
Connector Name	SUNROOF MOTOR ASSEMBLY
Connector Type	YEA10FGY



Terminal No.	Color	Wire	Signal Name [Specification]
1	GR	-	SUNROOF CLOSE SWITCH (BITD) SIGNAL
5	P	-	SUNROOF OPEN SWITCH (BITD) SIGNAL
7	BR	-	SUNROOF POWER SUPPLY
8	L	-	VEHICLE SPEED SENSOR (2PULSE)
9	Y	-	PAP SIGNAL
10	G	-	GROUND

Connector No.	RI2
Connector Name	VANITY MIRROR LAMP LH
Connector Type	MC2A02FW



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

Connector No.	RI2
Connector Name	VANITY MIRROR LAMP RH
Connector Type	MC2A02FW



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

Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

JRMWI3760GB

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> • Starter control relay signal • Starter relay status signal
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent <ul style="list-style-type: none"> • Starter motor relay control signal • Starter relay status signal (CAN)
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled <ul style="list-style-type: none"> • IGN relay (IPDM E/R) control signal: OFF (Battery voltage) • Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) • Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled <ul style="list-style-type: none"> • Power position changes to ACC • Receives engine status signal (CAN)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal. When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

1. More than 1 minute is passed after the rear wiper stops.
2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

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

Priority	DTC
1	B2562: LOW VOLTAGE
2	<ul style="list-style-type: none"> • U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)
3	<ul style="list-style-type: none"> • B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Priority	DTC	
4	• B2553: IGNITION RELAY	A
	• B2555: STOP LAMP	
	• B2556: PUSH-BTN IGN SW	
	• B2557: VEHICLE SPEED	B
	• B2560: STARTER CONT RELAY	
	• B2601: SHIFT POSITION	
	• B2602: SHIFT POSITION	
	• B2603: SHIFT POSI STATUS	C
	• B2604: PNP SW	
	• B2605: PNP SW	
	• B2608: STARTER RELAY	
	• B260A: IGNITION RELAY	D
	• B260F: ENG STATE SIG LOST	
	• B2614: ACC RELAY CIRC	
	• B2615: BLOWER RELAY CIRC	
	• B2616: IGN RELAY CIRC	E
	• B2617: STARTER RELAY CIRC	
	• B2618: BCM	
	• B261A: PUSH-BTN IGN SW	F
	• B261E: VEHICLE TYPE	
• B26EA: KEY REGISTRATION		
• C1729: VHCL SPEED SIG ERR		
• U0415: VEHICLE SPEED SIG	G	
5	• C1704: LOW PRESSURE FL	
	• C1705: LOW PRESSURE FR	
	• C1706: LOW PRESSURE RR	H
	• C1707: LOW PRESSURE RL	
	• C1708: [NO DATA] FL	
	• C1709: [NO DATA] FR	
	• C1710: [NO DATA] RR	I
	• C1711: [NO DATA] RL	
	• C1716: [PRESSDATA ERR] FL	
	• C1717: [PRESSDATA ERR] FR	
	• C1718: [PRESSDATA ERR] RR	J
	• C1719: [PRESSDATA ERR] RL	
	• C1734: CONTROL UNIT	
6	• B2621: INSIDE ANTENNA	K
	• B2622: INSIDE ANTENNA	
	• B2623: INSIDE ANTENNA	

DTC Index

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EXL

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to [EXL-272. "COMMON ITEM : CONSULT Function \(BCM - COMMON ITEM\)"](#).

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
No DTC is detected. Further testing may be required.	—	—	—	—	—
U1000: CAN COMM CIRCUIT	—	—	—	—	BCS-41
U1010: CONTROL UNIT (CAN)	—	—	—	—	BCS-42
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-43
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-40

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-43
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-44
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-45
B2195: ANTI SCANNING	×	—	—	—	SEC-46
B2553: IGNITION RELAY	—	×	—	—	PCS-52
B2555: STOP LAMP	—	×	—	—	SEC-47
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-49
B2557: VEHICLE SPEED	×	×	×	—	SEC-51
B2560: STARTER CONT RELAY	×	×	×	—	SEC-52
B2562: LOW VOLTAGE	—	×	—	—	BCS-44
B2601: SHIFT POSITION	×	×	×	—	SEC-53
B2602: SHIFT POSITION	×	×	×	—	SEC-56
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-59
B2604: PNP SW	×	×	×	—	SEC-62
B2605: PNP SW	×	×	×	—	SEC-64
B2608: STARTER RELAY	×	×	×	—	SEC-66
B260A: IGNITION RELAY	×	×	×	—	PCS-54
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-68
B2614: ACC RELAY CIRC	—	×	×	—	PCS-56
B2615: BLOWER RELAY CIRC	—	×	×	—	PCS-59
B2616: IGN RELAY CIRC	—	×	×	—	PCS-62
B2617: STARTER RELAY CIRC	×	×	×	—	SEC-71
B2618: BCM	×	×	×	—	PCS-65
B261A: PUSH-BTN IGN SW	—	×	×	—	SEC-73
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-76
B2621: INSIDE ANTENNA	—	×	—	—	DLK-58
B2622: INSIDE ANTENNA	—	×	—	—	DLK-60
B2623: INSIDE ANTENNA	—	×	—	—	DLK-62
B26E1: ENG STATE NO RES	×	×	×	—	SEC-69
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-70
C1704: LOW PRESSURE FL	—	—	—	×	WT-25
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	
C1708: [NO DATA] FL	—	—	—	×	WT-27
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-30
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-32
C1734: CONTROL UNIT	—	—	—	×	WT-34

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

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

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

Reference Value

INFOID:000000012750617

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

Monitor Item	Condition		Value/Status
RAD FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	0 – 100 %
AC COMP REQ	Engine running	A/C switch OFF	Off
		A/C switch ON (Compressor is operating)	On
TAIL&CLR REQ	Lighting switch OFF		Off
	Lighting switch 1ST, 2ND, HI or AUTO (Light is illuminated)		On
HL LO REQ	Lighting switch OFF		Off
	Lighting switch 2ND HI or AUTO (Light is illuminated)		On
HL HI REQ	Lighting switch OFF		Off
	Lighting switch HI		On
FR FOG REQ	Lighting switch 2ND or AUTO (Light is illuminated)	Front fog lamp switch OFF	Off
		<ul style="list-style-type: none"> • Front fog lamp switch ON • Daytime running light activated (Only for Canada) 	On
FR WIP REQ	Ignition switch ON	Front wiper switch OFF	Stop
		Front wiper switch INT	1LOW
		Front wiper switch LO	Low
		Front wiper switch HI	Hi
WIP AUTO STOP	Ignition switch ON	Front wiper stop position	STOP P
		Any position other than front wiper stop position	ACT P
WIP PROT	Ignition switch ON	Front wiper operates normally	Off
		Front wiper stops at fail-safe operation	BLOCK
IGN RLY1 -REQ	Ignition switch OFF or ACC		Off
	Ignition switch ON		On
IGN RLY	Ignition switch OFF or ACC		Off
	Ignition switch ON		On
PUSH SW	Release the push-button ignition switch		Off
	Press the push-button ignition switch		On
INTER/NP SW	Ignition switch ON	Selector lever in any position other than P or N	Off
		Selector lever in P or N position	On
ST RLY CONT	Ignition switch ON		Off
	At engine cranking		On

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

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Monitor Item	Condition	Value/Status
IHBT RLY -REQ	Ignition switch ON	Off
	At engine cranking	On
ST/INHI RLY	Ignition switch ON	Off
	At engine cranking	INHI ON → ST ON
	The status of starter relay or starter control relay cannot be recognized by the battery voltage malfunction, etc. when the starter relay is ON and the starter control relay is OFF	UNKWN
DETENT SW	Ignition switch ON	Off
	Release the selector button with selector lever in P position	On
S/L RLY -REQ	NOTE: The item is indicated, but not monitored.	Off
S/L STATE	NOTE: The item is indicated, but not monitored.	UNLOCK
DTRL REQ	Daytime running light system is not operated	Off
	Daytime running light system is operated	On
OIL P SW	Ignition switch OFF, ACC or engine running	Open
	Ignition switch ON	Close
HOOD SW	Close the hood	Off
	Open the hood	On
HL WASHER REQ	NOTE: The item is indicated, but not monitored.	Off
THFT HRN REQ	Not operation	Off
	<ul style="list-style-type: none"> • Panic alarm is activated • Horn is activated with VEHICLE SECURITY (THEFT WARNING) SYSTEM 	On
HORN CHIRP	Not operating	Off
	Door locking with Intelligent Key (horn chirp mode)	On
CRNRNG LMP REQ	NOTE: The item is indicated, but not monitored.	Off

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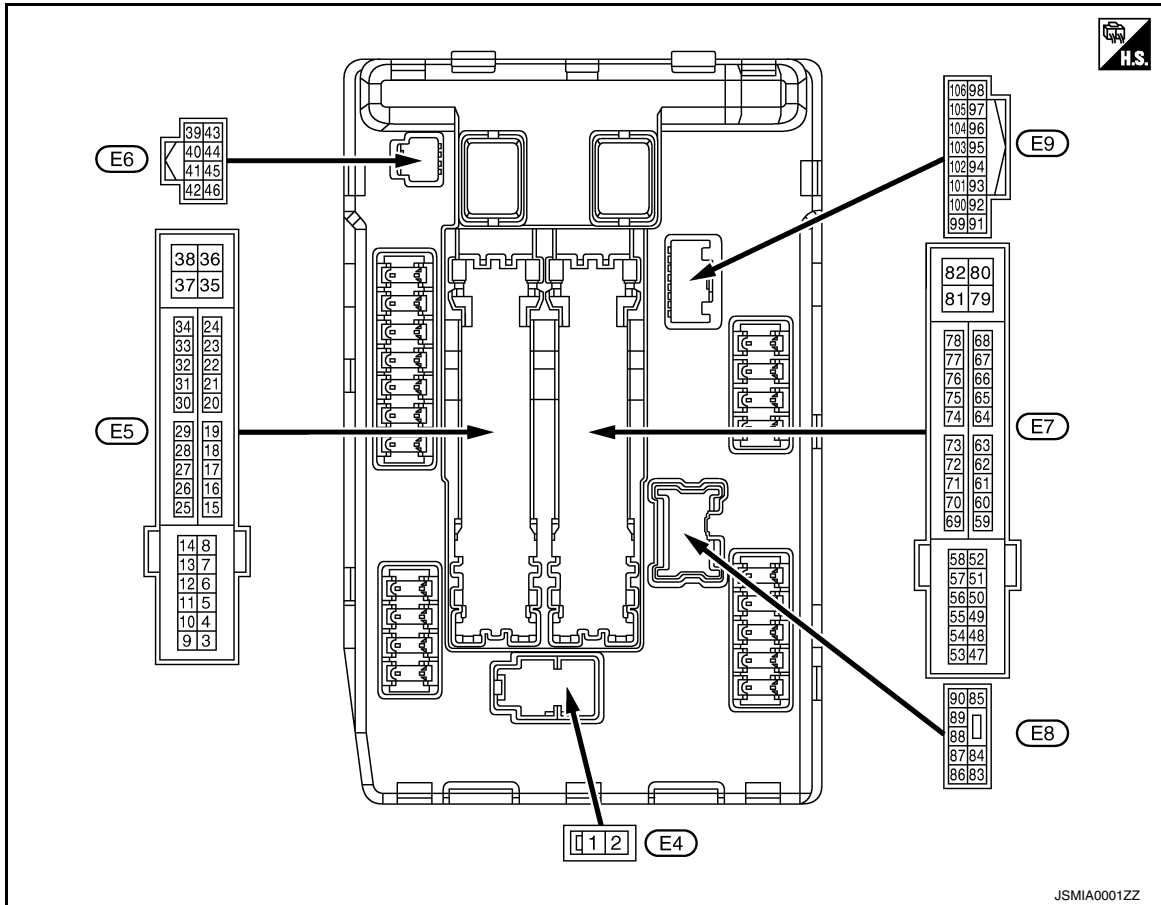
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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (L)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
4 (V)	Ground	Front wiper LO	Output	Ignition switch OFF	Front wiper switch OFF	0 V
				Ignition switch ON	Front wiper switch LO	Battery voltage
5 (L)	Ground	Front wiper HI	Output	Ignition switch OFF	Front wiper switch OFF	0 V
				Ignition switch ON	Front wiper switch HI	Battery voltage
6 (R)	Ground	Daytime running light relay power supply	Output	Ignition switch OFF		Battery voltage
7 (R)	Ground	Tail, license plate lamps & interior lamps	Output	Ignition switch OFF	Lighting switch OFF	0 V
				Ignition switch ON	Lighting switch 1ST	Battery voltage
12 (B/W)	Ground	Ground	—	Ignition switch ON		0 V
13 (Y)	Ground	Fuel pump power supply	Output	Approximately 1 second or more after turning the ignition switch ON		0 V
				<ul style="list-style-type: none"> Approximately 1 second after turning the ignition switch ON Engine running 		Battery voltage

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

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
16 (LG)	Ground	Front wiper auto stop	Input	Ignition switch ON	Front wiper stop position	0 V
					Any position other than front wiper stop position	Battery voltage
19 (W)	Ground	Ignition relay power supply	Output	Ignition switch OFF	Ignition switch OFF	0 V
					Ignition switch ON	Battery voltage
25 (G)	Ground	Ignition relay power supply	Output	Ignition switch OFF	Ignition switch OFF	0 V
					Ignition switch ON	Battery voltage
26* (R)	Ground	Ignition relay power supply	Output	Ignition switch OFF	Ignition switch OFF	0 V
					Ignition switch ON	Battery voltage
27 (BG)	Ground	Ignition relay monitor	Input	Ignition switch OFF or ACC	Ignition switch OFF or ACC	Battery voltage
					Ignition switch ON	0 V
28 (L)	Ground	Push-button ignition switch	Input	Press the push-button ignition switch	Press the push-button ignition switch	0 V
					Release the push-button ignition switch	Battery voltage
30 (GR)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V
					Selector lever P or N	Battery voltage
36 (G)	Ground	Battery power supply	Input	Ignition switch OFF	Ignition switch OFF	Battery voltage
39 (P)	—	CAN-L	Input/ Output	—	—	—
40 (L)	—	CAN-H	Input/ Output	—	—	—
41 (B/W)	Ground	Ground	—	Ignition switch ON	Ignition switch ON	0 V
43 (SB)	Ground	A/T shift selector (Detention switch)	Input	Ignition switch ON	<ul style="list-style-type: none"> • Press the selector button (Selector lever P) • Selector lever in any position other than P 	Battery voltage
					Release the selector button (selector lever P)	0 V
44 (BR)	Ground	Horn relay control	Input	The horn is deactivated	The horn is deactivated	Battery voltage
					The horn is activated	0 V
45 (G)	Ground	Anti theft horn relay control	Input	The horn is deactivated	The horn is deactivated	Battery voltage
					The horn is activated	0 V
46 (R)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any position other than P or N	0 V
					Selector lever P or N	Battery voltage
48 (L)	Ground	A/C relay power supply	Output	Engine running	A/C switch OFF	0 V
					A/C switch ON (A/C compressor is operating)	Battery voltage
49 (BG)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)	0 V
					<ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) 	Battery voltage

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

< ECU DIAGNOSIS INFORMATION >

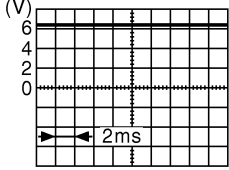
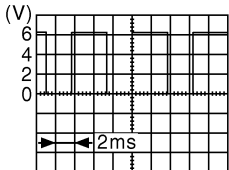
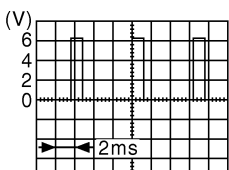
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
51 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF	0 V
				Ignition switch ON	Battery voltage
53 (W)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)	0 V
				<ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) 	Battery voltage
54 (P)	Ground	Throttle control motor relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)	0 V
				<ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) 	Battery voltage
55 (SB)	Ground	ECM power supply	Output	Ignition switch OFF	Battery voltage
56 (LG)	Ground	Ignition relay power supply	Output	Ignition switch OFF	0 V
				Ignition switch ON	Battery voltage
57 (G)	Ground	Ignition relay power supply	Output	Ignition switch OFF	0 V
				Ignition switch ON	Battery voltage
58 (V)	Ground	Ignition relay power supply	Output	Ignition switch OFF	0 V
				Ignition switch ON	Battery voltage
69 (BR)	Ground	ECM relay control	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)	Battery voltage
				<ul style="list-style-type: none"> • Ignition switch ON • Ignition switch OFF (For a few seconds after turning ignition switch OFF) 	0 – 1.5 V
70 (BG)	Ground	Throttle control motor relay control	Output	Ignition switch ON → OFF	0 – 1.0 V ↓ Battery voltage ↓ 0 V
				Ignition switch ON	0 – 1.0 V
74 (P)	Ground	Ignition relay power supply	Output	Ignition switch OFF	0 V
				Ignition switch ON	Battery voltage
75 (SB)	Ground	Oil pressure switch	Input	Ignition switch ON	0 V
				Engine stopped	Battery voltage
				Engine running	Battery voltage

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

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
76 (Y)	Ground	Power generation command signal	Output	Ignition switch ON		 6.3 V
				40% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE"		 3.8 V
				80% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE"		 1.4 V
77 (R)	Ground	Fuel pump relay control	Output	<ul style="list-style-type: none"> • Approximately 1 second after turning the ignition switch ON • Engine running 		0 – 1.0 V
				Approximately 1 second or more after turning the ignition switch ON		Battery voltage
80 (W)	Ground	Starter motor	Output	At engine cranking		Battery voltage
83 (BG)	Ground	Headlamp LO (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 2ND	Battery voltage
84 (V)	Ground	Headlamp LO (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 2ND	Battery voltage
86 (W)	Ground	Front fog lamp (RH)	Output	Lighting switch 2ND	Front fog lamp switch OFF	0 V
					<ul style="list-style-type: none"> • Front fog lamp switch ON • Daytime running light activated (Only for Canada) 	
87 (L)	Ground	Front fog lamp (LH)	Output	Lighting switch 2ND	Front fog lamp switch OFF	0 V
					<ul style="list-style-type: none"> • Front fog lamp switch ON • Daytime running light activated (Only for Canada) 	
88 (GR)	Ground	Washer pump power supply	Output	Ignition switch ON		Battery voltage

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

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
89 (BR)	Ground	Headlamp HI (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					<ul style="list-style-type: none"> • Lighting switch HI • Lighting switch PASS 	Battery voltage
90 (P)	Ground	Headlamp HI (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					<ul style="list-style-type: none"> • Lighting switch HI • Lighting switch PASS 	Battery voltage
91 (P)	Ground	Parking lamp (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
92 (BG)	Ground	Parking lamp (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
97 (V)	Ground	Cooling fan control	Output	Engine idling		0 – 5 V
104 (LG)	Ground	Hood switch	Input	Close the hood		Battery voltage
				Open the hood		0 V
105 (SB)	Ground	Daytime running light relay control	Output	Daytime running light system is not operated.		Battery voltage
				Daytime running light system is operated.		0 V

*: Only for the models with ICC system

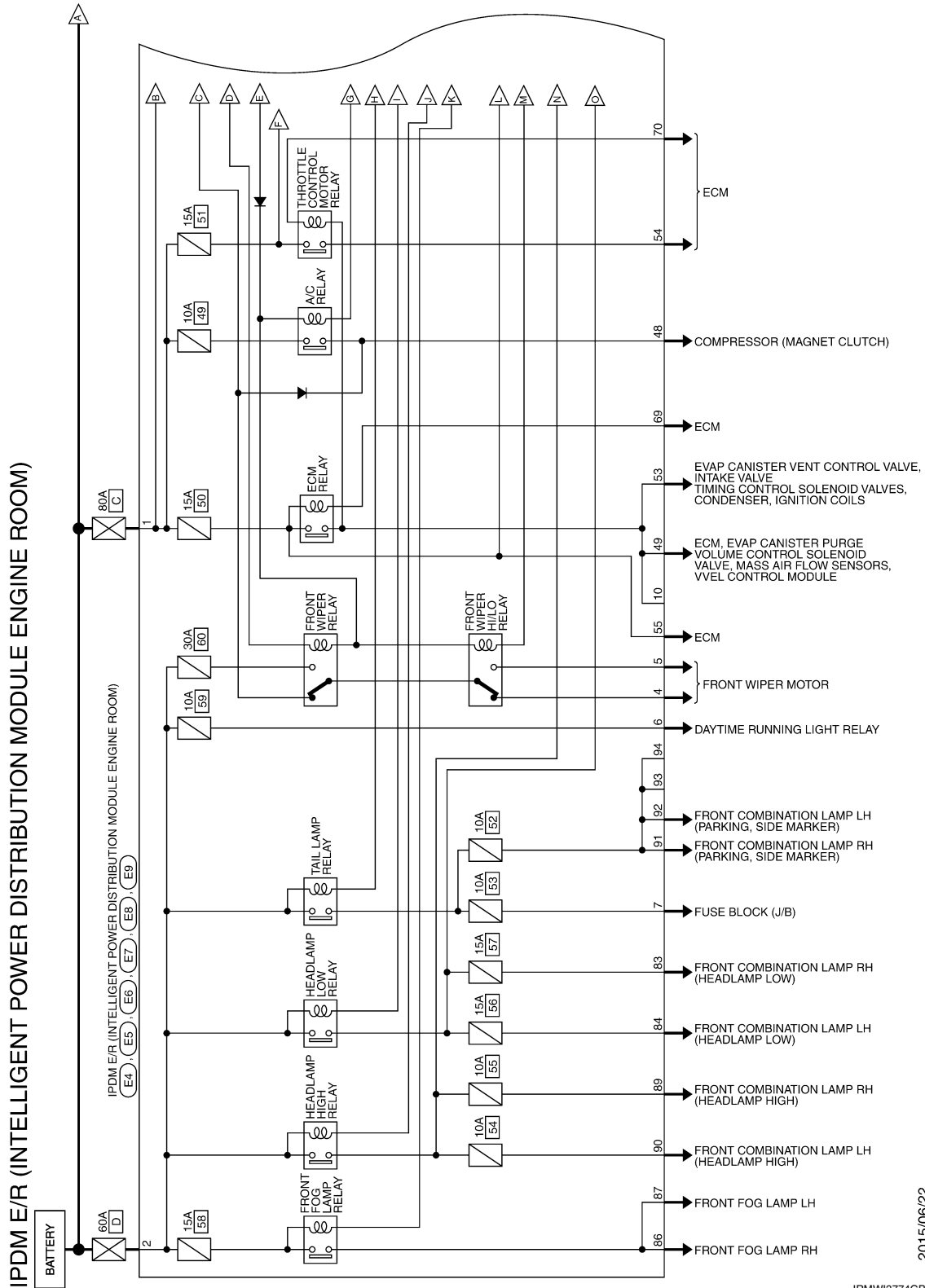
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Wiring Diagram - IPDM E/R -

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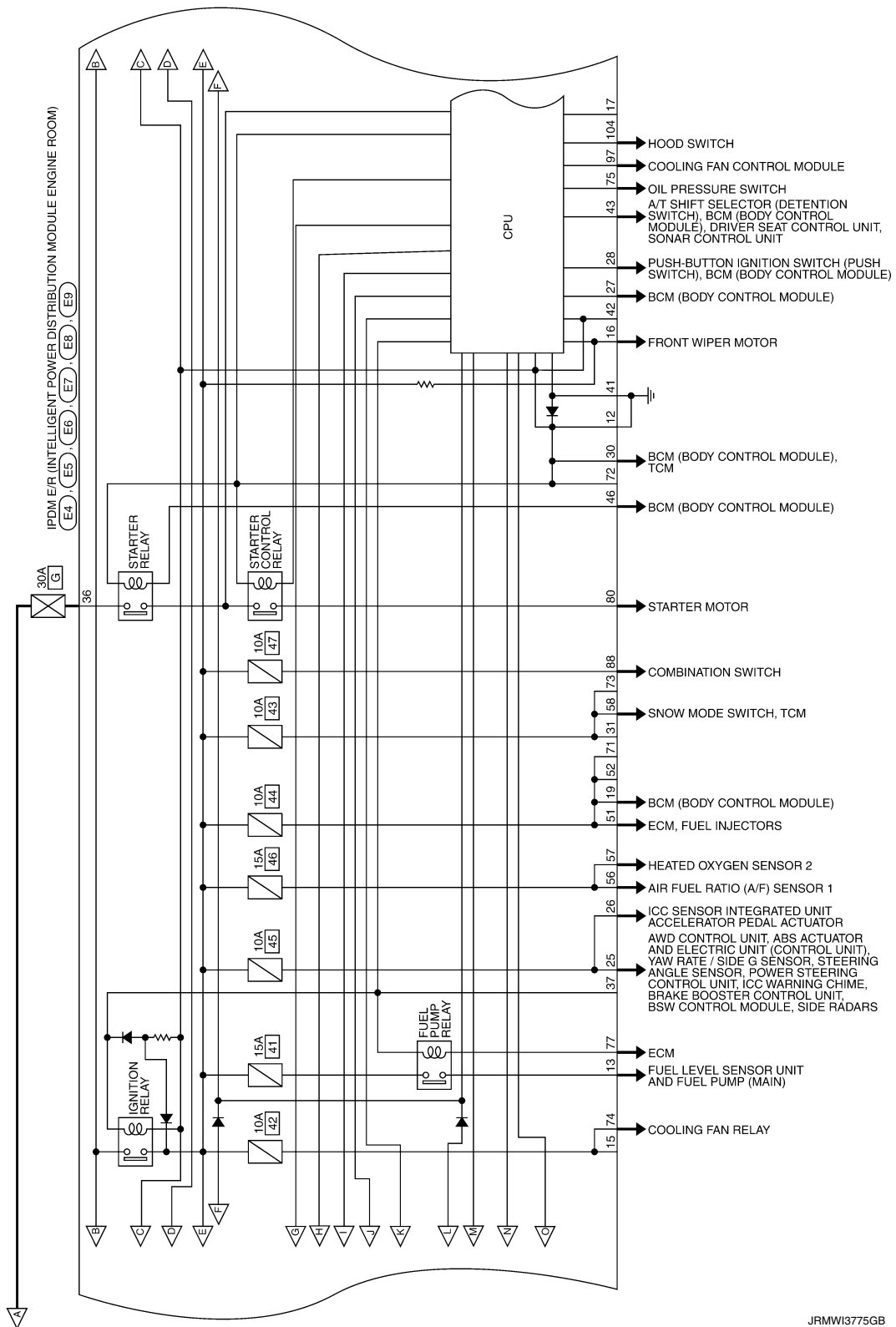
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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS INFORMATION >

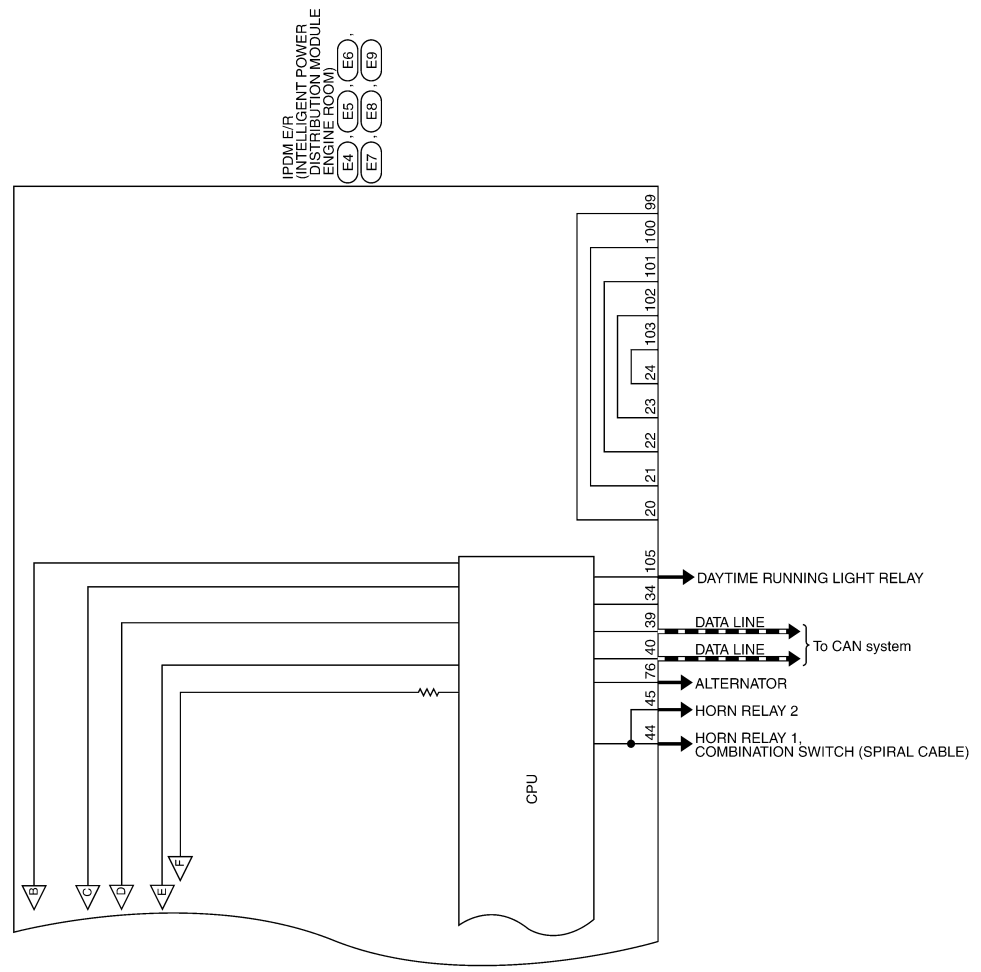
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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)			
Connector No.	Color Of Wire	Signal Name [Specification]	Terminal No.
1	W	-	1
2	L	-	2

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)			
Connector No.	Color Of Wire	Signal Name [Specification]	Terminal No.
38	P	-	38
40	L	-	40
41	B/W	-	41
43	SB	-	43
44	BR	-	44
45	G	-	45
46	R	-	46

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)			
Connector No.	Color Of Wire	Signal Name [Specification]	Terminal No.
47	P	-	47
48	L	-	48
49	BG	-	49
51	Y	-	51
52	W	-	52
53	B	-	53
55	SB	-	55
56	LG	-	56
57	G	-	57
58	V	-	58
69	BR	-	69
70	BG	-	70
74	P	-	74

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)			
Connector No.	Color Of Wire	Signal Name [Specification]	Terminal No.
4	V	-	4
5	L	-	5
6	R	-	6
7	R	-	7
12	B/W	-	12
13	Y	-	13
16	LG	-	16
18	W	-	18
25	B	-	25
27	BG	-	27
28	L	-	28
30	GR	-	30
36	G	-	36

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)			
Connector No.	Color Of Wire	Signal Name [Specification]	Terminal No.
75	SB	-	75
76	Y	-	76
77	R	-	77
80	W	-	80

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)			
Connector No.	Color Of Wire	Signal Name [Specification]	Terminal No.
83	BG	-	83
84	V	-	84
86	W	-	86
87	L	-	87
88	GR	-	88
89	BR	-	89
90	P	-	90

IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)			
Connector No.	Color Of Wire	Signal Name [Specification]	Terminal No.
91	P	-	91
92	BG	-	92
97	V	-	97
104	LG	-	104
105	SB	-	105

Fail-safe

CAN COMMUNICATION CONTROL

When CAN communication with ECM and BCM is impossible, IPDM E/R performs fail-safe control. After CAN communication recovers normally, it also returns to normal control.

If No CAN Communication Is Available With ECM

JRMW13777GB

INFOID:000000012750619

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

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Control part	Fail-safe operation
Cooling fan	<ul style="list-style-type: none"> • Outputs the pulse duty signal (PWM signal) 100% when the ignition switch is turned ON • Outputs the pulse duty signal (PWM signal) 0% when the ignition switch is turned OFF
A/C compressor	A/C relay OFF
Alternator	Outputs the power generation command signal (PWM signal) 0%

If No CAN Communication Is Available With BCM

Control part	Fail-safe operation
Headlamp	<ul style="list-style-type: none"> • Turns ON the headlamp low relay when the ignition switch is turned ON • Turns OFF the headlamp low relay when the ignition switch is turned OFF • Headlamp high relay OFF
<ul style="list-style-type: none"> • Parking lamps • License plate lamps • Side maker lamps • Illuminations • Tail lamps 	<ul style="list-style-type: none"> • Turns ON the tail lamp relay when the ignition switch is turned ON • Turns OFF the tail lamp relay when the ignition switch is turned OFF
Front wiper	<ul style="list-style-type: none"> • The status just before activation of fail-safe control is maintained until the ignition switch is turned OFF while the front wiper is operating at LO or HI speed. • The wiper is operated at LO speed until the ignition switch is turned OFF if the fail-safe control is activated while the front wiper is set in the INT mode and the front wiper motor is operating.
Front fog lamps	Front fog lamp relay OFF
Horn	Horn relay OFF
Ignition relay	The status just before activation of fail-safe is maintained.
Daytime running light	Daytime running light relay OFF
Starter motor	Starter control relay OFF

IGNITION RELAY MALFUNCTION DETECTION FUNCTION

- IPDM E/R monitors the voltage at the contact circuit and excitation coil circuit of the ignition relay inside it.
- IPDM E/R judges the ignition relay error if the voltage differs between the contact circuit and the excitation coil circuit.
- If the ignition relay cannot turn OFF due to contact seizure, it activates the tail lamp relay for 10 minutes to alert the user to the ignition relay malfunction when the ignition switch is turned OFF.

Voltage judgment		IPDM E/R judgment	Operation
Ignition relay contact side	Ignition relay excitation coil side		
ON	ON	Ignition relay ON normal	—
OFF	OFF	Ignition relay OFF normal	—
ON	OFF	Ignition relay ON stuck	<ul style="list-style-type: none"> • Detects DTC "B2098: IGN RELAY ON" • Turns ON the tail lamp relay for 10 minutes
OFF	ON	Ignition relay OFF stuck	Detects DTC "B2099: IGN RELAY OFF"

FRONT WIPER CONTROL

IPDM E/R detects front wiper stop position by a front wiper stop position signal.

When a front wiper stop position signal is in the conditions listed below, IPDM E/R stops power supply to wiper after repeating a front wiper 10 seconds activation and 20 seconds stop five times.

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

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Ignition switch	Front wiper switch	Front wiper stop position signal
ON	OFF	The front wiper stop position signal (stop position) cannot be input for 10 seconds.
	ON	The front wiper stop position signal does not change for 10 seconds.

NOTE:

This operation status can be confirmed on the IPDM E/R “Data Monitor” that displays “BLOCK” for the item “WIP PROT” while the wiper is stopped.

STARTER MOTOR PROTECTION FUNCTION

IPDM E/R turns OFF the starter control relay to protect the starter motor when the starter control relay remains active for 90 seconds.

DTC Index

INFOID:000000012750620

NOTE:

- The details of time display are as follows.
- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.
- IGN counter is displayed on FFD (Freeze Frame data).
- The number is 0 when is detected now.
- The number increases like 1 → 2 … 38 → 39 after returning to the normal condition whenever IGN OFF → ON.
- The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.

×: Applicable

CONSULT display	Fail-safe	Reference
No DTC is detected. Further testing may be required.	—	—
U1000: CAN COMM CIRCUIT	×	PCS-14
B2098: IGN RELAY ON CIRC	×	PCS-15
B2099: IGN RELAY OFF CIRC	—	PCS-17
B210B: STR CONT RLY ON CIRC	—	SEC-77
B210C: STR CONT RLY OFF CIRC	—	SEC-78
B210D: STARTER RLY ON CIRC	—	SEC-80
B210E: STARTER RLY OFF CIRC	—	SEC-82
B210F: INTRLCK/PNP SW ON	—	SEC-84
B2110: INTRLCK/PNP SW OFF	—	SEC-86

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[HALOGEN TYPE]

SYMPTOM DIAGNOSIS

EXTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000012172199

CAUTION:

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

Symptom		Possible cause	Inspection item
Headlamp (HI) is not turned ON.	One side	<ul style="list-style-type: none"> • Fuse • Halogen bulb (HI) • Harness between IPDM E/R and the headlamp high • Daytime running light relay (with daytime running light system) • IPDM E/R 	Headlamp (HI) circuit Refer to EXL-284 .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON" Refer to EXL-422 .	
Headlamp (HI) is not turned OFF.	When ignition switch is turned ON.	IPDM E/R	
	When ignition switch is turned OFF.	—	
High beam indicator lamp is not turned ON. [The headlamp (HI) is turned ON.]		Combination meter	<ul style="list-style-type: none"> • Combination meter Data monitor "HI-BEAM IND" • BCM (HEAD LAMP) Active test "HEADLAMP"
Headlamp (LO) is not turned ON.	One side	<ul style="list-style-type: none"> • Fuse • Halogen bulb (LO) • Harness between IPDM E/R and the headlamp low • IPDM E/R 	Headlamp (LO) circuit Refer to EXL-286 .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer to EXL-423 .	
Headlamp (LO) is not turned OFF.	When ignition switch is turned ON.	IPDM E/R	
	When ignition switch is turned OFF.	—	
Headlamp is not turned ON/OFF with the lighting switch AUTO.	<ul style="list-style-type: none"> • Combination switch • Harness between the combination switch and BCM • BCM 		Combination switch Refer to BCS-93 .
	<ul style="list-style-type: none"> • Optical sensor • Harness between the optical sensor and BCM • BCM 		Optical sensor Refer to EXL-299 .
Daytime running light is not turned ON.		<ul style="list-style-type: none"> • Fuse • Daytime running light relay • Daytime running light relay power supply/control signal circuit • Daytime running light power supply/ground circuit • Daytime running light • IPDM E/R • BCM • ECM • Unified meter and A/C amp. 	<ul style="list-style-type: none"> • Daytime running light circuit Refer to EXL-288. • BCM (HEAD LAMP) Data monitor "ENGINE STATE" • Unified meter and A/C amp. Data monitor "PKB SW"

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EXTERIOR LIGHTING SYSTEM SYMPTOMS

[HALOGEN TYPE]

< SYMPTOM DIAGNOSIS >

Symptom		Possible cause	Inspection item
Front fog lamp is not turned ON.	One side	<ul style="list-style-type: none"> • Front fog lamp bulb • Harness between IPDM E/R and the front combination lamp • Front combination lamp • IPDM E/R 	Front fog lamp circuit Refer to EXL-291 .
	Both side	Symptom diagnosis "BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON" Refer to EXL-425 .	
Front fog lamp indicator lamp is not turned ON. (Front fog lamp is turned ON.)		<ul style="list-style-type: none"> • Combination meter • Unified meter and A/C amp 	<ul style="list-style-type: none"> • Unified meter and A/C amp Data monitor "FR FOG IND" • BCM (HEAD LAMP) Active test "FR FOG LAMP"
Parking lamp is not turned ON.		<ul style="list-style-type: none"> • Fuse • Parking lamp bulb • Harness between IPDM E/R and the front combination lamp • Front combination lamp • IPDM E/R 	Parking lamp circuit Refer to EXL-293 .
Tail lamp is not turned ON.		<ul style="list-style-type: none"> • Harness between IPDM E/R and the rear combination lamp • Rear combination lamp 	Tail lamp circuit Refer to EXL-304 .
License plate lamp is not turned ON.		<ul style="list-style-type: none"> • Harness between IPDM E/R and the license plate lamp • License plate lamp 	License plate lamp circuit Refer to EXL-306 .
Tail lamp and the license plate lamp are not turned ON.		<ul style="list-style-type: none"> • Fuse • Harness between IPDM E/R and the rear combination lamp • IPDM E/R 	Tail lamp circuit Refer to EXL-304 .
<ul style="list-style-type: none"> • Parking lamp, the tail lamp and the license plate lamp are not turned ON. • Parking lamp, the tail lamp and the license plate lamp are not turned OFF. (Each illumination is turned ON/OFF.)		Symptom diagnosis "PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON" Refer to EXL-424 .	
Turn signal lamp does not blink.	Indicator lamp is normal. (The applicable side performs the high flasher activation.)	<ul style="list-style-type: none"> • Harness between BCM and each turn signal lamp • Front turn signal lamp bulb • Side turn signal lamp • Rear turn signal lamp 	Turn signal lamp circuit Refer to EXL-295 .
	Indicator lamp is included	<ul style="list-style-type: none"> • Combination switch • Harness between the combination switch and BCM • BCM 	Combination switch Refer to BCS-93 .
Turn signal indicator lamp does not blink. (The turn signal indicator lamp is normal.)	One side	Combination meter	—
	Both sides (Always)	<ul style="list-style-type: none"> • Turn signal indicator lamp signal - Unified meter and A/C amp. - BCM • Combination meter 	<ul style="list-style-type: none"> • Unified meter and A/C amp. Data monitor "TURN IND" • BCM (FLASHER) Active test "FLASHER"
	Both sides (Only when activating the hazard warning lamp with the ignition switch OFF)	<ul style="list-style-type: none"> • The combination meter power supply and the ground circuit • Combination meter 	Combination meter Power supply and the ground circuit Refer to MWI-52 .
<ul style="list-style-type: none"> • Hazard warning lamp does not activate. • Hazard warning lamp continues activating. (Turn signal is normal.)		<ul style="list-style-type: none"> • Hazard switch • Harness between the hazard switch and BCM • BCM 	Hazard switch Refer to EXL-302 .

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[HALOGEN TYPE]

NORMAL OPERATING CONDITION

Description

INFOID:000000012172200

AUTO LIGHT SYSTEM

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

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BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

[HALOGEN TYPE]

BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON

Description

INFOID:000000012172201

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

Diagnosis Procedure

INFOID:000000012172202

1.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-93, "Symptom Table"](#).

Is the combination 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. With operating the lighting switch, check the monitor status.

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

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-97, "Exploded View"](#).

3.HEADLAMP (HI) CIRCUIT INSPECTION

Check the headlamp (HI) circuit. Refer to [EXL-284, "Component Function Check"](#).

Is the headlamp (HI) circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

[HALOGEN TYPE]

BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

Description

INFOID:000000012172203

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

Diagnosis Procedure

INFOID:000000012172204

1. CHECK COMBINATION SWITCH

Check the combination switch. Refer to [BCS-93. "Symptom Table"](#).

Is the combination 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. With operating the lighting switch, check the monitor status.

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

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-97. "Exploded View"](#).

3. HEADLAMP (LO) CIRCUIT INSPECTION

Check the headlamp (LO) circuit. Refer to [EXL-286. "Component Function Check"](#).

Is the headlamp (LO) circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

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PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS ARE NOT TURNED ON

Description

INFOID:000000012172205

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

Diagnosis Procedure

INFOID:000000012172206

1.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-93, "Symptom Table"](#).

Is the combination switch normal?

YES >> GO TO 2.

NO >> Repair or replace the malfunctioning part.

2.CHECK TAIL LAMP RELAY REQUEST SIGNAL INPUT

ⓑCONSULT DATA MONITOR

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

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

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM.

3.TAIL LAMP CIRCUIT INSPECTION

Check the tail lamp circuit. Refer to [EXL-304, "Component Function Check"](#).

Is the tail lamp circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

< SYMPTOM DIAGNOSIS >

[HALOGEN TYPE]

BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON

Description

INFOID:000000012172207

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

Diagnosis Procedure

INFOID:000000012172208

1.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-93. "Symptom Table"](#).

Is the combination 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 (Lighting switch 2ND)	ON	On
		OFF	Off

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM.

3.FRONT FOG LAMP CIRCUIT INSPECTION

Check the front fog lamp circuit. Refer to [EXL-291. "Component Function Check"](#).

Is the front fog lamp circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

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PRECAUTION

PRECAUTIONS

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

INFOID:000000012172209

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.
- Improper repair, 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 "SRS AIR BAG".
- Never 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:

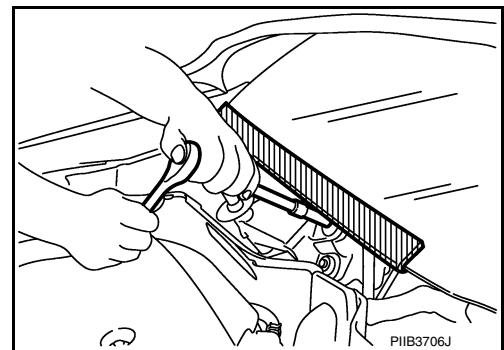
Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never 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 or batteries, and wait at least 3 minutes before performing any service.

Precaution for Procedure without Cowl Top Cover

INFOID:000000012172210

When performing the procedure after removing cowl top cover, cover the lower end of windshield with urethane, etc to prevent damage to windshield.



Precautions for Removing Battery Terminal

INFOID:000000012703735

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

- Always use a 12V battery as power source.
- Never disconnect battery terminal while engine is running.

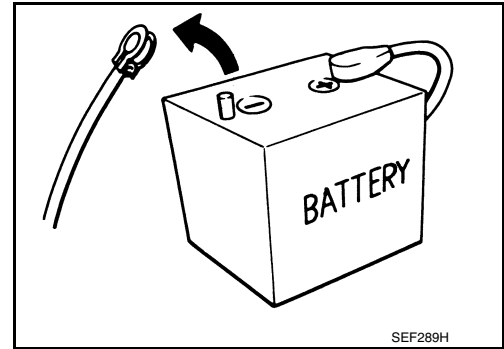
PRECAUTIONS

< PRECAUTION >

[HALOGEN TYPE]

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

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



NOTE:

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

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

NOTE:

- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
 - Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
 - Driving for 30 minutes or more on a steep slope.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:

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

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

NOTE:

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

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HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[HALOGEN TYPE]

PERIODIC MAINTENANCE

HEADLAMP AIMING ADJUSTMENT

Description

INFOID:000000012172212

PREPARATION BEFORE ADJUSTING

NOTE:

- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the headlamp assembly has been replaced.

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the trunk room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

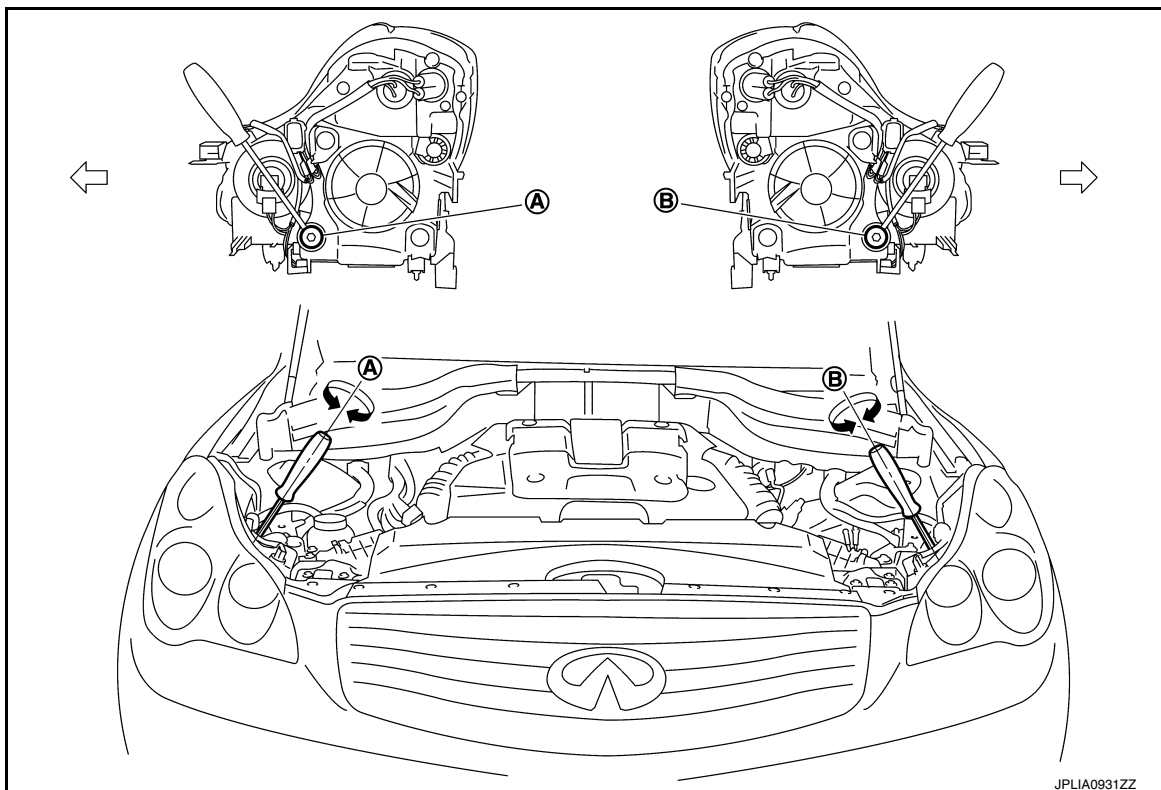
- Wipe out dirt on the headlamp.

CAUTION:

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

- Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW



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

↔ : Vehicle center

NOTE:

The figure is the vehicle without AFS. Each adjustment screw is applied to the vehicle with AFS.

HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[HALOGEN TYPE]

Adjustment screw		Screw driver rotation	Facing direction
A	Headlamp RH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN
B	Headlamp LH (UP/DOWN)	Clockwise	UP
		Counterclockwise	DOWN

For aiming adjustment procedure, refer to [EXL-429, "Aiming Adjustment Procedure"](#).

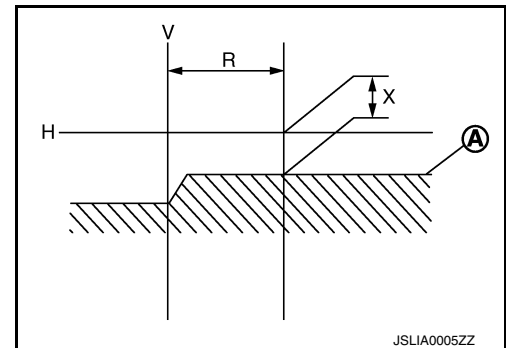
Aiming Adjustment Procedure

INFOID:000000012172213

- Place the screen.
 - NOTE:**
 - Stop the vehicle facing the wall.
 - Place the board on a plain road vertically.
- Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the headlamp center and the screen.
- Start the engine. Turn the headlamp (LO) ON.
 - CAUTION:**
Never cover the lens surface with a tape etc. The lens is made of resin.
 - NOTE:**
Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.
- Measure the distance (X) between the horizontal center line of headlamp (H) and the cutoff line (A) within the light axis measurement range (R) from the vertical center line ahead of headlamp (V).

Light axis measurement range (R) : 350 ± 175 mm (13.78 ± 6.89 in)

Low beam distribution on the screen

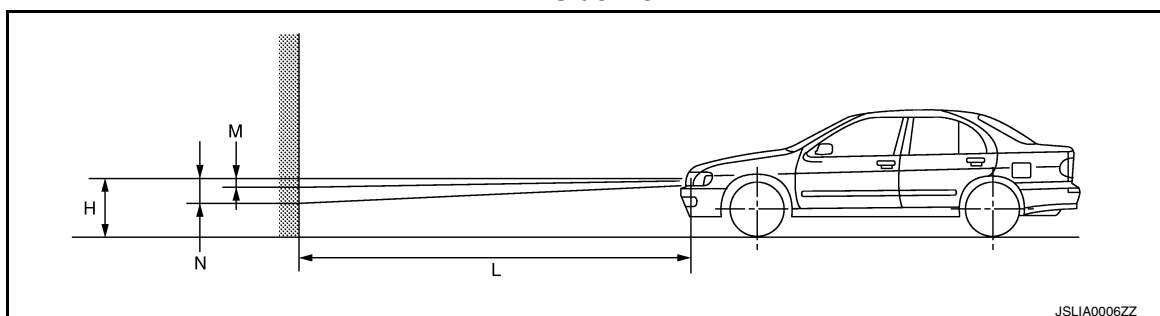


- Adjust the cutoff line height (X) with the aiming adjustment screw so as to enter in the adjustment range (M–N) according to the horizontal center line of headlamp (H).

unit: mm (in)

Horizontal center line of headlamp (H)	Highest cutoff line height (M)	Lowest cutoff line height (N)
700 (27.56) or less	4 (0.16)	30 (1.18)
701 (27.60) – 800 (31.50)	4 (0.16)	30 (1.18)
801 (31.54) or more	17 (0.67)	44 (1.73)

Side view



Distance between the headlamp center and the screen (L) : 10 m (32.8 ft)

FRONT FOG LAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[HALOGEN TYPE]

FRONT FOG LAMP AIMING ADJUSTMENT

Description

INFOID:000000012172214

PREPARATION BEFORE ADJUSTING

NOTE:

- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the headlamp assembly has been replaced.

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the trunk room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

- Wipe out dirt on the headlamp.

CAUTION:

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

- Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW

- Turn the aiming adjusting screw for adjustment.

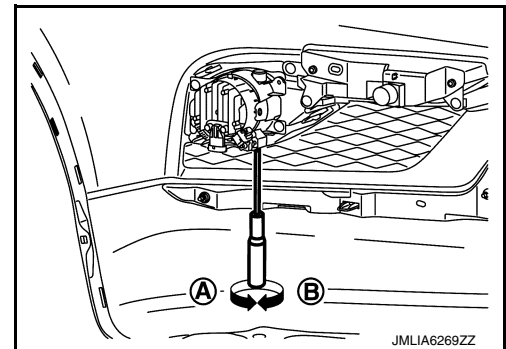
A: DOWN

B: UP

- For the position and direction of the adjusting screw, refer to the figure.

NOTE:

A screwdriver or hexagonal wrench [6 mm (0.24 in)] can be used for adjustment.



For aiming adjustment procedure, refer to [EXL-430, "Aiming Adjustment Procedure"](#).

Aiming Adjustment Procedure

INFOID:000000012172215

1. Place the screen.

NOTE:

- Stop the vehicle facing the wall.
- Place the board on a plain road vertically.

2. Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the front fog lamp center and the screen.

3. Start the engine. Turn the front fog lamp ON.

CAUTION:

Never cover the lens surface with a tape etc. The lens is made of resin.

NOTE:

Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.

4. 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).

NOTE:

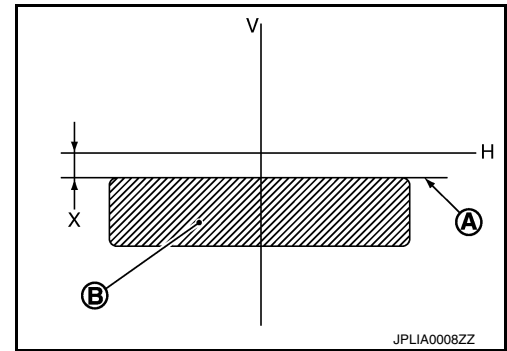
FRONT FOG LAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[HALOGEN TYPE]

Front fog lamp light distribution on the screen

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



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FRONT COMBINATION LAMP

< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

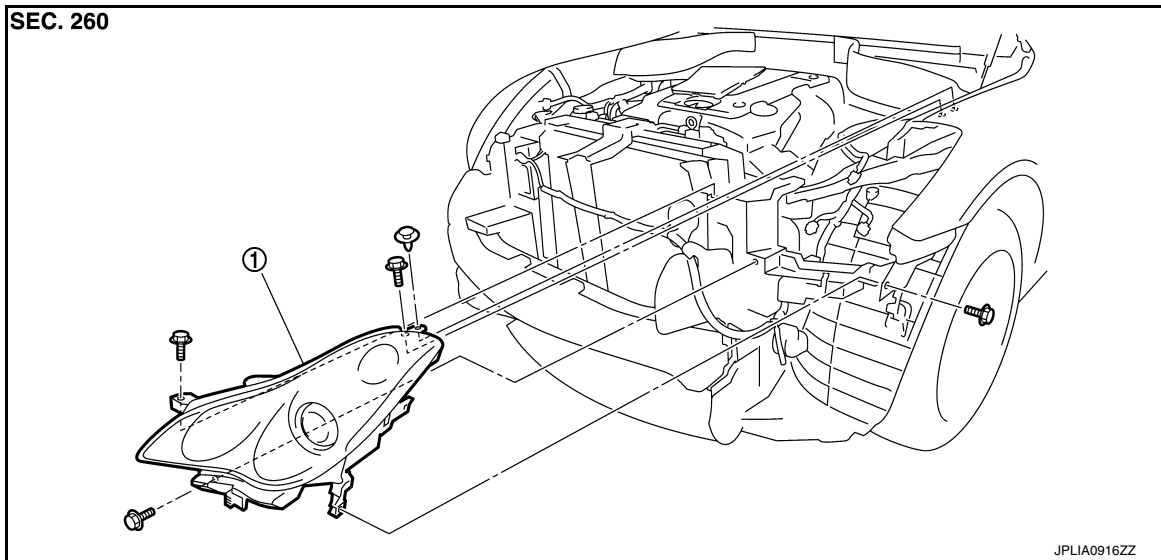
REMOVAL AND INSTALLATION

FRONT COMBINATION LAMP

Exploded View

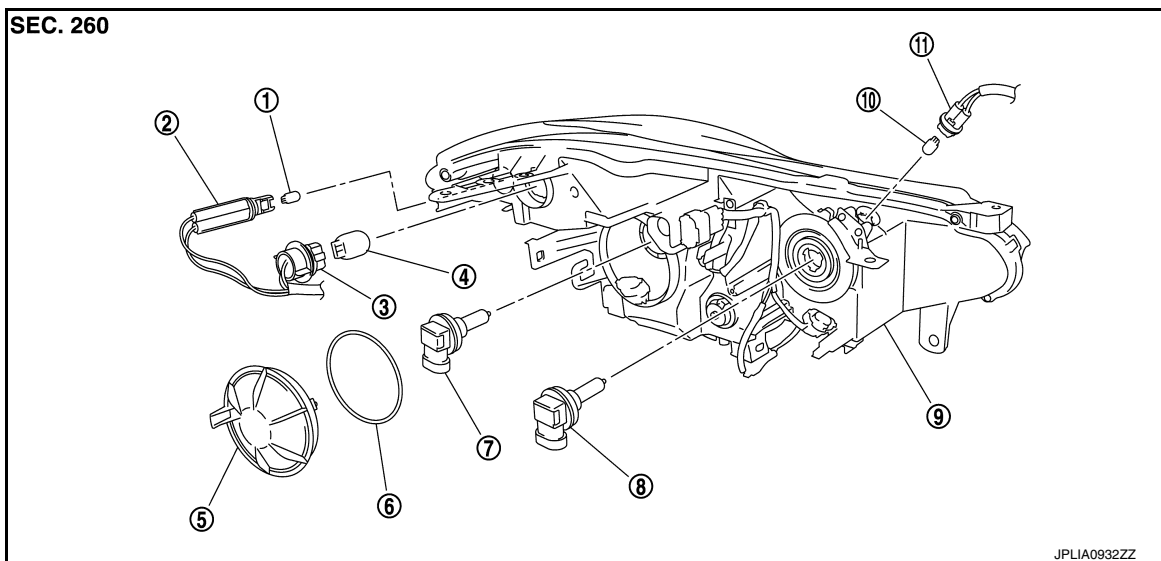
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REMOVAL



1. Front combination lamp

DISASSEMBLY



- | | | |
|--------------------------------|---------------------------------------|---------------------------------------|
| 1. Front side marker lamp bulb | 2. Front side marker lamp bulb socket | 3. Front turn signal lamp bulb socket |
| 4. Front turn signal lamp bulb | 5. Resin cap | 6. Seal packing |
| 7. Halogen bulb (LO) | 8. Halogen bulb (HI) | 9. Headlamp housing assembly |
| 10. Parking lamp bulb | 11. Parking lamp bulb socket | |

Removal and Installation

INFOID:000000012172217

REMOVAL

CAUTION:

FRONT COMBINATION LAMP

< REMOVAL AND INSTALLATION >

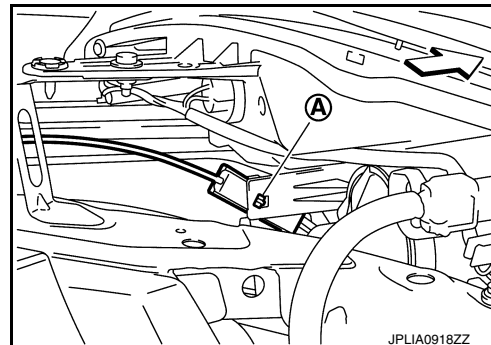
[HALOGEN TYPE]

Disconnect the battery negative terminal or remove the fuse.

1. Remove the front bumper fascia. Refer to [EXT-13, "Removal and Installation"](#).
2. Remove the headlamp mounting bolts and clips.
3. Remove the harness clip and the holding clip (A)*.
*: Left side only.

← : Vehicle front

4. Pull out the headlamp assembly forward the vehicle.
5. Disconnect the connector before removing the headlamp assembly.



INSTALLATION

Install in the reverse order of removal.

NOTE:

After installation, perform aiming adjustment. Refer to [EXL-428, "Description"](#).

Replacement

INFOID:000000012172218

CAUTION:

- **Disconnect the battery negative terminal or remove the fuse.**
- **After installing the bulb, install the resin cap and the bulb socket securely for watertightness.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it. Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

HEADLAMP BULB (LO)

1. Remove the fender rubber protector in the engine room. Keep a service area.
2. Rotate the resin cap counterclockwise and unlock it.
3. Disconnect the headlamp (LO) bulb connector.
4. Rotate the bulb counterclockwise and unlock it.
5. Remove the bulb from the headlamp housing assembly.

HEADLAMP BULB (HI)

1. Remove the washer tank inlet*. Refer to [WW-114, "Exploded View"](#).
*:When replace a right.
2. Disconnect the headlamp (HI) bulb connector.
3. Rotate the bulb socket counterclockwise and unlock it.
4. Remove the bulb socket from the headlamp housing assembly.

PARKING LAMP BULB

1. Rotate the bulb socket counterclockwise and unlock it.
2. Remove the bulb from the bulb socket.

FRONT TURN SIGNAL LAMP BULB

1. Remove the fender rubber protector in the engine room. Keep a service area.
2. Rotate the bulb socket counterclockwise and unlock it.
3. Remove the bulb from the bulb socket.

FRONT SIDE MARKER LAMP BULB

1. Remove the fender rubber protector in the engine room. Keep a service area.
2. Rotate the bulb socket counterclockwise and unlock it.
3. Remove the bulb from the bulb socket.

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FRONT COMBINATION LAMP

< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

Disassembly and Assembly

INFOID:000000012172219

DISASSEMBLY

1. Rotate the resin cap counterclockwise and unlock it.
2. Disconnect the headlamp bulb (LO) connector.
3. Rotate the headlamp bulb (LO) counterclockwise and unlock it
4. Remove the bulb from the headlamp housing assembly.
5. Rotate the headlamp bulb (HI) counterclockwise and unlock it
6. Remove the bulb from the headlamp housing assembly.
7. Rotate the parking lamp bulb socket counterclockwise and unlock it.
8. Remove the bulb from the parking lamp bulb socket.
9. Rotate the front turn signal lamp bulb socket counterclockwise and unlock it.
10. Remove the bulb from the front turn signal lamp bulb socket.
11. Rotate the front side marker lamp bulb socket counterclockwise and unlock it.
12. Remove the bulb from the front side marker lamp bulb socket.

ASSEMBLY

Assemble in the reverse order of disassembly.

DAYTIME RUNNING LIGHT

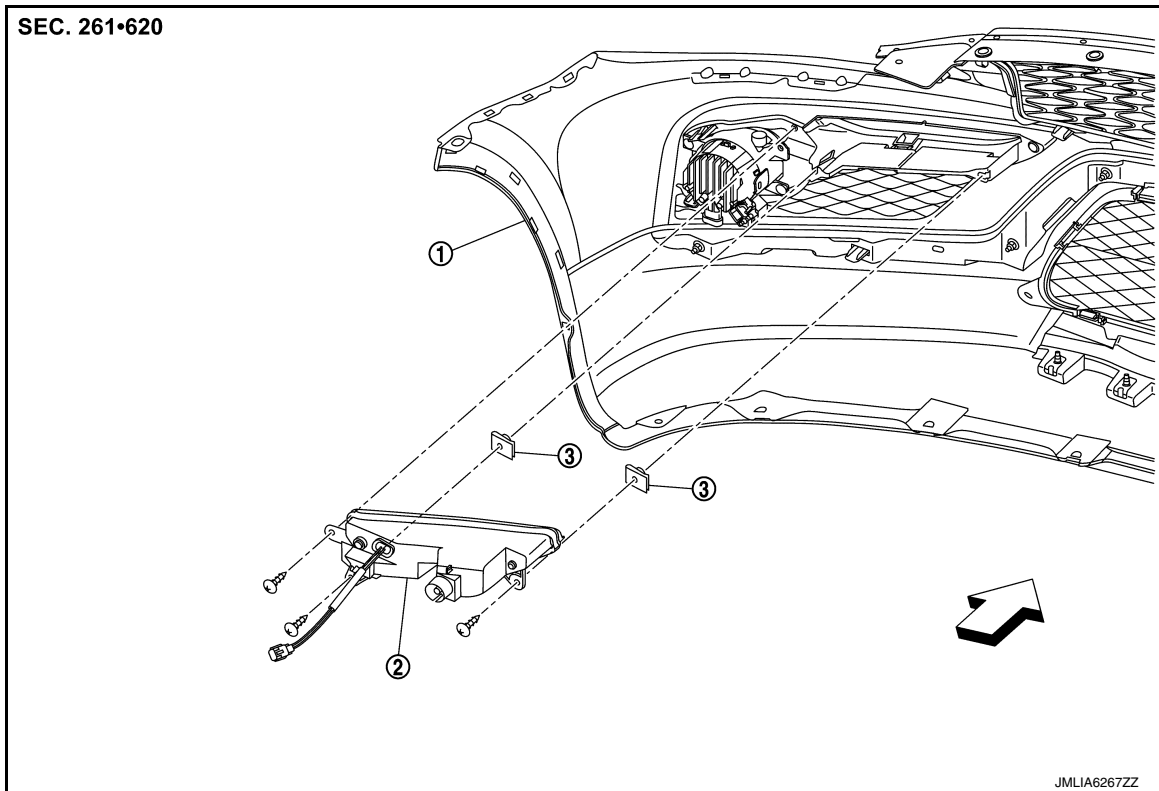
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT

Exploded View

INFOID:000000012741925



1. Front bumper fascia

2. Daytime running light

3. Spring nut

← : Vehicle front

Removal and Installation

INFOID:000000012741926

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the front fender protector. Keep a service area. Refer to [EXT-25. "FENDER PROTECTOR : Removal and Installation"](#).
2. Remove the daytime running light connector.
3. Remove the screws. And then remove the daytime running light.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:000000012741927

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

DAYTIME RUNNING LIGHT

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front fog lamp as a set. Refer to [EXL-435. "Removal and Installation"](#).

FRONT FOG LAMP

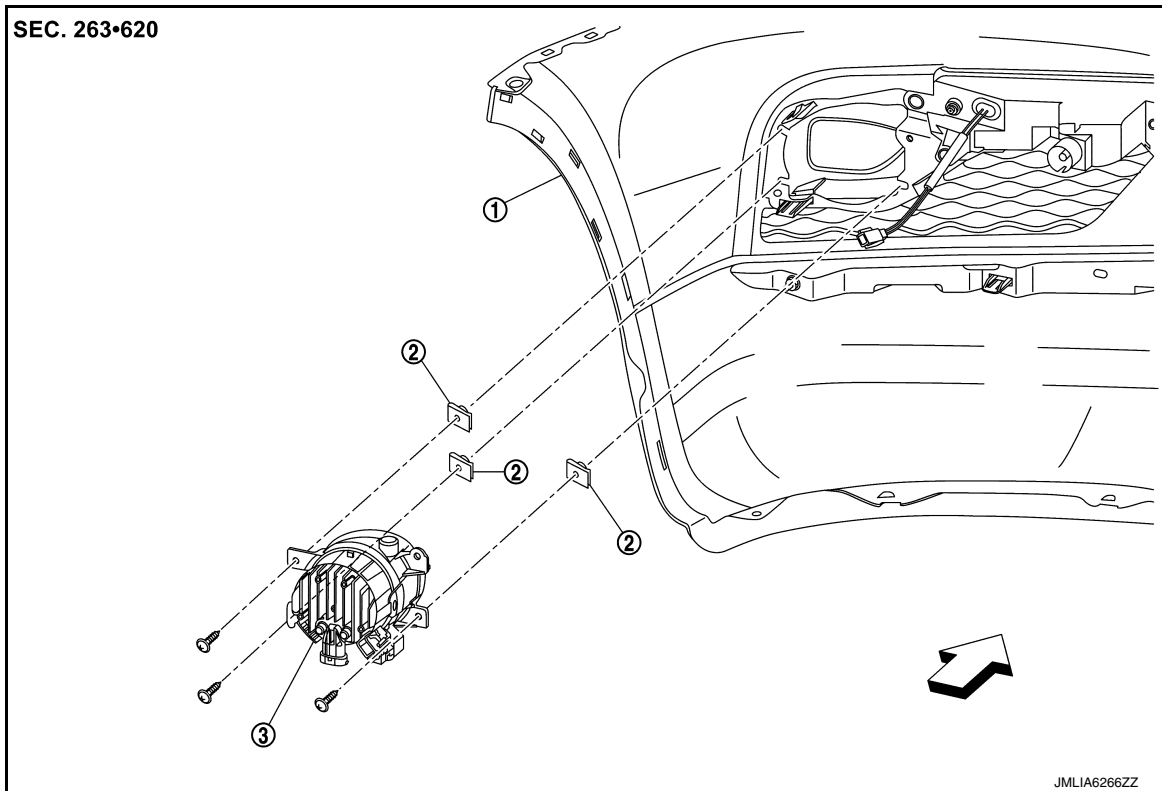
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

FRONT FOG LAMP

Exploded View

INFOID:000000012741928



1. Front bumper fascia

2. Spring nut

3. Front fog lamp

⇐ : Vehicle front

Removal and Installation

INFOID:000000012741929

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the front fender protector. Keep a service area. Refer to [EXT-25. "FENDER PROTECTOR : Exploded View"](#).
2. Remove the front fog lamp connector.
3. Remove the screw. And then remove the front fog lamp.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

NOTE:

After installation, perform aiming adjustment. Refer to [EXL-430. "Description"](#).

Replacement

INFOID:000000012741930

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

FRONT FOG LAMP BULB

CAUTION:

Replacement of a single part is not possible due to the adoption of LED. For replacement, replace front fog lamp as a set. Refer to [EXL-436. "Removal and Installation"](#).

OPTICAL SENSOR

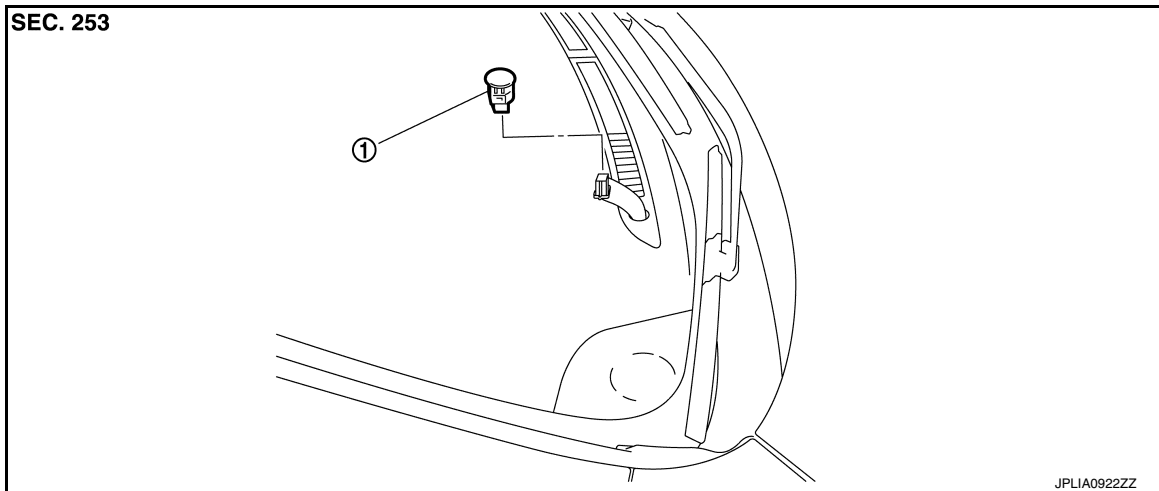
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

OPTICAL SENSOR

Exploded View

INFOID:000000012741931



1. Optical sensor

Removal and Installation

INFOID:000000012741932

REMOVAL

1. Insert an appropriate tool between the optical sensor and the instrument upper panel. Pull out the optical sensor upward.
2. Disconnect the optical sensor connector. And then remove the optical sensor.

INSTALLATION

Install in the reverse order of removal.

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LIGHTING AND TURN SIGNAL SWITCH

< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

LIGHTING AND TURN SIGNAL SWITCH

Exploded View

INFOID:000000012741933

Lighting and turn signal switch is integrated in the combination switch. [BCS-98. "Exploded View"](#).

HAZARD SWITCH

< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

HAZARD SWITCH

Exploded View

INFOID:000000012741934

The hazard warning switch is integrated in the multifunction switch. Refer to [AV-133. "Exploded View"](#).

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SIDE TURN SIGNAL LAMP

< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

SIDE TURN SIGNAL LAMP

Exploded View

INFOID:000000012741935

For exploded view of side turn signal lamp, refer to [MIR-126, "Exploded View"](#).

Removal and Installation

INFOID:000000012741936

For removal and installation procedures of side turn signal lamp, refer to [MIR-127, "DOOR MIRROR ASSEMBLY : Disassembly and Assembly"](#).

Replacement

INFOID:000000012741937

CAUTION:

Disconnect battery negative terminal or remove the fuse.

SIDE TURN SIGNAL LAMP

CAUTION:

Replace of a single part is not possible due to the adoption of LED. For replacement, replace side turn signal lamp as a set. Refer to [MIR-127, "DOOR MIRROR ASSEMBLY : Disassembly and Assembly"](#).

REAR COMBINATION LAMP

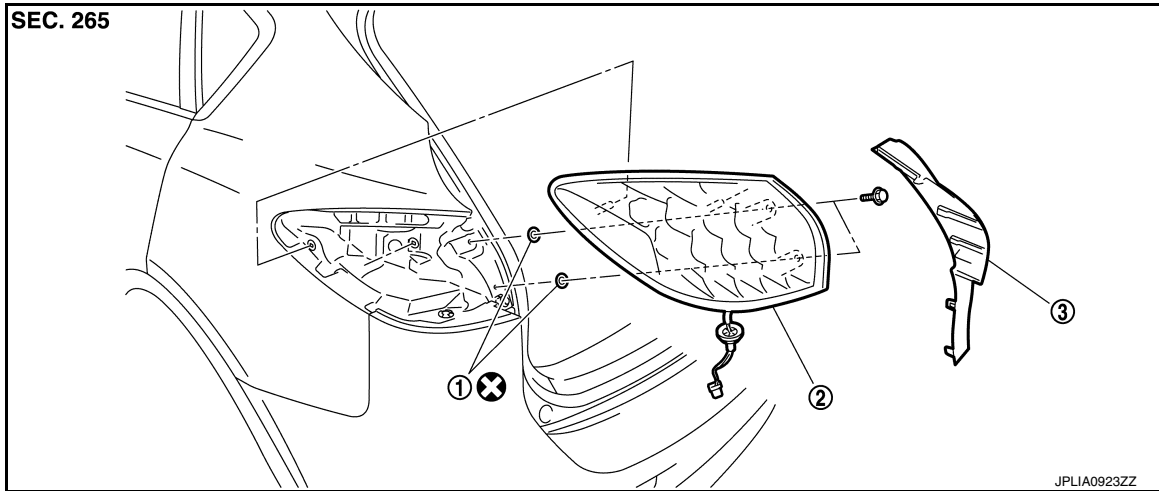
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

REAR COMBINATION LAMP

Exploded View

INFOID:000000012741938



1. Seal packing 2. Rear combination lamp 3. Rear combination lamp finisher

⊗ : Always replace after every disassembly.

Removal and Installation

INFOID:000000012741939

CAUTION:
Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the luggage side finisher lower. Refer to [INT-33, "Exploded View"](#).
2. Remove the rear combination lamp finisher.
3. Remove the rear combination lamp mounting bolts.
4. Disconnect the rear combination lamp connector.
5. Pull the rear combination lamp toward outside of the vehicle. Remove the rear combination lamp.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:
Seal packing cannot be reused.

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REAR TURN SIGNAL LAMP

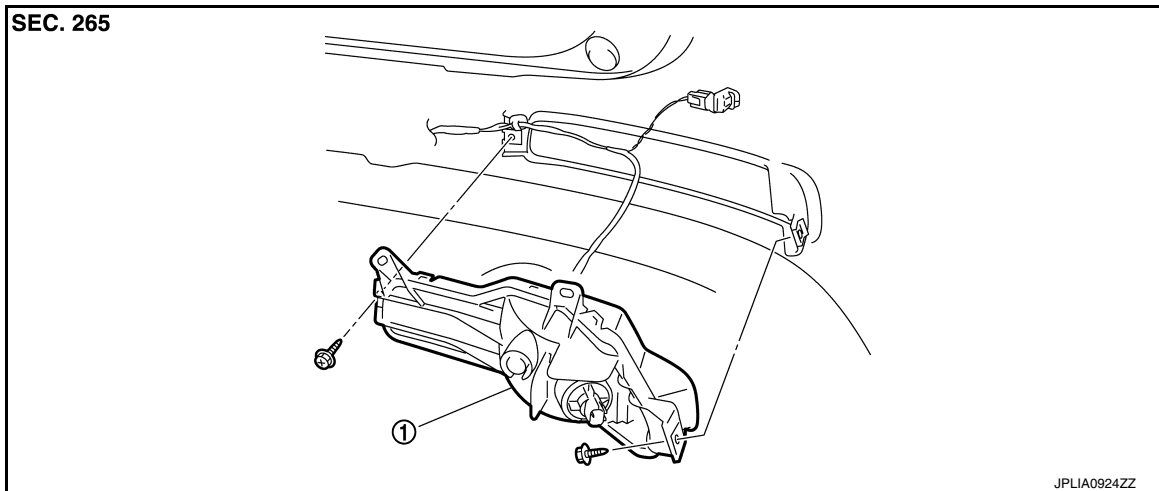
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

REAR TURN SIGNAL LAMP

Exploded View

INFOID:000000012741940



1. Rear turn signal lamp

Removal and Installation

INFOID:000000012741941

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the rear bumper fascia. Refer to [EXT-17, "Removal and Installation"](#).
2. Remove the rear turn signal lamp.

INSTALLATION

Install in the reverse order of removal.

Replacement

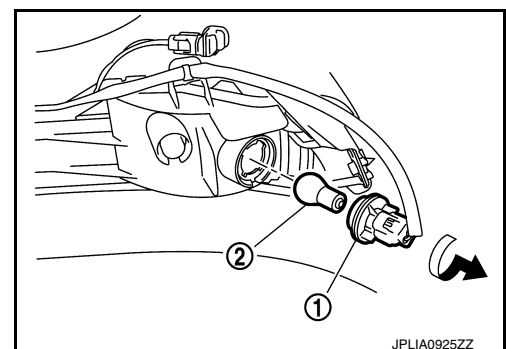
INFOID:000000012741942

CAUTION:

- **Disconnect the battery negative terminal or remove the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it. Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

REAR TURN SIGNAL LAMP BULB

1. Turn the bulb socket (1) counterclockwise and unlock it.
2. Remove the bulb (2) from the socket.



HIGH-MOUNTED STOP LAMP

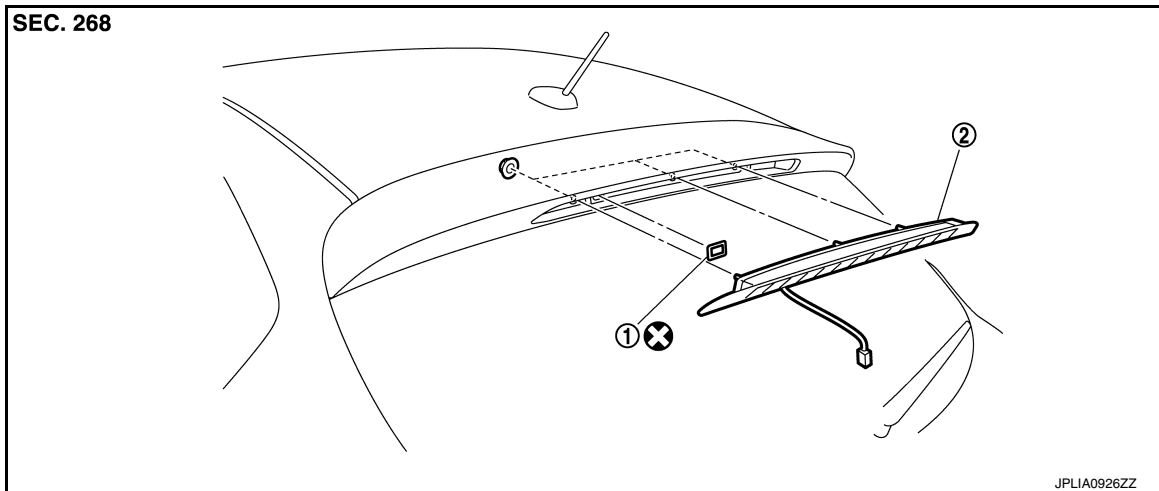
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

HIGH-MOUNTED STOP LAMP

Exploded View

INFOID:000000012741943



1. Seal packing
2. High-mounted stop lamp

⊗ : Always replace after every disassembly.

Removal and Installation

INFOID:000000012741944

REMOVAL

1. Remove the back door finisher inner. Refer to [JNT-37. "Exploded View"](#).
2. Remove the high-mounted stop lamp mounting nuts.
3. Disconnect the high-mounted stop lamp connector. And then remove the rear washer tube.
4. Pull the high-mounted stop lamp toward rear of the vehicle.
5. Remove the high-mounted stop lamp.

INSTALLATION

Note the following item, and then install in the reverse order of removal.

CAUTION:

Seal packing cannot be reused.

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BACK-UP LAMP

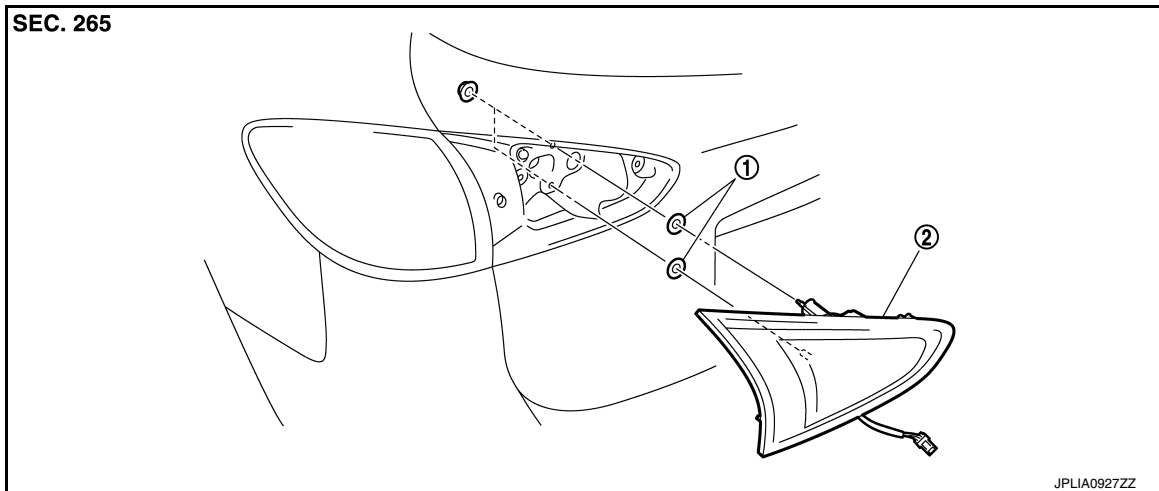
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

BACK-UP LAMP

Exploded View

INFOID:000000012741945



1. Seal packing
2. Back-up lamp

Removal and Installation

INFOID:000000012741946

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the back door finisher inner. Refer to [INT-37, "Exploded View"](#).
2. Remove the back-up lamp mounting nuts.
3. Disconnect the back-up lamp connector. And then remove the back-up lamp.

INSTALLATION

Install in the reverse order of removal.

Replacement

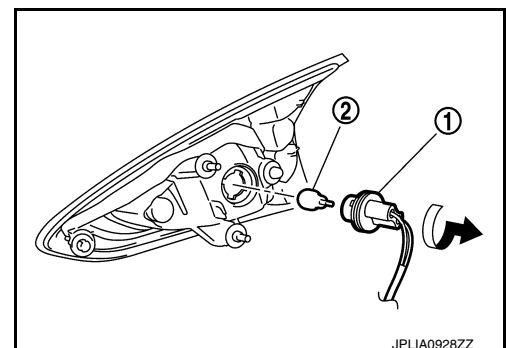
INFOID:000000012741947

CAUTION:

- **Disconnect the battery negative terminal or remove the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it. Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

BACK-UP LAMP BULB

1. Remove the back-up lamp. Refer to [EXL-444, "Exploded View"](#).
2. Turn the bulb socket (1) counterclockwise and unlock it.
3. Remove the bulb (2) from the socket.



LICENSE PLATE LAMP

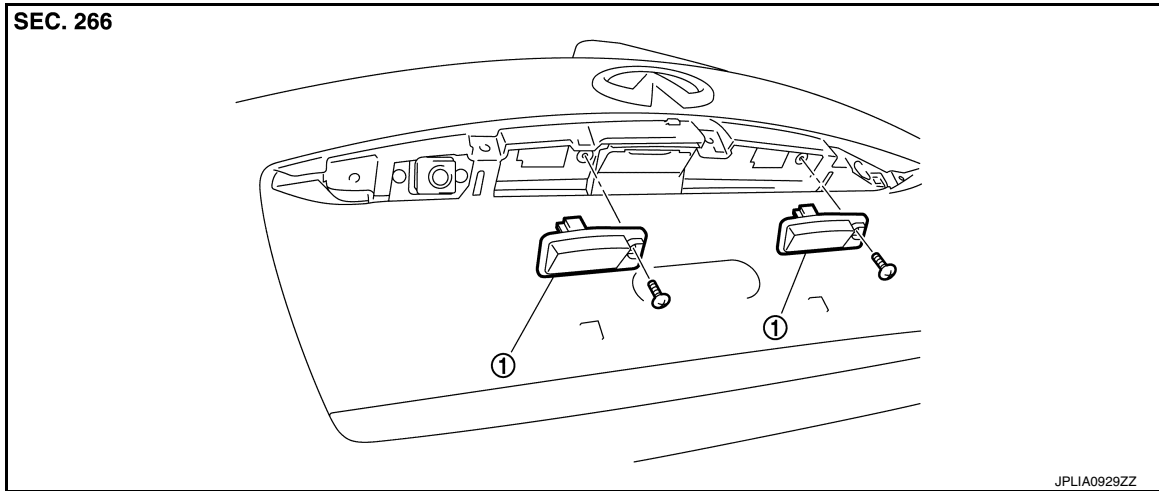
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

LICENSE PLATE LAMP

Exploded View

INFOID:000000012741948



1. License plate lamp

Removal and Installation

INFOID:000000012741949

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the door handle cover. Refer to [EXT-50, "Exploded View"](#).
2. Remove the screw. And then remove the license plate lamp.
3. Disconnect the license plate lamp connector.

INSTALLATION

Install in the reverse order of removal.

Replacement

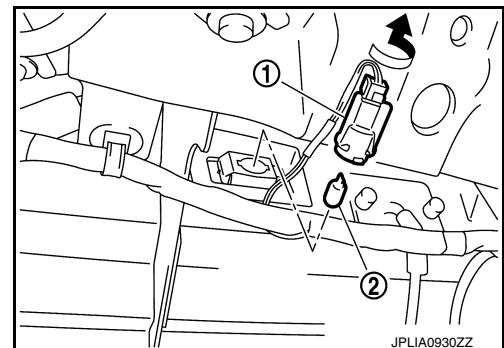
INFOID:000000012741950

CAUTION:

- Disconnect the battery negative terminal or remove the fuse.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it. Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.

LICENSE PLATE LAMP BULB

1. Remove the back door finisher inner. Refer to [INT-37, "Exploded View"](#).
2. Turn the bulb socket (1) counterclockwise and unlock it.
3. Remove the bulb (2) from the socket.



SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

[HALOGEN TYPE]

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000012172240

Item		Type	Wattage (W)
Front combination lamp	Headlamp (HI)	H9 (Halogen)	65
	Headlamp (LO)	H11 (Halogen)	55
	Front turn signal lamp	W21W	21
	Parking lamp	W5W	5
	Front side marker lamp	W5W	5
Daytime running light		LED	—
Front fog lamp		LED	—
Side turn signal lamp (built in door mirror)		LED	—
Rear combination lamp	Stop lamp/Tail lamp	LED	—
	Rear side marker lamp	LED	—
Rear turn signal lamp		PY21W (Amber)	21
Back-up lamp		W16W	16
License plate lamp		W5W	5
High-mounted stop lamp		LED	—