

SECTION EXL

EXTERIOR LIGHTING SYSTEM

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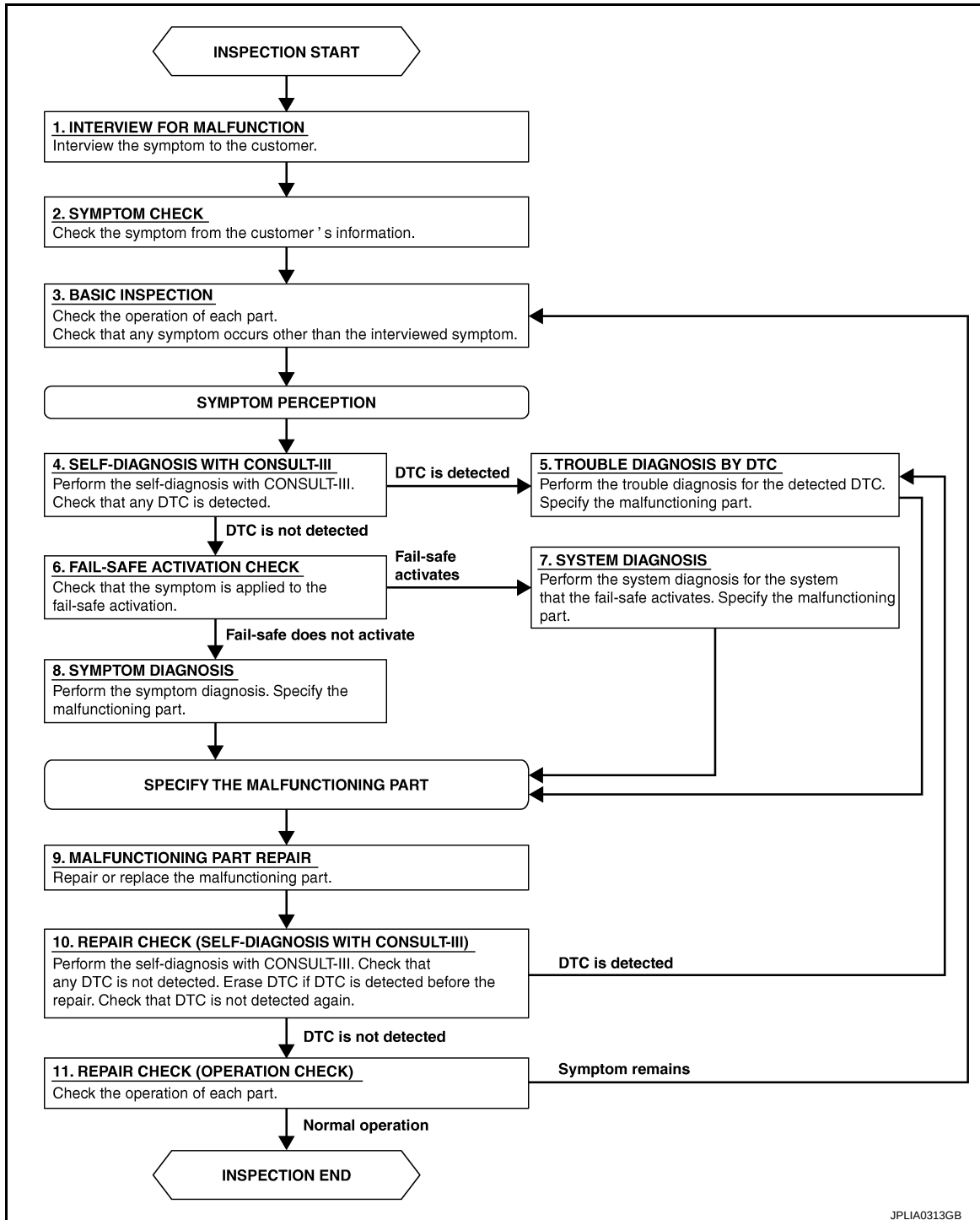
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000005515004

OVERALL SEQUENCE



DETAILED FLOW

1. INTERVIEW FOR MALFUNCTION

Interview the symptom to the customer.

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[XENON TYPE]

>> GO TO 2.

2. SYMPTOM CHECK

Check the symptom from the customer's information.

>> GO TO 3.

3. BASIC INSPECTION

Check the operation of each part. Check that any symptom occurs other than the interviewed symptom.

>> GO TO 4.

4. SELF-DIAGNOSIS WITH CONSULT-III

Perform the self-diagnosis with CONSULT-III. Check that any DTC is detected.

Is any DTC detected?

YES >> GO TO 5.

NO >> GO TO 6.

5. TROUBLE DIAGNOSIS BY DTC

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

>> GO TO 9.

6. FAIL-SAFE ACTIVATION CHECK

Check that the symptom is applied to the fail-safe activation.

Does the fail-safe activate?

YES >> GO TO 7.

NO >> GO TO 8.

7. SYSTEM DIAGNOSIS

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

>> GO TO 9.

8. SYMPTOM DIAGNOSIS

Perform the symptom diagnosis. Specify the malfunctioning part.

>> GO TO 9.

9. MALFUNCTION PART REPAIR

Repair or replace the malfunctioning part.

>> GO TO 10.

10. REPAIR CHECK (SELF-DIAGNOSIS WITH CONSULT-III)

Perform the self-diagnosis with CONSULT-III. Check that any DTC is not detected. Erase DTC if DTC is detected before the repair. Check that DTC is not detected again.

Is any DTC detected?

YES >> GO TO 5.

NO >> GO TO 11.

11. REPAIR CHECK (OPERATION CHECK)

Check the operation of each part.

Does it operate normally?

YES >> INSPECTION END

NO >> GO TO 3.

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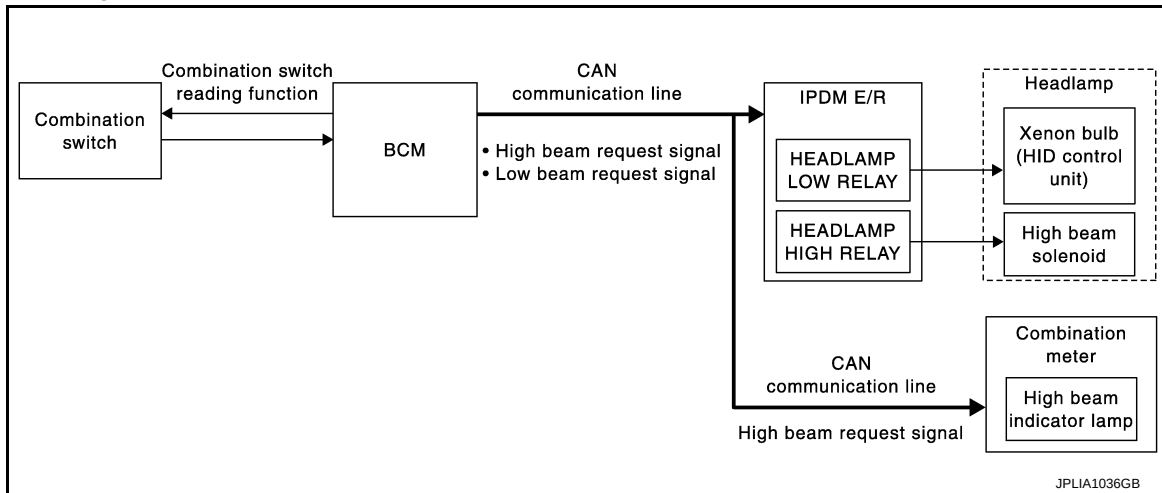
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SYSTEM DESCRIPTION

HEADLAMP SYSTEM

System Diagram



System Description

INFOID:000000005515006

OUTLINE

- Mobile valve shade type is adopted. Xenon headlamp switches the high beam and the low beam with one xenon bulb each on right and left.
- Headlamp is controlled by combination switch reading function and headlamp control function of BCM, and relay control function of IPDM E/R.

HEADLAMP BASIC 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 ON condition.

Headlamp ON condition

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

HEADLAMP HI/LO SWITCHING OPERATION

- BCM transmits the high beam request signal to IPDM E/R and the combination meter with CAN communication according to the high beam switching condition.

High beam switching condition

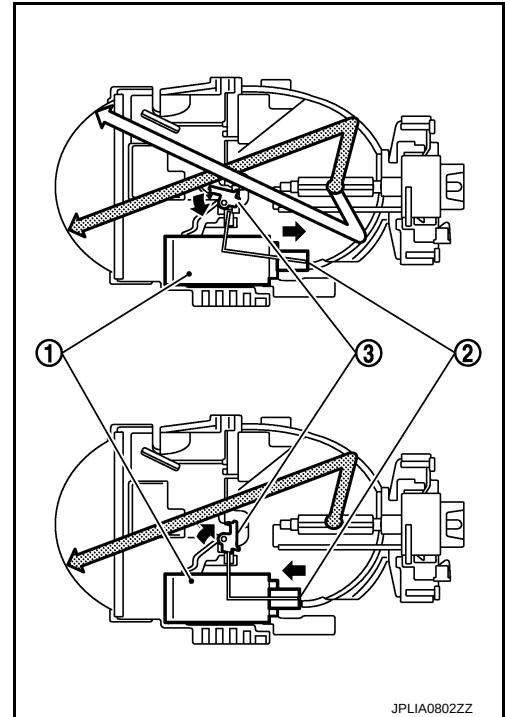
- Lighting switch HI with the lighting switch 2ND or AUTO (auto light function ON judgment)
- Lighting switch PASS
- Combination meter turns the high beam indicator lamp ON according to the high beam request signal.
- IPDM E/R turns the integrated headlamp high relay ON, and turns the headlamp ON according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

HEADLAMP SYSTEM

< SYSTEM DESCRIPTION >

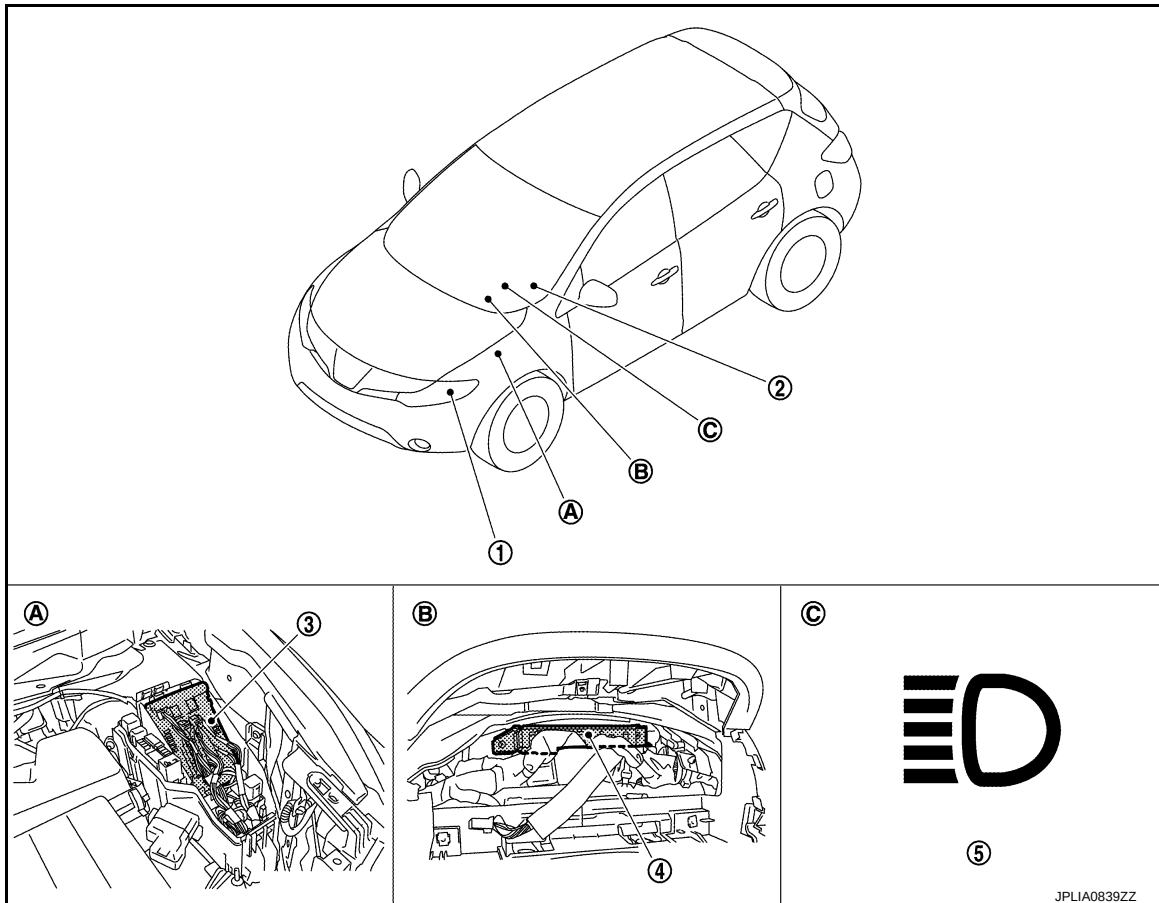
[XENON TYPE]

- When the headlamp high relay is turned ON, magnetic force is applied to the high beam solenoid (1) by a current. The mobile valve shade (3) is switched to the high beam position through the actuator rod (2).
- When the headlamp high relay is turned OFF, the current stops. The mobile valve shade returns to the low beam position automatically.



Component Parts Location

INFOID:000000005515007



1. Headlamp
4. BCM
- A. Engine room (LH)

2. Combination switch
5. High beam indicator lamp
- B. Behind the combination meter

3. IPDM E/R
- C. On the combination meter

HEADLAMP SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Description

INFOID:000000005515008

Part		Description
BCM		• 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-9, "System Description" .
Combination meter (High beam indicator lamp)		Turns the high beam indicator lamp ON according to the request from BCM (with CAN communication).
Headlamp assembly	• HID control unit • Xenon bulb	Refer to EXL-39, "Description" .
	High beam solenoid	Refer to EXL-36, "Description" .

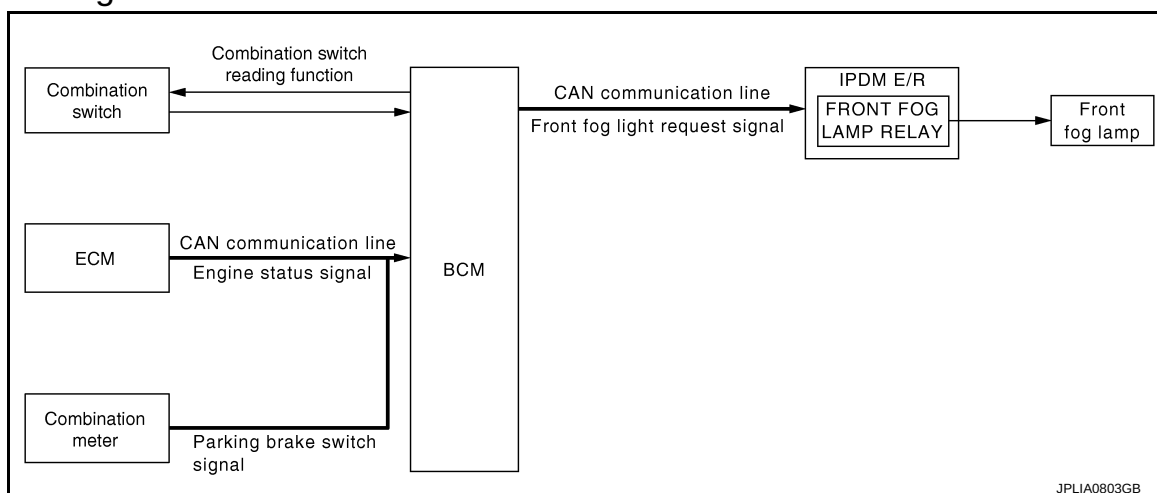
DAYTIME RUNNING LIGHT SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

System Diagram



System Description

INFOID:000000005515010

OUTLINE

- Turns the front fog lamp ON as the daytime running light.
- 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 condition signal (received from ECM with CAN communication)
 - Parking brake switch signal (received from combination meter with CAN communication)
- BCM transmits the front fog light request signal to IPDM E/R with CAN communication according to the daytime running light ON condition.

Daytime running light ON condition

- While the engine running with the parking brake released

Daytime running light OFF condition

- Engine stopped
- Headlamp ON (Passing included)
- 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.

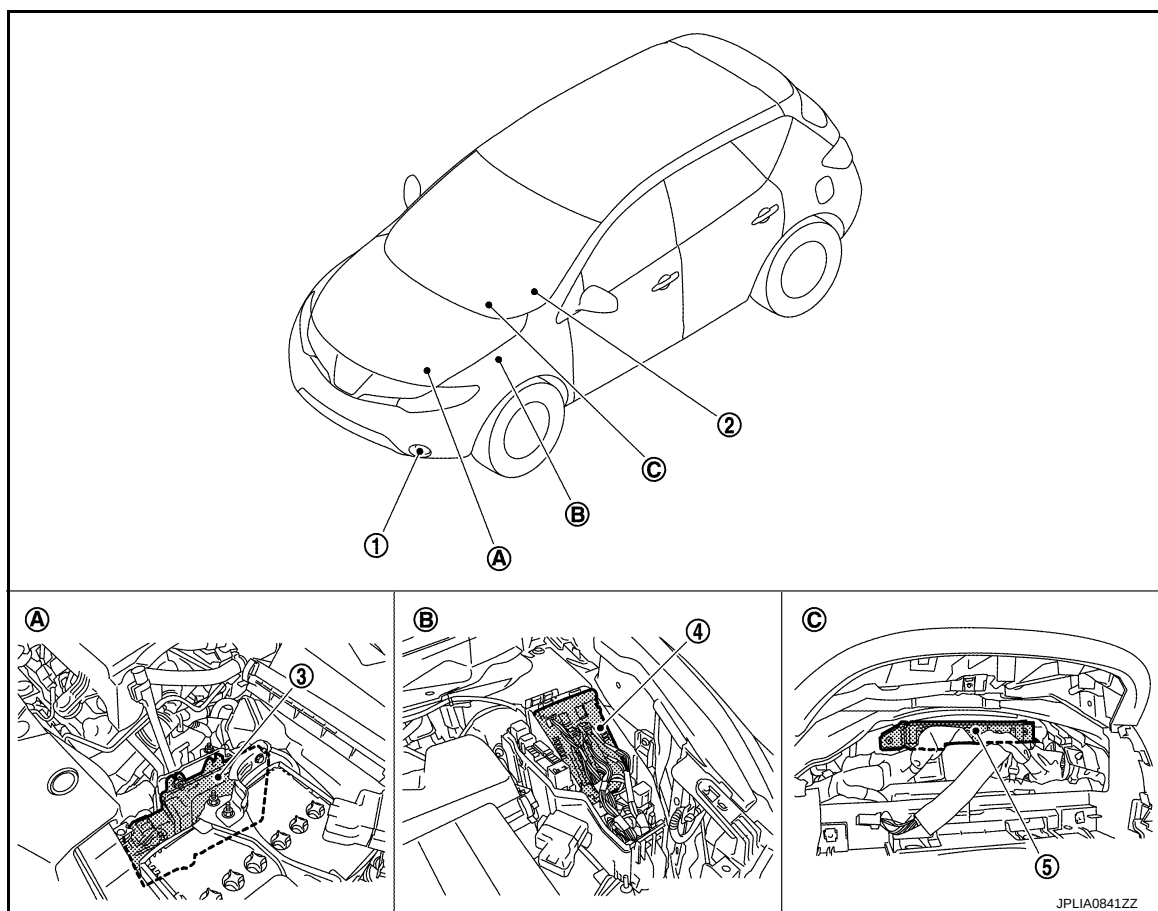
DAYTIME RUNNING LIGHT SYSTEM

[XENON TYPE]

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000005515011



- | | | |
|---|-----------------------|---------------------------------|
| 1. Daytime running light (Front fog lamp) | 2. Combination switch | 3. ECM |
| 4. IPDM E/R | 5. BCM | |
| A. Engine room (LH) | B. Engine room (LH) | C. Behind the combination meter |

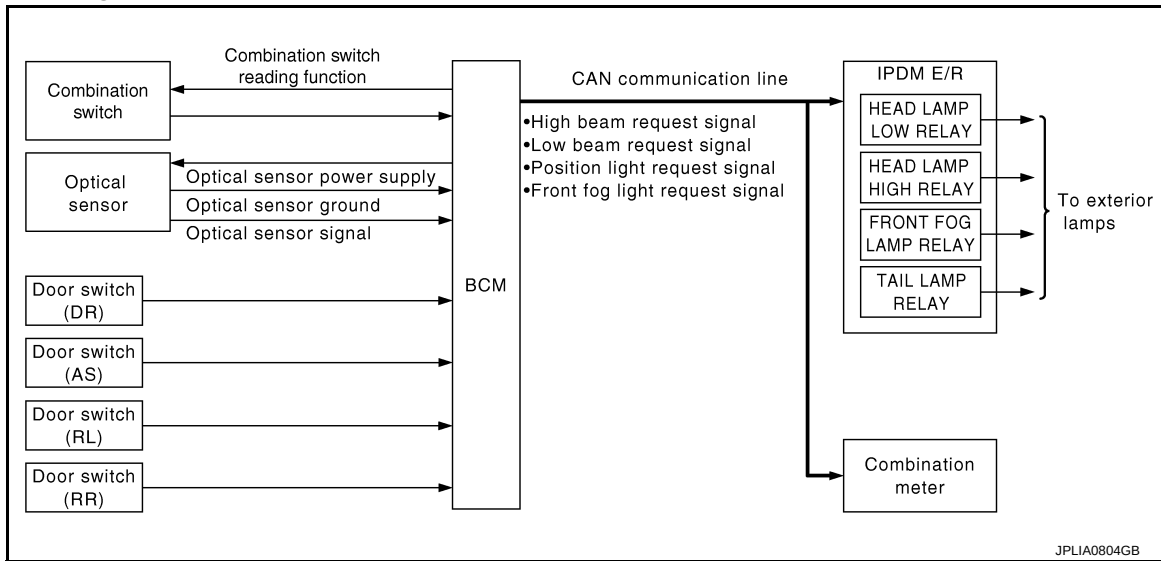
Component Description

INFOID:000000005515012

Part	Description
BCM	• Detects each switch condition with the combination switch reading function. • Judges the headlamp 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-9, "System Description" .
ECM	Transmits the engine condition signal to BCM with CAN communication.
Combination meter	Transmits the parking brake switch signal to BCM with CAN communication.

AUTO LIGHT SYSTEM

System Diagram



System Description

INFOID:000000005515014

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

AUTO LIGHT FUNCTION

- BCM detects the combination switch condition with the combination switch reading function.
- BCM supplies voltage to optical sensor when the 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-III. Refer to [EXL-24, "HEADLAMP : CONSULT-III Function \(BCM - HEAD LAMP\)"](#).

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

AUTO LIGHT SYSTEM

[XENON TYPE]

< SYSTEM DESCRIPTION >

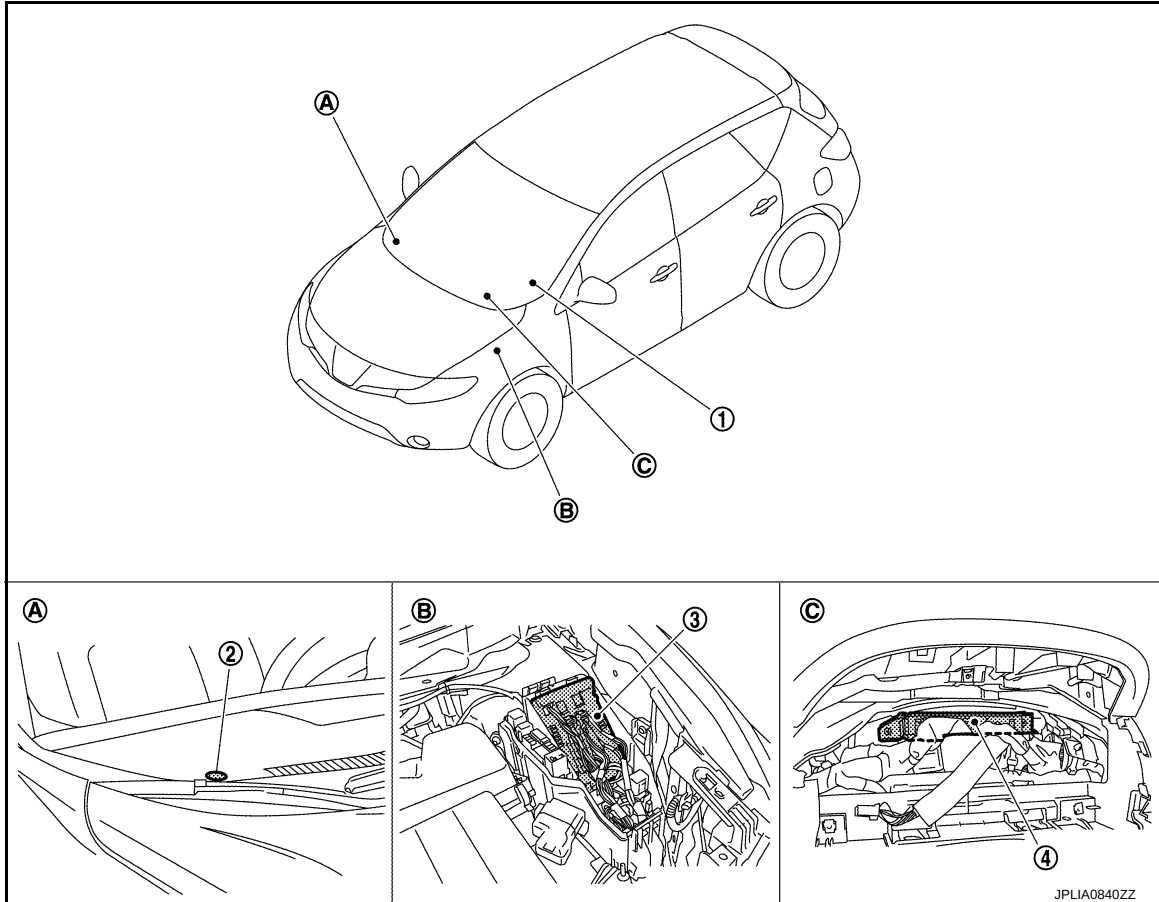
- Turns the exterior lamp OFF with the ignition switch ACC or the light switch OFF.
- *: The preset time is 45 seconds. The timer operating time can be set by CONSULT-III. Refer to [EXL-24, "HEADLAMP : CONSULT-III Function \(BCM - HEAD LAMP\)"](#).

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:000000005515015



- | | | |
|--------------------------------|---------------------|---------------------------------|
| 1. Combination switch | 2. Optical sensor | 3. IPDM E/R |
| 4. BCM | | |
| A. Instrument upper panel (RH) | B. Engine room (LH) | C. Behind the combination meter |

Component Description

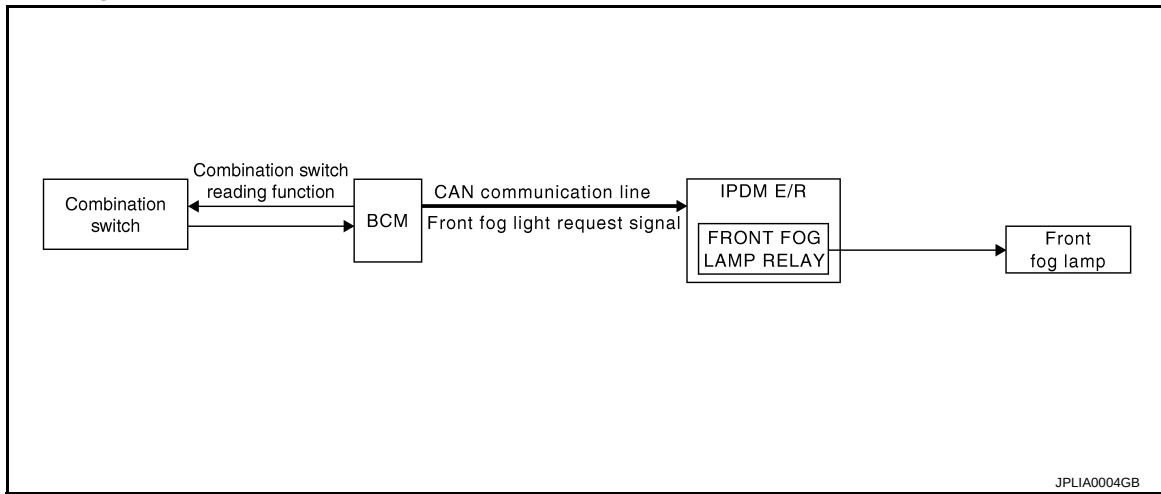
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Part	Description
BCM	• Detects each switch condition by the combination switch reading function. • Judges the outside brightness from the optical sensor signal. • Judges the OFF timing according to the vehicle condition. • Judges the ON/OFF status 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-9, "System Description" .
Optical sensor	Refer to EXL-52, "Description" .

FRONT FOG LAMP SYSTEM

System Diagram

INFOID:000000005515017



System Description

INFOID:000000005515018

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 with CAN communication according to the front fog lamp ON condition.

Front fog lamp ON condition

- Front fog lamp switch ON with headlamp ON (except for the high beam 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.

EXL

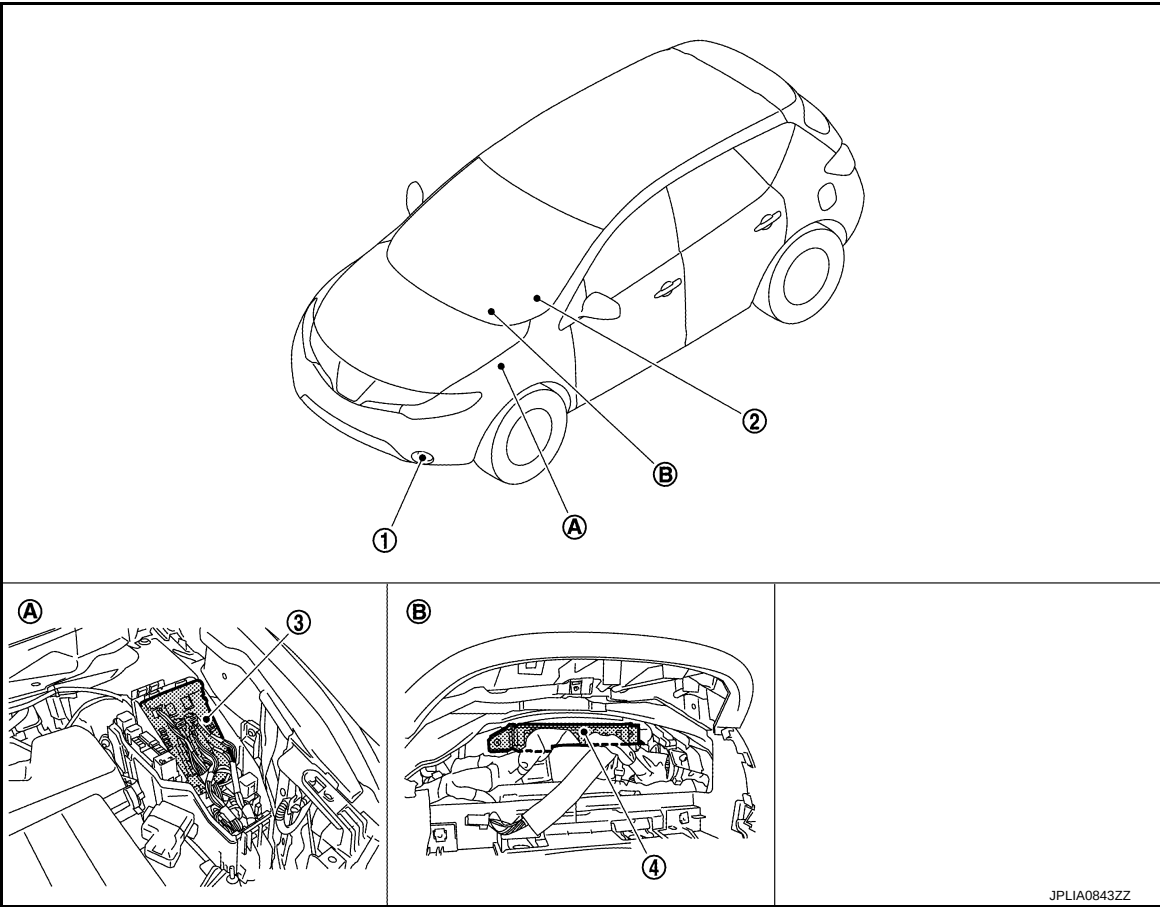
FRONT FOG LAMP SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Parts Location

INFOID:000000005515019



1. Front fog lamp
2. Combination switch
3. IPDM E/R
4. BCM
A. Engine room (LH)
B. Behind the combination meter

Component Description

INFOID:000000005515020

Part	Description
BCM	• Detects 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-9, "System Description" .

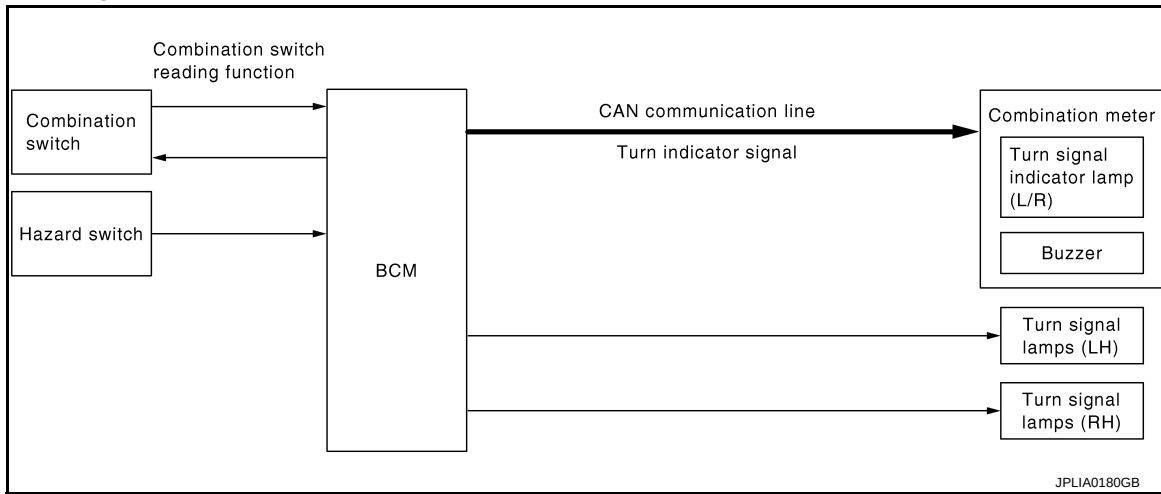
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

System Diagram



System Description

INFOID:0000000005515022

OUTLINE

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

TURN SIGNAL LAMP OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM supplies voltage to the right (left) turn signal lamp circuit when the 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 indicator signal to the combination meter with CAN communication while the turn signal lamp and the hazard warning lamp are operating.
- Combination meter outputs the turn signal sound with the integrated buzzer while blinking the turn signal indicator lamp according to the turn indicator signal.

HIGH FLASHER OPERATION (FAIL-SAFE)

- BCM detects the turn signal lamp circuit status by the terminal 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.

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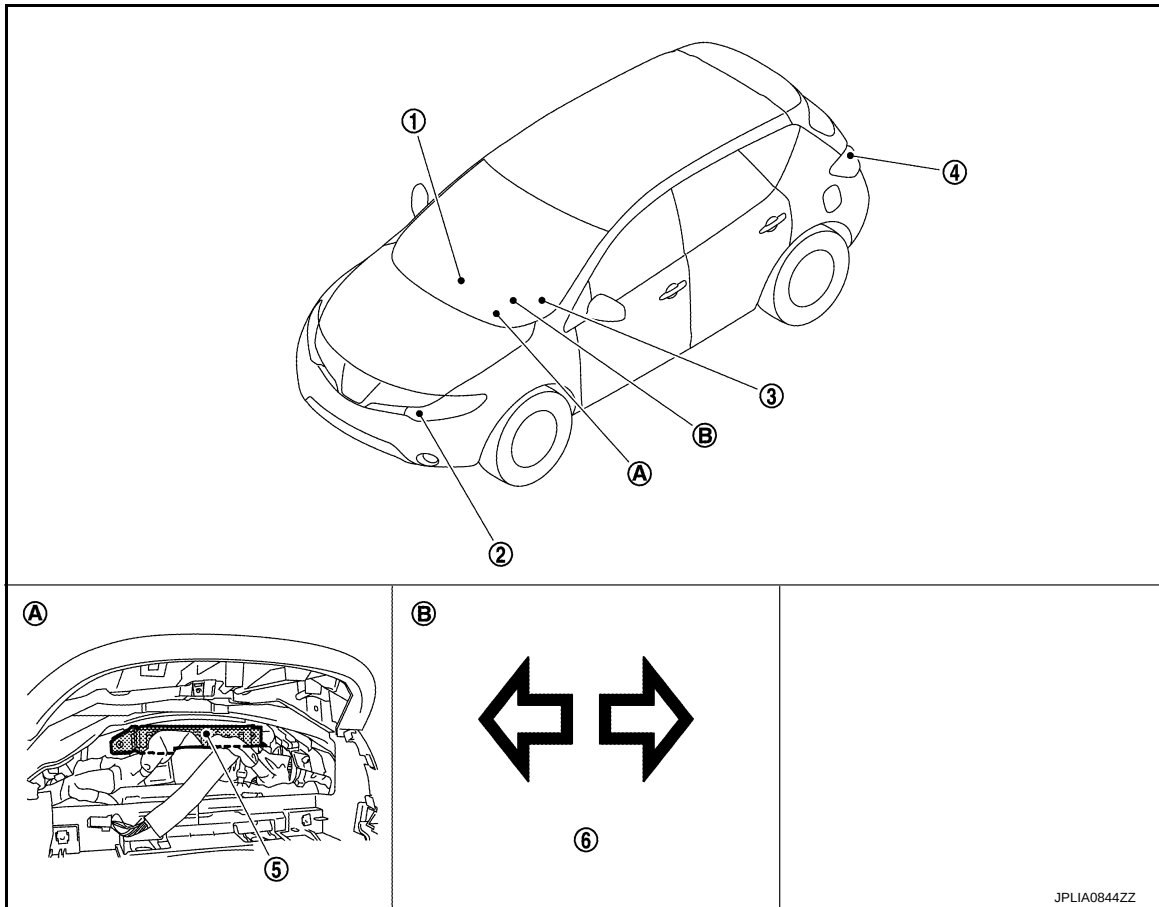
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Parts Location

INFOID:000000005515023



- | | | |
|---------------------------------|-----------------------------|-------------------------------|
| 1. Hazard switch | 2. Front turn signal lamp | 3. Combination switch |
| 4. Rear turn signal lamp | 5. BCM | 6. Turn signal indicator lamp |
| A. Behind the combination meter | B. On the combination meter | |

Component Description

INFOID:000000005515024

Part	Description
BCM	• Detects 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-9, "System Description" .
Hazard switch	Inputs the hazard switch ON/OFF signal to BCM.
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).

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

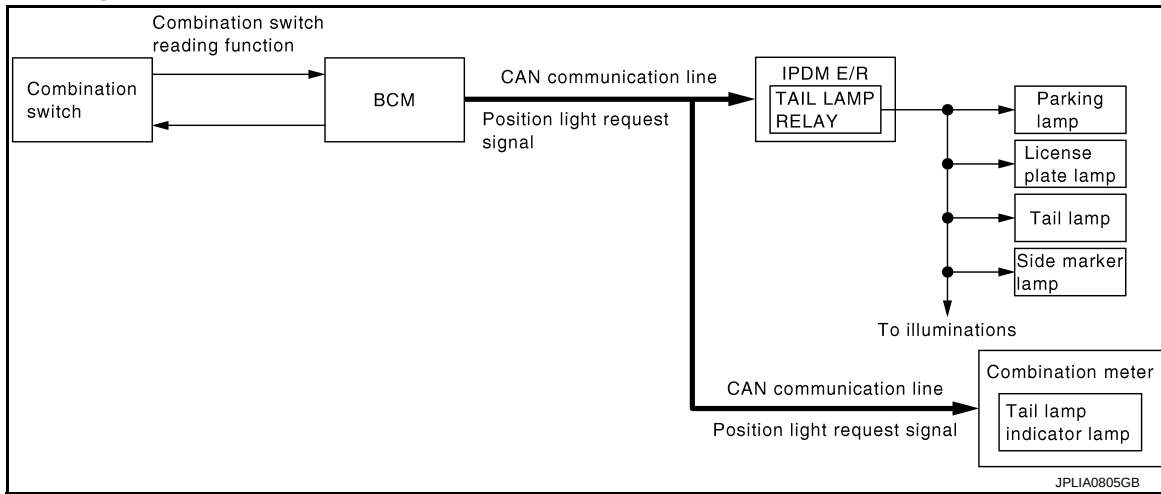
< SYSTEM DESCRIPTION >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

System Diagram

INFOID:000000005515025



System Description

INFOID:000000005515026

OUTLINE

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

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits the position light request signal to IPDM E/R and the combination meter 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
- 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.

EXL

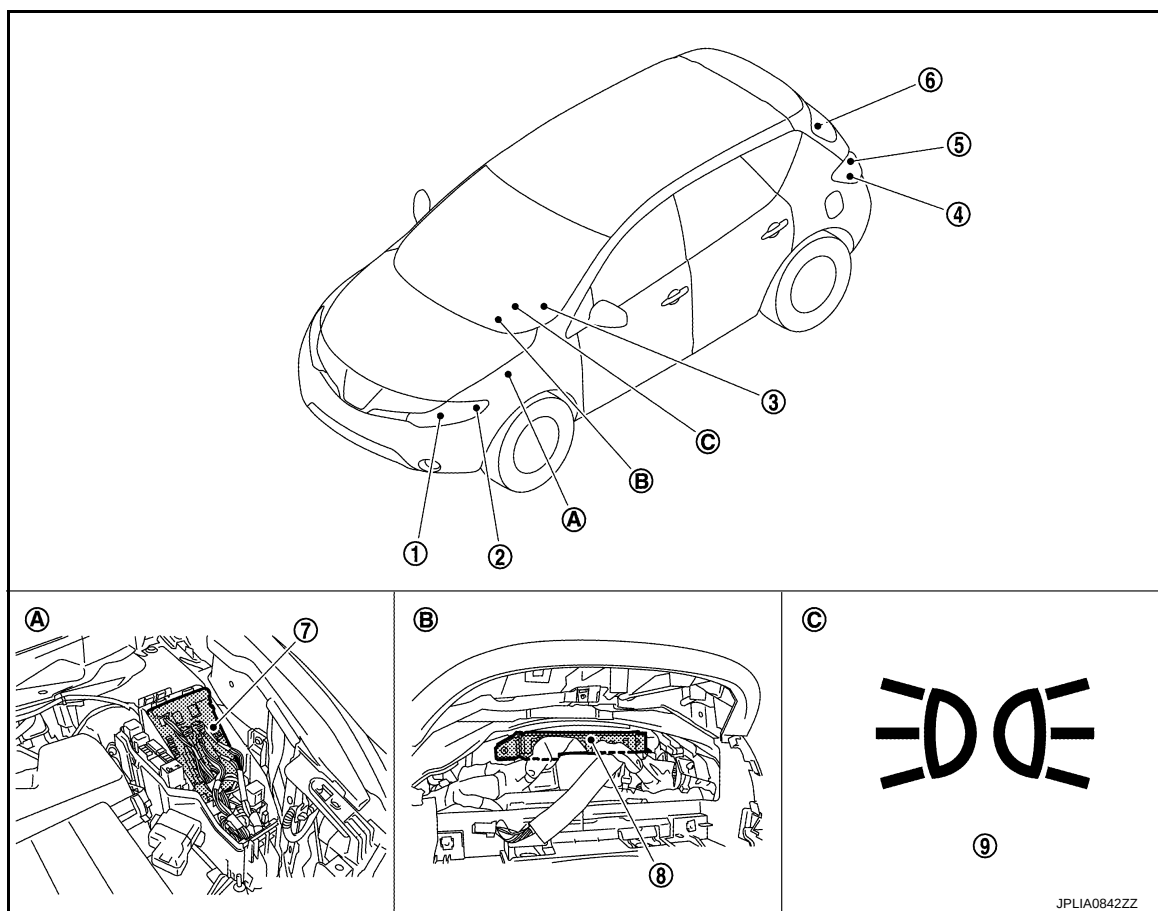
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Parts Location

INFOID:000000005515027



- | | | |
|--------------------------|---------------------------------|-----------------------------|
| 1. Parking lamp | 2. Front side marker lamp | 3. Combination switch |
| 4. Rear side marker lamp | 5. Tail lamp | 6. License plate lamp |
| 7. IPDM E/R | 8. BCM | 9. Tail lamp indicator lamp |
| A. Engine room (LH) | B. Behind the combination meter | C. On the combination meter |

Component Description

INFOID:000000005515028

Part	Description
BCM	• Detects each switch condition by the combination switch reading function. • Judges the ON/OFF status of the parking, license plate and tail lamps according to the vehicle condition. - Requests the tail lamp relay ON to IPDM E/R (with CAN communication). - Requests the tail lamp 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-9, "System Description" .
Combination meter (Tail lamp indicator lamp)	Turns the tail lamp indicator lamp ON according to the request from BCM (with CAN communication).

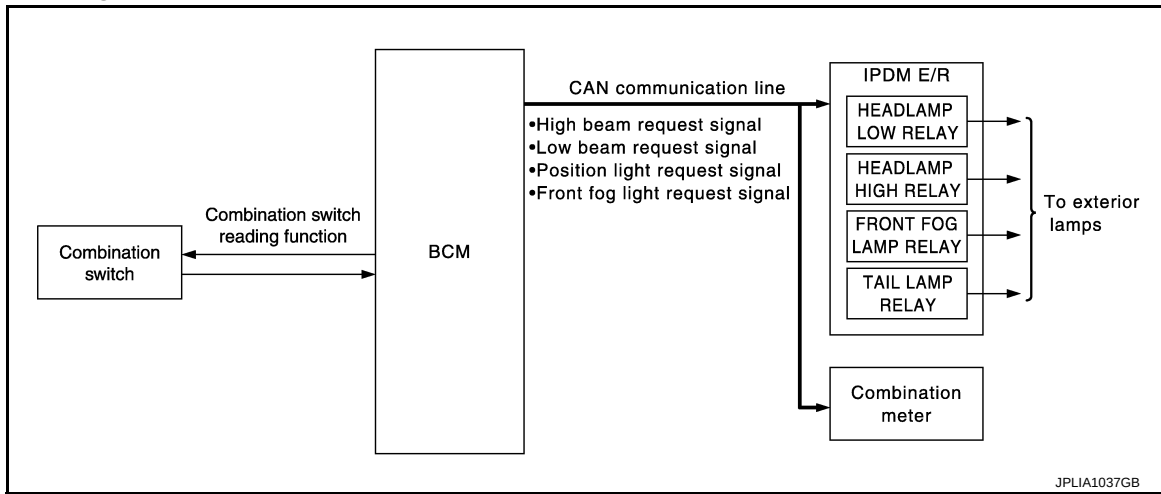
EXTERIOR LAMP BATTERY SAVER SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

EXTERIOR LAMP BATTERY SAVER SYSTEM

System Diagram



System Description

INFOID:000000005515030

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, side marker lamp, tail lamp, license plate lamp and front fog lamp.

EXTERIOR LAMP BATTERY SAVER ACTIVATION

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

NOTE:

- Headlamp control function turns the exterior lamps ON normally when the ignition switch is turned ACC or 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.

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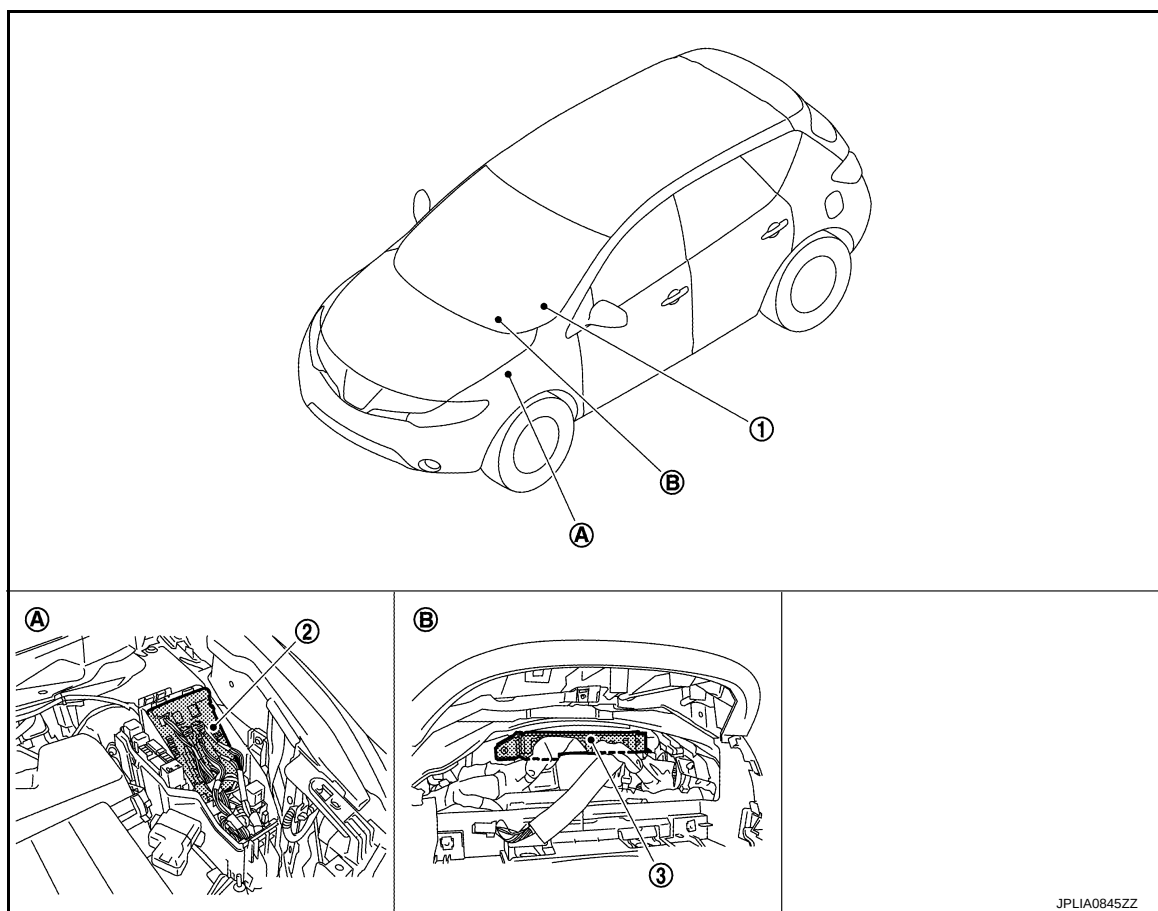
EXTERIOR LAMP BATTERY SAVER SYSTEM

< SYSTEM DESCRIPTION >

[XENON TYPE]

Component Parts Location

INFOID:000000005515031



1. Combination switch

2. IPDM E/R

3. BCM

A. Engine room (LH)

B. Behind the combination meter

Component Description

INFOID:000000005515032

Part	Description
BCM	• Detects each switch condition by the combination switch reading function. • Activates the battery saver to turn the exterior lamps 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-9. "System Description" .

DIAGNOSIS SYSTEM (BCM)

[XENON TYPE]

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)

INFOID:000000005681414

APPLICATION ITEM

CONSULT-III 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. Refer to CONSULT-III operation manual.
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	- 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.

x: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	x	x	x
Rear window defogger	REAR DEFOGGER		x	x
Warning chime	BUZZER		x	x
Interior room lamp timer	INT LAMP	x	x	x
Exterior lamp	HEAD LAMP	x	x	x
Wiper and washer	WIPER	x*1	x	x
Turn signal and hazard warning lamps	FLASHER	x	x	x
—	AIR CONDITONER*2			
- Intelligent Key system - Engine start system	INTELLIGENT KEY	x	x	x
Combination switch	COMB SW		x	
Body control system	BCM	x		
NVIS - NATS	IMMU		x	x
Interior room lamp battery saver	BATTERY SAVER	x	x	x
Back door opener system	TRUNK		x	x
Vehicle security system	THEFT ALM	x	x	x
RAP system	RETAINED PWR		x	
Signal buffer system	SIGNAL BUFFER		x	x
TPMS	TPMS (AIR PRESSURE MONITOR)	x	x	x

NOTE:

- *1: For models with rain sensor this mode is displayed, but is not used.
- *2: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

DIAGNOSIS SYSTEM (BCM)

[XENON TYPE]

< SYSTEM DESCRIPTION >

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

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 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" (Vehicle is stopping and selector lever is except P position.)
	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" (Ignition switch OFF with steering is locked.)
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)
	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 • 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.	

HEADLAMP

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

INFOID:000000005515034

WORK SUPPORT

Service item	Setting item	Setting
BATTERY SAVER SET	On*	With the exterior lamp battery saver function
	Off	Without the exterior lamp battery saver function

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[XENON TYPE]

Service item	Setting item	Setting	
ILL DELAY SET	MODE 1*	45 sec.	Sets delay timer function timer operation time. (All doors closed)
	MODE 2	Without the func- tion	
	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 SET- TING	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.)	

*: Factory setting

DATA MONITOR

Monitor item [Unit]	Description
PUSH SW [On/Off]	The switch status input from push-button ignition switch
ENGINE STATE [Stop/Stall/Crank/Run]	The engine status received from ECM with CAN communication
VEH SPEED 1 [km/h]	The value of the vehicle speed received from combination meter with CAN communication
KEY SW-SLOT [On/Off]	Key switch status input from key slot
TURN SIGNAL R [On/Off]	Each switch status that BCM detects 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]	
RR FOG SW [On/Off]	
DOOR SW-DR [On/Off]	The switch status input from front door switch (driver side)
DOOR SW-AS [On/Off]	The switch status input from front door switch (passenger side)

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[XENON TYPE]

Monitor item [Unit]	Description
DOOR SW-RR [On/Off]	The switch status input from rear door switch RH
DOOR SW-RL [On/Off]	The switch status input from rear door switch LH
DOOR SW-BK [On/Off]	NOTE: The item is indicated, but not monitored.
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	NOTE: The item is indicated, but cannot be tested.
	Off	
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-III Function (BCM - FLASHER)

INFOID:000000005515035

WORK SUPPORT

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	

*: Factory setting

DATA MONITOR

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[XENON TYPE]

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	The switch status input from the request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from the request switch (passenger side)
PUSH SW [On/Off]	The switch status input from the push-button ignition switch
TURN SIGNAL R [On/Off]	Each switch status that BCM detects 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]	Lock signal status received from the remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from the remote keyless entry receiver
RKE-PANIC [On/Off]	Panic alarm signal status received from the remote keyless entry receiver

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.

EXL

DIAGNOSIS SYSTEM (IPDM E/R)

Diagnosis Description

INFOID:000000005681416

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 marker lamps
- Tail lamps
- Front fog lamps
- Headlamps (LO, HI)
- A/C compressor (magnet clutch)
- Cooling fan

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-97, "WITH AUTOMATIC BACK DOOR : 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.

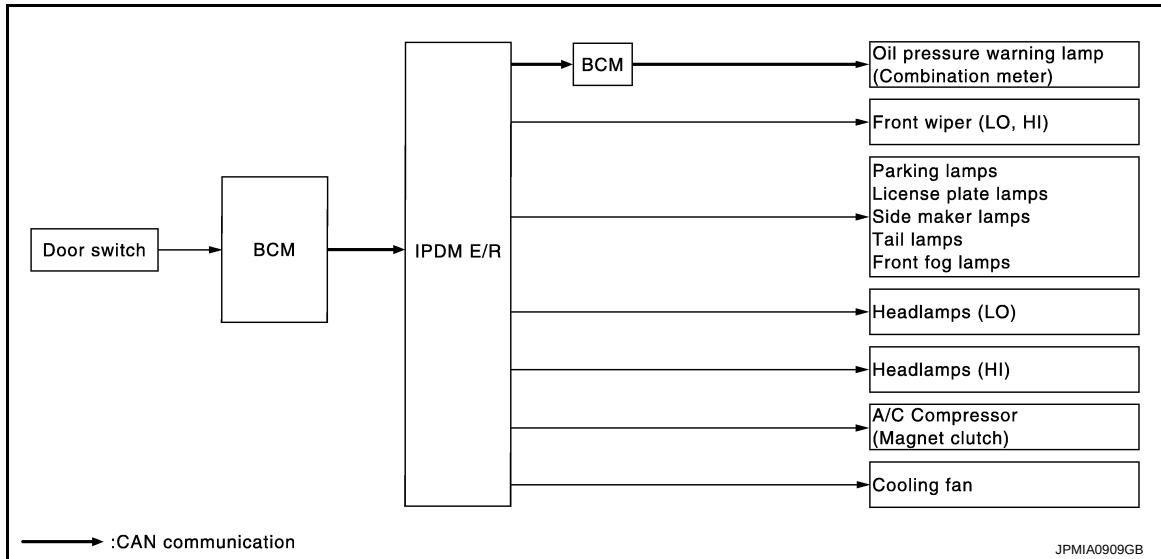
Operation sequence	Inspection location	Operation
1	Oil pressure warning lamp	Blinks continuously during operation of auto active test
2	Front wiper	LO for 5 seconds → HI for 5 seconds
3	• Parking lamps • License plate lamps • Side marker lamps • Tail lamps • Front fog lamps	10 seconds
4	Headlamps	LO ⇔ HI 5 times
5	A/C compressor (magnet clutch)	ON ⇔ OFF 5 times
6	Cooling fan	LO for 5 seconds → MID for 3 seconds → HI for 2 seconds

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

[XENON TYPE]

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 • Parking lamps • License plate lamps • Side maker lamps • Tail lamps • Front fog lamps • Headlamp (HI, LO) • Front wiper (HI, LO)	Perform auto active test. Does the applicable system operate?	YES BCM signal input circuit
		NO • Lamp or motor • Lamp or motor ground circuit • Harness or connector between IPDM E/R and applicable system • IPDM E/R
A/C compressor does not operate	Perform auto active test. Does the magnet clutch operate?	YES • A/C amp. signal input circuit • CAN communication signal between A/C amp. and ECM • CAN communication signal between ECM and IPDM E/R
		NO • Magnet clutch • Harness or connector between IPDM E/R and magnet clutch • IPDM E/R
Oil pressure warning lamp does not operate	Perform auto active test. Does the oil pressure warning lamp blink?	YES • Harness or connector between IPDM E/R and oil pressure switch • Oil pressure switch • IPDM E/R
		NO • CAN communication signal between IPDM E/R and BCM • CAN communication signal between BCM and combination meter • Combination meter

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

[XENON TYPE]

Symptom	Inspection contents		Possible cause
Cooling fan does not operate	Perform auto active test. Does the cooling fan operate?	YES	- ECM signal input circuit - CAN communication signal between ECM and IPDM E/R
		NO	- Harness or connector between IPDM E/R and cooling fan motor - Harness or connector between IPDM E/R and cooling fan relay - Cooling fan motor - Cooling fan relay - IPDM E/R

CONSULT-III Function (IPDM E/R)

INFOID:000000005681417

APPLICATION ITEM

CONSULT-III 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-348, "DTC Index"](#).

DATA MONITOR

Monitor item

Monitor Item [Unit]	MAIN SIGNALS	Description
MOTOR FAN REQ [1/2/3/4]	×	Displays the value of the cooling fan speed request 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.
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.

DIAGNOSIS SYSTEM (IPDM E/R)

[XENON TYPE]

< SYSTEM DESCRIPTION >

Monitor Item [Unit]	MAIN SIG- NALS	Description
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/INHI RLY [Off/ ST ON/INHI 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 CVT shift selector (detention switch) judged by IPDM E/R.
S/L RLY -REQ [Off/On]		Displays the status of the steering lock relay signal received from BCM via CAN communication. NOTE: For models without steering lock unit this item is not monitored.
S/L STATE [LOCK/UNLOCK/UNKWN]		Displays the status of the steering lock judged by IPDM E/R. NOTE: For models without steering lock unit this item is not monitored.
DTRL REQ [Off/On]		NOTE: The item is indicated, but not monitored.
OIL P SW [Open/Close]		Displays the status of the oil pressure switch judged by IPDM E/R.
HOOD SW [Off/On]		NOTE: The item is indicated, but not monitored.
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

Test item	Operation	Description
CORNERING LAMP	Off	NOTE: The item is indicated, but cannot be tested.
	LH	
	RH	
HORN	On	Operates horn relay 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	Operates the cooling fan relay-1.
	3	Operates the cooling fan relay-2.
	4	Operates the cooling fan relay-2 and cooling fan relay-3.

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

[XENON TYPE]

Test item	Operation	Description
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.

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:000000005515038

1.CHECK FUSE AND FUSIBLE LINK

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

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

Is the fuse fusing?

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 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:000000005515039

1.CHECK FUSES AND FUSIBLE LINK

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

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

Is the fuse fusing?

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			
Connector	Terminal	Ground	Battery voltage
E9	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		
E10	12		Existed
E11	41		

Does continuity exist?

YES >> INSPECTION END

NO >> Repair the harness or connector.

EXTERIOR LAMP FUSE

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

EXTERIOR LAMP FUSE

Description

INFOID:000000005515040

Fuse list

Unit	Location	Fuse No.	Capacity
Headlamp HI (LH)	IPDM E/R	#54	10 A
Headlamp HI (RH)	IPDM E/R	#55	10 A
Headlamp LO (LH)	IPDM E/R	#56	15 A
Headlamp LO (RH)	IPDM E/R	#57	15 A
Front fog lamp	IPDM E/R	#58	15 A
• Parking lamp • Front side marker lamp	IPDM E/R	#52	10 A
• Tail lamp • Rear side marker lamp • License plate lamp • Each illumination	IPDM E/R	#53	10 A
Stop lamp	FUSE BLOCK (J/B)	#7	10 A
Back-up lamp	FUSE BLOCK (J/B)	#4	10 A

Diagnosis Procedure

INFOID:000000005515041

1.CHECK FUSE

Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Headlamp HI (LH)	IPDM E/R	#54	10 A
Headlamp HI (RH)	IPDM E/R	#55	10 A
Headlamp LO (LH)	IPDM E/R	#56	15 A
Headlamp LO (RH)	IPDM E/R	#57	15 A
Front fog lamp	IPDM E/R	#58	15 A
• Parking lamp • Front side marker lamp	IPDM E/R	#52	10 A
• Tail lamp • Rear side marker lamp • License plate lamp • Each illumination	IPDM E/R	#53	10 A
Stop lamp	FUSE BLOCK (J/B)	#7	10 A
Back-up lamp	FUSE BLOCK (J/B)	#4	10 A

Is the fuse fusing?

- YES >> Repair the applicable circuit. And then replace the fuse.
NO >> The fuse is normal.

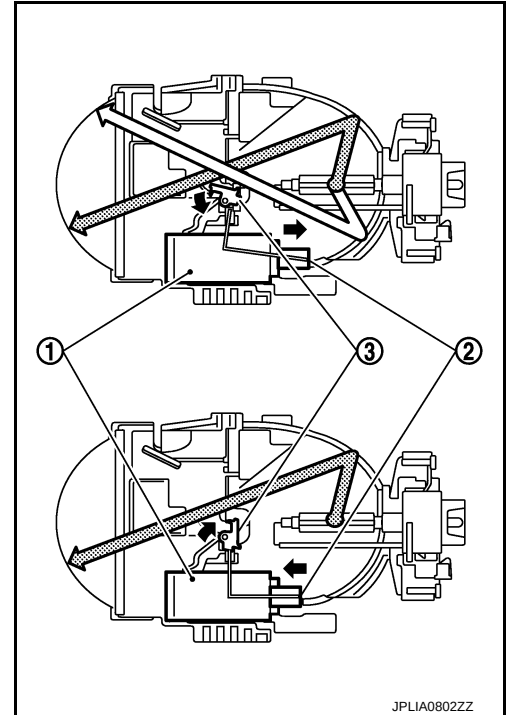
HEADLAMP (HI) CIRCUIT

Description

INFOID:000000005515042

The high beam solenoid drives the mobile valve shade. And the mobile valve shade switches the high beam and low beam of headlamp.

- When the headlamp high relay is turned ON, magnetic force is applied to the high beam solenoid (1) by a current. The mobile valve shade (3) is switched to the high beam position through the actuator rod (2).
- When the headlamp high relay is turned OFF, the current stops. The mobile valve shade returns to the low beam position automatically.



Component Function Check

INFOID:000000005515043

1.CHECK HEADLAMP (HI) OPERATION

⊗IPDM E/R AUTO ACTIVE TEST

1. Start IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the headlamp switches to the high beam.

ⓅCONSULT-III ACTIVE TEST

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

Hi : Headlamp switches to the high beam.

Off : Headlamp OFF

NOTE:

HI/LO is repeated 1 second each.

Does the headlamp switch to the high beam?

- YES >> Headlamp (HI) circuit is normal.
 NO >> Refer to [EXL-36, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515044

1.CHECK HEADLAMP (HI) OUTPUT VOLTAGE

ⓅCONSULT-III ACTIVE TEST

1. Turn the ignition switch OFF.
2. Disconnect the high beam solenoid 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.

HEADLAMP (HI) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

Terminals				Test item	Voltage (Approx.)
(+)			(-)		
IPDM E/R			Ground	EXTERNAL LAMPS	
Connector		Terminal			
RH	E345	89		Hi	Battery voltage
					Off
LH	E345	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 high beam solenoid harness connector.

IPDM E/R		High beam solenoid		Continuity
Connector	Terminal	Connector	Terminal	
RH	E345	E326	1	Existed
LH		E325	1	

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 fusing.

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 fusing?

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	E345	89	Not existed
LH		90	

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 fusing again.)

HEADLAMP (HI) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

5. CHECK HEADLAMP (HI) GROUND OPEN CIRCUIT

Check continuity between the high beam solenoid harness connector and the ground.

High beam solenoid			Ground	Continuity
Connector		Terminal		
RH	E326	2		
LH	E325	2		Existed

Does continuity exist?

YES >> Replace the front combination lamp.

NO >> Repair the harnesses or connectors.

HEADLAMP (LO) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

HEADLAMP (LO) CIRCUIT

Description

INFOID:0000000005515045

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-41, "Description"](#).

Component Function Check

INFOID:0000000005515046

1.CHECK HEADLAMP (LO) OPERATION

☒ IPDM E/R AUTO ACTIVE TEST

1. Start IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the headlamp is turned ON.

☐ CONSULT-III 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-39, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:0000000005515047

1.CHECK HEADLAMP (LO) OUTPUT VOLTAGE

☐ CONSULT-III ACTIVE TEST

1. Turn the ignition switch OFF.
2. Disconnect the headlamp 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 LAMPS	
Connector		Terminal		
RH	E345	83	Lo	Battery voltage
				0 V
LH	E345	84	Lo	Battery voltage
				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 headlamp harness connector.

HEADLAMP (LO) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

IPDM E/R		Headlamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E345	E324	83	Existed
LH			1	

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 fusing.

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 fusing?

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	E345	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 fusing again.)

5.CHECK HEADLAMP (LO) GROUND OPEN CIRCUIT

Check continuity between the headlamp harness connector and the ground.

Headlamp		Ground	Continuity
Connector	Terminal		
RH	E324	2	Existed
LH	E323	2	

Does continuity exist?

YES >> Perform the xenon headlamp diagnosis. Refer to [EXL-41, "Description"](#).

NO >> Repair the harnesses or connectors.

XENON HEADLAMP

Description

INFOID:000000005515048

OUTLINE

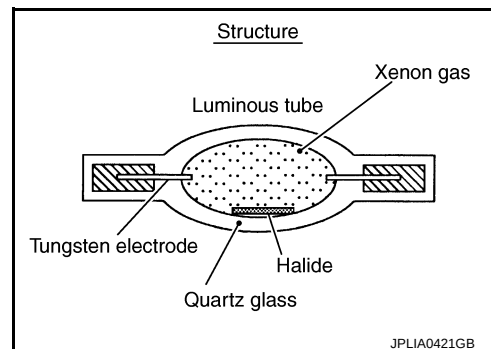
- The lamp light source is by the arch discharge by applying high voltage into the xenon gas-filled bulb instead of the halogen bulb filament.
- Sight becomes more natural and brighter because the amount of light are gained adequately and the color of light is sunshine-like white.
- The xenon bulb drops 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 lighting switch.**
- **Never work with wet hands.**

CAUTION:

- **Never perform HID control unit circuit diagnosis with a circuit tester or an equivalent.**
- **Temporarily install the headlamps 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 fusing 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:000000005515049

1.CHECK XENON BULB

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

Is the headlamp turned ON?

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

2.CHECK HID CONTROL UNIT

Install the normal HID control unit to the applicable headlamp. Check that the lighting switch is turned ON.

Is the headlamp turned ON?

XENON HEADLAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

-
- | | |
|-----|---|
| YES | >> Replace HID control unit. |
| NO | >> Xenon headlamp is normal. Check the headlamp control system. |

FRONT FOG LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

FRONT FOG LAMP CIRCUIT

Component Function Check

INFOID:000000005515050

1.CHECK FRONT FOG LAMP OPERATION

IPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the front fog lamp is turned ON.

CONSULT-III 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-43, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515051

1.CHECK FRONT FOG LAMP FUSE

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

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

Is the fuse fusing?

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

IPDM E/R			Ground	Continuity
Connector		Terminal		Not existed
RH	E345	86		
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 fusing 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-III 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			Ground	EXTERNAL LAMPS	
Connector		Terminal		Fog	Battery voltage
RH	E345	86		Off	0 V
LH		87		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	E345	E402	1	Existed
LH		E331	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		Existed
RH	E402	2		
LH	E331	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:000000005515052

1.CHECK PARKING LAMP OPERATION

IPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the parking lamp is turned ON.

CONSULT-III 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-45, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515053

1.CHECK PARKING LAMP FUSE

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

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

Is the fuse fusing?

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

2.CHECK PARKING LAMP SHORT CIRCUIT

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
RH	E346	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 fusing 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-III ACTIVE TEST

1. Disconnect the parking 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 LAMPS	
Connector		Terminal		
RH	E346	91	TAIL	Battery voltage
			Off	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 parking lamp harness connector.

IPDM E/R			Parking lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	E346	91	E330	2	Existed
LH		92	E329	2	

Does continuity exist?

YES >> GO TO 6.

NO >> Repair the harnesses or connectors.

6.CHECK PARKING LAMP GROUND OPEN CIRCUIT

Check continuity between the parking lamp harness connector and the ground.

Parking lamp			Ground	Continuity
Connector		Terminal		
RH	E330	1		Existed
LH	E329	1		

Does continuity exist?

YES >> Replace the front combination lamp.

NO >> Repair the harnesses or connectors.

FRONT SIDE MARKER LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

FRONT SIDE MARKER LAMP CIRCUIT

Component Function Check

INFOID:000000005515054

NOTE:

Check the parking lamp circuit if the parking lamp and the front side marker lamp are not turned ON. Refer to [EXL-45, "Component Function Check"](#).

1.CHECK FRONT SIDE MARKER LAMP OPERATION

IPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the front side marker lamp is turned ON.

CONSULT-III ACTIVE TEST

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

TAIL : Front side marker lamp ON

Off : Front side marker lamp OFF

Is the front side marker lamp turned ON?

YES >> Front side marker lamp circuit is normal.

NO >> Refer to [EXL-47, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515055

1.CHECK FRONT SIDE MARKER LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
Front side marker lamp	IPDM E/R	#52	10 A

Is the fuse fusing?

YES >> GO TO 2.

NO >> GO TO 3.

2.CHECK FRONT SIDE MARKER LAMP SHORT CIRCUIT

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

IPDM E/R			Ground	Continuity
Connector		Terminal		
RH	E346	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 fusing is found again.)

3.CHECK FRONT SIDE MARKER LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

YES >> GO TO 4.

NO >> Replace the bulb.

4.CHECK FRONT SIDE MARKER LAMP OUTPUT VOLTAGE

CONSULT-III ACTIVE TEST

1. Disconnect the front side marker lamp connector.

FRONT SIDE MARKER LAMP CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

- Turn the ignition switch ON.
- Select "EXTERNAL LAMPS" of IPDM E/R active test item.
- 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			Ground	EXTERNAL LAMPS	
Connector		Terminal			
RH	E346	91		TAIL	Battery voltage
				Off	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 FRONT SIDE MARKER 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 side marker lamp harness connector.

IPDM E/R		Front side marker lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E346	E315	2	Existed
LH		E314	2	

Does continuity exist?

YES >> GO TO 6.

NO >> Repair the harnesses or connectors.

6.CHECK FRONT SIDE MARKER LAMP GROUND OPEN CIRCUIT

Check continuity between the front side marker lamp harness connector and the ground.

Front side marker lamp			Ground	Continuity
Connector		Terminal		
RH	E315	1		Existed
LH	E314	1		

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:000000005515056

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

NOTE:

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

Component Function Check

INFOID:000000005515057

1.CHECK TURN SIGNAL LAMP

CONSULT-III ACTIVE TEST

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

LH : Turn signal lamps (LH) ON

RH : Turn signal lamps (RH) ON

Off : Turn signal lamps OFF

Is the turn signal lamp turned ON?

YES >> Turn signal lamp circuit is normal.

NO >> Refer to [EXL-49. "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515058

1.CHECK TURN SIGNAL LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

YES >> GO TO 2.

NO >> Replace the bulb.

2.CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

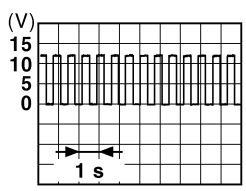
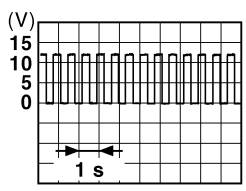
1. Turn the ignition switch OFF.
2. Disconnect the front turn signal lamp connector or the rear combination lamp connector.
3. Turn the ignition switch ON.
4. With operating the turn signal switch, check the voltage between the BCM harness connector and the ground.

A
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TURN SIGNAL LAMP CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

Terminals			Condition	Voltage (Approx.)
(+) (+)		(-)		
BCM			Turn signal switch	
Connector	Terminal			
RH	M119	17	Ground	
				OFF
LH		18	Ground	
				OFF

Is the measurement value normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-95, "Exploded View"](#).

3.CHECK TURN SIGNAL LAMP OPEN CIRCUIT

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

Front turn signal lamp

BCM		Front turn signal lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	M119	E328	1	Existed
LH		E327		

Rear turn signal lamp

BCM		Rear combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	M119	B59	2	Existed
LH		B80		

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4.CHECK TURN SIGNAL LAMP SHORT CIRCUIT

Check continuity between the BCM harness connector and the ground.

TURN SIGNAL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

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

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 5.

5.CHECK TURN SIGNAL LAMP GROUND OPEN CIRCUIT

Check continuity between the front turn signal lamp or the rear combination lamp and the ground.

Front turn signal lamp

Front turn signal lamp			Ground	Continuity
Connector		Terminal		
RH	E328	2		Existed
LH	E327			

Rear turn signal lamp

Rear combination lamp			Ground	Continuity
Connector		Terminal		
RH	B59	1		Existed
LH	B80			

Does continuity exist?

YES >> Replace the front combination lamp or the rear combination lamp.

NO >> Repair the harnesses or connectors.

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OPTICAL SENSOR

Description

INFOID:000000005515059

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

Component Function Check

INFOID:000000005515060

1.CHECK OPTICAL SENSOR SIGNAL BY CONSULT-III

CONSULT-III 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-52, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515061

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			
Connector	Terminal	Ground	
M17	1		
			5 V

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	
Connector	Terminal		
M17	3		0 V

Is the measurement value normal?

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

OPTICAL SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

3.CHECK OPTICAL SENSOR SIGNAL OUTPUT

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	
Connector	Terminal		
M17	2	Ground	When illuminating
			When shutting off light

*: 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	
M17	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		
M17	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	
M17	3	M123	137	Existed

Does continuity exist?

YES >> Replace BCM.

NO >> Repair the harnesses or connectors.

7.CHECK OPTICAL SENSOR SIGNAL OPEN CIRCUIT

OPTICAL SENSOR

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

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	
M17	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		
M17	2		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM.

HAZARD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

HAZARD SWITCH

Component Function Check

INFOID:000000005515062

1.CHECK HAZARD SWITCH SIGNAL BY CONSULT-III

CONSULT-III 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	ON	On
		OFF	Off

Is the item status normal?

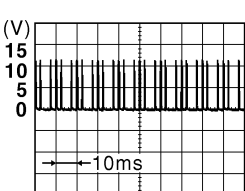
- YES >> Hazard switch circuit is normal.
NO >> Refer to [EXL-55, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515063

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	ON	
		OFF	

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Is the measurement value normal?

- YES >> Replace BCM. Refer to [BCS-95, "Exploded View"](#).
NO >> GO TO 2.

2.CHECK HAZARD SWITCH SIGNAL OPEN CIRCUIT

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

Hazard switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M45	2	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 hazard switch harness connector and the ground.

HAZARD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

Hazard switch		Ground	Continuity
Connector	Terminal		
M45	2		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 hazard switch harness connector and the ground.

Hazard switch		Ground	Continuity
Connector	Terminal		
M45	1		Existed

Does continuity exist?

YES >> Replace the hazard switch.

NO >> Repair the harnesses or connectors.

TAIL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TAIL LAMP CIRCUIT

Component Function Check

INFOID:000000005515064

NOTE:

Check the license plate lamp circuit if the tail lamp and the license plate lamp are not turned ON. Refer to [EXL-59, "Component Function Check"](#).

1.CHECK TAIL LAMP OPERATION

IPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the tail lamp is turned ON.

CONSULT-III 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-57, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515065

1.CHECK TAIL LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
Tail lamp	IPDM E/R	#53	10 A

Is the fuse fusing?

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

2.CHECK TAIL LAMP OUTPUT VOLTAGE

CONSULT-III 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 LAMPS	Battery voltage
Connector	Terminal		
E10	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.

TAIL LAMP CIRCUIT

[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

2. Disconnect IPDM E/R connector.
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	E10	7	B59	4	Existed
LH			B80	4	

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	B59	1	Existed
LH	B80	1	

Does continuity exist?

YES >> Replace the rear combination lamp.

NO >> Repair the harnesses or connectors.

LICENSE PLATE LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

LICENSE PLATE LAMP CIRCUIT

Component Function Check

INFOID:000000005515066

1.CHECK LICENSE PLATE LAMP OPERATION

☒ IPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the license plate lamp is turned ON.

☐ CONSULT-III 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-59, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515067

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	E10	7	D163	1	Existed
LH			D162	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.

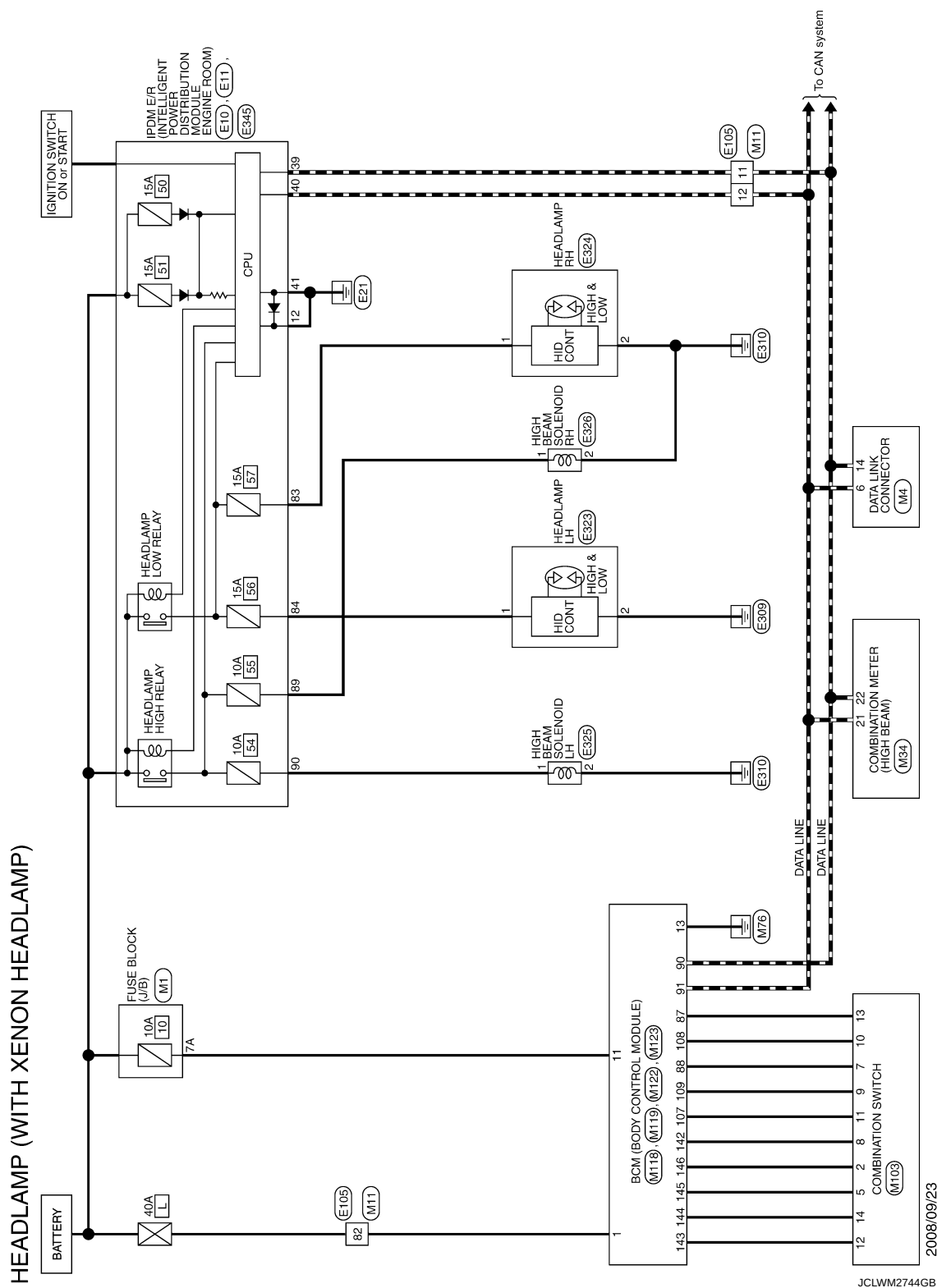
License plate lamp			Ground	Continuity
Connector		Terminal		
RH	D163	2		Existed
LH	D162	2		

Does continuity exist?

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

Wiring Diagram - HEADLAMP -

INFOID:0000000005515068



HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

HEADLAMP (WITH XENON HEADLAMP)

Connector No.	E10
Connector Name	SWAYLE INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20PW-CS12-M4-1V



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

Connector No.	E11
Connector Name	SWAYLE INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH40FW-NH



42	41	40	39
46	45	44	43

Terminal No.	Color of Wire	Signal Name [Specification]
4	LG	-
5	Y	-
7	GR	-
10	BR	-
11	P	-
12	B	-
13	SB	-
15	W	-
16	L/Y	-
19	Y	-
20	L	-
21	O	-
22	SB	-
23	GR	-
24	G	-
25	GR	-
26	Y	-
27	W	-
28	SB	-
30	BR	-
32	V	-
33	G	-
34	O	-
35	P	-
36	G	-
38	GR	-

Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B	-
42	SB	-
43	Y	-
44	W	-
45	O	-
46	BR	-

Connector No.	E105
Connector Name	WIPE TO WIRE
Connector Type	TH70MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-

Connector No.	E23
Connector Name	HEADLAMP LH
Connector Type	ES2FGY-RS



2	1
---	---

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	B	-

Connector No.	E24
Connector Name	HEADLAMP RH
Connector Type	ES2FGY-RS



2	1
---	---

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

Connector No.	E25
Connector Name	HIGH BEAM SOLENOID LH
Connector Type	RS22FB



2	1
---	---

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

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HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

HEADLAMP (WITH XENON HEADLAMP)

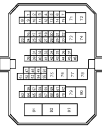
Connector No.	E326
Connector Name	HIGH BEAM SOLENOID RH
Connector Type	RS02FB



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



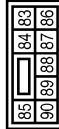
Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH06FW-CS10-M3



67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

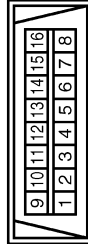
Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	B	-

Connector No.	E345
Connector Name	SWAYER INTELLIGENT POWER DISTRIBUTION MODULE (PUMP ROOM)
Connector Type	NS08FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
83	Y	-
84	L	-
86	SB	-
87	GR	-
88	W	-
89	L	-
90	G	-

Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-
24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-

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HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

HEADLAMP (WITH XENON HEADLAMP)

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40PV-NH



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
2	O	IGN
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL
6	SB	TRIP RESET SWITCH
7	W	SW ILL POWER
8	W	METER CONTROL SW GND
9	L	ENTER SWITCH
10	O	SELECT SWITCH
11	L	ILLUMINATION CONTROL SWITCH (OFF/On automatic drive position)
12	R	ILLUMINATION CONTROL SWITCH (OFF/On automatic drive position)
13	Y	ILLUMINATION CONTROL SWITCH (OFF/On automatic drive position)
14	GR	ILLUMINATION CONTROL SWITCH (-)
15	BR	AIR BAG
16	L	AMBIENT SENSOR
17	P	AMBIENT SENSOR POWER
18	P	AMBIENT SENSOR GROUND
19	P	CAN-H
20	Y	GROUND
21	L	GROUND
22	P	GROUND
23	B	FUEL LEVEL SENSOR GROUND
24	W	CHG
25	BR	PARKING BRAKE SWITCH
26	G	BRAKE FLUID LEVEL SWITCH
27	V	WASHER LEVEL SWITCH
28	R	VEHICLE SPEED (2-PULSE)
29	P	OD OFF/SPORTS
30	P	FUEL LEVEL SENSOR
31	V	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
32	LG	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
33	G	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
34	G	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
35	SB	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
36	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

Connector No.	M103
Connector Name	COMBINATION SWITCH
Connector Type	TH16FV-NH



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GROUND
7	GR	INPUT 3
8	L	OUTPUT 2
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	OUTPUT 2

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



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

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

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	M18FW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INTERIOR ROOM LAMP POWER SUPPLY
5	P	PASSENGER DOOR UNLOCK OUTPUT
6	W	STEP LAMP OUTPUT
7	G	ALL DOOR FUEL LID LOCK OUTPUT
8	G	DRIVER DOOR FUEL LID LOCK OUTPUT
9	G	REAR DOOR UNLOCK OUTPUT
10	P	BAT (RUSE)
11	LG	GND
12	B	PUSH-BUTTON IGNITION SW ILL GND
13	B	TURN SIGNAL RH
14	O	TURN SIGNAL LH
15	L	ACC IND
16	G	TURN SIGNAL RH
17	GR	TURN SIGNAL LH
18	BR	ROOM LAMP TIMER CONTROL
19	Y	ROOM LAMP TIMER CONTROL

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



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

Terminal No.	Color of Wire	Signal Name [Specification]
72	B	ROOM ANT2-
73	W	ROOM ANT2+
74	Y	PASSENGER DOOR ANT-
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	P	DRIVER DOOR ANT+
80	SB	IMMOBI ANTENNA CONTROL
81	O	IMMOBI ANTENNA SIGNAL
82	BR	IGN RELAY (F/B) CONT

83	P	KEYLESS ENTRY RECEIVER SIGNAL
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	R	KEY SLOT ILL
93	P	ON IND
95	L	ACC RELAY CONT
96	Y	CVT SHIFT SELECTOR POWER SUPPLY
97	O	S/L CONDITION 1
98	L	S/L CONDITION 2
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER FAN MOTOR RELAY SW
102	Y	KEYLESS ENTRY RECEIVER POWER SUPPLY
103	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	Y	S/L POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW
111	LG	S/L COMM

HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

HEADLAMP (WITH XENON HEADLAMP)

Connector No.	M123
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-1H1



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	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

Terminal No.	Color of Wire	Signal Name [Specification]
112	R	RAIN SENSOR SERIAL LINK
113	O	OPTICAL SENSOR
116	GR	FUSE CHECK
118	L	STOP LAMP SW
119	W	DR DOOR UNLOCK SENSOR
121	Y	KEY SLOT SW
123	G	IGN F/B
124	R	PASSENGER DOOR SW
130	BR	REAR DEFOGGER SW
132	G	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	R	LOCK IND
137	P	RECEIVER/SENSOR GND
138	V	RECEIVER/SENSOR POWER SUPPLY
139	O	TIRE PRESS RECEIVER SIGNAL
140	GR	SHIFT N/P
141	O	SECURITY INDICATOR OUTPUT
142	L	COMBI SW OUTPUT 5
143	W	COMBI SW OUTPUT 1
144	P	COMBI SW OUTPUT 2
145	V	COMBI SW OUTPUT 3
146	Y	COMBI SW OUTPUT 4
149	W	TIRE PRESS WARNING CHECK SW
150	SB	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY

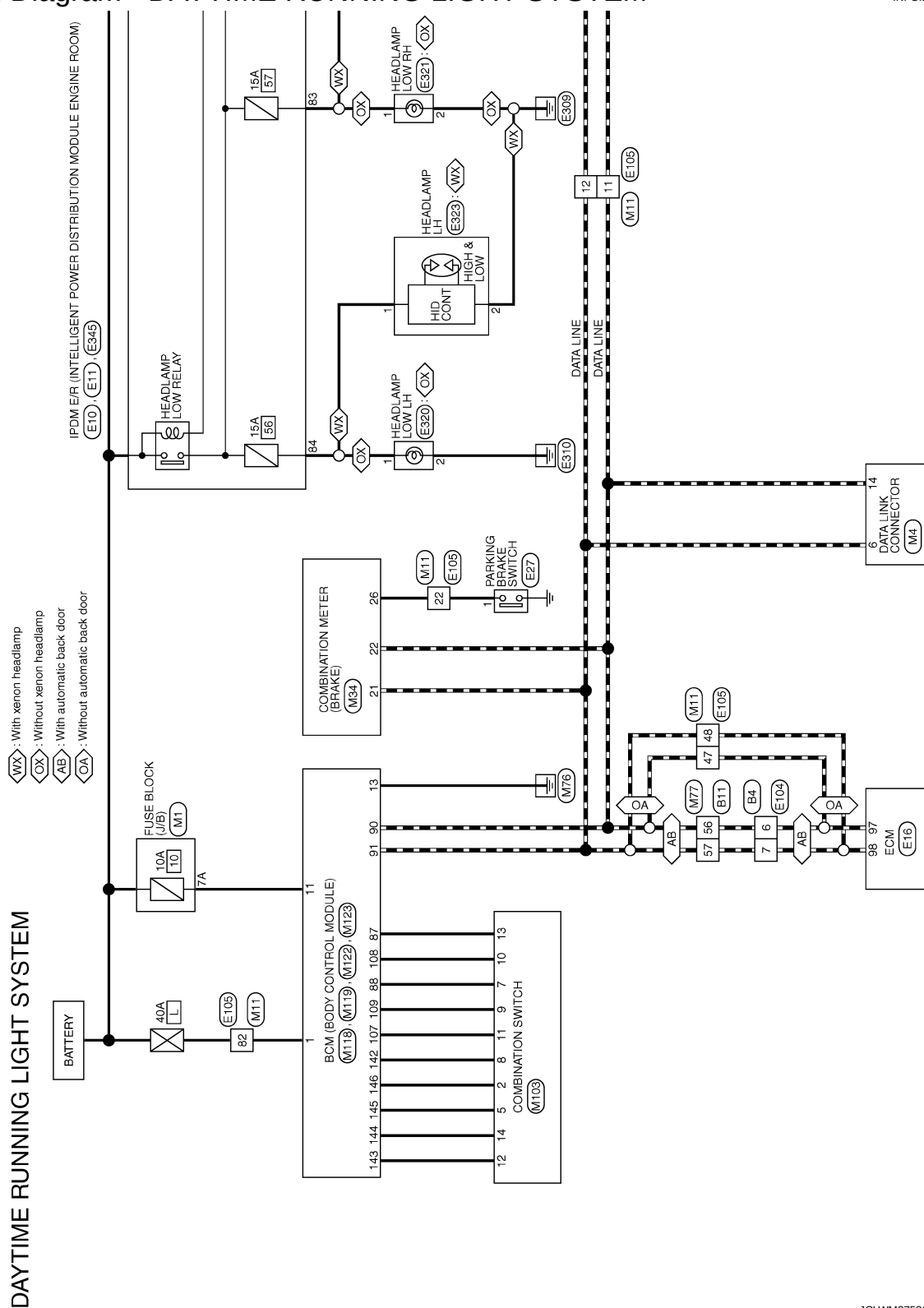
JCLWM4147GB

[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Wiring Diagram - DAYTIME RUNNING LIGHT SYSTEM -

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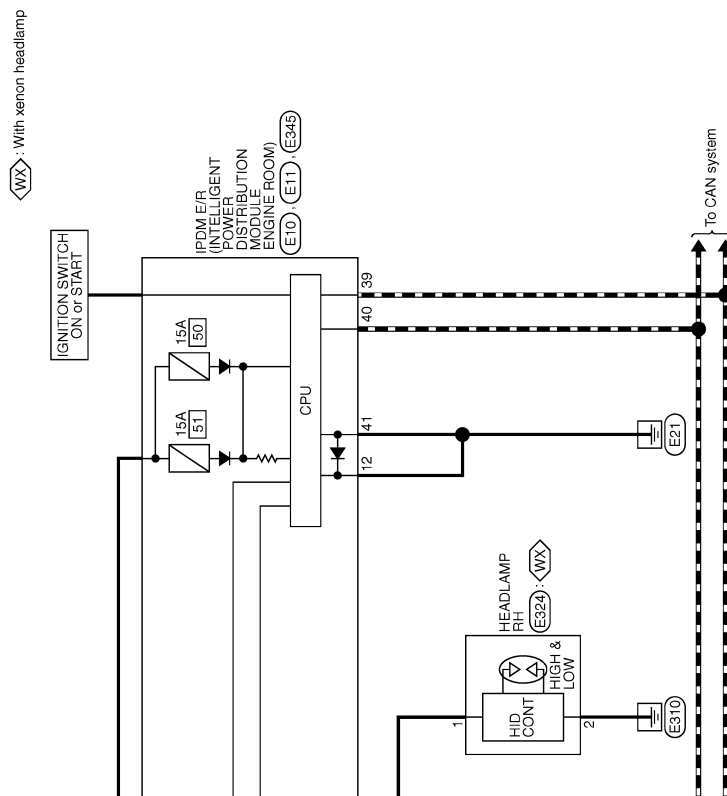


JCLWM2752GB

DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]



JCLWM2753GB

DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	W	-
3	W	-
4	R	-
5	O	-
6	P	-
7	L	-
8	B	-
9	LG	-
10	V	-
11	L	-
12	BR	-
13	P	-
14	BR	-
15	O	-
16	G	-

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS19



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R/L	-
4	R/W	-
5	SB	-
6	P	-

7	V	-
8	SHIELD	-
9	BR/L	-
10	V/G	-
11	V/L	-
12	W/L	-
13	L	-
14	BR	-
15	SB	-
16	BR	-
17	V	-
18	SB	-
19	R	-
20	P	-
21	LG	-
22	W	-
23	Y	-
24	GR	-
25	Y	-
26	V	-
27	W	-
28	W/L	-
29	P	-
30	P	-
31	O	-
32	BR	-
33	SB	-
34	L	-
35	SHIELD	-
36	L/O	-
37	LG	-
40	Y	-
41	O	-
42	SB	-
43	G	-
44	BR	-
45	L	-
46	GR	-
47	V	-
48	GR	- [With rear view camera and telephone]
49	Y	- [With rear view camera without telephone]
50	SHIELD	-
51	B	-
52	B	-
53	Y	-
54	LG	-
55	BR	-
56	P	-
57	L	-
58	R	-
59	SHIELD	-
60	B	-
61	R/L	-
62	R/W	-

63	LG	-
64	Y	-
65	GR	-
66	G	-
67	R	-
68	SHIELD	-
69	W/R	-
70	B/R	-
71	Y	-
72	Y	-
73	LG	-
74	SB	-
75	L	-
76	G	-
77	R	-
78	SHIELD	-
79	B	-
80	W	-
81	R	-
82	L	-
83	BR	-
84	O	-
85	G	-
86	SB	-
87	R	-
88	G	-
89	GR	-
90	Y	-
91	G	-
92	BR	-
93	G	-
94	V	-
95	BR	-
96	GR	-
97	R	-
98	LG	-
99	O	-

Connector No.	E10
Connector Name	ENGINE ROOM INTELLIGENT POWER DISTRIBUTION MODULE
Connector Type	TH20FW-CS12-MM-IV



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

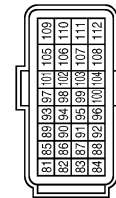
DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	E16
Connector Name	ECM
Connector Type	RH24FB-R28-L-LH



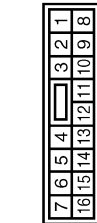
Terminal No.	Color of Wire	Signal Name [Specification]
81	W	APSI
82	O	APSZ
83	BR	AVGCI-APSI
84	B	GND-A-APSI
85	Y	ASCD SW
86	SB	FTPRES
87	GR	AVGCI2-APSZ
88	O	KLINE
91	L	AVGCI2-FTPRES
92	BR	GND-ASCD SW
93	BR	IGN SW
94	GR	TACHO(CABIN)
95	Y	TF
96	GR	GND-FTPRES
97	P	VEHCAN-L
98	L	VEHCAN-H
100	G	GND-A-APSZ
102	R	NEUT-H
104	SB	GND-TF
105	V	VER
106	SB	BRAKE
107	B	GND
108	B	GND
109	W	ODCV
110	G	ENG SW
111	B	GND
112	B	GND

Connector No.	E27
Connector Name	PARKING BRAKE SWITCH
Connector Type	PRO1B-A



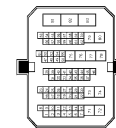
Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-

Connector No.	E104
Connector Name	WIRE TO WIRE
Connector Type	NS16F11-CS



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

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH10MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-
23	P	-
24	L	-
25	O	-
26	G	-
27	V	-
28	SB	-
29	W	-
30	Y	-
37	P	-
48	L	-
49	SB	-
50	GR	-
51	LG	-
52	V	-
53	GR	-
54	BR	-
55	Y	-
56	W/L	-
60	V	-
61	BR	-
62	O	-
63	L/O	-
64	SHIELD	-
66	W	-

67	BR	-
68	Y	-
69	SB	-
70	GR	-
71	SB	-
72	Y	-
73	L	-
74	W	-
75	BR	-
76	GR	-
77	O	-
78	V	-
79	Y	-
80	R	-
81	W	-
82	LG	-
83	O	-

Connector No.	E220
Connector Name	HEADLAMP LOW LH
Connector Type	FT202FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	B	-

JCLWM4153GB

DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	E321
Connector Name	HEADLAMP LOW RH
Connector Type	FH202FB



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

Connector No.	E323
Connector Name	HEADLAMP LH
Connector Type	E0PFGY-RS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	B	

Connector No.	E324
Connector Name	HEADLAMP RH
Connector Type	E0PFGY-RS



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

Connector No.	E345
Connector Name	ENGINE INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	NS06FY-CS



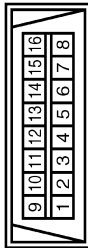
Terminal No.	Color of Wire	Signal Name [Specification]
83	Y	
84	L	
86	SR	
87	GR	
88	W	
89	L	
90	G	

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FY-M2



Terminal No.	Color of Wire	Signal Name [Specification]
1A	Y	
2A	G	
3A	Y	
4A	GR	
5A	R	
6A	W	
7A	LG	
8A	Y	

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
4	B	
5	B	
6	L	
7	O	
8	G	
14	P	
16	Y	

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH10FW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	
3	P	
4	O	
5	O	
6	G	
8	R	
11	P	
12	L	
13	V	
14	Y	
15	R	
20	Y	
21	BR	
22	G	
23	P	

24	Y	
25	L	
26	L	
27	O	
28	BR	
29	L	
30	R	
47	P	
48	L	
49	W	
50	GR	
51	LG	
52	Y	
53	V	
54	SR	
55	P	
56	SR	
60	V	
61	GR	
62	V	
63	V	
64	SHIELD	
66	W	
67	R	
68	W	
69	P	
70	G	
71	G	
72	BR	
73	L	
74	W	
75	BR	
76	R	
77	G	
78	Y	
79	Y	
80	R	
81	W	
82	W	
83	O	

JCLWM4154GB

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

DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH45FW-NH



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
2	O	IGN
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL
8	SB	TRIP RESET SWITCH
9	W	SW ILL POWER
10	O	METER CONTROL SW GND
11	L	ENTER SWITCH
12	R	SELECT SWITCH
13	Y	ILLUMINATION CONTROL SWITCH (OFF/automatic drive position)
14	GR	ILLUMINATION CONTROL SWITCH (ON/automatic drive position)
15	BR	AIR BAG
18	L	AMBIENT SENSOR
19	P	AMBIENT SENSOR POWER
20	Y	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	CAN-L
23	B	GROUND
24	W	FUEL LEVEL SENSOR GROUND
25	BR	CHG
26	G	PARKING BRAKE SWITCH
27	V	BRAKE FLUID LEVEL SWITCH
29	R	WASHER LEVEL SWITCH
30	P	VEHICLE SPEED (2-PULSE)
31	V	VEHICLE SPEED (8-PULSE)
32	LG	OD OFF/SPORTS
34	G	FUEL LEVEL SENSOR
35	SB	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
36	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH48FW-CS19



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

44	V	-
45	P	-
46	R	-
47	Y	-
48	L	-
49	G	-
50	SHIELD	-
51	W	-
52	B	-
53	BR	-
54	B	-
55	G	-
56	P	-
57	L	-
58	SB	-
59	SHIELD	-
60	B	-
61	R	-
62	W	-
63	O	-
64	Y	-
65	L	-
67	R	-
68	G	-
69	SHIELD	-
70	L	-
71	R	-
72	LG	-
73	Y	-
74	R	-
75	P	-
76	L	-
77	BR	-
78	SHIELD	-
79	B	-
80	W	-
81	LG	-
82	L	-
83	W	- [With automatic drive positioner]
83	GR	- [With driver side power seat]
84	R	-
85	V	- [With front heated seat and passenger side power seat]
85	GR	- [With front heated seat without passenger side power seat]
86	W	-
87	R	-
88	G	-
89	B	-
90	G	-
91	G	-
92	BR	-
93	P	-
94	V	-

95	O	-
96	SB	-
97	L	-
98	LG	-
99	Y	-

Connector No.	M103
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	OUTPUT 2

DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	M118
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MO3FB-LC



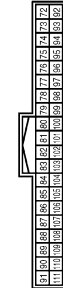
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS



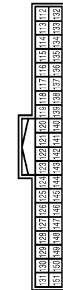
Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	W	STEP LAMP OUTPUT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	P	REAR DOOR UNLOCK OUTPUT
11	LG	BAT (FUSE)
13	B	GND
14	O	PUSH-BUTTON IGNITION SW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

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



Terminal No.	Color of Wire	Signal Name [Specification]
72	B	ROOM ANT2-
73	W	ROOM ANT2+
74	Y	PASSENGER DOOR ANT-
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	P	DRIVER DOOR ANT+
80	SB	IMMOBI ANTENNA CONTROL
81	O	IMMOBI ANTENNA SIGNAL
82	BR	IGN RELAY (F/B) CONT
83	P	KEYLESS ENTRY RECEIVER SIGNAL
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	R	KEY SLOT ILL
93	P	ON IND
95	L	ACC RELAY CONT
96	Y	CVT SHIFT SELECTOR POWER SUPPLY
97	O	S/L CONDITION 1
98	L	S/L CONDITION 2
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER DOOR REQUEST SW
102	Y	BLOWER FAN MOTOR RELAY CONT
103	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	Y	S/L POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW
111	LG	S/L COMMI

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



Terminal No.	
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AUTO LIGHT SYSTEM

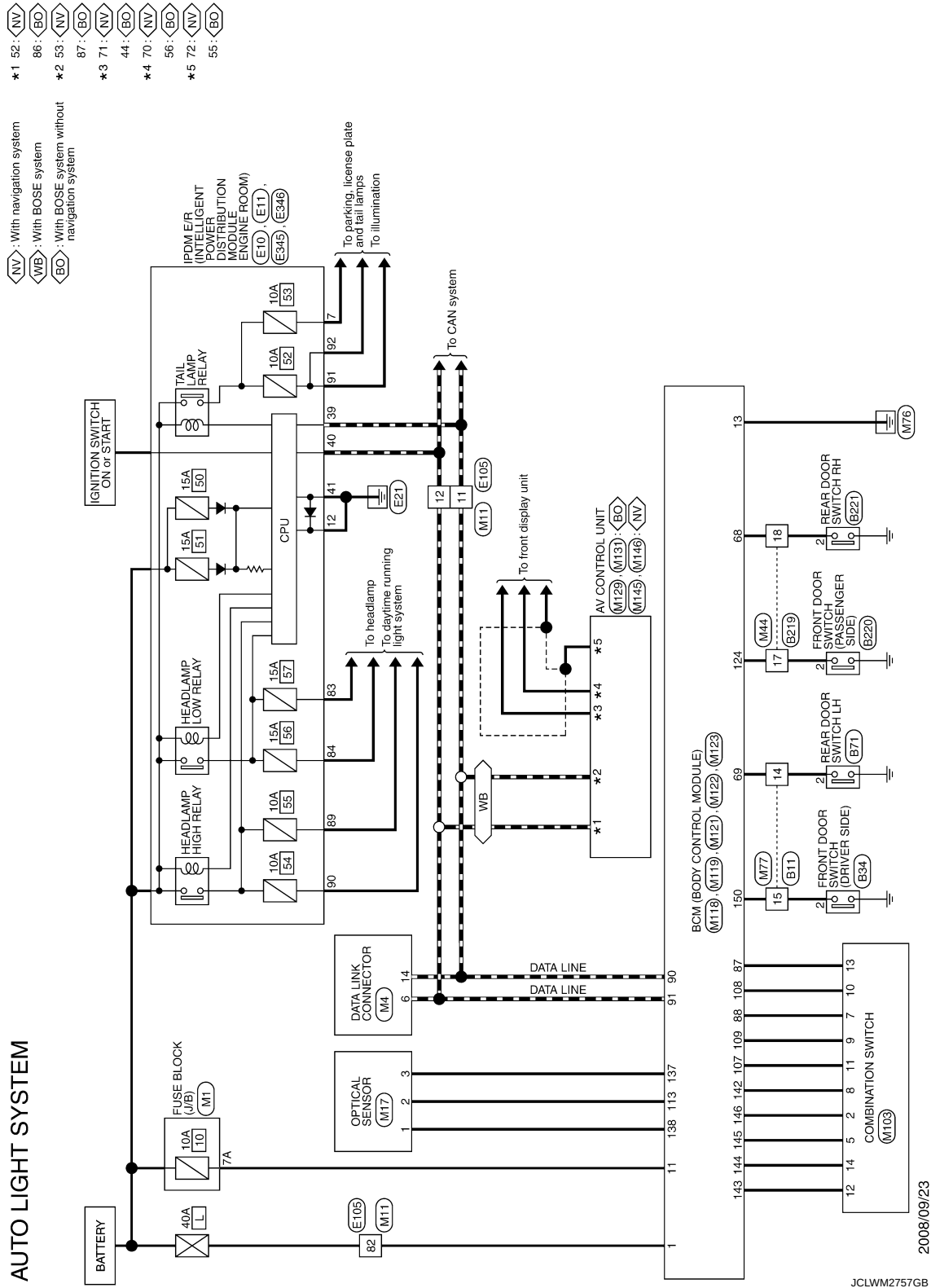
[XENON TYPE]

< DTC/CIRCUIT DIAGNOSIS >

AUTO LIGHT SYSTEM

Wiring Diagram - AUTO LIGHT SYSTEM -

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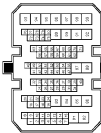
AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

AUTO LIGHT SYSTEM

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS19

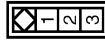


Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	
2	B	
3	R/L	
4	R/W	
5	SB	
6	P	
7	V	
8	SHIELD	
9	BR/L	
10	Y/G	
11	Y/L	
12	W/L	
13	L	
14	BR	
15	SB	
16	BR	
17	V	
18	SB	
19	R	
20	P	
21	LG	
22	W	
23	Y	
24	GR	
25	Y	
27	V	
28	W/L	
30	P	
31	O	
32	BR	
34	SB	
35	SHIELD	
36	L/O	
37	LG	
40	Y	
41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

44	BR	-
45	L	-
46	GR	-
47	Y	-
48	GR	- [With rear view camera and telephone]
49	BR	- [With rear view camera without telephone]
49	Y	-
50	SHIELD	-
51	B	-
52	B	-
53	Y	-
54	LG	-
55	BR	-
56	P	-
57	L	-
58	R	-
59	SHIELD	-
60	B	-
61	R/L	-
62	R/W	-
63	LG	-
64	Y	-
66	GR	-
67	G	-
68	R	-
69	SHIELD	-
70	W/R	-
71	B/R	-
72	Y	-
73	LG	-
74	SB	-
75	L	-
76	G	-
77	R	-
78	SHIELD	-
79	B	-
80	W	-
81	R	-
82	L	-
83	BR	-
84	O	-
85	G	-
86	SB	-
87	R	-
88	G	-
89	GR	-
90	Y	-
91	G	-
92	BR	-
93	G	-
94	V	-
95	BR	-

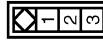
96	GR	-
97	R	-
98	LG	-
99	O	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



Terminal No.	2
Color of Wire	SB
Signal Name [Specification]	

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



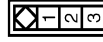
Terminal No.	2
Color of Wire	BR
Signal Name [Specification]	

Connector No.	B219
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	W/R	-
2	B/R	-
3	SHIELD	-
4	W/R	-
5	B/R	-
6	SHIELD	-
7	GR/V	-
8	W/L	-
9	SHIELD	-
10	GR/V	-
11	W/L	-
12	SHIELD	-
13	SB	-
15	SB	-
16	Y	-
17	R	-
18	W	-
29	G	-
30	P	-
31	V	-
32	RR	-

Connector No.	B220
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



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

JCLWM4157GB

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AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

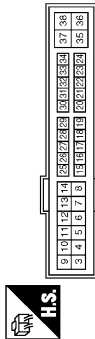
AUTO LIGHT SYSTEM

Connector No.	B221
Connector Name	REAR DOOR SWITCH RH
Connector Type	A03FW



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

Connector No.	E10
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-CS12-M4-1V



Terminal No.	Color of Wire	Signal Name [Specification]
4	LG	-
5	Y	-
7	GR	-
10	BR	-
11	P	-
12	B	-
13	SB	-
15	W	-
16	L/Y	-
19	Y	-
20	L	-
21	O	-
22	SB	-
23	GR	-
24	G	-
25	GR	-
26	Y	-
27	W	-
28	SB	-
30	BR	-
32	V	-

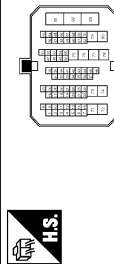
33	G	-
34	O	-
35	P	-
36	G	-
38	GR	-

Connector No.	E11
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH08FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B	-
42	SB	-
43	Y	-
44	W	-
45	O	-
46	BR	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH7DMW-CS10-M3



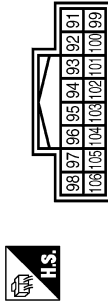
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-

Connector No.	E345
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	NS30FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
83	Y	-
84	L	-
86	SB	-
87	GR	-
88	W	-
89	L	-
90	G	-

Connector No.	E348
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH16FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
91	R	-
92	LG	-
99	BR	-
100	SB	-
101	L	-
102	B	-
103	P	-

JCLWM4158GB

AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

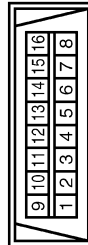
AUTO LIGHT SYSTEM

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS8FW-M2



Terminal No.	Color of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH7DFW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-
24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-

67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

Connector No.	M17
Connector Name	OPTICAL SENSOR
Connector Type	TK03FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	O	-
3	P	-

Connector No.	M44
Connector Name	WIRE TO WIRE
Connector Type	TH92FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
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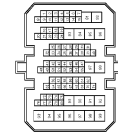
AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

AUTO LIGHT SYSTEM

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19

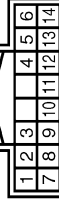


Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	W	-
4	R	-
5	Y	-
6	W	-
7	G	-
8	SHIELD	-
9	W	-
10	R	-
11	G	-
12	B	-
13	O	-
14	R	-
15	SB	-
16	R	-
17	V	-
18	P	-
19	P	-
20	LG	-
21	Y	-
22	O	-
23	LG	-
24	SB	-
25	Y	-
27	Y	-
28	R	-
30	Y	-
31	W	-
32	BR	-
34	Y	-
35	SHIELD	-
36	G	-
37	Y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

44	V	-
45	P	-
46	R	-
47	Y	-
48	L	-
49	G	-
50	SHIELD	-
51	W	-
52	B	-
53	BR	-
54	B	-
55	G	-
56	P	-
57	L	-
58	SB	-
59	SHIELD	-
60	B	-
61	R	-
62	W	-
63	O	-
64	Y	-
66	L	-
67	R	-
68	G	-
69	SHIELD	-
70	L	-
71	R	-
72	LG	-
73	Y	-
74	R	-
75	P	-
76	L	-
77	BR	-
78	SHIELD	-
79	B	-
80	W	-
81	LG	-
82	L	-
83	W	-
83	GR	- [With automatic drive positioner]
84	R	- [With driver side power seat]
85	V	-
85	GR	- [With front heated seat and passenger side power seat]
86	W	- [With front heated seat without passenger side power seat]
87	R	-
88	G	-
89	B	-
90	G	-
91	G	-
92	BR	-
93	P	-
94	V	-

95	O	-
96	SB	-
97	LG	-
98	LG	-
99	Y	-

Connector No.	MI03
Connector Name	COMBINATION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	OUTPUT 2

Connector No.	MI18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MI03F-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (E/L)

2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (RAP)

Connector No.	MI19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS18FW-CS



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

JCLWM4160GB

AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

AUTO LIGHT SYSTEM

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FG-NH



51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52

AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

AUTO LIGHT SYSTEM

Connector No. M145

Connector Name AV CONTROL UNIT (WITH NAVIGATION SYSTEM)

Connector Type TH12FW-NH

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RGB (G:GREEN) SIGNAL

RGB (B:BLUE) SIGNAL

SHIELD

RGB SYNC

SHIELD

RGB AREA (TS) SIGNAL

HP

VP

COMM (CONT->DISP)

COMM (DISP->CONT)

SHIELD

Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	R	ACC
26	B	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
35	W	MICROPHONE SIGNAL
36	G	IGNITION
37	SB	PARKING BRAKE
38	V	REVERSE
39	V	VEHICLE SPEED (8-PULSE)
40	P	CONNECTION RECOGNITION
42	B	CONTROL SIGNAL
43	B	CONTROL SIGNAL
46	G	AV COMM (H)
49	L	AV COMM (L)
50	R	AV COMM (H)
51	L	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

AUTO LIGHT SYSTEM

Connector No. M146

Connector Name AV CONTROL UNIT (WITH NAVIGATION SYSTEM)

Connector Type TH12FW-NH

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RGB (RED) SIGNAL

Terminal No.	Color of Wire	Signal Name [Specification]
61	G	RGB (RED) SIGNAL

FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

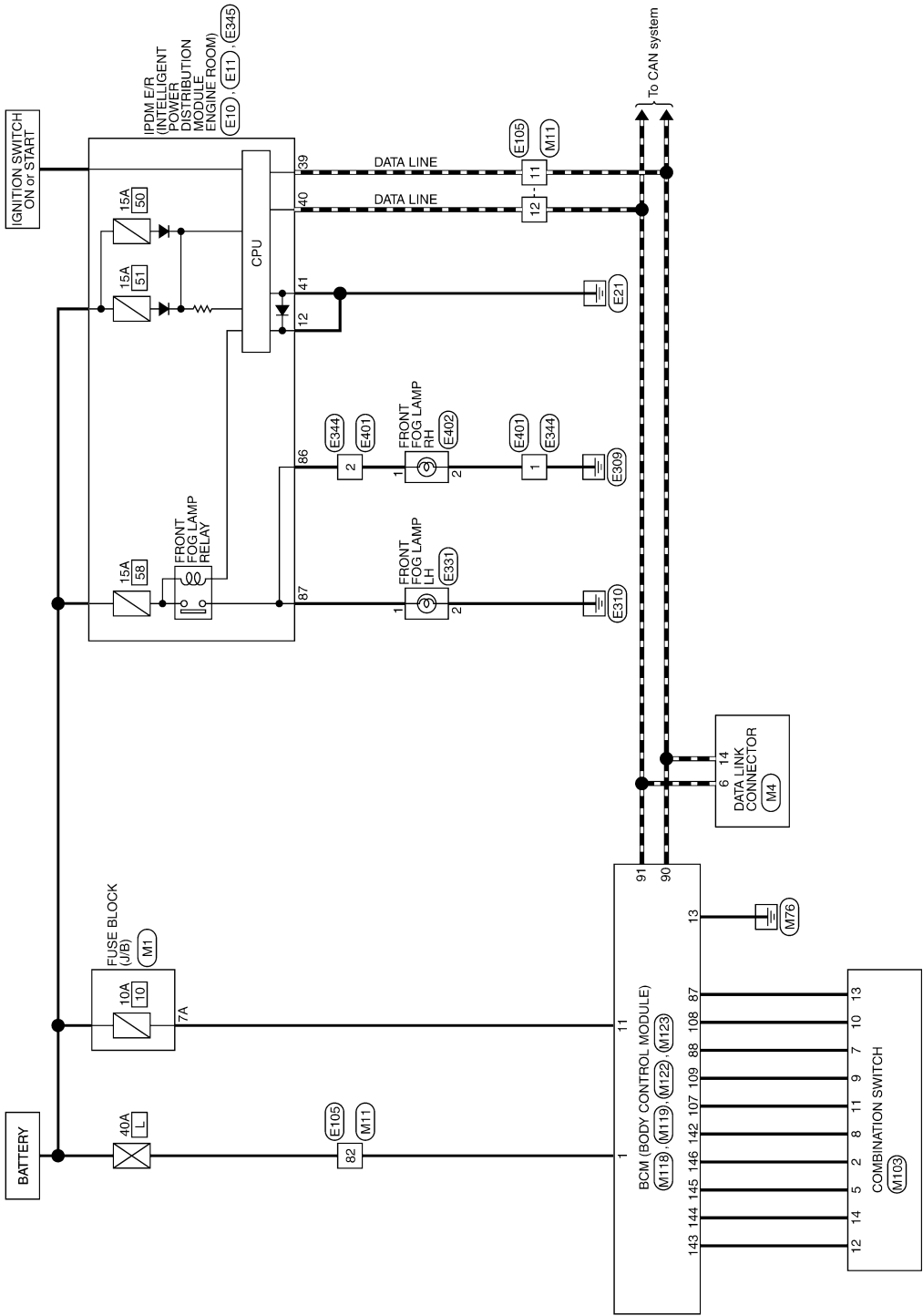
[XENON TYPE]

FRONT FOG LAMP SYSTEM

Wiring Diagram - FRONT FOG LAMP -

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FRONT FOG LAMP



2008/09/23

JCLWM2764GB

FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

FRONT FOG LAMP

Connector No.	E10
Connector Name	ENGINE INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-CS12-M4-1V



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

Terminal No.	Color of Wire	Signal Name [Specification]
4	LG	-
5	Y	-
7	GR	-
10	BR	-
11	P	-
12	B	-
13	SB	-
13	W	-
16	L/Y	-
19	Y	-
20	L	-
21	O	-
22	SB	-
23	GR	-
24	G	-
25	GR	-
26	Y	-
27	W	-
28	SB	-
30	BR	-
32	V	-
33	G	-
34	O	-
35	P	-
36	G	-
38	GR	-

Connector No.	E11
Connector Name	ENGINE INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH40FW-NH



42	41	40	39
46	45	44	43

Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B	-
42	SB	-
43	Y	-
44	W	-
45	O	-
46	BR	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3



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Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-

Connector No.	E331
Connector Name	FRONT FOG LAMP LH
Connector Type	FTZ22FB



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

Connector No.	E344
Connector Name	WIRE TO WIRE
Connector Type	RS22MGY



1	2
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Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	SB	-

JCLWM4163GB

FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

FRONT FOG LAMP

Connector No.	E345
Connector Name	SWAYLE INTELLIGENT POWER DISTRIBUTION MODULE (SWAYLE FORD)
Connector Type	NS08FW-CS



85	84	83
90	89	88
87	86	85

Terminal No.	Color of Wire	Signal Name [Specification]
83	Y	-
84	L	-
85	SB	-
86	GR	-
87	W	-
88	L	-
89	G	-
90	G	-

Connector No.	E401
Connector Name	WIRE TO WIPE
Connector Type	RS02FGY



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

Connector No.	E402
Connector Name	FRONT FOG LAMP RH
Connector Type	FLZ02FB



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

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



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

Terminal No.	Color of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



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

Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

Connector No.	M11
Connector Name	WIRE TO WIPE
Connector Type	TH10FW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-

24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-
67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

JCLWM4164GB

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FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

FRONT FOG LAMP

Connector No.	M103
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	OUTPUT 2

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



1	2	3
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Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (E/L)
2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (RAP)

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS1EFW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	W	STEP LAMP OUTPUT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	P	REAR DOOR UNLOCK OUTPUT
11	LG	BAT FUSE
13	B	GND
14	O	PUSH-BUTTON IGNITION SW ILL GND
15	L	ACC IND
17	G	TURN SIGNAL RH
18	BR	TURN SIGNAL LH
19	Y	ROOM LAMP TIMER CONTROL

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



41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70

Terminal No.	Color of Wire	Signal Name [Specification]
72	B	ROOM ANT2-
73	W	ROOM ANT2+
74	Y	PASSENGER DOOR ANT-
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	P	DRIVER DOOR ANT+
80	SB	IMMOBI ANTENNA CONTROL
81	O	IMMOBI ANTENNA SIGNAL
82	BR	IGN RELAY (E/B) CONT

83	P	KEYLESS ENTRY RECEIVER SIGNAL
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3
89	PR	PUSH SW
90	P	GAN-L
91	L	GAN-H
92	R	KEY SLOT ILL
93	P	ON IND
95	L	ACC RELAY CONT
96	Y	OVT SHIFT SELECTOR POWER SUPPLY
97	O	S/L CONDITION 1
98	L	S/L CONDITION 2
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER DOOR REQUEST SW
102	Y	BLOWER FAN MOTOR RELAY CONT
103	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	Y	S/L POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW
111	LG	S/L COMM

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



81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110

Terminal No.	Color of Wire	Signal Name [Specification]
112	R	RAIN SENSOR SERIAL LINK
113	O	OPTICAL SENSOR
116	GR	FUSE CHECK
118	L	STOP LAMP SW
119	W	DR DOOR UNLOCK SENSOR
121	Y	KEY SLOT SW
123	G	IGN F/B
124	R	PASSENGER DOOR SW
130	BR	REAR DEFOGGER SW
132	G	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	R	LOCK IND
137	P	RECEIVER-SENSOR GND

138	V	RECEIVER-SENSOR POWER SUPPLY
139	O	TIRE PRESS RECEIVER SIGNAL
140	GR	SHIFT N/P
141	O	SECURITY INDICATOR OUTPUT
142	L	COMBI SW OUTPUT 5
143	W	COMBI SW OUTPUT 1
144	P	COMBI SW OUTPUT 2
145	V	COMBI SW OUTPUT 3
146	Y	COMBI SW OUTPUT 4
149	W	TIRE PRESS WARNING CHECK SW
150	SB	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

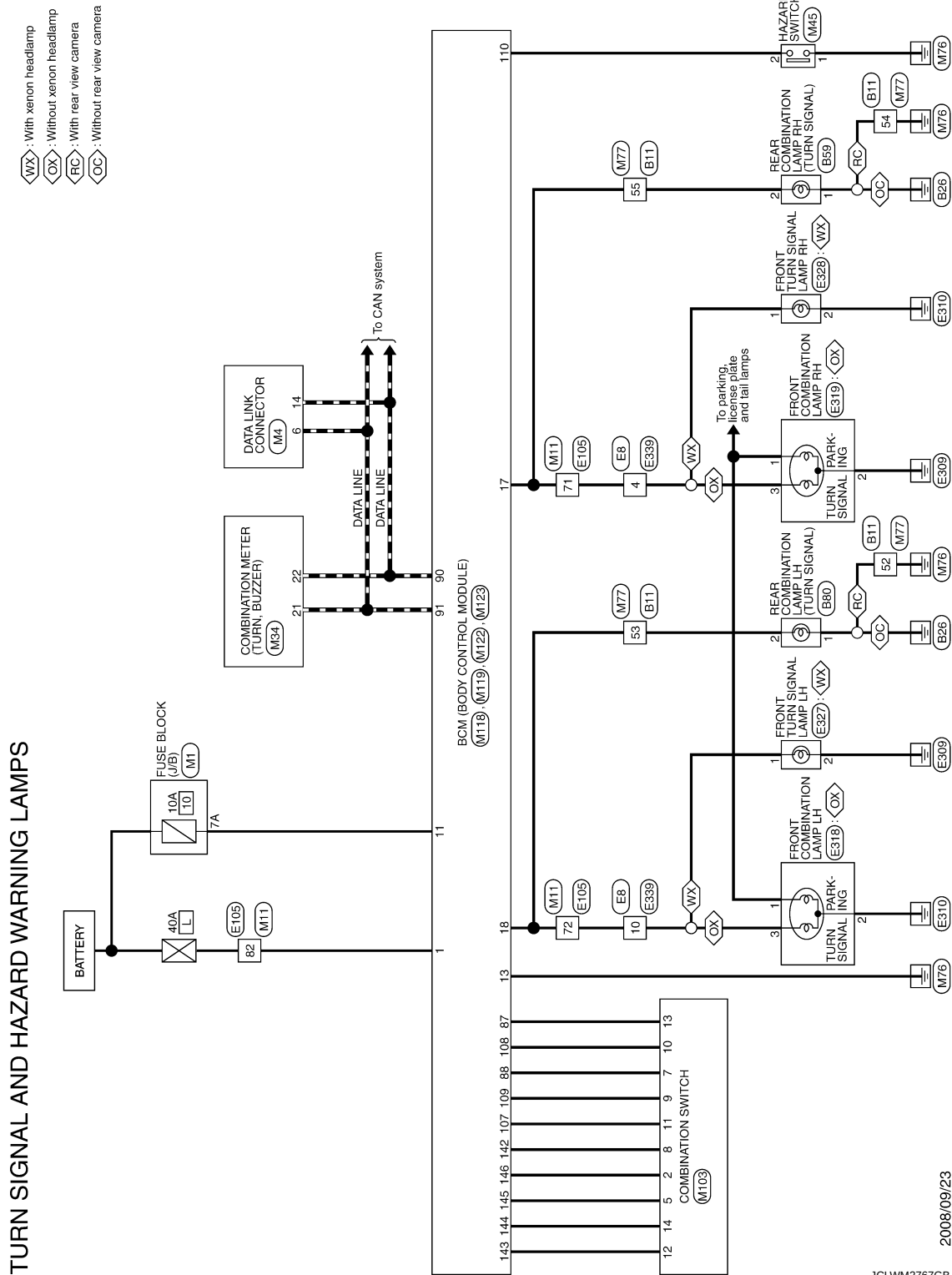
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

Wiring Diagram - TURN AND HAZARD WARNING LAMPS -

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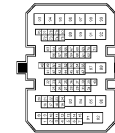
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS19



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

44	BR	-
45	L	-
46	GR	-
47	V	-
48	GR	- [With rear view camera and telephone]
48	BR	- [With rear view camera without telephone]
49	Y	-
50	SHIELD	-
51	B	-
52	B	-
53	Y	-
54	LG	-
55	BR	-
56	P	-
57	L	-
58	R	-
59	SHIELD	-
60	B	-
61	R/L	-
62	P/W	-
63	LG	-
64	Y	-
66	GR	-
67	G	-
68	R	-
69	SHIELD	-
70	W/R	-
71	B/R	-
72	Y	-
73	LG	-
74	SB	-
75	L	-
76	G	-
77	R	-
78	SHIELD	-
79	B	-
80	W	-
81	R	-
82	L	-
83	BR	-
84	O	-
85	G	-
86	SB	-
87	R	-
88	G	-
89	GR	-
90	Y	-
91	G	-
92	BR	-
93	G	-
94	V	-
95	BR	-

96	GR	-
97	R	-
98	LG	-
99	O	-

Connector No.	B59
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS34MW-CS



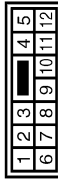
Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	- [With rear view camera]
1	B/W	- [Without rear view camera]
2	BR	-
3	P	-
4	L	-

Connector No.	B80
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS34MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	Y	-
3	P	-
4	L	-

Connector No.	E8
Connector Name	WIRE TO WIRE
Connector Type	NS12MER-CS



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	SB	-
5	O	-
8	G	-
9	W	-
10	Y	-
11	G	-

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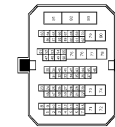
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH20MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-
23	P	-
24	L	-
25	O	-
26	G	-
27	V	-
28	SB	-
29	W	-
30	Y	-
43	P	-
48	L	-
49	SB	-
50	GR	-
51	LG	-
52	V	-
53	GR	-
54	BR	-
55	Y	-
56	W/L	-
60	V	-
61	BR	-
62	O	-
63	L/O	-
64	SHIELD	-
66	W	-

67	BR	-
68	Y	-
69	SB	-
70	GR	-
71	SB	-
72	Y	-
73	L	-
74	W	-
75	BR	-
76	GR	-
77	O	-
78	V	-
79	Y	-
80	R	-
81	W	-
82	LG	-
83	O	-

Connector No.	E318
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	Z03FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	B	-
3	Y	-

Connector No.	E319
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	Z03FBR



Terminal No.	Color of Wire	Signal Name [Specification]

1	R	-
2	B	-
3	G	-

Connector No.	E327
Connector Name	FRONT TURN SIGNAL LAMP LH
Connector Type	RS02FGY



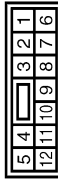
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

Connector No.	E328
Connector Name	FRONT TURN SIGNAL LAMP RH
Connector Type	RS02FGY



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

Connector No.	E339
Connector Name	WIRE TO WIRE
Connector Type	NS12FBR-OS



Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
4	G	-
5	O	-
8	G	-
9	W	-
10	Y	-
11	R	-

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	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

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TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

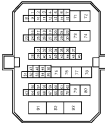
Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



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

Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH70FW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-

24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	SB	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-
67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40FW-M1



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
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Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
2	O	IGN
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL
8	SB	TRIP RESET SWITCH
9	W	SWILL POWER
10	O	METER CONTROL SW GND
11	L	ENTER SWITCH
12	R	SELECT SWITCH
13	V	ILLUMINATION CONTROL SWITCH (With automatic dimm position)
14	GR	ILLUMINATION CONTROL SWITCH (-)
15	BR	AIR BAG
18	L	AMBIENT SENSOR
19	P	AMBIENT SENSOR POWER
20	Y	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	CAN-L
23	B	GROUND
24	W	FUEL LEVEL SENSOR GROUND
25	BR	CHG
26	G	PARKING BRAKE SWITCH
27	V	BRAKE FLUID LEVEL SWITCH
29	R	WASHER LEVEL SWITCH
30	P	VEHICLE SPEED (2-PULSE)
31	V	VEHICLE SPEED (8-PULSE)
32	LG	OD OFF/SPORTS
34	G	FUEL LEVEL SENSOR
35	SB	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
36	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

Connector No.	M45
Connector Name	HAZARD SWITCH
Connector Type	TH40FW



3	1	2	4
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Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	G	-
3	R	-
4	SB	-

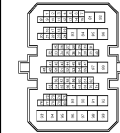
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19



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

44	V	-
45	P	-
46	R	-
47	Y	-
48	L	-
49	G	-
50	SHIELD	-
51	W	-
52	B	-
53	BR	-
54	B	-
55	G	-
56	P	-
57	L	-
58	SB	-
59	SHIELD	-
60	B	-
61	R	-
62	W	-
63	O	-
64	Y	-
66	L	-
67	R	-
68	G	-
69	SHIELD	-
70	L	-
71	R	-
72	LG	-
73	Y	-
74	R	-
75	P	-
76	L	-
77	BR	-
78	SHIELD	-
79	B	-
80	W	-
81	LG	-
82	L	-
83	W	-
83	GR	-
84	R	-
85	V	-
85	GR	-
86	W	-
87	R	-
88	G	-
89	B	-
90	G	-
91	G	-
92	BR	-
93	P	-
94	V	-

95	O	-
96	SB	-
97	L	-
98	LG	-
99	Y	-

Connector No.	M103
Connector Name	COMBINATION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	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	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (R4P)

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



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

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TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

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



91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72
111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

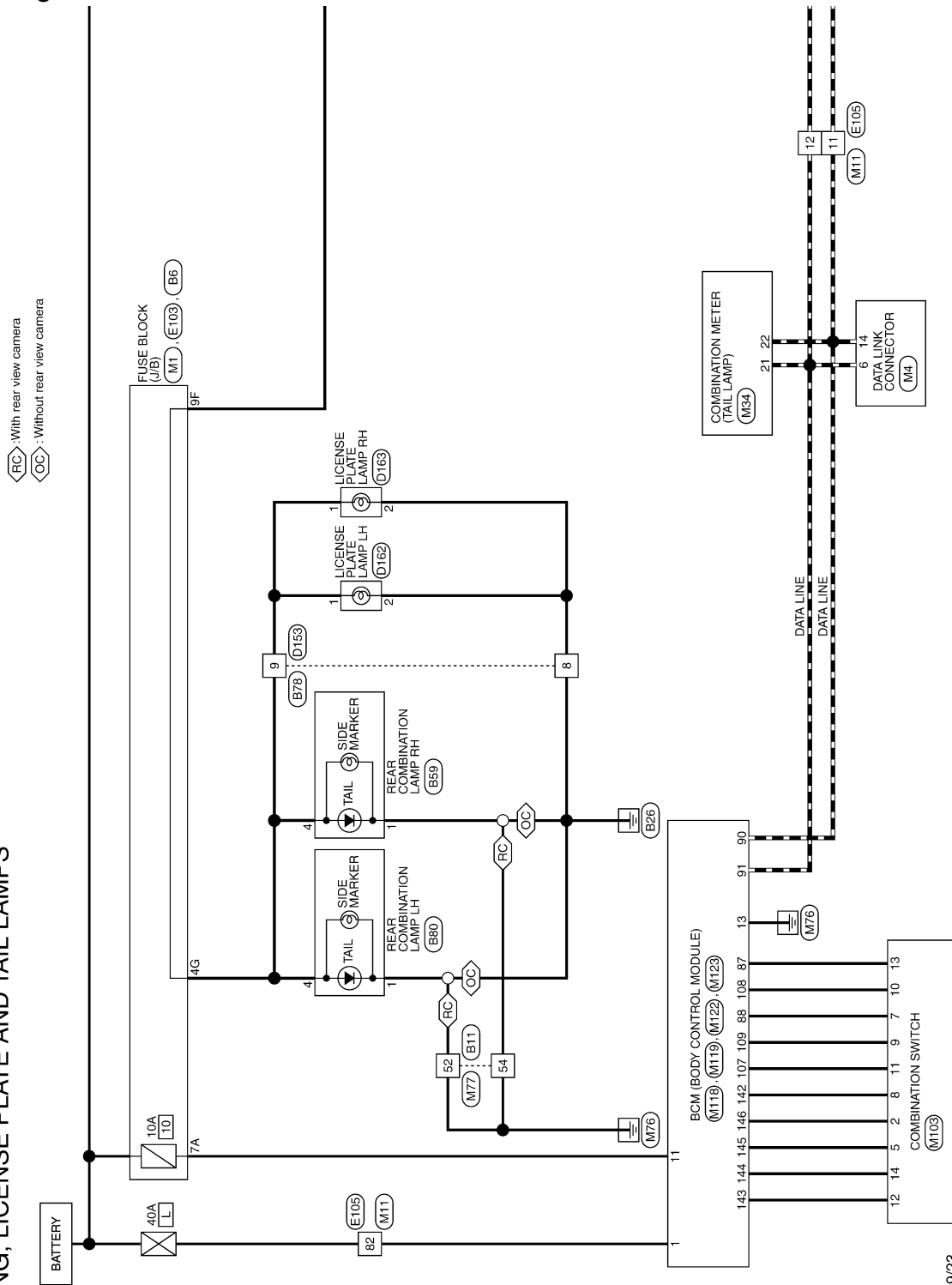
[XENON TYPE]

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



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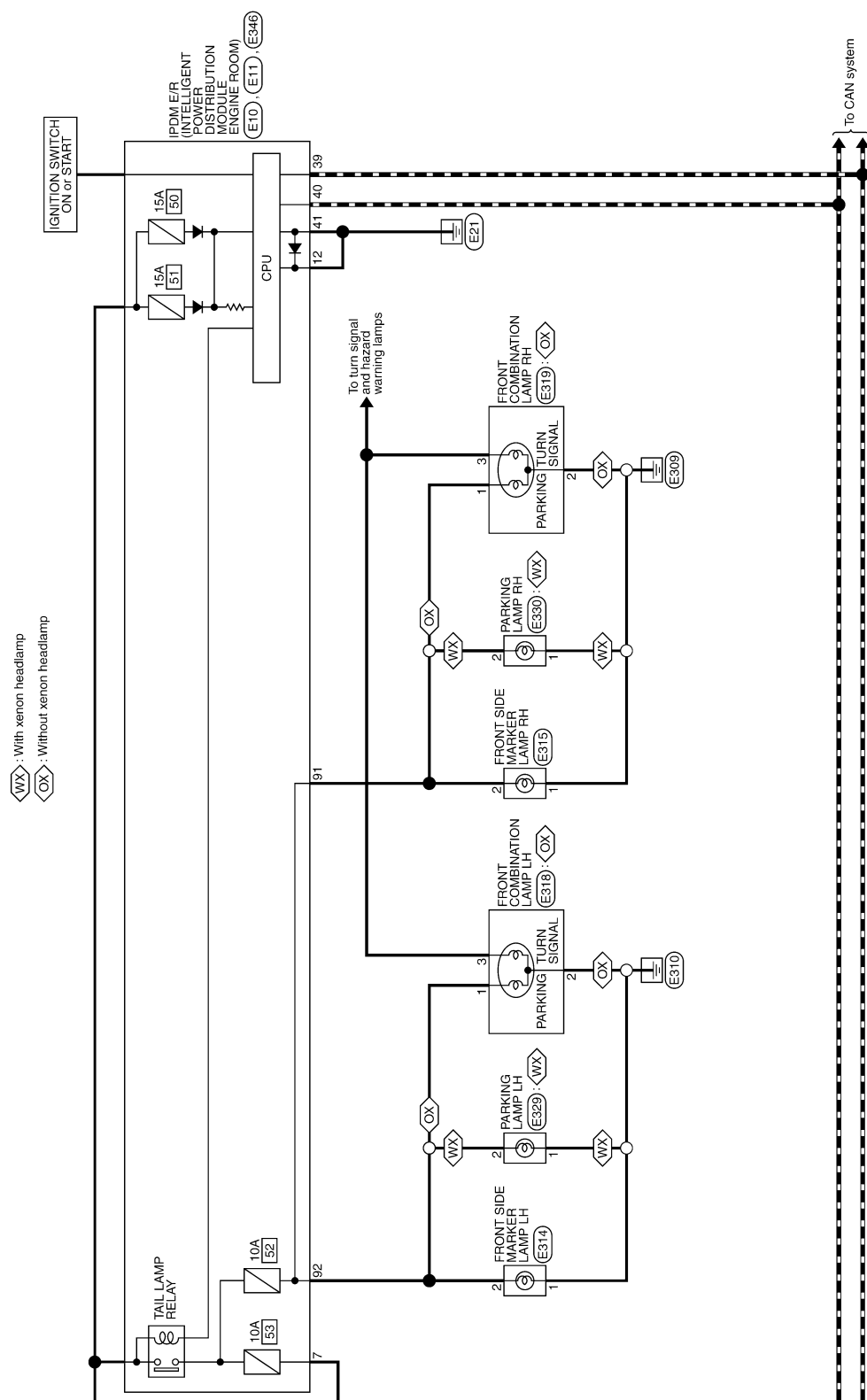
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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]



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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

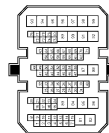
Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FB-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
2G	GR	-
4G	L	-
5G	P	-
10G	Y	-
11G	Y	-

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS19



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

18	SB	-
19	R	-
20	P	-
21	LG	-
22	W	-
23	Y	-
24	GR	-
25	Y	-
27	V	-
28	W/L	-
30	P	-
31	O	-
32	BR	-
34	SB	-
35	SHIELD	-
36	L/O	-
37	LG	-
40	Y	-
41	O	-
42	SB	-
43	G	-
44	BR	-
45	L	-
46	GR	-
47	V	-
48	GR	- [With rear view camera and telephone]
49	Y	- [With rear view camera without telephone]
50	SHIELD	-
51	B	-
52	B	-
53	Y	-
54	LG	-
55	BR	-
56	P	-
57	L	-
58	R	-
59	SHIELD	-
60	B	-
61	R/L	-
62	R/W	-
63	LG	-
64	Y	-
66	GR	-
67	G	-
68	R	-
69	SHIELD	-
70	W/R	-
71	B/R	-
72	Y	-
73	LG	-
74	SB	-

75	L	-
76	G	-
77	R	-
78	SHIELD	-
79	B	-
80	W	-
81	R	-
82	L	-
83	BR	-
84	O	-
85	G	-
86	SB	-
87	R	-
88	G	-
89	GR	-
90	Y	-
91	G	-
92	BR	-
93	G	-
94	V	-
95	BR	-
96	GR	-
97	R	-
98	LG	-
99	O	-

Connector No.	B59
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS4MMW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	- [With rear view camera]
2	B	- [Without rear view camera]
3	P	-
4	L	-

Connector No.	B78
Connector Name	WIRE TO WIRE
Connector Type	NS18MW-CS



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

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

Connector No.	B80
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS4MMW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	Y	-
3	P	-
4	L	-

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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	D163
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	W	-
3	V	-
5	R	-
6	V	-
8	B	-
9	L	-
10	R	-
11	O	-
12	W	-
13	GR	-
14	G	-
15	O	-
16	BR	-

Connector No.	D162
Connector Name	LICENSE PLATE LAMP LH
Connector Type	TK02FBR



2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	B	-

Connector No.	D163
Connector Name	LICENSE PLATE LAMP RH
Connector Type	TK02FBR



2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	B	-

Connector No.	E10
Connector Name	SPM-16 INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-CS/2-M4-1V



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

Terminal No.	Color of Wire	Signal Name [Specification]
4	LG	-
5	Y	-
7	GR	-
10	BR	-
11	P	-
12	B	-
13	SB	-
15	W	-
16	L/Y	-
19	Y	-
20	L	-
21	O	-
22	SB	-
23	GR	-
24	G	-
25	GR	-
26	Y	-
27	W	-
28	SB	-
30	BR	-

32	V	-
33	G	-
34	O	-
35	P	-
36	G	-
38	GR	-

Connector No.	E11
Connector Name	SPM-16 INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH08FW-NH



42	41	40	39
46	45	44	43

Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B	-
42	SB	-
43	Y	-
44	W	-
45	O	-
46	BR	-

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



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

Terminal No.	Color of Wire	Signal Name [Specification]
1F	L	-
2F	LG	-
4F	BR	-
6F	Y	-
8F	R	-
9F	GR	-

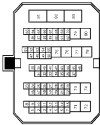
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-
23	P	-
24	L	-
25	O	-
26	G	-
27	V	-
28	SB	-
29	W	-
30	Y	-
47	P	-
48	L	-
49	SB	-
50	GR	-
51	LG	-
52	V	-
53	GR	-
54	BR	-
55	Y	-
56	W/L	-
60	V	-
61	BR	-
62	O	-
63	L/O	-
64	SHIELD	-
66	W	-

67	BR	-
68	Y	-
69	SB	-
70	GR	-
71	SB	-
72	Y	-
73	L	-
74	W	-
75	BR	-
76	GR	-
77	O	-
78	V	-
79	Y	-
80	R	-
81	W	-
82	LG	-
83	O	-

Connector No.	E314
Connector Name	FRONT SIDE MARKER LAMP LH
Connector Type	RK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	LG	-

Connector No.	E315
Connector Name	FRONT SIDE MARKER LAMP RH
Connector Type	RK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

2	R	-
---	---	---

Connector No.	E318
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	Z03FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	B	-
3	Y	-

Connector No.	E319
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	Z03FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	G	-

Connector No.	E323
Connector Name	PARKING LAMP LH
Connector Type	RK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	LG	-

Connector No.	E320
Connector Name	PARKING LAMP RH
Connector Type	RK02FGY



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

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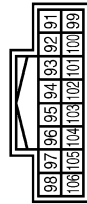
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	E346
Connector Name	IGNITION/ILLUMINANT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH16FW-NH



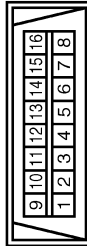
Terminal No.	Color of Wire	Signal Name [Specification]
91	R	-
92	LG	-
96	BR	-
100	SB	-
101	L	-
102	B	-
103	P	-

Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	MS06FW-M2



Terminal No.	Color of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

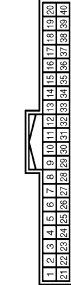
Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH70FW-OS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-

24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-
67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
2	O	IGN
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL
8	SB	TRIP RESET SWITCH
9	W	SWILL POWER
10	O	METER CONTROL SW GND
11	L	ENTER SWITCH
12	R	SELECT SWITCH
13	V	ILLUMINATION CONTROL SWITCH (OFF/ON automatic drive position)
14	GR	ILLUMINATION CONTROL SWITCH (OFF/ON automatic drive position)
15	BR	AIR BAG
18	L	AMBIENT SENSOR
19	P	AMBIENT SENSOR POWER
20	Y	AMBIENT SENSOR GROUND
21	L	CAAN-H
22	P	CAAN-L
23	B	GROUND
24	W	FUEL LEVEL SENSOR GROUND
25	BR	CHG
26	G	PARKING BRAKE SWITCH
27	V	BRAKE FLUID LEVEL SWITCH
29	R	WASHER LEVEL SWITCH
30	P	VEHICLE SPEED (2-PULSE)
31	V	VEHICLE SPEED (8-PULSE)
32	LG	OD OFF/SPORTS
34	G	FUEL LEVEL SENSOR
35	SB	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
36	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

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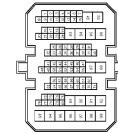
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19



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

44	V	-
45	P	-
46	R	-
47	Y	-
48	L	-
49	G	-
50	SHIELD	-
51	W	-
52	B	-
53	BR	-
54	B	-
55	G	-
56	P	-
57	L	-
58	SB	-
59	SHIELD	-
60	B	-
61	R	-
62	W	-
63	O	-
64	Y	-
66	L	-
67	R	-
68	G	-
69	SHIELD	-
70	L	-
71	R	-
72	LG	-
73	Y	-
74	R	-
75	P	-
76	L	-
77	BR	-
78	SHIELD	-
79	B	-
80	W	-
81	LG	-
82	L	-
83	W	-
83	GR	-
84	R	-
85	V	-
85	GR	-
86	W	-
87	R	-
88	G	-
89	B	-
90	G	-
91	G	-
92	BR	-
93	P	-
94	V	-

95	O	-
96	SB	-
97	L	-
98	LG	-
99	Y	-

Connector No.	M103
Connector Name	COMBINATION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	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	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (R4P)

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



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

JCLWM4182GB

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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

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



91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72
111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92

STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

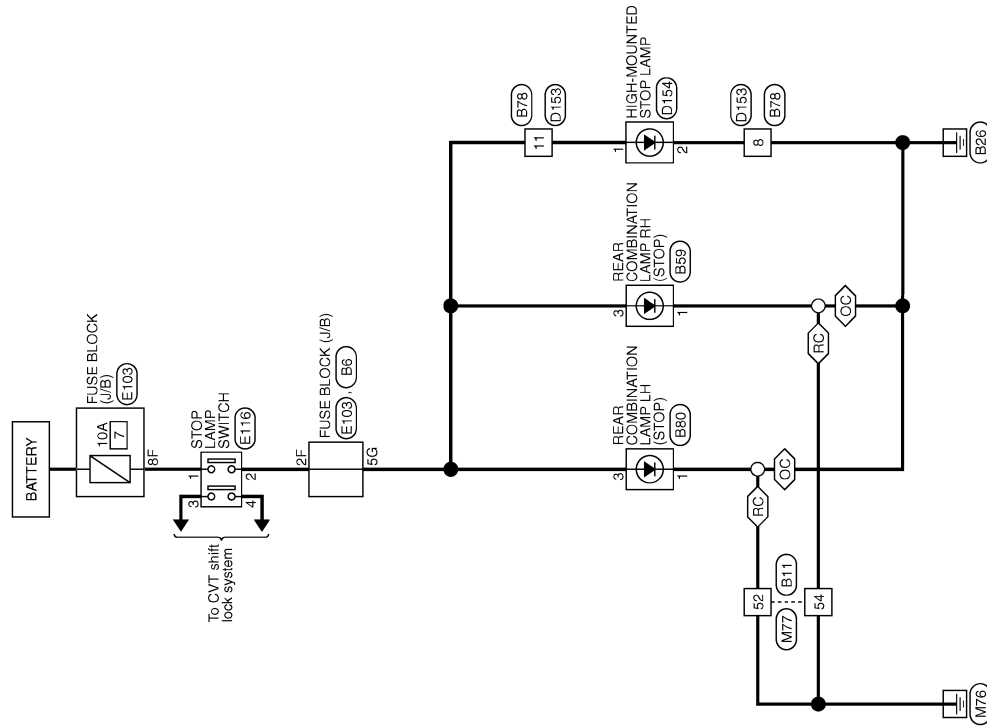
STOP LAMP

Wiring Diagram - STOP LAMP -

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STOP LAMP

RC : With rear view camera
OC : Without rear view camera



2009/08/07

JCLWM4171GB

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STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

STOP LAMP

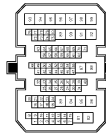
Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FB-CS



5G4G	3G2G1G
12G1G10G9G8G7G6G	

Terminal No.	Color of Wire	Signal Name [Specification]
2G	GR	-
4G	L	-
5G	P	-
10G	Y	-
11G	Y	-

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS19



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

18	SB	-
19	R	-
20	P	-
21	LG	-
22	W	-
23	Y	-
24	GR	-
25	Y	-
27	V	-
28	W/L	-
30	P	-
31	O	-
32	BR	-
34	SB	-
35	SHIELD	-
36	L/O	-
37	LG	-
40	Y	-
41	O	-
42	SB	-
43	G	-
44	BR	-
45	L	-
46	GR	-
47	V	-
48	GR	- [With rear view camera and telephone]
48	BR	- [With rear view camera without telephone]
49	Y	-
50	SHIELD	-
51	B	-
52	B	-
53	Y	-
54	LG	-
55	BR	-
56	P	-
57	L	-
58	R	-
59	SHIELD	-
60	B	-
61	R/L	-
62	R/W	-
63	LG	-
64	Y	-
66	GR	-
67	G	-
68	R	-
69	SHIELD	-
70	W/R	-
71	B/R	-
72	Y	-
73	LG	-
74	SB	-

75	L	-
76	G	-
77	R	-
78	SHIELD	-
79	B	-
80	W	-
81	R	-
82	L	-
83	BR	-
84	O	-
85	G	-
86	SB	-
87	R	-
88	G	-
89	GR	-
90	Y	-
91	G	-
92	BR	-
93	G	-
94	V	-
95	BR	-
96	GR	-
97	R	-
98	LG	-
99	O	-

Connector No.	B59
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS4MMW-CS



4	3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	- [With rear view camera]
2	BR	- [Without rear view camera]
3	P	-
4	L	-

Connector No.	B78
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



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

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

Connector No.	B80
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS4MMW-CS



4	3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	Y	-
3	P	-
4	L	-

JCLWM4172GB

STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

STOP LAMP

Connector No.	D153
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	W	-
3	V	-
5	R	-
6	V	-
8	B	-
9	L	-
10	R	-
11	O	-
12	W	-
13	GR	-
14	G	-
15	O	-
16	BR	-

Connector No.	D154
Connector Name	HIGH-MOUNTED STOP LAMP
Connector Type	YZK 7323-1324-F



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	B	-

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



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

Terminal No.	Color of Wire	Signal Name [Specification]
1F	L	-
2F	LG	-
4F	BR	-
6F	Y	-
8F	R	-
9F	GR	-
11F	G	-
12F	V	-

Connector No.	E118
Connector Name	STOP LAMP SWITCH
Connector Type	MD4FW-LC



3	4
1	2

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	LG	-
3	G	-
4	Y	-

JCLWM4173GB

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STOP LAMP

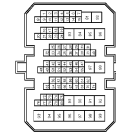
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

95	O	-
96	SB	-
97	L	-
98	LG	-
99	Y	-

44	V	-
45	P	-
46	R	-
47	Y	-
48	L	-
49	G	-
50	SHIELD	-
51	W	-
52	B	-
53	BR	-
54	B	-
55	G	-
56	P	-
57	L	-
58	SB	-
59	SHIELD	-
60	B	-
61	R	-
62	W	-
63	O	-
64	Y	-
65	L	-
66	L	-
67	R	-
68	G	-
69	SHIELD	-
70	L	-
71	R	-
72	LG	-
73	Y	-
74	R	-
75	P	-
76	L	-
77	BR	-
78	SHIELD	-
79	B	-
80	W	-
81	LG	-
82	L	-
83	W	- [With automatic drive positioner]
84	GR	- [With driver side power seat]
85	V	-
86	W	- [With front heated seat and passenger side power seat]
87	R	- [With front heated seat without passenger side power seat]
88	G	-
89	B	-
90	G	-
91	G	-
92	BR	-
93	P	-
94	V	-

STOP LAMP	
Connector No.	W77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19



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

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BACK-UP LAMP

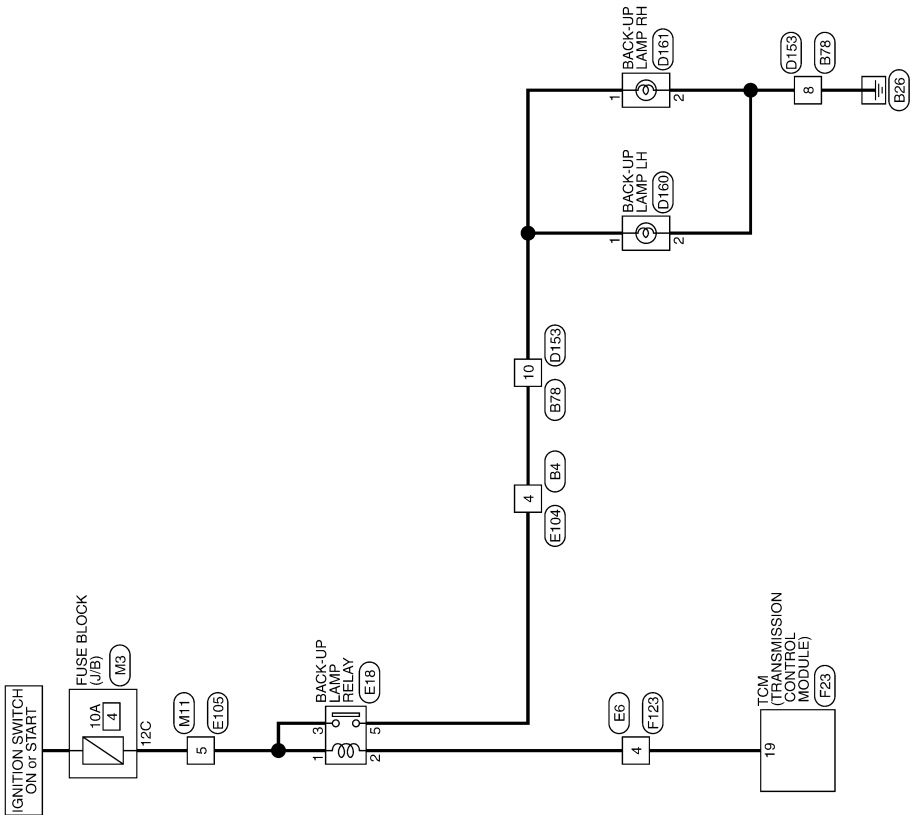
< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

BACK-UP LAMP

Wiring Diagram - BACK-UP LAMP -

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BACK-UP LAMP

2008/09/23

JCLWM2777GB

BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

BACK-UP LAMP

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	W	-
3	W	-
4	R	-
5	O	-
6	P	-
7	L	-
8	B	-
9	LG	-
10	V	-
11	L	-
12	BR	-
13	P	-
14	BR	-
15	O	-
16	G	-

Connector No.	B78
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	Y	-
3	SB	-
5	R	-
6	V	-
8	B	-

9	L	-
10	R	-
11	P	-
12	W	-
13	GR	-
14	G	-
15	Y	-
16	BR	-

Connector No.	D133
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	W	-
3	V	-
5	R	-
6	V	-
8	B	-
9	L	-
10	R	-
11	O	-
12	W	-
13	GR	-
14	G	-
15	O	-
16	BR	-

Connector No.	D160
Connector Name	BACK-UP LAMP LH
Connector Type	NS02MW-CS



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

Connector No.	D181
Connector Name	BACK-UP LAMP RH
Connector Type	NS02MW-CS



1	2
---	---

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

Connector No.	E6
Connector Name	WIRE TO WIRE
Connector Type	TK16MGY-IV



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
3	Y	-
4	R	-
5	GR	-
6	V	-
8	P	-
10	W	-
11	G	-
12	BR	-
13	SB	-
14	B	-
15	O	-

Connector No.	E18
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LG



5	3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	LG	-
5	R	-

Connector No.	E04
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



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

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

JCLWM4175GB

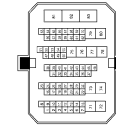
BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

BACK-UP LAMP

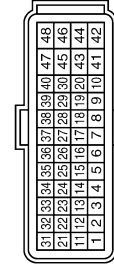
Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-
23	P	-
24	L	-
25	O	-
26	G	-
27	V	-
28	SB	-
29	W	-
30	Y	-
47	P	-
48	L	-
49	SB	-
50	GR	-
51	LG	-
52	V	-
53	GR	-
54	BR	-
55	Y	-
56	W/L	-
60	V	-
61	BR	-
62	O	-
63	L/O	-
64	SHIELD	-
66	W	-

67	BR	-
68	Y	-
69	SB	-
70	GR	-
71	SB	-
72	Y	-
73	L	-
74	W	-
75	BR	-
76	GR	-
77	O	-
78	V	-
79	Y	-
80	R	-
81	W	-
82	LG	-
83	O	-

Connector No.	F73
Connector Name	TGM (TRANSMISSION CONTROL MODULE)
Connector Type	RH40FB-R28-L-RH



Terminal No.	Color of Wire	Signal Name [Specification]
1	P/B	INH SW 2
2	P/L	INH SW 3
3	G/O	INH SW 4
4	GR	INH SW 3 MON
5	B	GND
7	W	SENSOR GND
8	G/W	CLOCK (SEL2)
9	L/R	CHIP SELECT (SEL1)
10	BR/R	DATA I/O (SEL3)
11	BR/W	INH SW 1
13	V	ATF TEMP SENSOR
14	R/W	PRI PRESS SENSOR
15	V/W	SEC PRESS SENSOR
19	G/B	REV LAMP RELAY
20	R/B	STARTER RELAY
25	W/R	SENSOR GND
26	L/O	SENSOR POWER SOURCE(5V)
27	R/G	S/M-D
28	R	S/M-C

29	O/B	S/M-B
30	G/B	S/M-A
31	P	CAN-L
32	L	CAN-H
33	LG	PRI SPEED SENSOR
34	LG/R	SEC SPEED SENSOR
37	V/R	L/USSEL-ON/OFF SOL
38	L/W	L/USSEL-LINEAR SOL
39	W/B	SEC-LINEAR SOL
40	R/Y	PL LINEAR SOL
42	B	GND
46	Y	VIGN
47	L/R	BATT
48	Y	VIGN

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK18FGY-IV



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
3	G/R	-
4	G/B	-
5	R	-
6	L/R	-
8	P	-
10	Y/B	-
11	BR/W	-
12	BR	-
13	G	-
14	B	-
15	O	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
6C	BR	-
7C	B	-
8C	G	-
9C	GR	-
10C	SB	-
11C	R	-
12C	O	-

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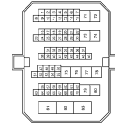
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BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[XENON TYPE]

BACK-UP LAMP		
Connector No.	M11	
Connector Name	WIRE TO WIRE	
Connector Type	TH70W-CS10-M3	

Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-
24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-

67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

JCLWM4177GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000005681404

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III 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/AUTO	Off
	Front wiper switch INT/AUTO	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
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Monitor Item	Condition	Value/Status
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: For models with BOSE audio system this item is not monitored.	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
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
RKE-LOCK	LOCK button of Intelligent Key is not pressed	Off
	LOCK button of Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed	On
RKE-TR/BD	BACK DOOR OPEN button of Intelligent Key is not pressed	Off
	BACK DOOR OPEN button of Intelligent Key is pressed	On
RKE-PANIC	PANIC button of Intelligent Key is not pressed	Off
	PANIC button of Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent 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 Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	On
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
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
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
BRAKE SW 2	The brake pedal is not depressed	Off
	Stop lamp switch 1 signal circuit is normal	On
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
	Selector lever in P or N position	On
S/L -LOCK NOTE: For models without steering lock unit this item is not displayed.	Steering is unlocked	Off
	Steering is locked	On
S/L -UNLOCK NOTE: For models without steering lock unit this item is not displayed.	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-F/B NOTE: For models without steering lock unit this item is not displayed.	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
UNLK SEN -DR	Driver door is unlocked	Off
	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Monitor Item	Condition	Value/Status
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
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: For models without steering lock unit this item is not displayed.	Steering is unlocked	Off
	Steering is locked	On
S/L UNLK-IPDM NOTE: For models without steering lock unit this item is not displayed.	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-REQ NOTE: For models without steering lock unit this item is not displayed.	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK.	Off
	Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK.	On
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	Power supply position in LOCK position	Reset
	Power supply position in any position other than LOCK	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	Intelligent Key is not inserted into key slot	Off
	Intelligent Key is inserted into key slot	On
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

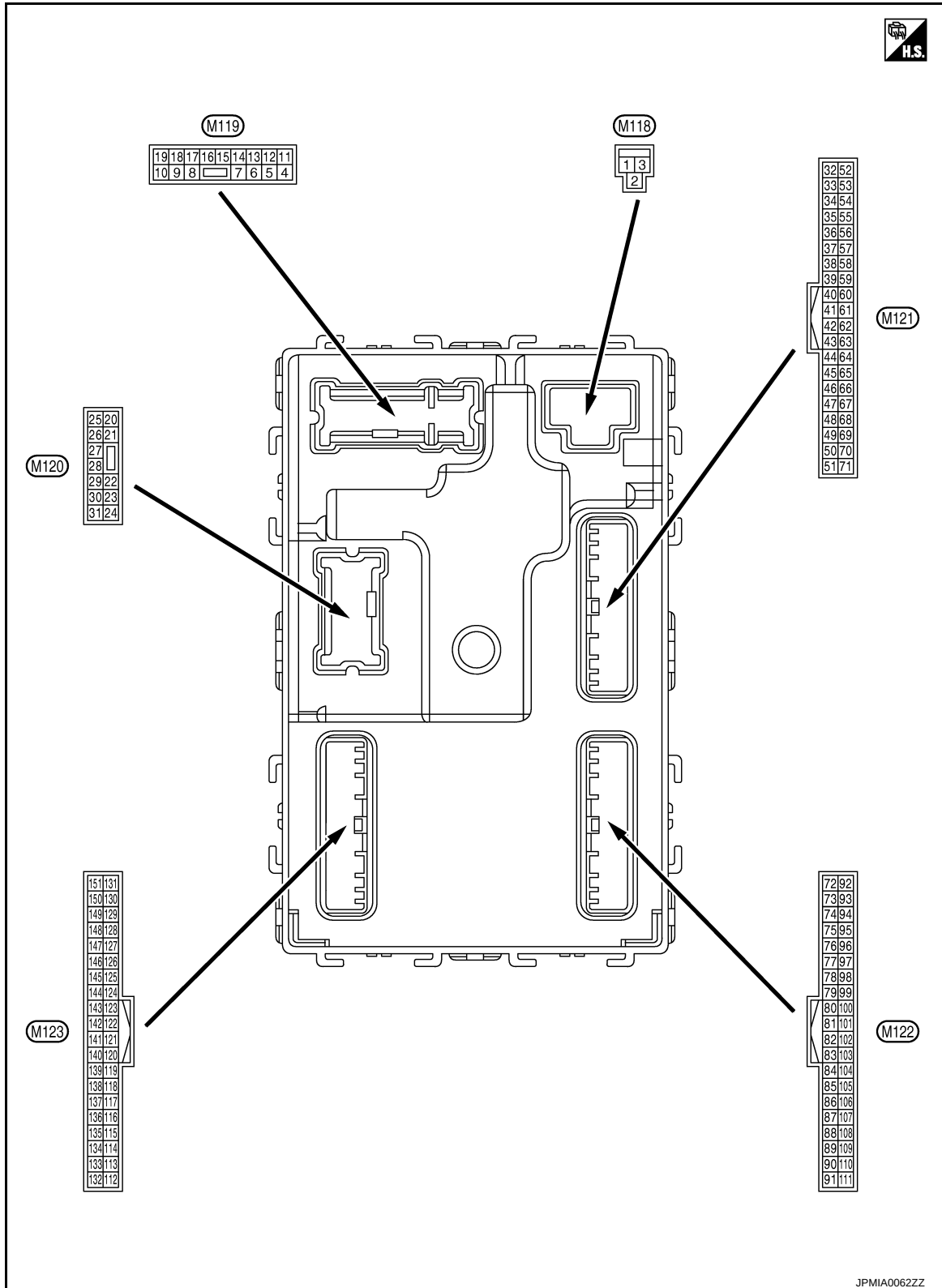
Monitor Item	Condition	Value/Status	
CONFIRM ID ALL	The Intelligent Key ID that the key slot receives is not recognized by any Intelligent Key ID registered to BCM.	Yet	A
	The Intelligent Key ID that the key slot receives is recognized by any Intelligent Key ID registered to BCM.	Done	B
CONFIRM ID4	The Intelligent Key ID that the key slot receives is not recognized by the fourth Intelligent Key ID registered to BCM.	Yet	C
	The Intelligent Key ID that the key slot receives is recognized by the fourth Intelligent Key ID registered to BCM.	Done	
CONFIRM ID3	The Intelligent Key ID that the key slot receives is not recognized by the third Intelligent Key ID registered to BCM.	Yet	D
	The Intelligent Key ID that the key slot receives is recognized by the third Intelligent Key ID registered to BCM.	Done	
CONFIRM ID2	The Intelligent Key ID that the key slot receives is not recognized by the second Intelligent Key ID registered to BCM.	Yet	E
	The Intelligent Key ID that the key slot receives is recognized by the second Intelligent Key ID registered to BCM.	Done	F
CONFIRM ID1	The Intelligent Key ID that the key slot receives is not recognized by the first Intelligent Key ID registered to BCM.	Yet	G
	The Intelligent Key ID that the key slot receives is recognized by the first Intelligent Key ID registered to BCM.	Done	
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet	H
	The ID of fourth Intelligent Key is registered to BCM	Done	
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet	I
	The ID of third Intelligent Key is registered to BCM	Done	
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet	J
	The ID of second Intelligent Key is registered to BCM	Done	
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet	
	The ID of first Intelligent 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	K
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire	
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire	EXL
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire	M
ID REGST FL1	ID of front LH tire transmitter is registered	Done	N
	ID of front LH tire transmitter is not registered	Yet	
ID REGST FR1	ID of front RH tire transmitter is registered	Done	O
	ID of front RH tire transmitter is not registered	Yet	
ID REGST RR1	ID of rear RH tire transmitter is registered	Done	P
	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	
	Tire pressure indicator ON	On	
BUZZER	Tire pressure warning alarm is not sounding	Off	
	Tire pressure warning alarm is sounding	On	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

TERMINAL LAYOUT

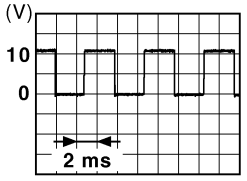


PHYSICAL VALUES

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (L)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4 (P)	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 (G)	Ground	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (W)	Ground	Step lamp	Output	Step lamp	ON	0 V
					OFF	Battery voltage
8 (V)	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
10 (P)	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 (LG)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (O)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	NOTE: When the illumination brightening/dimming level is in the neutral position  JSNIA0010GB
15 (L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK and ON indicator lamps are not illuminated.)	Battery voltage
					ACC	0 V

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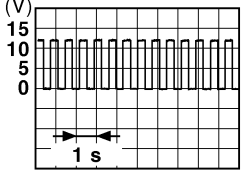
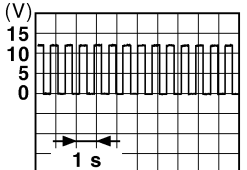
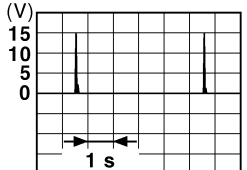
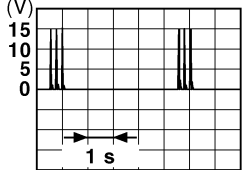
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

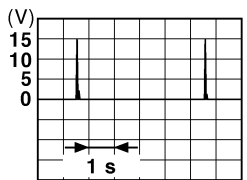
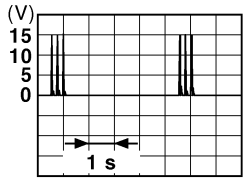
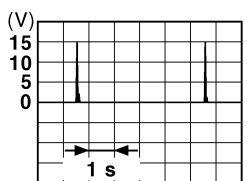
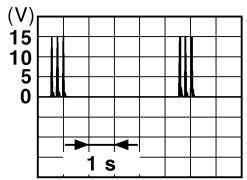
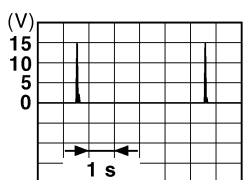
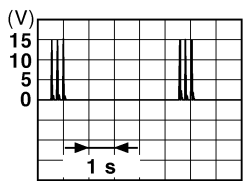
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
17 (G)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
23 (BR)	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
26 (G)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
					ON (Operated)	Battery voltage
34 (B)	Ground	Luggage room anten- na (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compart- ment	 JMKIA0063GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

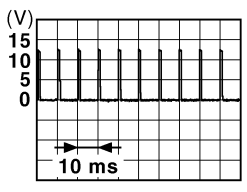
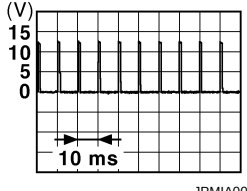
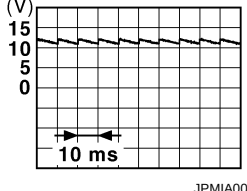
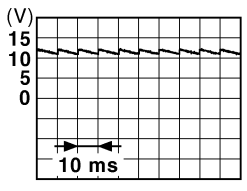
Terminal No. (Wire color)		Description		Condition		Value (Approx.)	
+	-	Signal name	Input/ Output				
35 (W)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment		A
					When Intelligent Key is not in the passenger compartment		B
38 (L)	Ground	Rear bumper antenna (-)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area		C
					When Intelligent Key is not in the antenna detection area		D
39 (BR)	Ground	Rear bumper antenna (+)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area		E
					When Intelligent Key is not in the antenna detection area		F
47 (L)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage	G
					ON	0 V	H

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

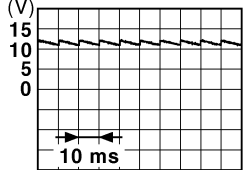
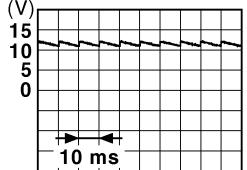
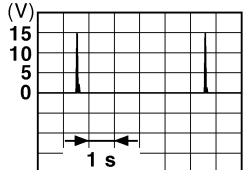
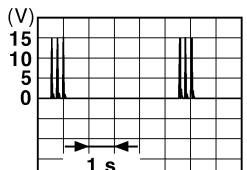
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
52 (R)	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	0.3 V
				Ignition switch OFF		0 V
61 (R)	Ground	Back door request switch	Input	Back door re- quest switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
64 (GR)	Ground	Warning buzzer	Output	Warning buzzer	Sounding	0 V
					Not sounding	Battery voltage
65 (O)	Ground	Rear wiper stop posi- tion	Input	Rear wiper	In stop position	 JPMIA0016GB 1.0 V
					Not in stop position	0 V
66 (Y)	Ground	Back door switch	Input	Back door switch	OFF (When back door closes)	 JPMIA0011GB 11.8 V
					ON (When back door opens)	0 V
67 (LG)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 JPMIA0011GB 11.8 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

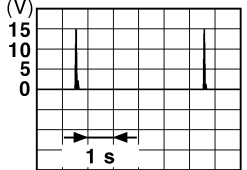
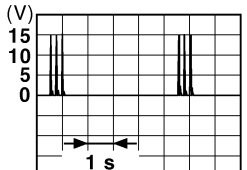
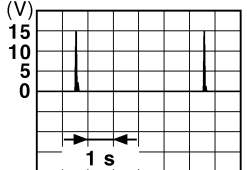
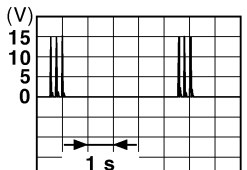
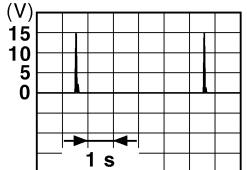
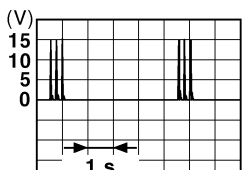
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
68 (W)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	 JPMIA0011GB 11.8 V
				Rear RH door switch	ON (When rear RH door opens)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	 JPMIA0011GB 11.8 V
				Rear LH door switch	ON (When rear LH door opens)	0 V
72 (B)	Ground	Room antenna (-) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compart- ment	 JMKIA0063GB

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BCM (BODY CONTROL MODULE)

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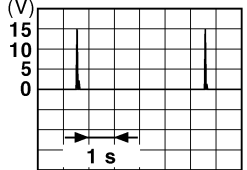
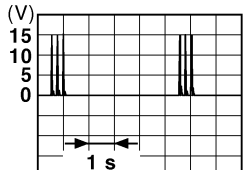
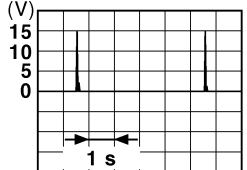
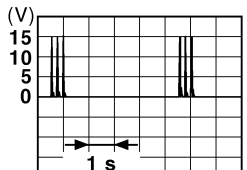
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
73 (W)	Ground	Room antenna (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compart- ment	 JMKIA0063GB
74 (Y)	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	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
75 (LG)	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	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

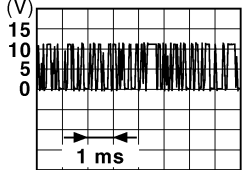
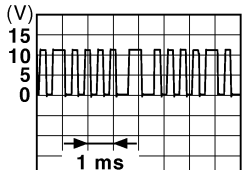
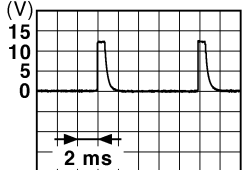
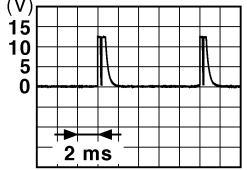
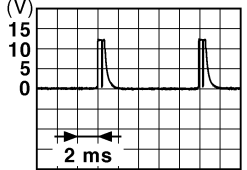
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
76 (V)	Ground	Driver door antenna (-)	Output	When the driver door request switch is operat- ed with ignition switch OFF	 JMKIA0062GB
				When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
77 (P)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operat- ed with ignition switch OFF	 JMKIA0062GB
				When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
80 (SB)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.
81 (O)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.
82 (BR)	Ground	Ignition relay [fuse block (J/B)] control	Output	Ignition switch	OFF or ACC
					ON
					0 V
					Battery voltage

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BCM (BODY CONTROL MODULE)

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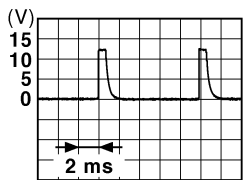
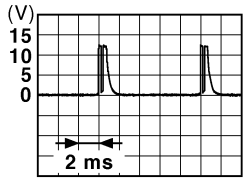
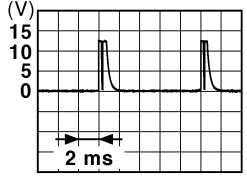
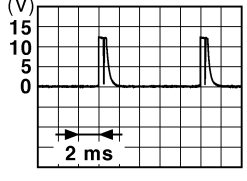
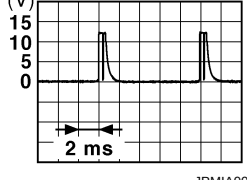
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
83 (P)	Ground	Remote keyless entry receiver communica- tion	Input/ Output	During waiting	 JMKIA0064GB
				When operating either button on Intelligent Key	 JMKIA0065GB
87 (R)	Ground	Combination switch INPUT 5	Input	Combination switch	
				All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
				Front fog lamp switch ON (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
				Rear wiper switch ON (Wiper intermittent dial 4)	 JPMIA0039GB 1.3 V
				Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7	 JPMIA0040GB 1.3 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
88 (GR)	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
89 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button igni- tion switch (push switch)	Pressed 0 V
				Not pressed	Battery voltage
90 (P)	Ground	CAN - L	Input/ Output	—	—
91 (L)	Ground	CAN - H	Input/ Output	—	—

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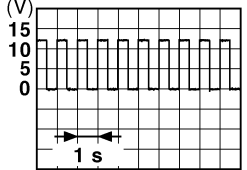
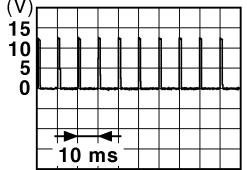
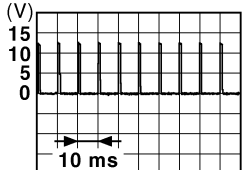
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BCM (BODY CONTROL MODULE)

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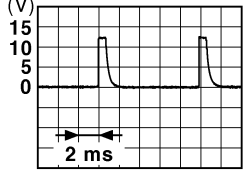
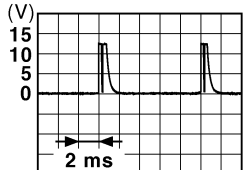
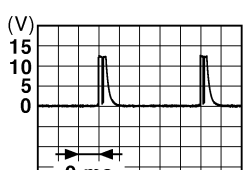
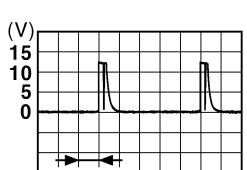
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
92 (R)	Ground	Key slot illumination	Output	Key slot illumination	OFF	0 V
					Blinking	 JPMIA0015GB
					ON	Battery voltage
93 (P)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK and ACC indicator lamps are not illuminated.)	Battery voltage
					ON	0 V
95 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (Y)	Ground	CVT shift selector (detention switch) power supply	Output	—	—	Battery voltage
97*1 (O)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	Battery voltage
98*1 (L)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	Battery voltage
					UNLOCK status	0 V
99 (V)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	Battery voltage
100 (P)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB
101 (W)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB
102 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (L)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

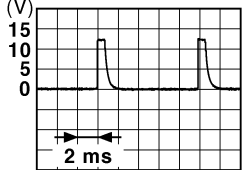
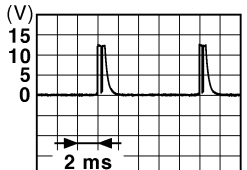
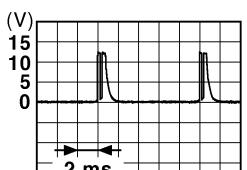
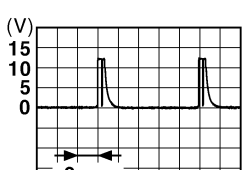
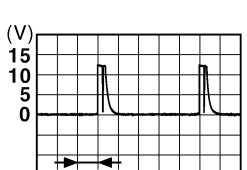
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
106*1 (Y)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC ON	Battery voltage 0 V
107 (O)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Turn signal switch LH	 JPMIA0037GB 1.3 V
					Turn signal switch RH	 JPMIA0036GB 1.3 V
					Front wiper switch LO	 JPMIA0038GB 1.3 V
					Front washer switch ON	 JPMIA0039GB 1.3 V

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BCM (BODY CONTROL MODULE)

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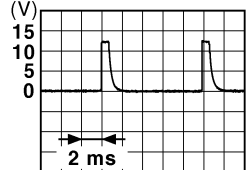
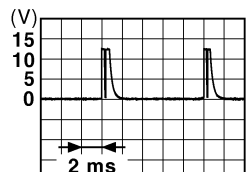
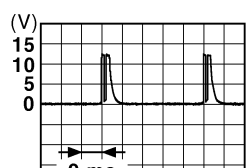
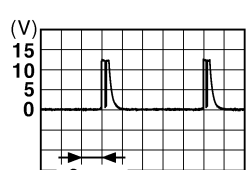
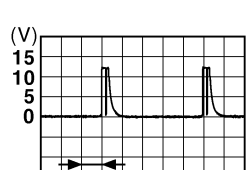
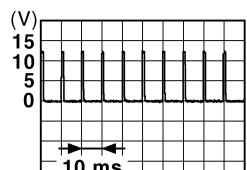
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
108 (P)	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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

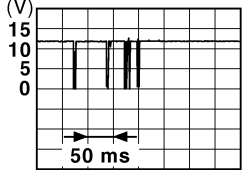
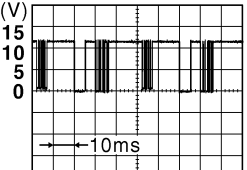
Terminal No. (Wire color)		Description		Condition		Value (Approx.)	
+	−	Signal name	Input/ Output				
109 (SB)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	 1.4 V	A
					Lighting switch PASS	 1.3 V	B
					Lighting switch 2ND	 1.3 V	C
					Front wiper switch INT/ AUTO	 1.3 V	D
					Front wiper switch HI	 1.3 V	E
110 (G)	Ground	Hazard switch	Input	Hazard switch	ON	0 V	F
					OFF	 1.1 V	G

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

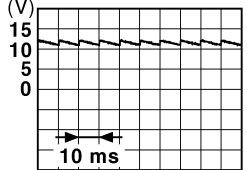
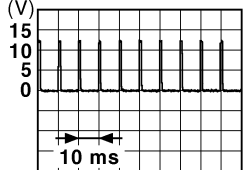
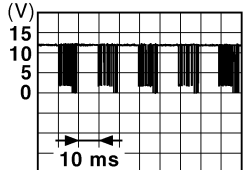
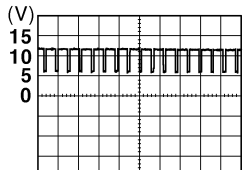
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
111*1 (LG)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	Battery voltage
					LOCK or UNLOCK	 JMKIA0066GB
					For 15 seconds after UN- LOCK	Battery voltage
					15 seconds or later after UNLOCK	0 V
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		 JPMIA0156GB 8.7 V
113 (O)	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 (GR)	Ground	Stop lamp switch 1	Input	—		Battery voltage
118 (L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is de- pressed)	Battery voltage
119 (W)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (unlock sen- sor switch OFF)	 JPMIA0012GB 1.1 V
					UNLOCK status (unlock sensor switch ON)	0 V
121 (Y)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot		Battery voltage
				When Intelligent Key is not inserted into key slot		0 V
123 (G)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

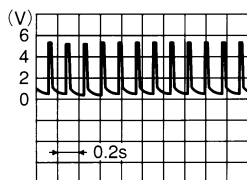
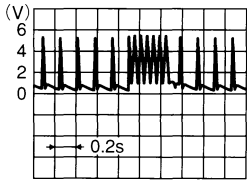
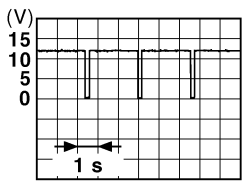
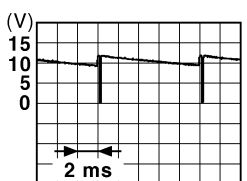
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	 JPMIA0011GB 11.8 V
				Passenger door switch	ON (When passenger door opens)	0 V
130*2 (BR)	Ground	Rear window defogger switch	Input	Ignition switch ON	Rear window defogger switch OFF	 JPMIA0012GB 1.1 V
				Ignition switch ON	Rear window defogger switch ON	0 V
132 (G)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2 V
				Ignition switch OFF or ACC		Battery voltage
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (When tail lamps OFF)	9.5 V
				Push-button ignition switch illumination	ON (When tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.  JPMIA0159GB
				Push-button ignition switch illumination	OFF	0 V
134 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF (ACC and ON indicator lamps are not illuminated.)	Battery voltage
				LOCK indicator lamp	ON	0 V
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (V)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
				Ignition switch	ACC or ON	5.0 V

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

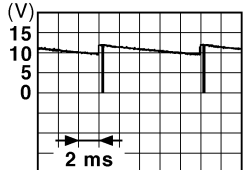
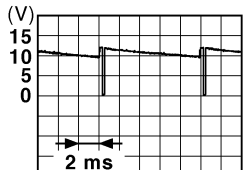
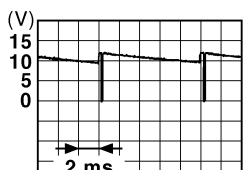
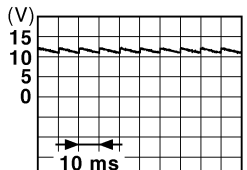
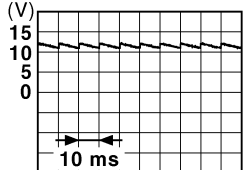
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
139 (O)	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch ON	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
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 (O)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB
					OFF	Battery voltage
142 (L)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 1ST	 JPMIA0031GB
					Lighting switch HI	
					Lighting switch 2ND	
					Turn signal switch RH	
143 (W)	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)	 JPMIA0032GB
					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	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
144 (P)	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	
145 (V)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front wiper switch INT/ AUTO	
					Front wiper switch LO	
					Lighting switch AUTO	
146 (Y)	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	
149 (W)	Ground	Tire pressure warn- ing check switch	Input	Ignition switch ON		
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	
					ON (When driver door opens)	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			
+	—					
151 (G)	Ground	Rear window defog- ger relay control	Output	Rear window de- fogger	Active	0 V
					Not activated	Battery voltage

NOTE:

- *1: With steering lock unit
- *2: Without BOSE audio system

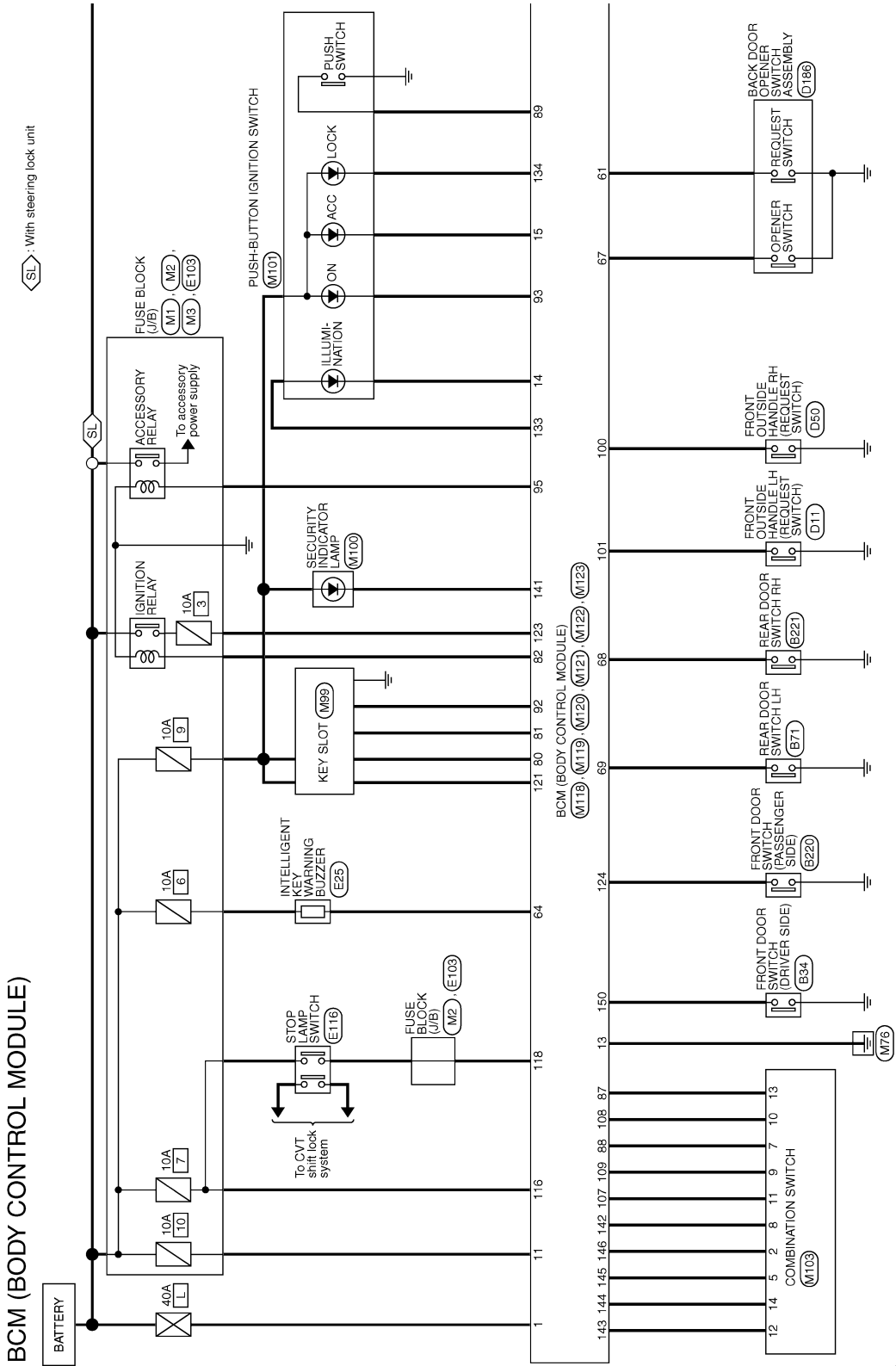
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Wiring Diagram - BCM -

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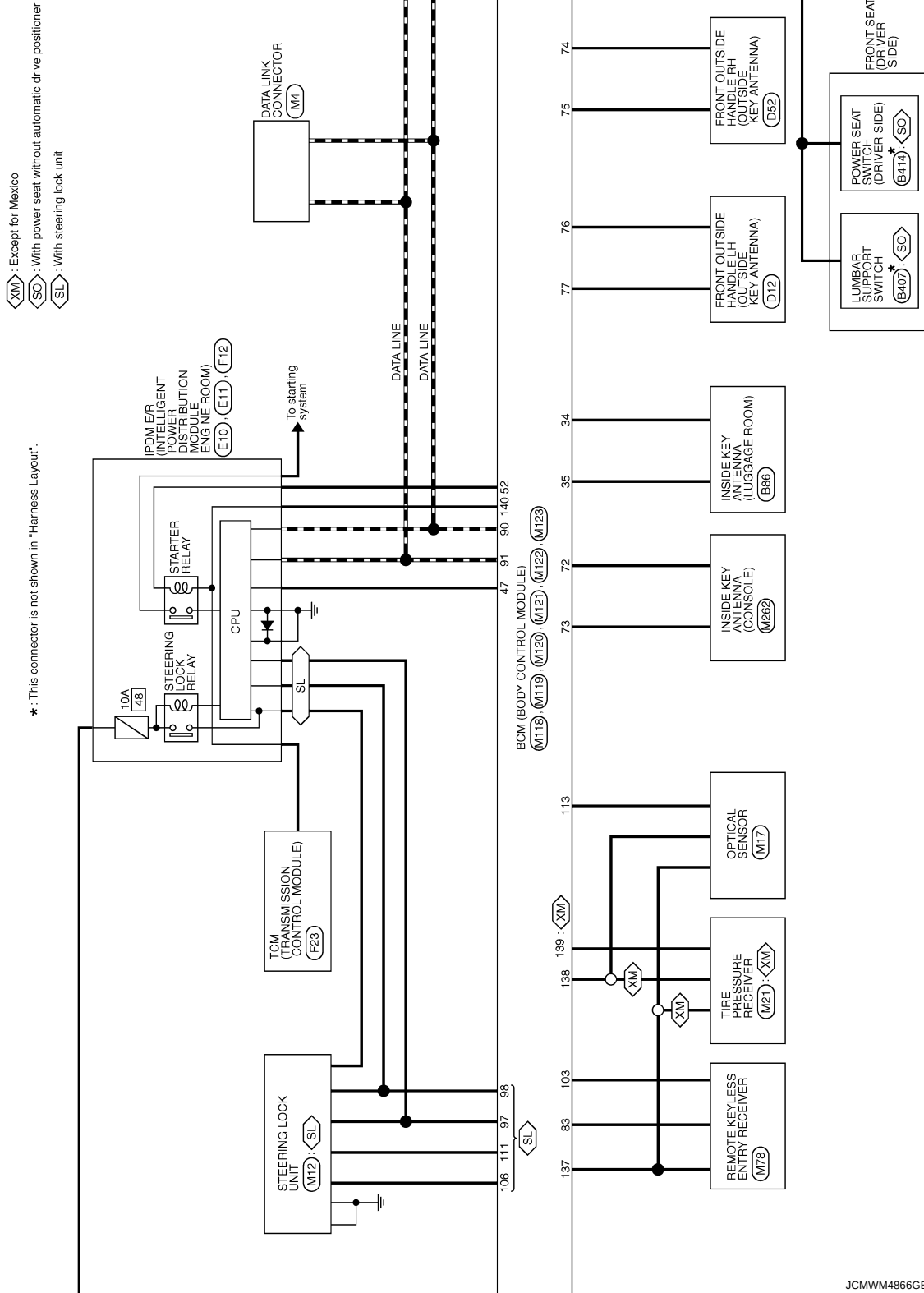
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]



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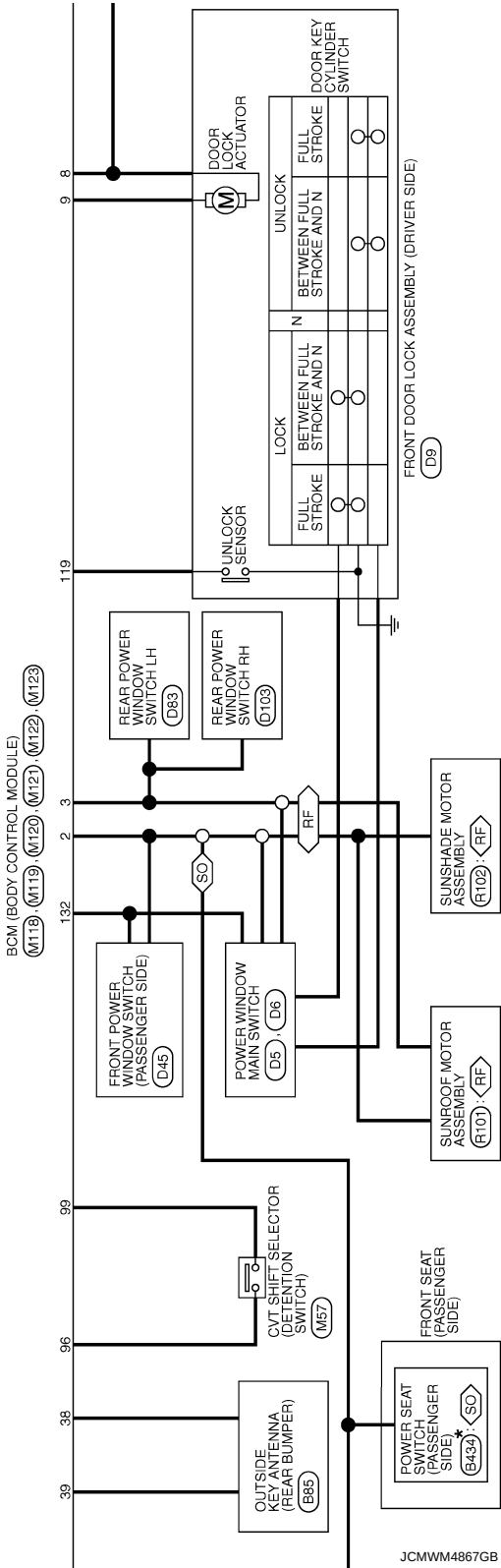
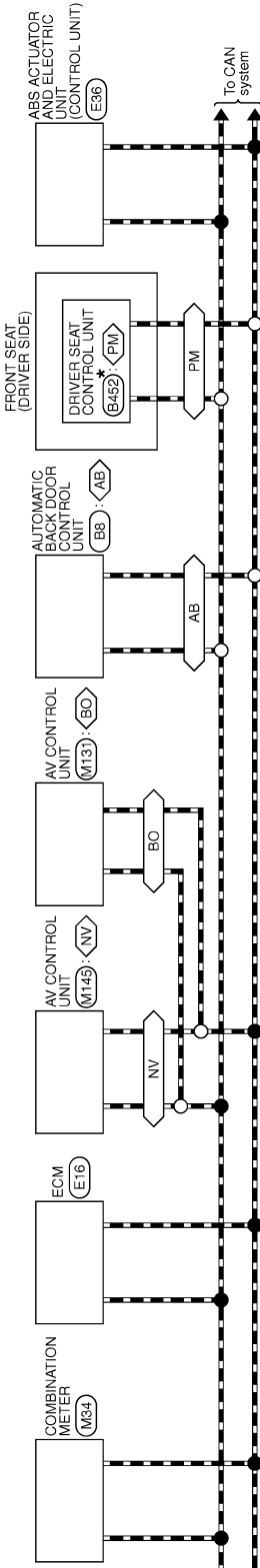
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

- : With navigation system
- : With BOSE system without navigation system
- : With sunroof
- : With automatic drive positioner
- : With power seat without automatic drive positioner
- : With automatic back door

★ : This connector is not shown in "Harness Layout".



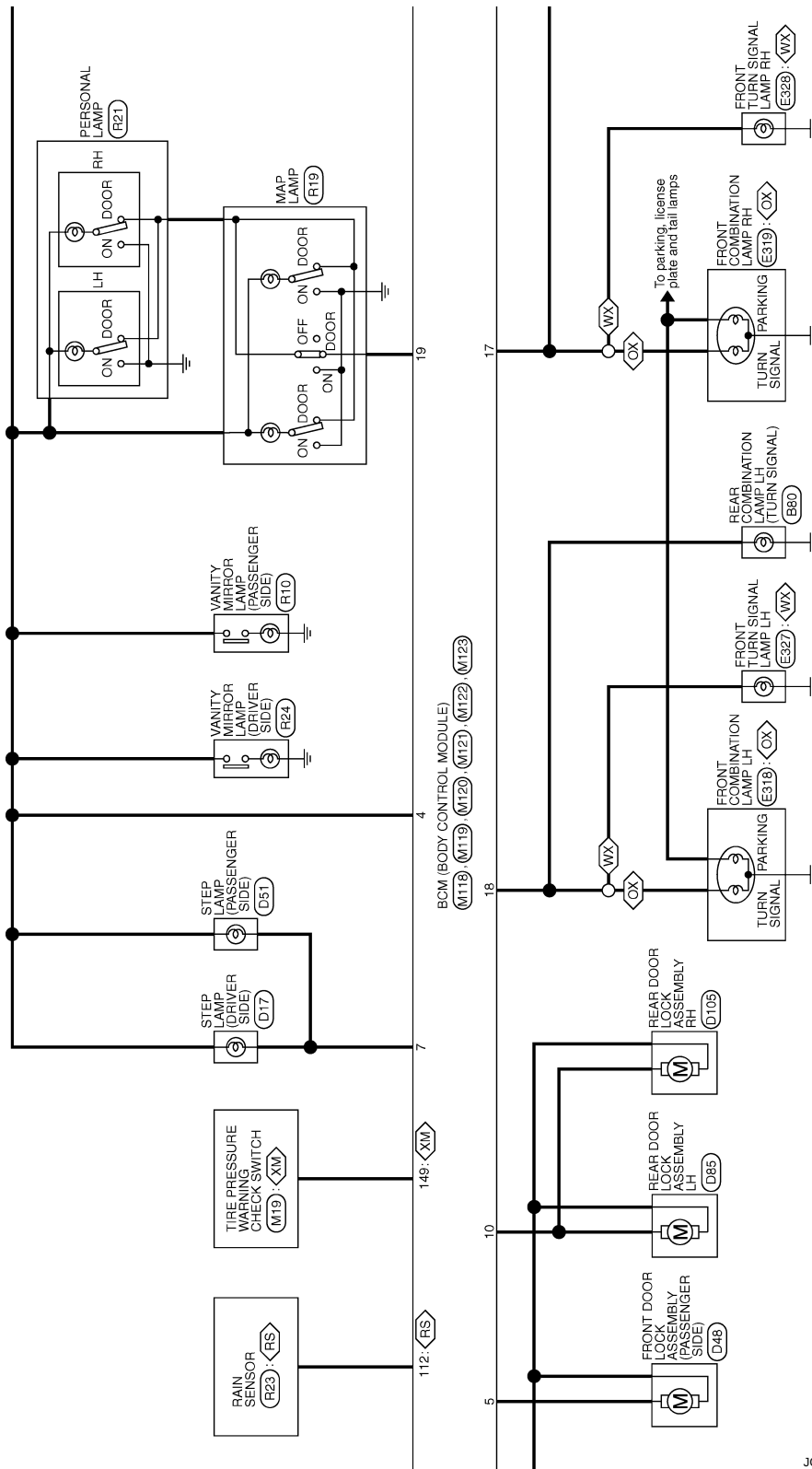
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

<XM> : Except for Mexico
 <RS> : With rain sensor
 <WX> : With xenon headlamp
 <OX> : Without xenon headlamp

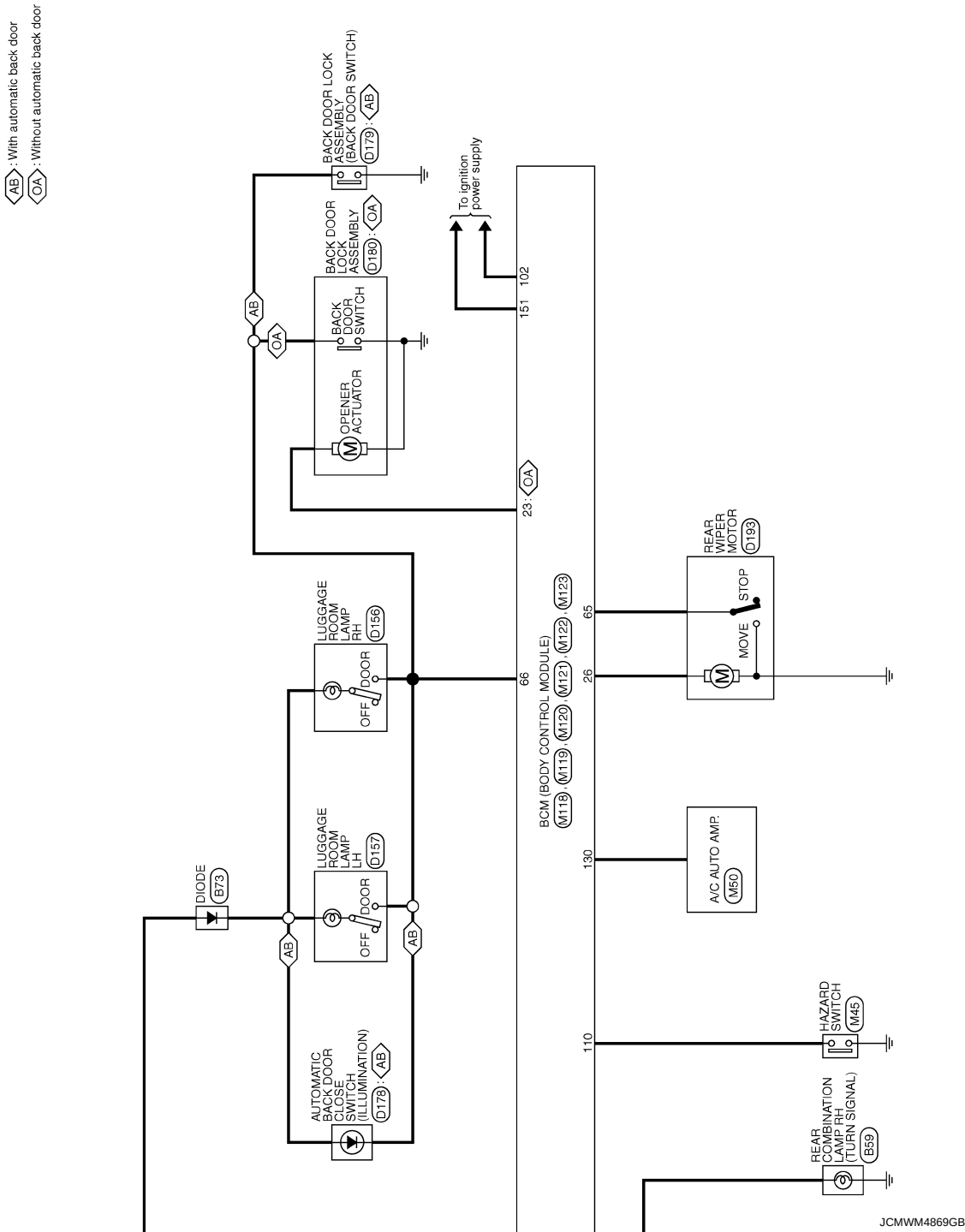


JCMWM4868GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]



BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	B8
Connector Name	AUTOMATIC BACK DOOR CONTROL UNIT
Connector Type	TH20FW-T56



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	Buzzer
2	Y	ABD SW
4	Y	ABD CLOSE SW
6	L	CAN HI
7	P	CAN LOW
8	LG	HALF LATCH SW
9	GR	IGN
10	SB	BAT
11	V	CLOSURE MTR (CLOSE)
12	R	CLOSURE MTR (OPEN)
14	V	TOUCH SENS LH
15	O	TOUCH SENS GND
16	W	TOUCH SENS RH
17	LG	MAIN SW
19	P	CLOSE SW
20	L	OPEN SW
21	B	GND
22	B	GND
23	GR	GND
24	BR	ENCODER B
25	Y	ENCODER A
26	G	ENCODER PWR

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



1	2	3
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Terminal No.	Color of Wire	Signal Name [Specification]
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2	SB	-
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Connector No.	B59
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS4MMW-CS



4	3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-[With rear view camera]
1	B/W	-[Without rear view camera]
2	BR	-
3	P	-
4	L	-

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



1	2	3
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Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-

Connector No.	B73
Connector Name	DIODE
Connector Type	24335 CS902



1	2
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Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	L	-

Connector No.	B80
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS4MMW-CS



4	3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	Y	-
3	P	-
4	L	-

Connector No.	B85
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Type	RK02FGY



1	2
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Terminal No.	Color of Wire	Signal Name [Specification]
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1	R	-
2	G	-

Connector No.	B86
Connector Name	INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Type	RK02FGY



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

Connector No.	B220
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



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

JCMWM4870GB

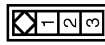
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	B221
Connector Name	REAR DOOR SWITCH RH
Connector Type	AQ3FW



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

Connector No.	B407
Connector Name	LUMBAR SUPPORT SWITCH
Connector Type	NS4FBR-CS



Terminal No.	11
Color of Wire	O
Signal Name [Specification]	-
12	LG
13	Y/W
14	Y

Connector No.	B414
Connector Name	POWER SEAT SWITCH (DRIVER SIDE)
Connector Type	NS10FW-CS



Terminal No.	1
Color of Wire	R
Signal Name [Specification]	-

2	B	-
3	G	-
4	G/R	-
5	V	-
6	R/L	-
7	L	-
8	L/W	-
9	L/R	-
10	L/B	-

Connector No.	B434
Connector Name	POWER SEAT SWITCH (PASSENGER SIDE)
Connector Type	NS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	G	-
4	G/R	-
5	V	-
6	B/W	-

Connector No.	B432
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH43FW



Terminal No.	Color of Wire	Signal Name [Specification]
11	G/B	-
12	G/W	-
13	R/G	-
14	R/W	-
15	Y/B	-

16	Y/R	-
17	LG/B	-
18	LG/R	-
19	G/Y	-
20	R/Y	-
21	L/Y	-
22	BR/Y	-
23	P	-
24	P/L	-
25	G/O	-
26	L/O	-
27	V	-
28	V/W	-
29	O/L	-
30	BR	-
31	BR/W	-
32	W/L	-
33	W	-

Connector No.	D5
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	W	-
3	BR	-
4	L	-
5	SB	-
6	R	-
7	P	-
8	L	-
9	G	-
10	V	-
11	LG	-
13	Y	-
14	O	-
15		

Connector No.	D6
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	NS33FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
17	B	-
19	LG	-

Connector No.	D8
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	ES6FGY-RS



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	G	-
3	P	-
4	B	-
5	R	-
6	L	-

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	D11
Connector Name	FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)
Connector Type	RN02FB



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

Connector No.	D12
Connector Name	FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA)
Connector Type	RK02MGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	V	-

Connector No.	D17
Connector Name	STEP LAMP (DRIVER SIDE)
Connector Type	G02FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D45
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Type	NS08FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
3	W	-
4	R	-
8	L	-
9	LG	-
10	P	-
11	B	-
12	Y	-
13	G	-
16	O	-

Connector No.	D48
Connector Name	FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)
Connector Type	E06FGY-RS



Terminal No.	Color of Wire	Signal Name [Specification]
5	V	-
6	G	-

Connector No.	D50
Connector Name	FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)
Connector Type	RN02FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	B	-

Connector No.	D51
Connector Name	STEP LAMP (PASSENGER SIDE)
Connector Type	G02FW



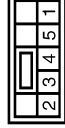
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D52
Connector Name	FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA)
Connector Type	RK02MGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	W	-

Connector No.	D63
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	NS08FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	P	-
3	SB	-
4	LG	-
5	L	-

Connector No.	D65
Connector Name	REAR DOOR LOCK ASSEMBLY LH
Connector Type	E06FGY-RS



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	G	-

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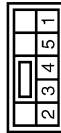
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	D103
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	NS08FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	P	-
3	SB	-
4	LG	-
5	L	-

Connector No.	D105
Connector Name	REAR DOOR LOCK ASSEMBLY RH
Connector Type	ED08FY-RS



Terminal No.	Color of Wire	Signal Name [Specification]
5	V	-
6	G	-

Connector No.	D156
Connector Name	LUGGAGE ROOM LAMP RH
Connector Type	CJ04FW



Terminal No.	Color of Wire	Signal Name [Specification]
2	W	-
4	LG	-

Connector No.	D157
Connector Name	LUGGAGE ROOM LAMP LH
Connector Type	CJ04FW



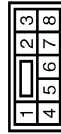
Terminal No.	Color of Wire	Signal Name [Specification]
2	W	-
4	LG	-

Connector No.	D178
Connector Name	AUTOMATIC BACK DOOR CLOSE SWITCH
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	B	-
3	W	-
4	LG	-

Connector No.	D179
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH AUTOMATE BACK DOOR)
Connector Type	NS08FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	V	-
4	G	-
5	L	-
6	W	-
7	LG	-
8	B	-

Connector No.	D180
Connector Name	BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATE BACK DOOR)
Connector Type	NS04FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	B	-
3	LG	-
4	B	-

Connector No.	D186
Connector Name	BACK DOOR OPENER SWITCH ASSEMBLY
Connector Type	TR04MF-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	B	-
4	V	-

Connector No.	D193
Connector Name	REAR WIPER MOTOR
Connector Type	CJ04FW-1V



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
3	GR	-
4	O	-

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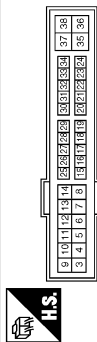
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	E10
Connector Name	ENGINE INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20FW-CS12-M4-1V



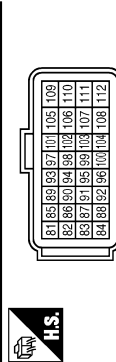
Terminal No.	Color of Wire	Signal Name [Specification]
4	LG	-
5	Y	-
7	GR	-
10	BR	-
11	P	-
12	B	-
13	SB	-
13	W	-
16	L/Y	-
19	Y	-
20	L	-
21	O	-
22	SB	-
23	GR	-
24	G	-
25	GR	-
26	Y	-
27	W	-
28	SB	-
30	BR	-
32	V	-
33	G	-
34	O	-
35	P	-
36	G	-
38	GR	-

Connector No.	E11
Connector Name	ENGINE INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B	-
42	SB	-
43	Y	-
44	W	-
45	O	-
46	BR	-

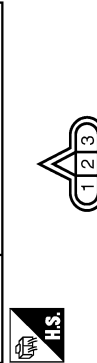
Connector No.	E16
Connector Name	ECM
Connector Type	RH24FB-RZ8-L-LH



Terminal No.	Color of Wire	Signal Name [Specification]
81	W	APSI
82	O	APS2
83	BR	AVCC1-APSI
84	B	GND-APSI
85	Y	ASCD SW
86	SB	FTPRES
87	GR	AVCC2-APS2
88	O	KLINE
91	L	AVCC2-FTPRES
92	BR	GND-ASCD SW
93	BR	IGN SW
94	GR	TACHO(GABIN)
95	Y	TF
96	GR	GND-FTPRES

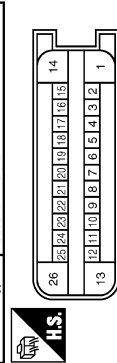
97	P	VEH CAN-L
98	L	VEH CAN-H
100	G	GND-APS2
102	B	NEUT-H
104	SB	GND-IF
105	V	VER
106	SB	BRAKE
107	B	GND
108	B	GND
109	W	ODCV
110	G	ENCSW
111	B	GND
112	B	GND

Connector No.	E25
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Type	RK03BR



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
3	GR	-

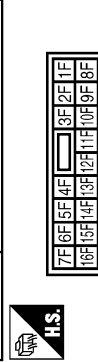
Connector No.	E36
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	AE22FB-AJZ4-LH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	VALVE/ECU SUPPLY
2	Y	WSS RL SIG(-)
3	L	WSS RL PWRC(-)
4	GR	CLUSTER SUPPLY
5	B	WSS FR PWRC(-)

6	W	WSS FR SIG(-)
7	LG	LIS
8	V	WSS FL SIG(-)
9	W	WSS FL PWRC(-)
10	SB	CLUSTER GND
11	P	WSS FR PWRC(-)
12	V	WSS FR SIG(-)
13	B/W	MOTOR GND
14	G	MOTOR SUPPLY
16	SB	BLS
18	O	DIAG K
19	BR	CAN2 H
20	GR	IGN
21	P	CAN1 L
22	Y	VDG OFF SW
23	L	CAN1 H
25	W	CAN2 L
26	B/W	VALVE/ECU GND

Connector No.	E03
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1F	L	-
2F	LG	-
4F	BR	-
6F	Y	-
8F	R	-
9F	GR	-
11F	G	-
12F	V	-

JCMWM4874GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	E116
Connector Name	STOP LAMP SWITCH
Connector Type	M04FW-LC



3	4
1	2

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	LG	-
3	G	-
4	Y	-

Connector No.	E318
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	Z03FER



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	B	-
3	Y	-

Connector No.	E319
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	Z03FER



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

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

Connector No.	E327
Connector Name	FRONT TURN SIGNAL LAMP LH
Connector Type	RS02FGY



2	1
---	---

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

Connector No.	E328
Connector Name	FRONT TURN SIGNAL LAMP RH
Connector Type	RS02FGY



2	1
---	---

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

Connector No.	F12
Connector Name	ENGINE F INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	T423FW-CS12-M4



55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0

Terminal No.	Color of Wire	Signal Name [Specification]
48	W	-
49	R/B	-
51	LG	-
52	Y/G	-
53	R/W	-
54	G/W	-
55	W/L	-
56	R/Y	-
57	O	-
58	Y	-
69	W/B	-
70	O	-
72	R/B	-
75	LG	-
76	SB	-
77	GR	-
80	B	-

Connector No.	F23
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	RH40FB-R2B-L-RH



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	P/B	INH SW 2
2	P/L	INH SW 3
3	G/O	INH SW 4
4	GR	INH SW 3 MON
5	B	GND

Terminal No.	Color of Wire	Signal Name [Specification]
6	O	K-LINE
7	W	SENSOR GND
8	G/W	CLOCK (SEL2)
9	L/R	CHP SELECT (SEL1)
10	BR/R	DATA I/O (SEL3)
11	BR/W	INH SW 1
13	V	ATF TEMP SENSOR
14	R/W	PRI PRESS SENSOR
15	V/W	SEC PRESS SENSOR
19	G/B	REV LAMP RELAY
20	R/B	STARTER RELAY
25	W/R	SENSOR GND
26	L/O	SENSOR POWER SOURCE(V)
27	R/G	S/M-D
28	R	S/M-C
29	O/B	S/M-B
30	G/R	S/M-A
31	P	CAN-H
32	L	CAN-L
33	LG	PRI SPEED SENSOR
34	LG/R	SEC SPEED SENSOR
37	V/R	L/OASEL-ON/OFF SOL
38	L/W	L/OASEL LINEAR SOL
39	W/B	SEC LINEAR SOL
40	R/Y	PL LINEAR SOL
42	B	GND
46	Y	VIGN
47	L/R	BATT
48	Y	VIGN

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

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



3A	2A1A
8A	7A6A5A4A

Terminal No.	Color of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

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



4B	3B	2B1B
10B	9B	8B7B6B5B

Terminal No.	Color of Wire	Signal Name [Specification]
1B	W	-
3B	L	-
4B	G	-
5B	L	-
6B	Y	-
7B	R	-
8B	R	-
9B	GR	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



5C	4C	3C2C1C
12C	11C	10C9C8C7C6C

Terminal No.	Color of Wire	Signal Name [Specification]
6C	BR	-
7C	B	-
8C	G	-
9C	GR	-
10C	SB	-
11C	R	-
12C	O	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



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

Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

Connector No.	M12
Connector Name	STEERING LOCK UNIT
Connector Type	TH06FW-MH



4	3	2	1
8	7	6	5

Terminal No.	Color of Wire	Signal Name [Specification]
1	P	S/L 12V MECHANICAL(V1)
2	LG	S/L COM
3	O	S/L CONDITION 1
5	B	GND 1
6	B	GND 2
7	Y	S/L 12V CP(V2)
8	L	S/L CONDITION 2

Connector No.	M17
Connector Name	OPTICAL SENSOR
Connector Type	TK03FW



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	O	-
3	P	-

Connector No.	M19
Connector Name	TIRE PRESSURE WARNING CHECK SWITCH
Connector Type	TK02FW



1	2
---	---

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

Connector No.	M21
Connector Name	TIRE PRESSURE RECEIVER
Connector Type	TK04FW



1	2	3	4
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Terminal No.	Color of Wire	Signal Name [Specification]
1	P	GND
2	O	SIGNAL
4	V	POWER

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40PW-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	Y	BAT
2	O	IGN
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL
6	SB	TRIP RESET SWITCH
7	W	SW ILL POWER
8	O	METER CONTROL SW GND
9	L	ENTER SWITCH
10	L	SELECT SWITCH
11	R	ILLUMINATION CONTROL SWITCH (OFF/On automatic drive position)
12	V	ILLUMINATION CONTROL SWITCH (OFF/On automatic drive position)
13	Y	ILLUMINATION CONTROL SWITCH (OFF/On automatic drive position)
14	GR	ILLUMINATION CONTROL SWITCH (OFF/On automatic drive position)
15	BR	AIR BAG
16	L	AMBIENT SENSOR
17	P	AMBIENT SENSOR POWER
18	P	AMBIENT SENSOR GROUND
19	Y	CAN-H
20	L	CAN-L
21	L	GROUND
22	P	FUEL LEVEL SENSOR GROUND
23	B	CHG
24	W	PARKING BRAKE SWITCH
25	BR	WASHER LEVEL SWITCH
26	G	VEHICLE SPEED (2-PULSE)
27	R	OD OFF/SPORTS
28	V	FUEL LEVEL SENSOR
29	LG	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
30	G	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
31	SB	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
32	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
33	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
34	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
35	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
36	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
37	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
38	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
39	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
40	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

Connector No.	M45
Connector Name	HAZARD SWITCH
Connector Type	TK30FW



3	1	2	4
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Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	G	-
3	R	-
4	SB	-

Connector No.	M50
Connector Name	A/C AUTO AMP
Connector Type	ISAB0FW



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	L	CAN-H
2	P	CAN-L
3	L	TX(AMP)/SW(ESP)
4	P	RX(SW/AMP)
5	L	LAN SIG
6	R	VACTR
7	O	SUN SENS
8	G	INTAKE SENS
9	G	ACC
10	R	IGN
11	B	RR DEF F/B
12	G	RR DEF F/B
13	L	FAN PWM
14	P	AMB POWER
15	L	AMB SENS
16	LG	INCAR SENS
17	Y	SENS GND

39	B	GND(POWER)
40	Y	BAT

Connector No.	M57
Connector Name	CVT SHIFT SELECTOR
Connector Type	TK10FW



1	2	3	4	5	6	7	8	9
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Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	B	-
3	P	-
4	B	-
5	P	-
6	B	-
7	Y	-
8	Y	-
9	V	-

Connector No.	M78
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	JAB04FB



1	2	3	4
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Terminal No.	Color of Wire	Signal Name [Specification]
1	P	GND
2	P	SIGNAL
3	L	+12V

Connector No.	M89
Connector Name	KEY SLOT
Connector Type	TH12FW-NH



1	2	3	4	5	6	7	8	9	10	11	12
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Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BAT
2	SB	GLOCK
3	O	DATA
4	GR	ILL BAT
5	B	ILL
6	B	GND
7	Y	KEY SWITCH SIGNAL

Connector No.	MT00
Connector Name	SECURITY INDICATOR LAMP
Connector Type	TK02FBR



1	2
---	---

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	O	-

JCMWM4877GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	M101
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08BR



1	2	3
4	5	6
7	8	

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	O	-
3	W	-
4	BR	-
5	R	-
6	L	-
7	P	-
8	GR	-

Connector No.	M103
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	OUTPUT 2

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



1	2	3
4	5	6
7	8	9

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

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	W	STEP LAMP OUTPUT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	P	REAR DOOR UNLOCK OUTPUT
11	LG	BAT FUSE
13	B	GND
14	O	PUSH-BUTTON IGNITION SW ILL GND
15	L	ACC IND
17	G	TURN SIGNAL RH
18	BR	TURN SIGNAL LH
19	Y	ROOM LAMP TIMER CONTROL

Connector No.	M120
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS



20	21	22	23	24
25	26	27	28	29
30	31			

Terminal No.	Color of Wire	Signal Name [Specification]
23	BR	BACK DOOR OPEN OUTPUT
28	G	REAR WIPER OUTPUT

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40GY-NH



51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

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



131	130	129	128	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	R21
Connector Name	PERSONAL LAMP
Connector Type	TH04FW-NH



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	P/W	-
2	B	-
3	SB	-

Connector No.	R23
Connector Name	RAIN SENSOR
Connector Type	AA030FB



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

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

Connector No.	R24
Connector Name	VANITY MIRROR LAMP (DRIVER SIDE)
Connector Type	MC020FW



1	2
---	---

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-

1	B
2	P/W

Connector No.	R101
Connector Name	SUNROOF MOTOR ASSEMBLY
Connector Type	YEA10FGY



1	2	3	4	5
6	7	8	9	10

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	O	GND
3	L	IGN
4	Y	PUSH SW
5	LG	OPEN SW
6	R	BAT
7	P	COMM
8	BR	SPEED(P)
9	W	2ND SW
10	V	CLOSE SW

Connector No.	R102
Connector Name	SUNSHADE MOTOR ASSEMBLY
Connector Type	YEA10FGY



1	2	3	4	5
6	7	8	9	10

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
6	G	BAT
7	P	COMM
8	BR	SPEED(P)

Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

JCMWM4880GB

INFOID:000000005681406

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Display contents of CONSULT	Fail-safe	Cancellation	
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC	A
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC	
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC	B
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC	
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC	C
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC	
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF	
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms	D
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Starter control relay signal • Starter relay status signal	E
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)	F
B2602: SHIFT POSITION	Inhibit steering lock	5 seconds after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 km/h (2.5 MPH) or more	G
B2603: SHIFT POSI STATUS	Inhibit steering lock	500 ms after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V)	H
B2604: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF	I
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON	J
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)	K

EXL

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Display contents of CONSULT	Fail-safe	Cancellation
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent - Steering lock relay signal (Request signal) - Steering lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent - Starter motor relay control signal - Starter relay status signal (CAN)
B2609: S/L STATUS	- Inhibit engine cranking - Inhibit steering lock	When the following steering lock conditions agree - BCM steering lock control status - Steering lock condition No. 1 signal status - Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled - 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 - Power position changes to ACC - Receives engine status signal (CAN)
B2612: S/L STATUS	- Inhibit engine cranking - Inhibit steering lock	When any of the following conditions are fulfilled - Steering lock unit status signal (CAN) is received normally - The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
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
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E9: S/L STATUS	- Inhibit engine cranking - Inhibit steering lock	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled - Steering condition No. 1 signal: LOCK (0V) - Steering condition No. 2 signal: LOCK (Battery voltage)

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by 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 activating the hazard warning lamp.

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

NOTE:

If rain sensor malfunction is detected when ignition switch is turned OFF ⇒ ON and front wiper switch is INT/AUTO position, BCM operates a fail-safe control.

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

- More than 1 minute is passed after the rear wiper stop.

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

INFOID:000000005681407

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	A
2	• U1000: CAN COMM • U1010: CONTROL UNIT(CAN)	B
3	• B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING	C
4	• B2013: ID DISCORD BCM-S/L • B2014: CHAIN OF S/L-BCM • B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2606: S/L RELAY • B2607: S/L RELAY • B2608: STARTER RELAY • B2609: S/L STATUS • B260A: IGNITION RELAY • B260B: STEERING LOCK UNIT • B260C: STEERING LOCK UNIT • B260D: STEERING LOCK UNIT • B260F: ENG STATE SIG LOST • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E9: S/L STATUS • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG	D
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Priority	DTC
5	• C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1734: CONTROL UNIT
6	• B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:000000005681408

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-211. "COMMON ITEM : CONSULT-III 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 page
No DTC is detected. further testing may be required.	—	—	—	—	—
U1000: CAN COMM	—	—	—	—	BCS-38
U1010: CONTROL UNIT(CAN)	—	—	—	—	BCS-39
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-40
B2013: ID DISCORD BCM-S/L*	×	×	—	—	SEC-51
B2014: CHAIN OF S/L-BCM*	×	×	—	—	SEC-52
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-43
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-46
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-47
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-49
B2195: ANTI SCANNING	×	—	—	—	SEC-50
B2553: IGNITION RELAY	—	×	—	—	PCS-48
B2555: STOP LAMP	—	×	—	—	SEC-55
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-57
B2557: VEHICLE SPEED	×	×	×	—	SEC-59
B2560: STARTER CONT RELAY	×	×	×	—	SEC-60
B2562: LOW VOLTAGE	—	×	—	—	BCS-41
B2601: SHIFT POSITION	×	×	×	—	SEC-61
B2602: SHIFT POSITION	×	×	×	—	SEC-64
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-66
B2604: PNP SW	×	×	×	—	SEC-69

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 page
B2605: PNP SW	×	×	×	—	SEC-71
B2606: S/L RELAY*	×	×	×	—	SEC-73
B2607: S/L RELAY*	×	×	×	—	SEC-74
B2608: STARTER RELAY	×	×	×	—	SEC-76
B2609: S/L STATUS*	×	×	×	—	SEC-78
B260A: IGNITION RELAY	×	×	×	—	PCS-50
B260B: STEERING LOCK UNIT*	—	×	×	—	SEC-82
B260C: STEERING LOCK UNIT*	—	×	×	—	SEC-83
B260D: STEERING LOCK UNIT*	—	×	×	—	SEC-84
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-85
B2612: S/L STATUS*	×	×	×	—	SEC-88
B2614: ACC RELAY CIRC	—	×	×	—	PCS-52
B2615: BLOWER RELAY CIRC	—	×	×	—	PCS-55
B2616: IGN RELAY CIRC	—	×	×	—	PCS-58
B2617: STARTER RELAY CIRC	×	×	×	—	SEC-92
B2618: BCM	×	×	×	—	PCS-61
B2619: BCM*	×	×	×	—	SEC-94
B261A: PUSH-BTN IGN SW	—	×	×	—	SEC-95
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-98
B2622: INSIDE ANTENNA	—	×	—	—	DLK-91
B2623: INSIDE ANTENNA	—	×	—	—	DLK-93
B26E9: S/L STATUS*	×	×	× (Turn ON for 15 seconds)	—	SEC-86
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-87
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	—	—	—	×	
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

NOTE:

*: For models without steering lock unit this DTC is not applied.

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

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

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

Reference Value

INFOID:000000005681420

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
MOTOR FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	1/2/3/4
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
		- 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
IHBT RLY -REQ	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
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	- Press the selector button with selector lever in P position - Selector lever in any position other than P	Off
		Release the selector button with selector lever in P position	On
S/L RLY -REQ NOTE: For models without steering lock unit this item is not monitored.	None of the conditions below are present		Off
	- Open the driver door after the ignition switch is turned OFF (for a few seconds) - Press the push-button ignition switch when the steering lock is activated		On
S/L STATE NOTE: For models without steering lock unit this item is not monitored.	Steering lock is activated		LOCK
	Steering lock is deactivated		UNLOCK
	[DTC: B210A] is detected		UNKWN
DTRL REQ	NOTE: The item is indicated, but not monitored.		Off
OIL P SW	Ignition switch OFF, ACC or engine running		Open
	Ignition switch ON		Close
HOOD SW	NOTE: The item is indicated, but not monitored.		Off
HL WASHER REQ	NOTE: The item is indicated, but not monitored.		Off
THFT HRN REQ	Not operating		Off
	- 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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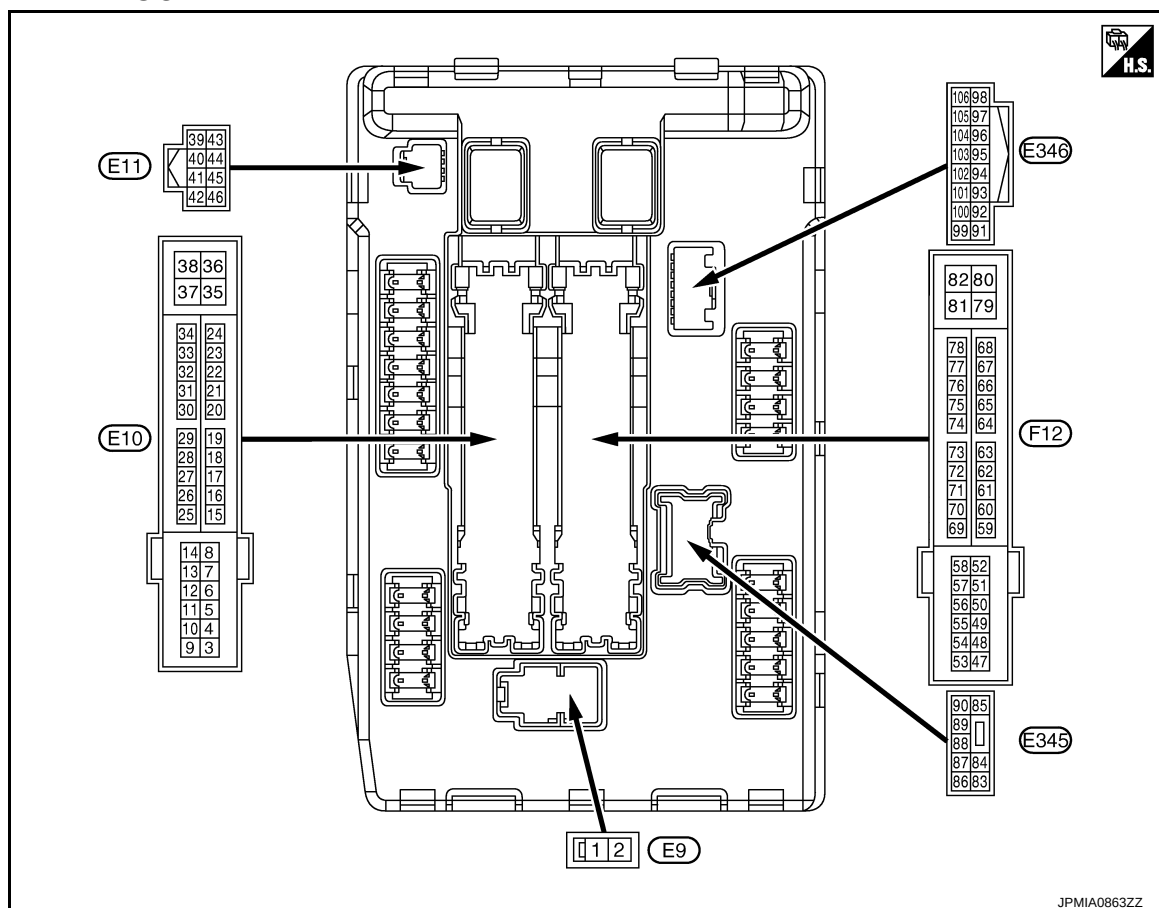
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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

TERMINAL LAYOUT



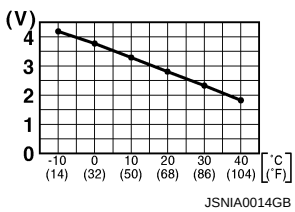
PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (L)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
4 (LG)	Ground	Front wiper LO	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch LO	Battery voltage
5 (Y)	Ground	Front wiper HI	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch HI	Battery voltage
7 (GR)	Ground	Tail, license plate lamps & illuminations	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
10 (BR)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V
				- Ignition switch ON - Ignition switch OFF (For a few seconds after turning igni- tion switch OFF)		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			
11*2 (P)	Ground	Steering lock unit power supply	Output	Ignition switch OFF	A few seconds after opening the driver door	Battery voltage
				Ignition switch LOCK	Press the push-button ignition switch	Battery voltage
				Ignition switch ACC or ON		0 V
12 (B)	Ground	Ground	—	Ignition switch ON		0 V
13 (SB)	Ground	Fuel pump power supply	Output	Approximately 1 second or more after turning the ignition switch ON		0 V
				- Approximately 1 second after turning the ignition switch ON - Engine running		Battery voltage
15 (W)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
16 (L/Y)	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 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
20 (L)	Ground	Ambient sensor ground	Output	Ignition switch ON		0 V
21 (O)	Ground	Ambient sensor	Input	Ignition switch ON NOTE: Changes depending to ambient temperature		 JSNIA0014GB
22 (SB)	Ground	Refrigerant pressure sensor ground	Output	Engine running	- Warm-up condition - Idle speed	0 V
23 (GR)	Ground	Refrigerant pressure sensor	Output	Engine running	- Warm-up condition - Both A/C switch and blower fan motor switch ON (Compressor operates)	1.0 - 4.0 V
24 (G)	Ground	Refrigerant pressure sensor power supply	Input	Ignition switch OFF		0 V
				Ignition switch ON		5.0 V
25 (GR)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
26*1 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
27 (W)	Ground	Ignition relay monitor	Input	Ignition switch OFF or ACC		Battery voltage
				Ignition switch ON		0 V
28 (SB)	Ground	Push-button ignition switch	Input	Press the push-button ignition switch		0 V
				Release the push-button ignition switch		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			
30 (BR)	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
32*2 (V)	Ground	Steering lock unit condition-1	Input	Steering lock is activated		0 V
				Steering lock is deactivated		Battery voltage
33*2 (G)	Ground	Steering lock unit condition-2	Input	Steering lock is activated		Battery voltage
				Steering lock is deactivated		0 V
34 (O)	Ground	Cooling fan relay-3 control	Input	Cooling fan stopped		Battery voltage
				Cooling fan at HI operation		0 V
35 (P)	Ground	Cooling fan relay-1 power supply	Input	Cooling fan stopped		Battery voltage
				Cooling fan at LO operation		6.0 V
36 (G)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
38 (GR)	Ground	Cooling fan relay-1 power supply	Output	Cooling fan not operating		0 V
				Cooling fan at LO operation		6.0 V
39 (P)	—	CAN-L	Input/ Output	—		—
40 (L)	—	CAN-H	Input/ Output	—		—
41 (B)	Ground	Ground	—	Ignition switch ON		0 V
42 (SB)	Ground	Cooling fan relay-2 control	Input	Cooling fan stopped		Battery voltage
				- Cooling fan MID operating - Cooling fan HI operating		0 V
43 (Y)	Ground	CVT shift selector (Detention switch)	Input	Ignition switch ON	Press the selector button (selector lever P)	Battery voltage
					- Selector lever in any position other than P - Release the selector button (selector lever P)	0 V
44 (W)	Ground	Horn relay control	Input	The horn is deactivated		Battery voltage
				The horn is activated		0 V
45 (O)	Ground	Horn switch	Input	The horn is deactivated		Battery voltage
				The horn is activated		0 V
46 (BR)	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 (W)	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 (R/B)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V
				- Ignition switch ON - Ignition switch OFF (For a few seconds after turning ignition switch OFF)		Battery voltage

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

< ECU DIAGNOSIS INFORMATION >

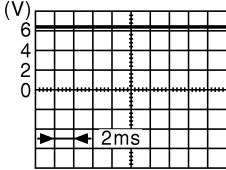
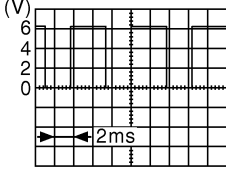
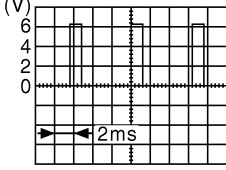
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)	
+	-	Signal name	Input/ Output				
51 (LG)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V	A
				Ignition switch ON		Battery voltage	B
52 (Y/G)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V	C
				Ignition switch ON		Battery voltage	
53 (R/W)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V	D
				- Ignition switch ON - Ignition switch OFF (For a few seconds after turning igni- tion switch OFF)		Battery voltage	E
54 (G/W)	Ground	Throttle control motor re- lay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V	F
				- Ignition switch ON - Ignition switch OFF (For a few seconds after turning igni- tion switch OFF)		Battery voltage	G
55 (W/L)	Ground	ECM power supply	Output	Ignition switch OFF		Battery voltage	H
56 (R/Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V	I
				Ignition switch ON		Battery voltage	
57 (O)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V	J
				Ignition switch ON		Battery voltage	
58 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V	K
				Ignition switch ON		Battery voltage	
69 (W/B)	Ground	ECM relay control	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		Battery voltage	
				- Ignition switch ON - Ignition switch OFF (For a few seconds after turning igni- tion switch OFF)		0 - 1.5 V	EXL
70 (O)	Ground	Throttle control motor re- lay control	Output	Ignition switch ON → OFF		0 -1.0 V ↓ Battery voltage ↓ 0 V	M
				Ignition switch ON		0 - 1.0 V	N
72 (R/B)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any posi- tion other than P or N	0 V	O
					Selector lever P or N	Battery voltage	
75 (LG)	Ground	Oil pressure switch	Input	Ignition switch ON	Engine stopped	0 V	P
					Engine running	Battery voltage	

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

< ECU DIAGNOSIS INFORMATION >

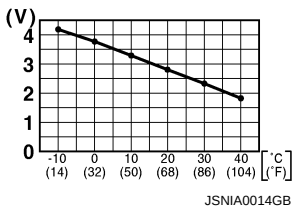
[XENON TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
76 (SB)	Ground	Power generation command signal	Output	Ignition switch ON		 JPMIA0001GB 6.3 V
				40% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE"		 JPMIA0002GB 3.8 V
				80% is set on "ACTIVE TEST", "ALTERNATOR DUTY" of "ENGINE"		 JPMIA0003GB 1.4 V
77 (GR)	Ground	Fuel pump relay control	Output	- Approximately 1 second after turning the ignition switch ON - Engine running		0 - 1.5 V
				Approximately 1 second or more after turning the ignition switch ON		Battery voltage
80 (B)	Ground	Starter motor	Output	At engine cranking		Battery voltage
83 (Y)	Ground	Headlamp LO (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 2ND	Battery voltage
84 (L)	Ground	Headlamp LO (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 2ND	Battery voltage
86 (SB)	Ground	Front fog lamp (RH)	Output	Lighting switch 2ND	Front fog lamp switch OFF	0 V
					- Front fog lamp switch ON - Daytime running light activated (Only for Canada)	Battery voltage
87 (GR)	Ground	Front fog lamp (LH)	Output	Lighting switch 2ND	Front fog lamp switch OFF	0 V
					- Front fog lamp switch ON - Daytime running light activated (Only for Canada)	Battery voltage
88 (W)	Ground	Washer pump power supply	Output	Ignition switch ON		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			
89 (L)	Ground	Headlamp HI (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					- Lighting switch HI - Lighting switch PASS	Battery voltage
90 (G)	Ground	Headlamp HI (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					- Lighting switch HI - Lighting switch PASS	Battery voltage
91 (R)	Ground	Parking lamp (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
92 (LG)	Ground	Parking lamp (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
99 (BR)	Ground	Ambient sensor ground	Input	Ignition switch ON		0 V
100 (SB)	Ground	Ambient sensor	Output	Ignition switch ON NOTE: Changes depending to ambient temperature		 JSNIA0014GB
101 (L)	Ground	Refrigerant pressure sensor ground	Input	Engine running	- Warm-up condition - Idle speed	0 V
102 (B)	Ground	Refrigerant pressure sensor	Input	Engine running	- Warm-up condition - Both A/C switch and blower fan motor switch ON (Compressor operates)	1.0 - 4.0 V
103 (P)	Ground	Refrigerant pressure sensor power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		5.0 V

*1: AWD models only

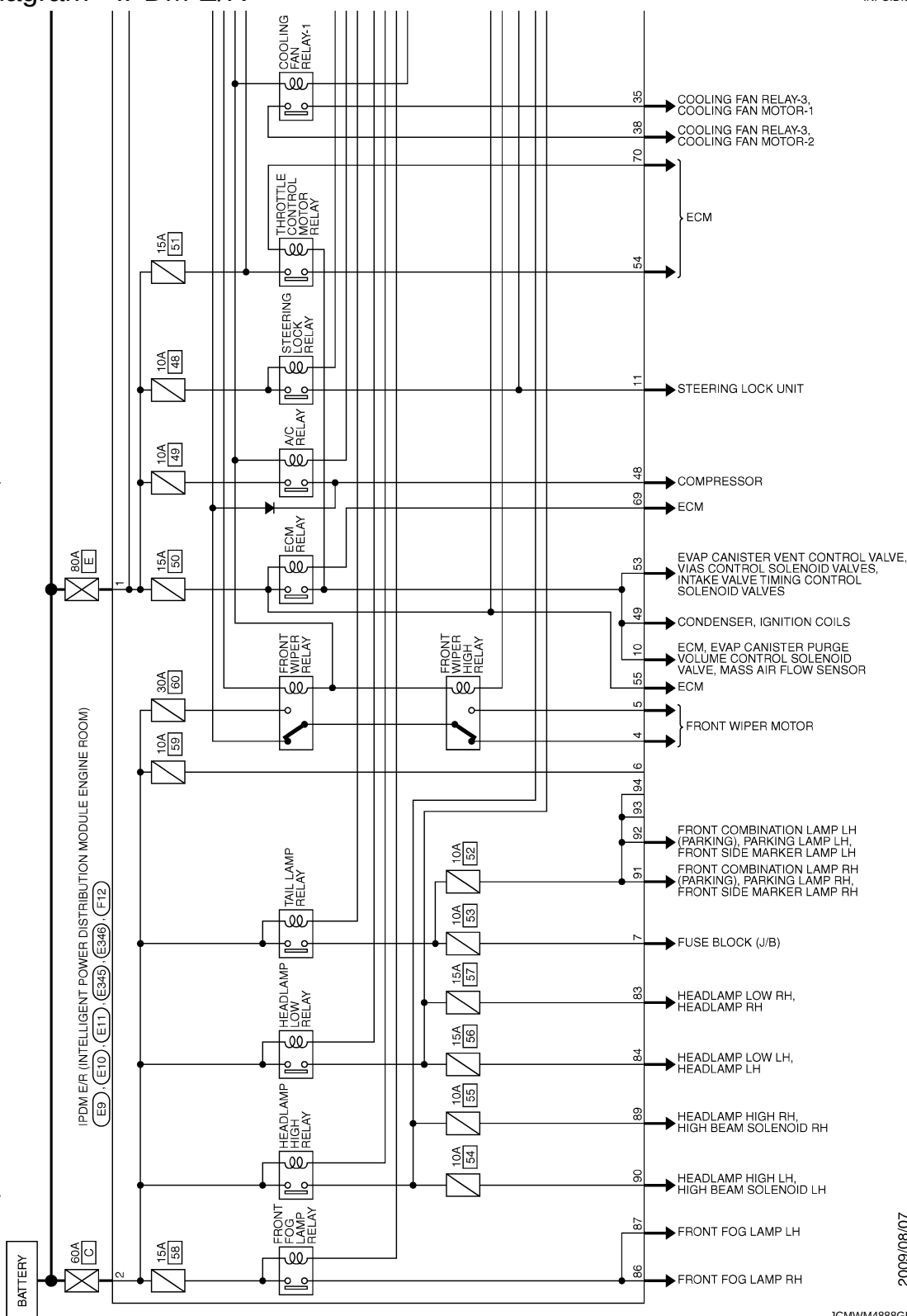
*2: Only for models with steering lock unit

EXL

[XENON TYPE]

Wiring Diagram - IPDM E/R -

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



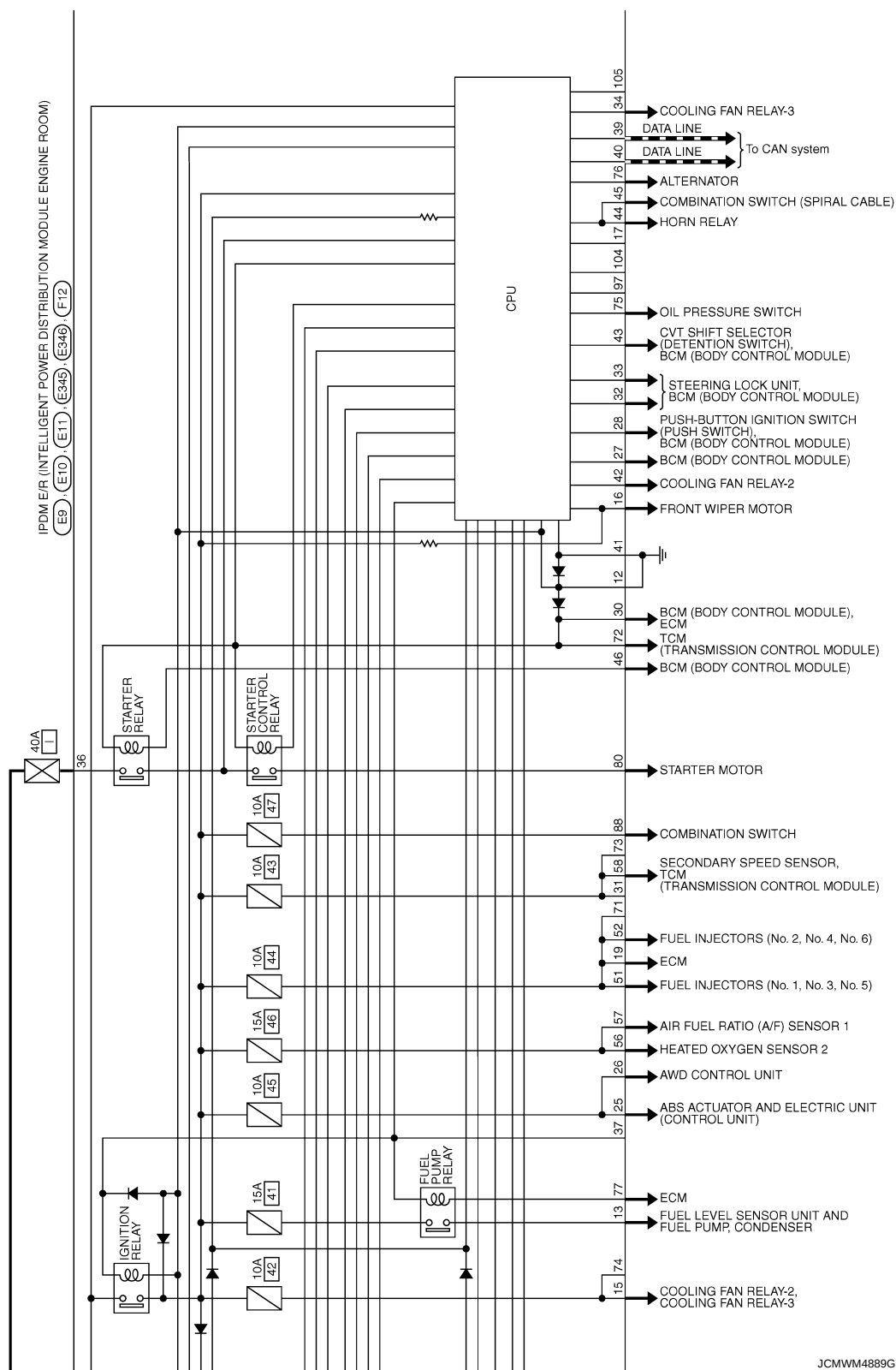
JCMWM4888GB

2009/08/07

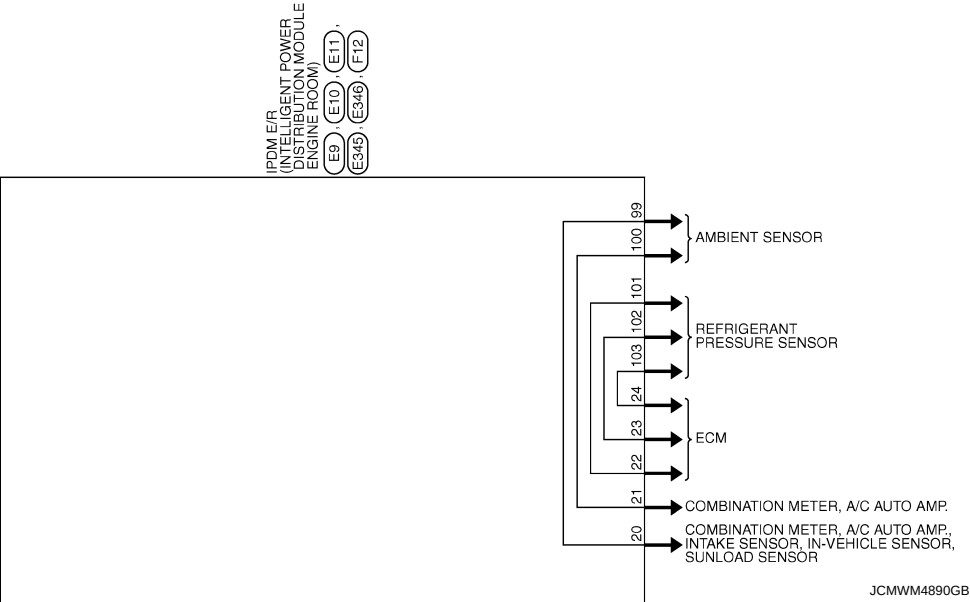
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]



JCMWM4889GB



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

< ECU DIAGNOSIS INFORMATION >

[XENON TYPE]

Control part	Fail-safe operation
Cooling fan	• Turns ON the cooling fan relay-2 and the cooling fan relay-3 when ignition switch is turned ON (Cooling fan operates at HI) • Turns OFF the cooling fan relay-1, the cooling fan relay-2 and the cooling fan relay-3 when the ignition switch is turned OFF (Cooling fan does not operate)
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	• 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
• Parking lamps • License plate lamps • Side maker lamps • Illuminations • Tail lamps	• Turns ON the tail lamp relay when the ignition switch is turned ON • Turns OFF the tail lamp relay when the ignition switch is turned OFF
Front wiper	• 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/AUTO mode and the front wiper motor is operating.
Front fog lamps	Front fog lamp relay OFF
Horn	Horn OFF
Ignition relay	The status just before activation of fail-safe is maintained.
Starter motor	Starter control relay OFF
Steering lock unit*	Steering lock relay OFF

*: Only for models with steering lock unit.

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	• 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 auto stop 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 auto stop 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:0000000005681423

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	Refer to
No DTC is detected. further testing may be required.	—	—
U1000: CAN COMM CIRCUIT	×	PCS-15
B2098: IGN RELAY ON	×	PCS-16
B2099: IGN RELAY OFF	—	PCS-17
B2108: STRG LCK RELAY ON *	—	SEC-99
B2109: STRG LCK RELAY OFF *	—	SEC-100
B210A: STRG LCK STATE SW *	—	SEC-101
B210B: START CONT RLY ON	—	SEC-105
B210C: START CONT RLY OFF	—	SEC-106
B210D: STARTER RELAY ON	—	SEC-107
B210E: STARTER RELAY OFF	—	SEC-108
B210F: INTRLCK/PNP SW ON	—	SEC-110
B2110: INTRLCK/PNP SW OFF	—	SEC-112

*: For models without steering lock unit this DTC is not applied.

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

SYMPTOM DIAGNOSIS

EXTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:000000005515088

CAUTION:

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

Symptom		Possible cause	Inspection item
Headlamp does not switch to the high beam.	One side	- Fuse - Harness between IPDM E/R and the front combination lamp - Front combination lamp (High beam solenoid) - IPDM E/R	Headlamp (HI) circuit Refer to EXL-36 .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM" Refer to EXL-168 .	
High beam indicator lamp is not turned ON. (The headlamp switches to the high beam.)		Combination meter	- Combination meter Data monitor "HI-BEAM IND" - BCM (HEAD LAMP) Active test "HEADLAMP"
Headlamp does not switch to the low beam.	One side	Front combination lamp (High beam solenoid)	—
	Both sides	- Combination switch - Harness between the combination switch and BCM - BCM	Combination switch Refer to BCS-92 .
		High beam request signal	IPDM E/R Data monitor "HL HI REQ"
		IPDM E/R	—
Headlamp is not turned ON.	One side	- Fuse - Xenon bulb - Harness between IPDM E/R and the front combination lamp - Front combination lamp (xenon headlamp) - IPDM E/R	Headlamp (LO) circuit Refer to EXL-39 .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer to EXL-168 .	
Headlamp is not turned OFF.	When ignition switch is turned ON		
	Ignition switch is turned OFF.	IPDM E/R	—
Headlamp is not turned ON/OFF with the lighting switch AUTO.	- Combination switch - Harness between the combination switch and BCM - BCM		Combination switch Refer to BCS-92 .
	- Optical sensor - Harness between the optical sensor and BCM - BCM		Optical sensor Refer to EXL-52 .

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

Symptom		Possible cause	Inspection item
Front fog lamp is not turned ON.	One side	- Front fog lamp bulb - Harness between IPDM E/R and the front fog lamp - Front fog lamp - IPDM E/R	Front fog lamp circuit Refer to EXL-43 .
	Both side	Symptom diagnosis "BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON" Refer to EXL-171 .	
Front fog lamp is not turned ON.			
Parking lamp is not turned ON.		- Parking lamp bulb - Harness between IPDM E/R and the parking lamp - IPDM E/R	Parking lamp circuit Refer to EXL-45 .
Front side marker lamp is not turned ON.		- Front side marker lamp bulb - Harness between IPDM E/R and the front side marker lamp - IPDM E/R	Front side marker lamp circuit Refer to EXL-47 .
Parking lamp and front side marker lamp are not turned ON.		- Fuse - Harness between IPDM E/R and the front combination lamp - IPDM E/R	Parking lamp circuit Refer to EXL-45 .
Tail lamp is not turned ON.		- Harness between IPDM E/R and the rear combination lamp - Rear combination lamp	Tail lamp circuit Refer to EXL-57 .
License plate lamp is not turned ON.		- License plate lamp bulb - Harness between IPDM E/R and the license plate lamp - License plate lamp	License plate lamp circuit Refer to EXL-59 .
Tail lamp and license plate lamp are not turned ON.		- Fuse - Harness between IPDM E/R and the rear combination lamp - IPDM E/R	License plate lamp circuit Refer to EXL-59 .
- Parking lamp, tail lamp, side marker lamp and license plate lamp are not turned ON. - Parking lamp, tail lamp, side marker lamp and 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-170 .	
Turn signal lamp does not blink.	Indicator lamp is normal. (Applicable side performs the high flasher activation.)	- Harness between BCM and each turn signal lamp - Turn signal lamp bulb	Turn signal lamp circuit Refer to EXL-49 .
	Indicator lamp is included	- Combination switch - Harness between the combination switch and BCM - BCM	Combination switch Refer to BCS-92 .

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EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

Symptom		Possible cause	Inspection item
Turn signal indicator lamp does not blink. (Turn signal indicator lamp is normal.)	One side	Combination meter	—
	Both sides (Always)	• Turn indicator signal - Combination meter - BCM • Combination meter	• Combination meter - Data monitor "TURN IND" • BCM (FLASHER) - Active test "FLASHER"
	Both sides (Only when activating hazard warning lamp with the ignition switch OFF)	• Combination meter power supply and the ground circuit • Combination meter	Combination meter Power supply and the ground circuit Refer to MWI-43 .
• Hazard warning lamp does not activate. • Hazard warning lamp continues activating. (Turn signal is normal.)		• Hazard switch • Harness between the hazard switch and BCM • BCM	Hazard switch Refer to EXL-55 .

NORMAL OPERATING CONDITION

Description

INFOID:00000000515089

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 the control difference. This is normal.

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EXL

BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM

< SYMPTOM DIAGNOSIS >

[XENON TYPE]

BOTH SIDE HEADLAMPS DO NOT SWITCH TO HIGH BEAM

Description

INFOID:000000005515090

The headlamp (both sides) does not switch to the high beam when setting to the lighting switch HI or PASS.

Diagnosis Procedure

INFOID:000000005515091

1.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-92, "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-III 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
		Except for HI or PASS	OFF

Is the item status normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-95, "Exploded View"](#)

3.HEADLAMP (HI) CIRCUIT INSPECTION

Check the headlamp (HI) circuit. Refer to [EXL-36, "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:000000005515092

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

Diagnosis Procedure

INFOID:000000005515093

1.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-92. "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-III 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-95. "Exploded View"](#).

3.HEADLAMP (LO) CIRCUIT INSPECTION

Check the headlamp (LO) circuit. Refer to [EXL-39. "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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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:000000005515094

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

Diagnosis Procedure

INFOID:000000005515095

1.CHECK FUSE

Check that the following fuse is fusing.

Unit	Location	Fuse No.	Capacity
• Parking lamp • Front side marker lamp	IPDM E/R	#52	10 A
• Tail lamp • License plate lamp • Rear side marker lamp		#53	10 A

Is the fuse fusing?

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

NO >> GO TO 2.

2.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-92, "Symptom Table"](#).

Is the combination switch normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning part.

3.CHECK TAIL LAMP RELAY REQUEST SIGNAL INPUT

CONSULT-III 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 4.

NO >> Replace BCM. Refer to [BCS-95, "Exploded View"](#).

4.TAIL LAMP CIRCUIT INSPECTION

Check the tail lamp circuit. Refer to [EXL-57, "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:000000005515096

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

Diagnosis Procedure

INFOID:000000005515097

1.CHECK FUSE

Check that the following fuse is fusing.

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

Is the fuse fusing?

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

NO >> GO TO 2.

2.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-92, "Symptom Table"](#).

Is the combination switch normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning part.

3.CHECK FRONT FOG LAMP REQUEST SIGNAL INPUT

CONSULT-III DATA MONITOR

1. Select "FR FOG REQ" of IPDM E/R data monitor item.

2. With operating the front fog lamp switch, check the monitor status.

Monitor item	Condition	Monitor status
FR FOG REQ	Front fog lamp switch (With lighting switch 1ST) ON	On
	OFF	Off

Is the item status normal?

YES >> GO TO 4.

NO >> Replace BCM. Refer to [BCS-95, "Exploded View"](#).

4.FRONT FOG LAMP CIRCUIT INSPECTION

Check the front fog lamp circuit. Refer to [EXL-43, "Component Function Check"](#).

Is the front fog lamp circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000005515098

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:

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

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

WARNING:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

FOR MEXICO

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

INFOID:000000005716397

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

WARNING:

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

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

WARNING:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s)

PRECAUTIONS

< PRECAUTION >

[XENON TYPE]

- with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

Precautions For Xenon Headlamp Service

INFOID:0000000005515100

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. (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.).

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PERIODIC MAINTENANCE

HEADLAMP AIMING ADJUSTMENT

Description

INFOID:000000005515101

PREPARATION BEFORE ADJUSTING

NOTE:

- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the front combination lamp assembly has been replaced.

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the luggage room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

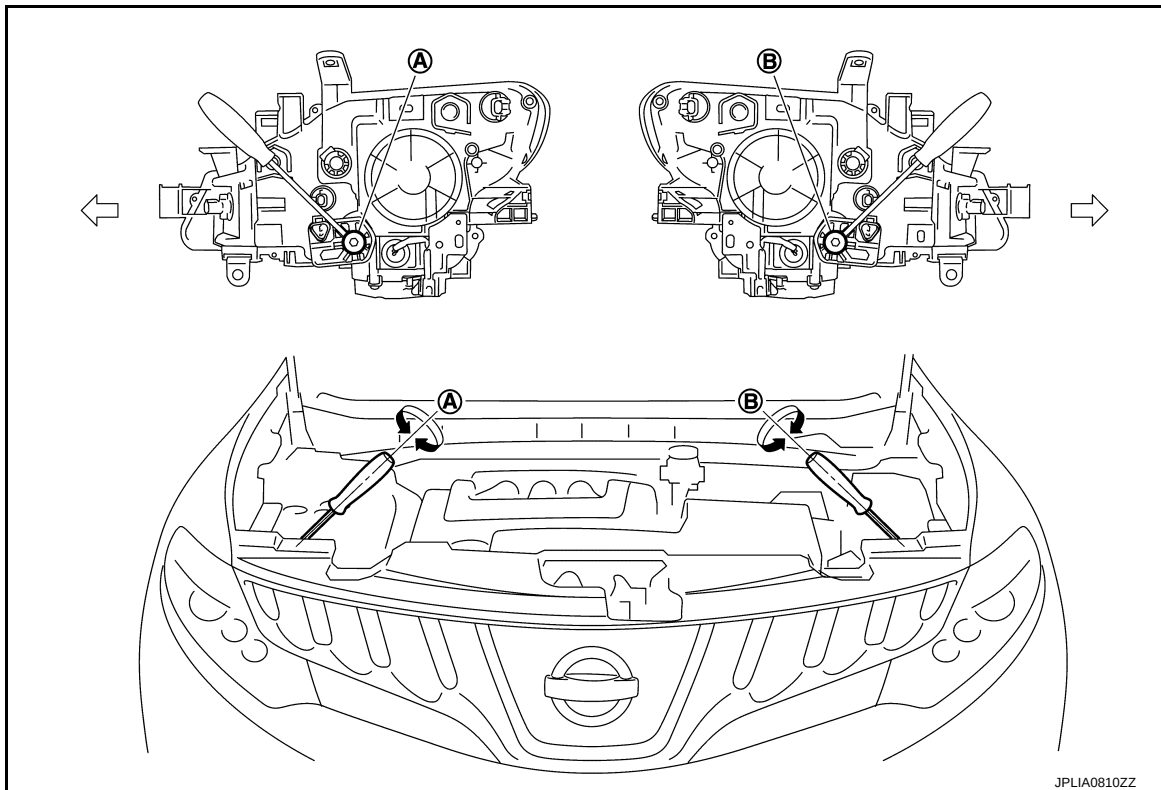
- Wipe out dirt on the headlamp.

CAUTION:

Never use organic solvent (thinner, gasoline etc.)

- Ride alone on the driver seat.
- Headlamp aiming switch sets to "0".

AIMING ADJUSTMENT SCREW



A. Headlamp RH (UP/DOWN) adjustment screw

B. Headlamp LH (UP/DOWN) adjustment screw

↔: Vehicle center

HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[XENON TYPE]

Adjustment screw		Screw driver rotation	Facing direction
A	Headlamp RH (UP/DOWN)	Clockwise	DOWN
		Counterclockwise	UP
B	Headlamp LH (UP/DOWN)	Clockwise	DOWN
		Counterclockwise	UP

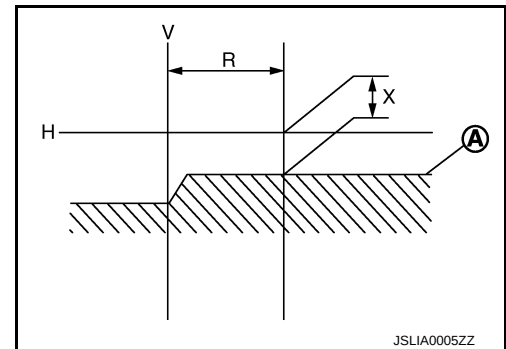
Aiming Adjustment Procedure

INFOID:000000005515102

- 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 bulb center and the screen.
- Start the engine. Turn the headlamp (LO) ON.
NOTE: Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.
CAUTION: Never cover the lens surface with a tape etc. The lens is made of resin.
- 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

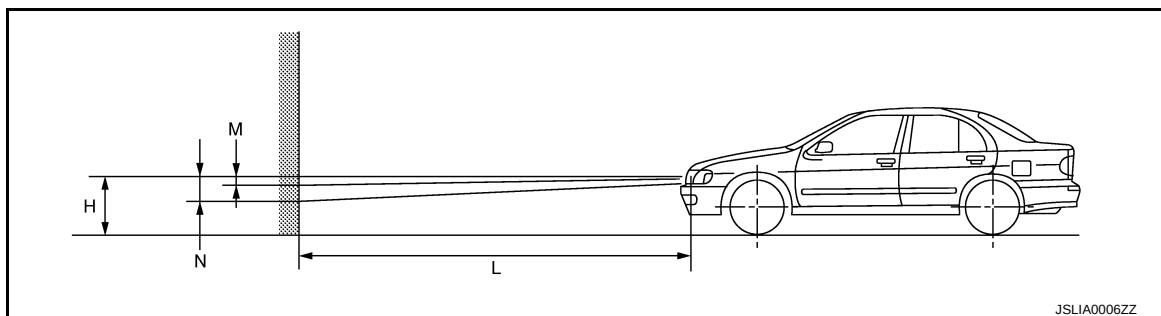


- Adjust the cutoff line height (X) with the aiming adjustment screw so as to enter in the adjustment range (M–N) according to the horizontal center line of headlamp (H).

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



HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[XENON TYPE]

Distance between the headlamp : 10 m (32.8 ft)
center and the screen (L)

FRONT FOG LAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[XENON TYPE]

FRONT FOG LAMP AIMING ADJUSTMENT

Description

INFOID:000000005515103

PREPARATION BEFORE ADJUSTING

NOTE:

- For details, refer to the regulations in your own country.

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the luggage room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

- Wipe out dirt on the 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.

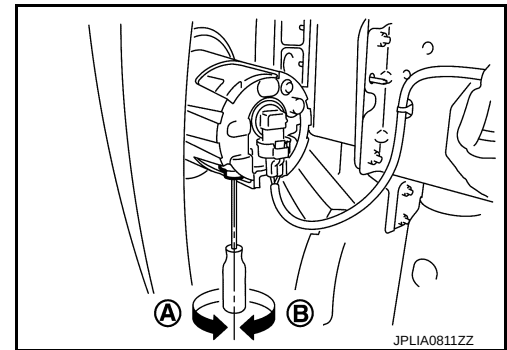
A: UP

B: DOWN

- For the position and direction of the adjusting screw, refer to the figure.

NOTE:

A screwdriver or hexagonal wrench [6 mm (0.24 in)] can be used for adjustment.



JPLIA0811ZZ

Aiming Adjustment Procedure

INFOID:000000005515104

- 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 front fog lamp center and the screen.

- Start the engine. Illuminate the front fog lamp.

CAUTION:

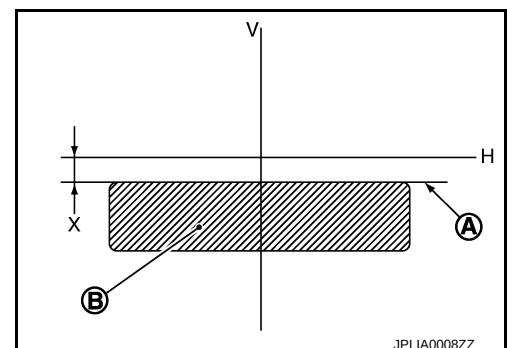
Never cover the lens surface with a tape etc. The lens is made of resin.

NOTE:

Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.

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

Front fog lamp light distribution on the screen



JPLIA0008ZZ

FRONT FOG LAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[XENON TYPE]

- 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

FRONT COMBINATION LAMP

< REMOVAL AND INSTALLATION >

[XENON TYPE]

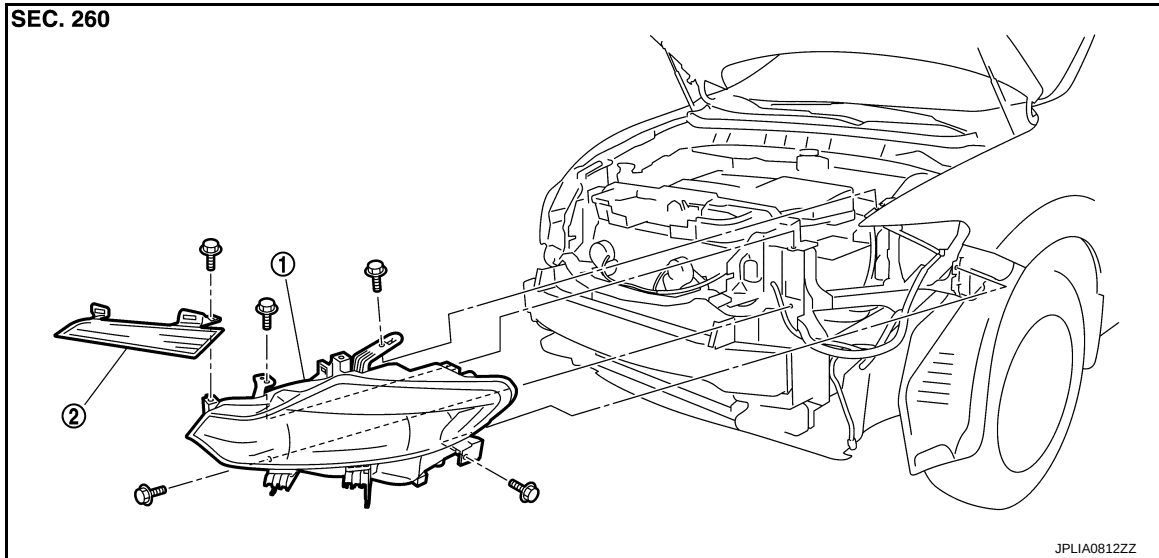
REMOVAL AND INSTALLATION

FRONT COMBINATION LAMP

Exploded View

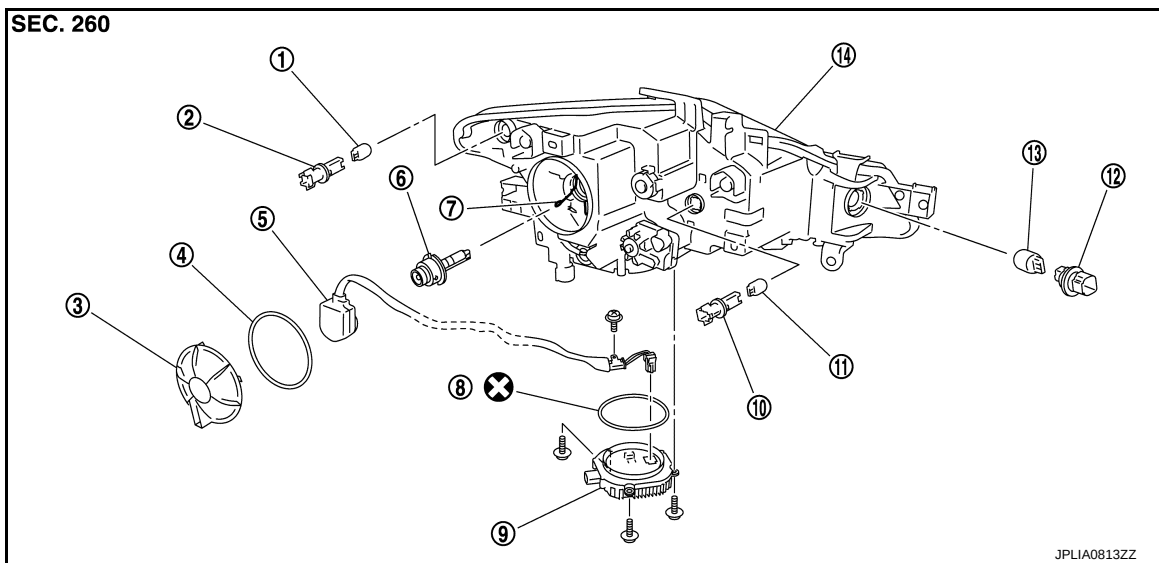
INFOID:0000000005515105

REMOVAL



1. Front combination lamp
2. Headlamp extension panel

DISASSEMBLY



- | | | |
|---------------------------------|---------------------------------------|--|
| 1. Front side marker lamp bulb | 2. Front side marker lamp bulb socket | 3. Resin cap |
| 4. Seal packing | 5. Xenon bulb socket (Starter) | 6. Xenon bulb |
| 7. Retaining spring | 8. Seal packing | 9. HID control unit (Inverter) |
| 10. Parking lamp bulb socket | 11. Parking lamp bulb | 12. Front turn signal lamp bulb socket |
| 13. Front turn signal lamp bulb | 14. Headlamp housing assembly | |

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000005515106

REMOVAL

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

1. Remove the front grille. Refer to [EXT-19, "Exploded View"](#).
2. Remove the headlamp extension panel.
3. Remove the front bumper fascia. Refer to [EXT-13, "Exploded View"](#).
4. Remove the headlamp mounting bolts.
5. Remove the harness clips from headlamp housing assembly.
6. Pull out the headlamp assembly forward the vehicle.
7. 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-174, "Description"](#).

Replacement

INFOID:000000005515107

CAUTION:

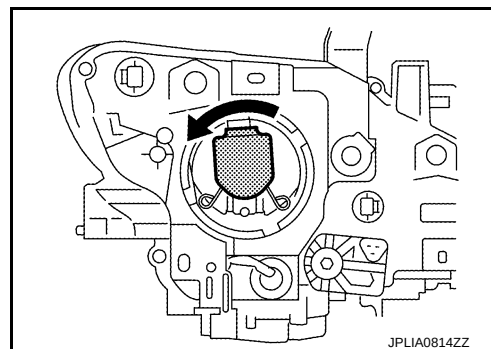
- **Disconnect the battery negative terminal or remove the fuse.**
- **After installing the bulb, install the resin cap and the bulb socket securely for watertightness.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand 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

1. Remove the fender rubber protector in engine room.
2. Rotate the resin cap counterclockwise and unlock it.
3. Rotate the bulb socket counterclockwise and unlock it.
4. Unlock the retaining spring. And then remove the bulb from the headlamp housing assembly.

CAUTION:

Never break the xenon bulb ceramic tube when replacing the bulb.



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 front grille.
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 engine room.
2. Rotate the bulb socket counterclockwise and unlock it.
3. Remove the bulb from the bulb socket.

FRONT COMBINATION LAMP

< REMOVAL AND INSTALLATION >

[XENON TYPE]

Disassembly and Assembly

INFOID:00000000515108

DISASSEMBLY

1. Rotate the resin cap counterclockwise and unlock it.
2. Rotate the xenon bulb socket counterclockwise and unlock it.
3. Unlock the retaining spring. And then remove the xenon bulb.
4. Remove the HID control unit installation screw.
5. Remove the screw. And then disconnect the connector from HID control unit.
6. Remove the xenon bulb socket from headlamp housing assembly.
7. Rotate the parking lamp bulb socket counterclockwise and unlock it.
8. Remove the bulb from parking lamp bulb socket.
9. Rotate the front turn signal lamp bulb socket counterclockwise and unlock it.
10. Remove the bulb from front turn signal lamp bulb socket.
11. Rotate the front side marker lamp bulb socket counterclockwise and unlock it.
12. Remove the bulb from front side marker lamp bulb socket.

ASSEMBLY

Assemble in the reverse order of disassembly.

CAUTION:

- Install HID control unit securely.
- After installing the bulb, install the resin cap and the bulb socket securely for watertightness.

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FRONT FOG LAMP

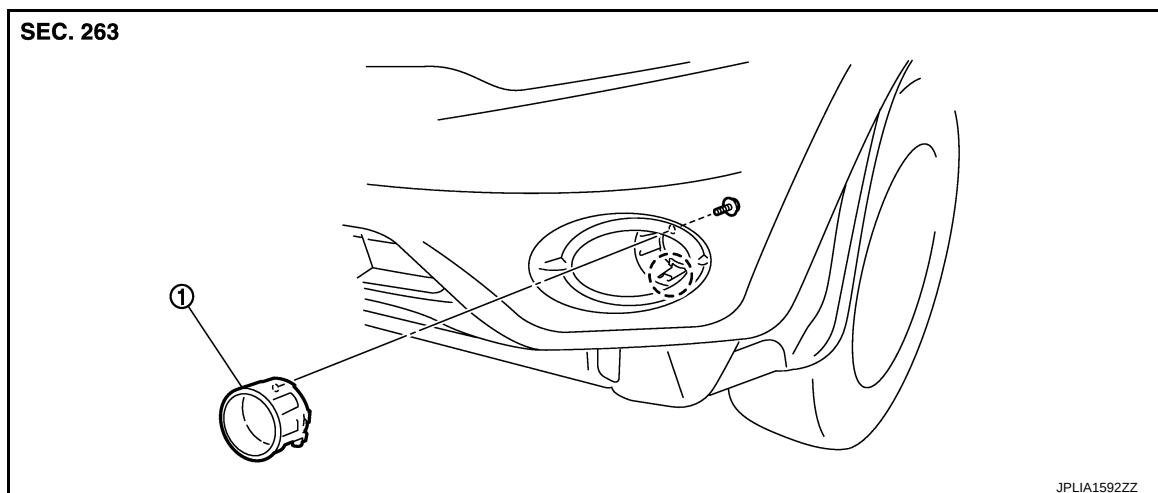
< REMOVAL AND INSTALLATION >

[XENON TYPE]

FRONT FOG LAMP

Exploded View

INFOID:000000005515109



1. Front fog lamp

2. Pawl

Removal and Installation

INFOID:000000005515110

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the front fender protector. Keep a service area. Refer to [EXT-24, "FENDER PROTECTOR : Exploded View"](#).
2. Remove the front fog lamp connector.
3. Remove the screw.
4. Disengage the pawl. And then remove the front fog lamp.

INSTALLATION

Installation is the reverse order of removal.

NOTE:

After installation, perform aiming adjustment. Refer to [EXL-177, "Description"](#)

Replacement

INFOID:000000005515111

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.

FRONT FOG LAMP BULB

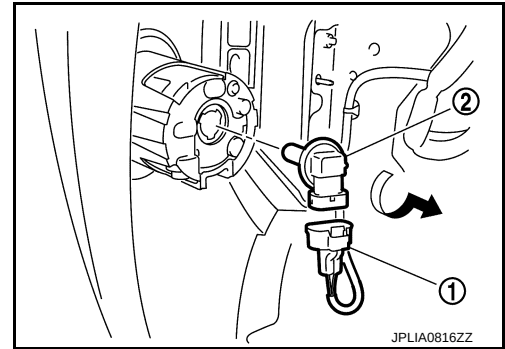
1. Remove the front fender protector. Keep the service area. Refer to [EXT-24, "FENDER PROTECTOR : Exploded View"](#).

FRONT FOG LAMP

< REMOVAL AND INSTALLATION >

[XENON TYPE]

2. Remove the front fog lamp bulb connector (1).
3. Rotate the bulb (2) counterclockwise and unlock it.

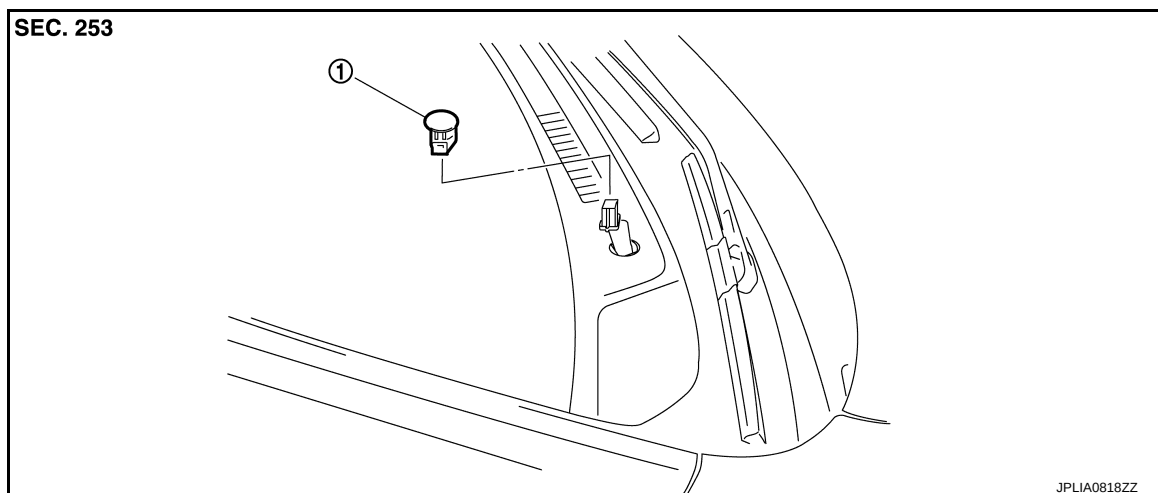


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OPTICAL SENSOR

Exploded View

INFOID:000000005515112



1. Optical sensor

Removal and Installation

INFOID:000000005515113

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.

LIGHTING & TURN SIGNAL SWITCH

< REMOVAL AND INSTALLATION >

[XENON TYPE]

LIGHTING & TURN SIGNAL SWITCH

Exploded View

INFOID:0000000005515114

Removal and Installation

INFOID:0000000005515115

Lighting & turn signal switch is integrated in the combination switch. Refer to [BCS-96, "Exploded View"](#).

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HAZARD SWITCH

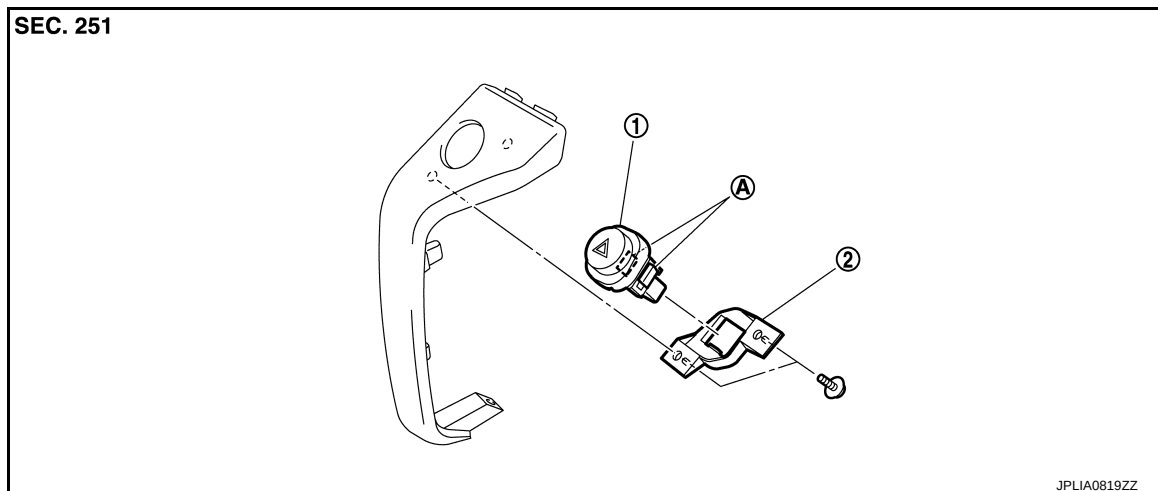
< REMOVAL AND INSTALLATION >

[XENON TYPE]

HAZARD SWITCH

Exploded View

INFOID:000000005515116



- 1. Hazard switch
- A. Pawls
- 2. Switch bracket

Removal and Installation

INFOID:000000005515117

REMOVAL

1. Remove the instrument stay cover (RH). Refer to [IP-12. "Exploded View"](#).
2. Remove the screws. And then remove the switch bracket from the instrument stay cover.
3. Remove the hazard switch.

INSTALLATION

Install in the reverse order of removal.

HEADLAMP AIMING SWITCH

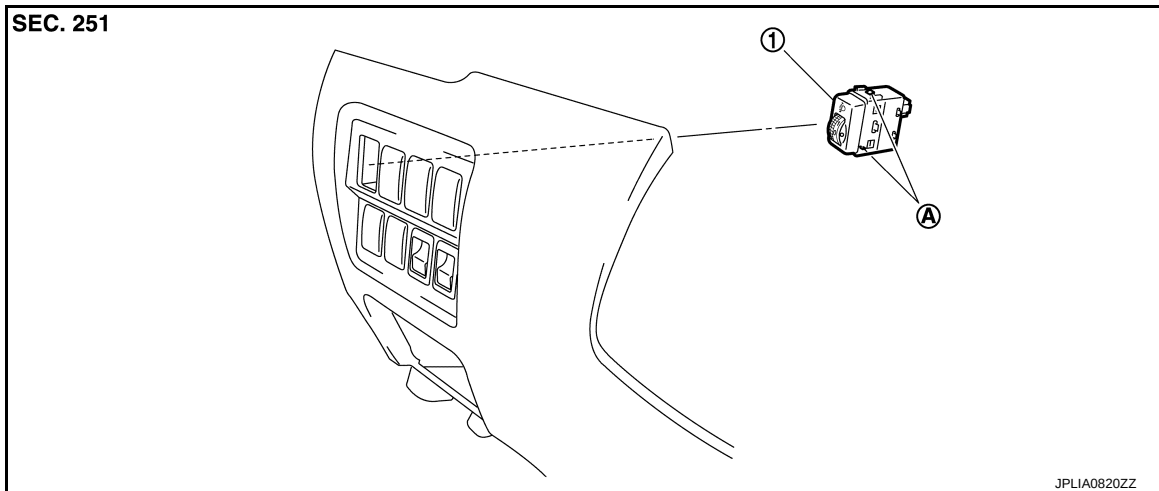
< REMOVAL AND INSTALLATION >

[XENON TYPE]

HEADLAMP AIMING SWITCH

Exploded View

INFOID:000000005515118



- 1. Headlamp aiming switch
- A. Pawls

Removal and Installation

INFOID:000000005515119

REMOVAL

1. Remove the instrument driver lower panel. Refer to [IP-12, "Exploded View"](#).
2. Disengage the pawls. And remove the headlamp aiming switch.

INSTALLATION

Install in the reverse order of removal.

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REAR COMBINATION LAMP

< REMOVAL AND INSTALLATION >

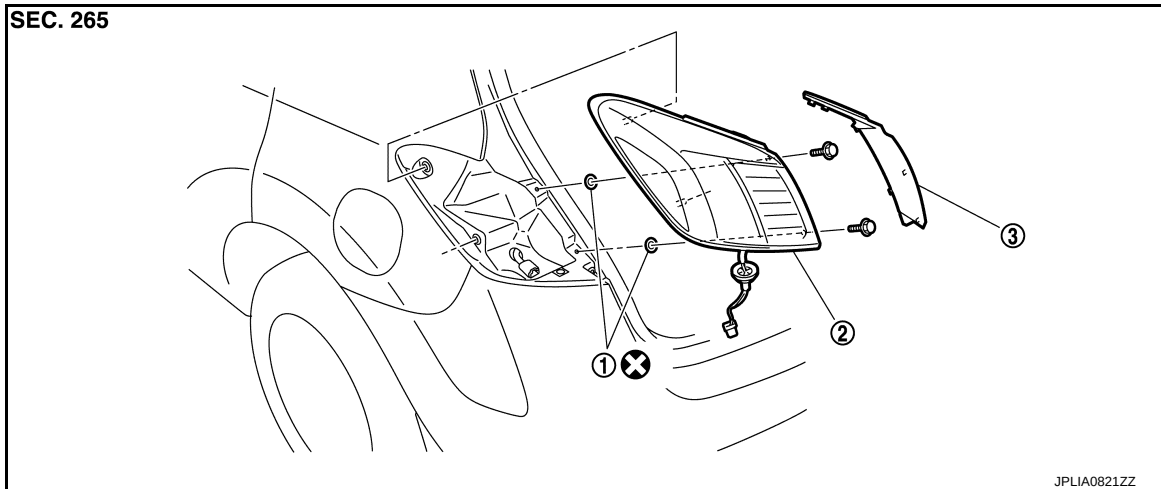
[XENON TYPE]

REAR COMBINATION LAMP

Exploded View

INFOID:000000005515120

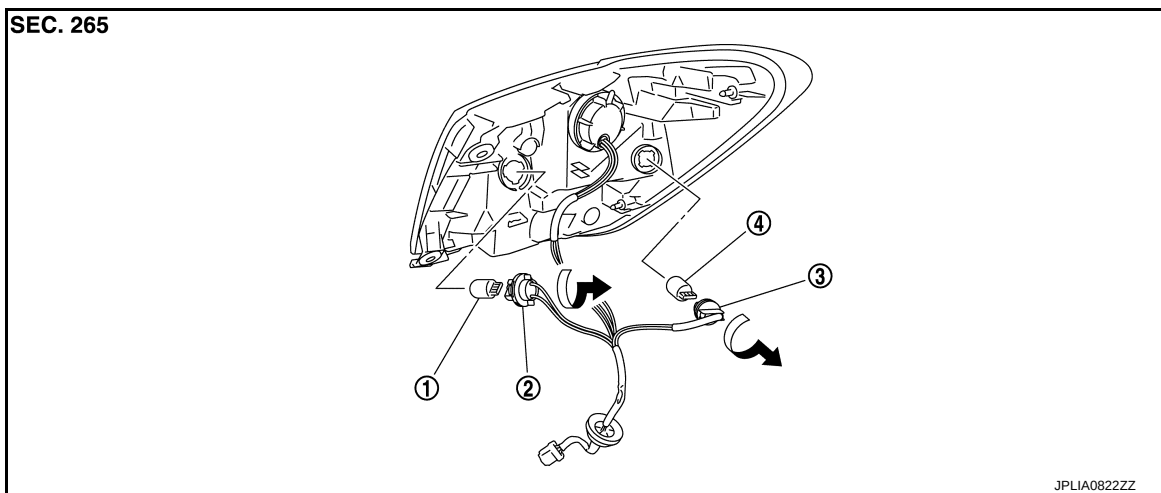
REMOVAL



1. Seal packing 2. Rear combination lamp 3. Rear combination lamp finisher

Refer to [GI-4, "Components"](#) for symbols in the figure.

DISASSEMBLY



1. Rear turn signal lamp bulb 2. Rear turn signal lamp bulb socket 3. Rear side marker lamp bulb socket
4. Rear side marker lamp bulb

Removal and Installation

INFOID:000000005515121

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

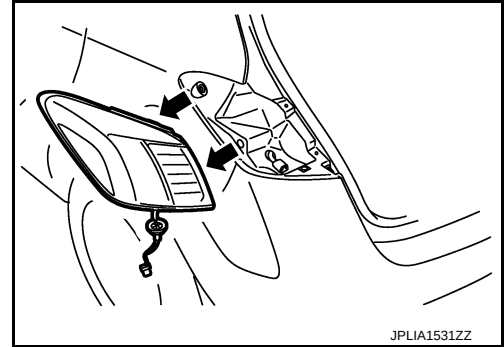
1. Remove the rear combination lamp finisher.
2. Remove the rear combination lamp mounting bolts.

REAR COMBINATION LAMP

< REMOVAL AND INSTALLATION >

[XENON TYPE]

3. Pull the rear combination lamp toward outside of the vehicle (←). Remove the rear combination lamp.
4. Disconnect the rear combination lamp connector.



INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:000000005515122

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.

STOP/TAIL LAMP

Replacement integral with rear combination lamp. Refer to [EXL-188. "Exploded View"](#).

REAR SIDE MARKER LAMP BULB

1. Remove the rear combination lamp. Refer to [EXL-188. "Exploded View"](#).
2. Rotate the rear side marker lamp bulb socket counterclockwise, and unlock it.
3. Remove the bulb from the rear side marker lamp bulb socket.

REAR TURN SIGNAL LAMP BULB

1. Remove the rear combination lamp. Refer to [EXL-188. "Exploded View"](#).
2. Rotate the rear turn signal lamp bulb socket counterclockwise, and unlock it.
3. Remove the bulb from the rear turn signal lamp bulb socket.

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EXL

HIGH-MOUNTED STOP LAMP

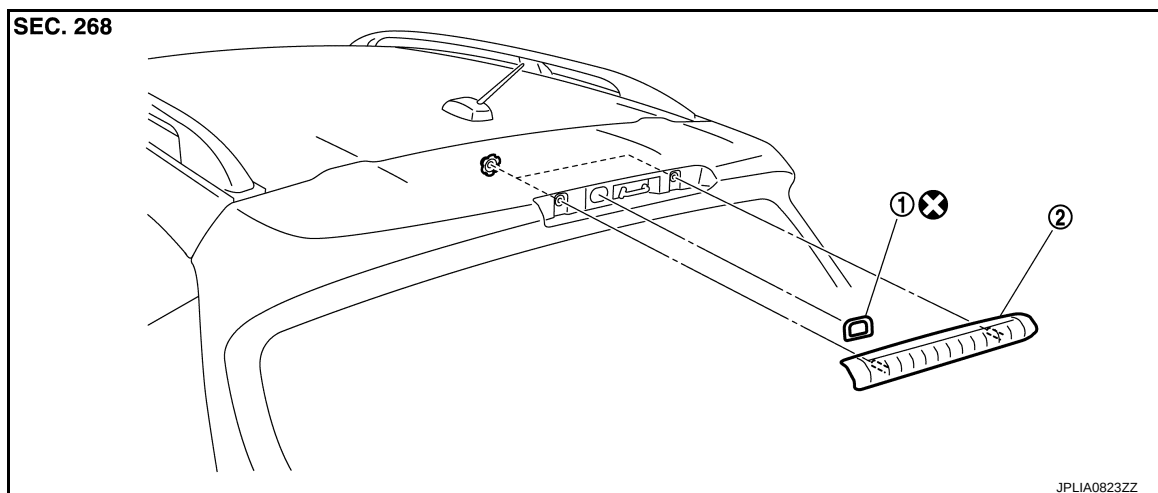
< REMOVAL AND INSTALLATION >

[XENON TYPE]

HIGH-MOUNTED STOP LAMP

Exploded View

INFOID:000000005515123



1. Seal packing
2. High-mounted stop lamp

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000005515124

CAUTION:

Disconnect battery negative terminal or remove the fuse.

REMOVAL

1. Remove the back door plate. Refer to [INT-38, "Exploded View"](#).
2. Remove the high-mounted stop lamp mounting nuts and connector.
3. Pull the high-mounted stop lamp toward rear of the vehicle. Remove the rear washer tube.
4. Disconnect the high-mounted stop lamp connector.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Seal packing cannot be reused.

BACK-UP LAMP

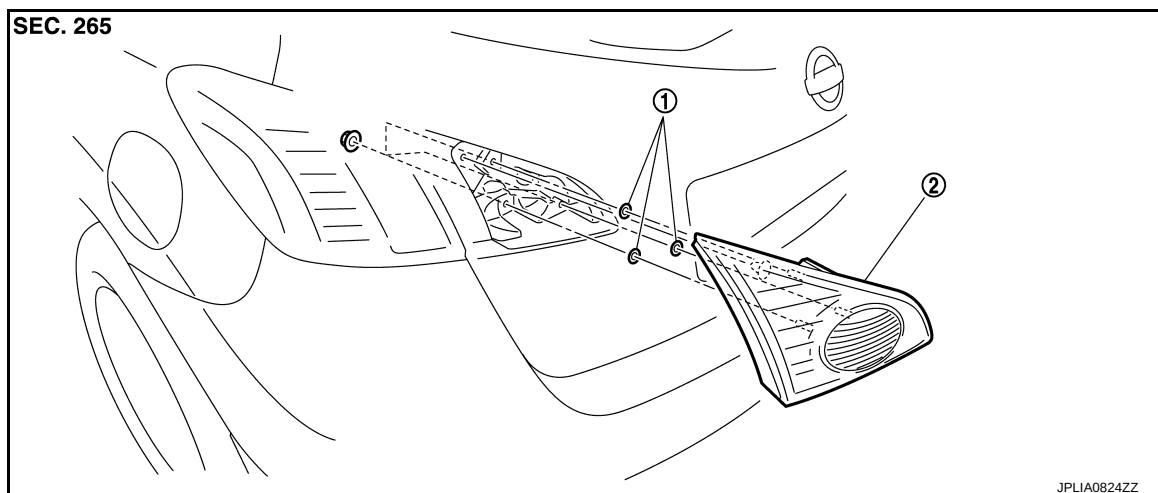
< REMOVAL AND INSTALLATION >

[XENON TYPE]

BACK-UP LAMP

Exploded View

INFOID:000000005515125



1. Seal packing
2. Back-up lamp

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000005515126

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the back door finisher inner. Refer to [INT-38, "Exploded View"](#).
2. Remove the back-up lamp mounting nuts and clip.
3. Disconnect the back-up lamp connector. And then remove the back-up lamp.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Seal packing cannot be reused.

Replacement

INFOID:000000005515127

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

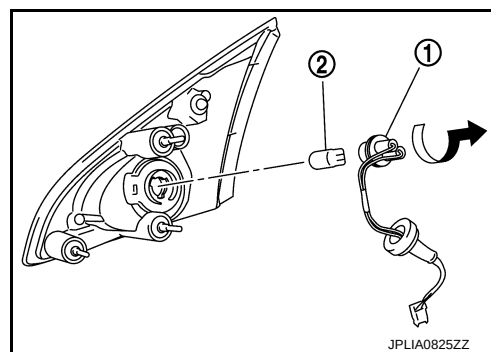
1. Remove the back-up lamp. Refer to [EXL-191, "Exploded View"](#).

BACK-UP LAMP

< REMOVAL AND INSTALLATION >

[XENON TYPE]

2. Disconnect the connector, rotate the back-up lamp bulb socket (1) counterclockwise and unlock it.
3. Remove the bulb (2) from the back-up lamp bulb socket.



LICENSE PLATE LAMP

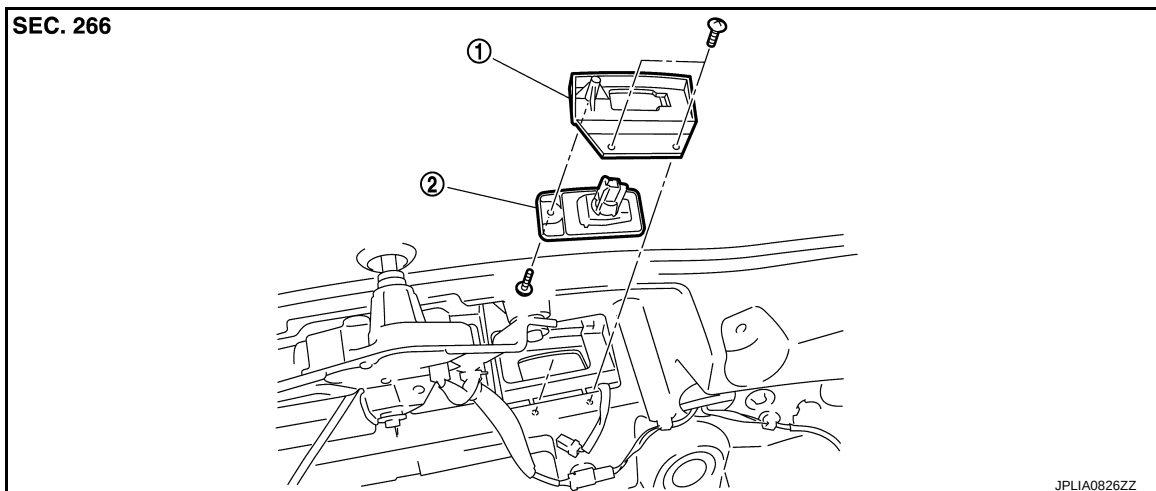
< REMOVAL AND INSTALLATION >

[XENON TYPE]

LICENSE PLATE LAMP

Exploded View

INFOID:000000005515128



1. License plate lamp bracket
2. License plate lamp

Removal and Installation

INFOID:000000005515129

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the back door finisher inner. Refer to [INT-38, "Exploded View"](#).
2. Remove the screw. And then disconnect the license plate lamp connector.
3. Remove the license plate lamp.
4. Remove the screw. And then remove the license plate lamp bracket.

INSTALLATION

Install in the reverse order of removal.

Replacement

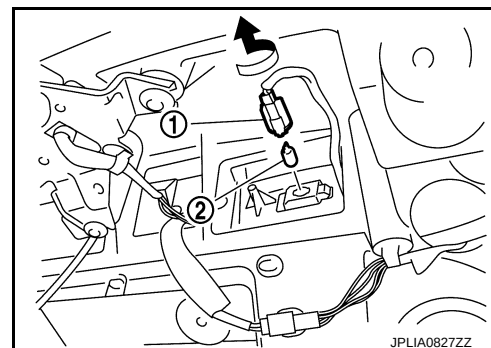
INFOID:000000005515130

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-38, "Exploded View"](#).
2. Turn the license plate lamp bulb socket (1) counterclockwise and unlock it.
3. Remove the bulb (2) from the license plate lamp bulb 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:000000005515131

Item		Type	Wattage (W)
Front combination lamp	Headlamp (HI/LO)	D2S (Xenon)	35
	Front turn signal lamp	WY21W (Amber)	21
	Parking lamp	W5W	5
	Front side marker lamp	WY5W (Amber)	5
Front fog lamp		H8	35
Rear combination lamp	Stop lamp	LED	—
	Tail lamp	LED	—
	Rear turn signal lamp	W21W	21
	Rear side marker lamp	W5W	5
Back-up lamp		W16W	16
License plate lamp		W5W	5
High-mounted stop lamp		LED	—

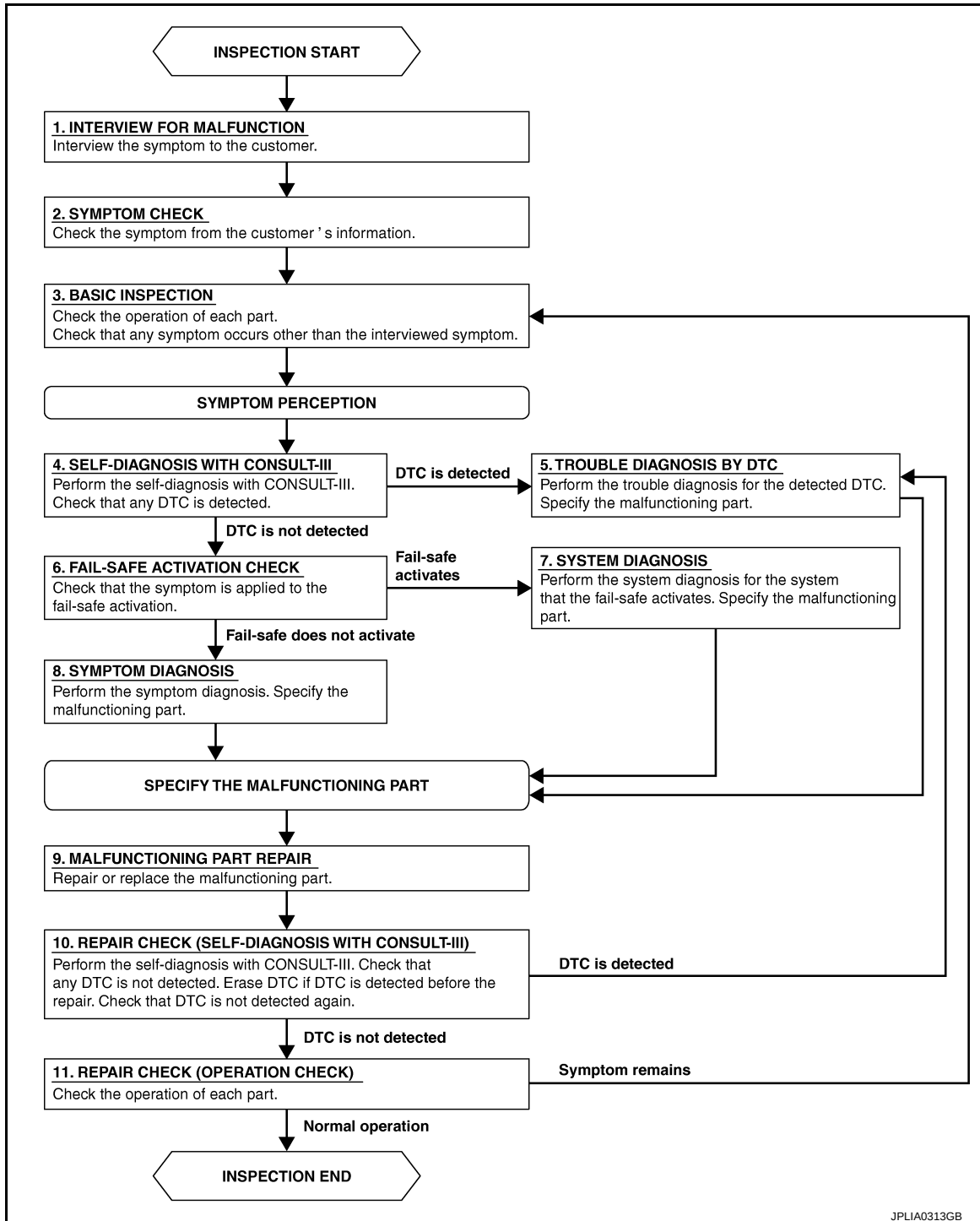
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:000000005515132

OVERALL SEQUENCE



DETAILED FLOW

1. INTERVIEW FOR MALFUNCTION

Interview the symptom to the customer.

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

[HALOGEN TYPE]

>> GO TO 2.

2. SYMPTOM CHECK

Check the symptom from the customer's information.

>> GO TO 3.

3. BASIC INSPECTION

Check the operation of each part. Check that any symptom occurs other than the interviewed symptom.

>> GO TO 4.

4. SELF-DIAGNOSIS WITH CONSULT-III

Perform the self-diagnosis with CONSULT-III. Check that any DTC is detected.

Is any DTC detected?

YES >> GO TO 5.

NO >> GO TO 6.

5. TROUBLE DIAGNOSIS BY DTC

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

>> GO TO 9.

6. FAIL-SAFE ACTIVATION CHECK

Check that the symptom is applied to the fail-safe activation.

Does the fail-safe activate?

YES >> GO TO 7.

NO >> GO TO 8.

7. SYSTEM DIAGNOSIS

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

>> GO TO 9.

8. SYMPTOM DIAGNOSIS

Perform the symptom diagnosis. Specify the malfunctioning part.

>> GO TO 9.

9. MALFUNCTION PART REPAIR

Repair or replace the malfunctioning part.

>> GO TO 10.

10. REPAIR CHECK (SELF-DIAGNOSIS WITH CONSULT-III)

Perform the self-diagnosis with CONSULT-III. Check that any DTC is not detected. Erase DTC if DTC is detected before the repair. Check that DTC is not detected again.

Is any DTC detected?

YES >> GO TO 5.

NO >> GO TO 11.

11. REPAIR CHECK (OPERATION CHECK)

Check the operation of each part.

Does it operate normally?

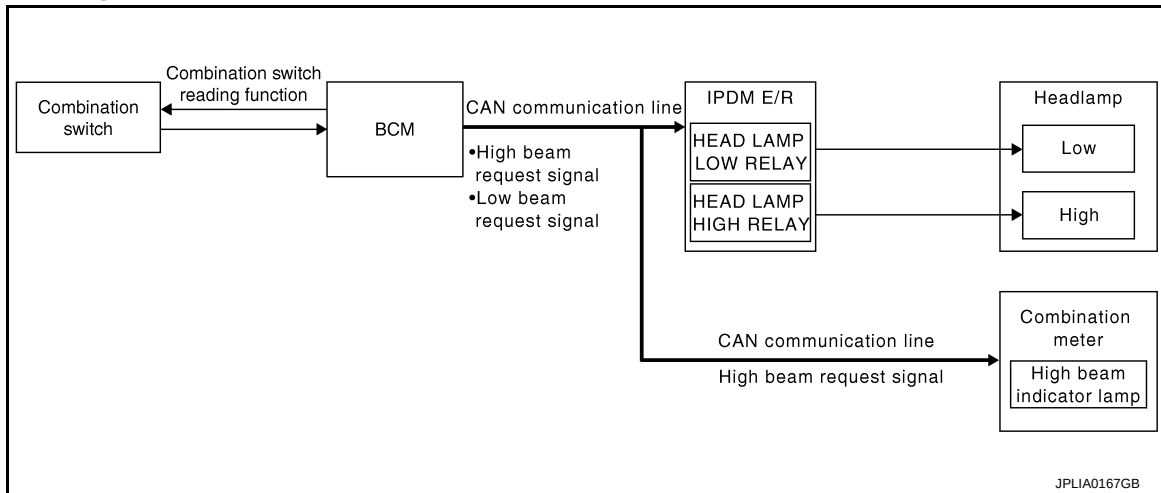
YES >> INSPECTION END

NO >> GO TO 3.

SYSTEM DESCRIPTION

HEADLAMP SYSTEM

System Diagram



System Description

INFOID:0000000005515134

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 (With auto light system)
- IPDM E/R turns the integrated headlamp low relay ON, and turns the headlamp ON according to the low beam request signal.

HEADLAMP (HI) OPERATION

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

Headlamp (HI) ON condition

- Lighting switch HI with the lighting switch 2ND
- Lighting switch AUTO, and the auto light function ON judgment (With auto light system)
- 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.

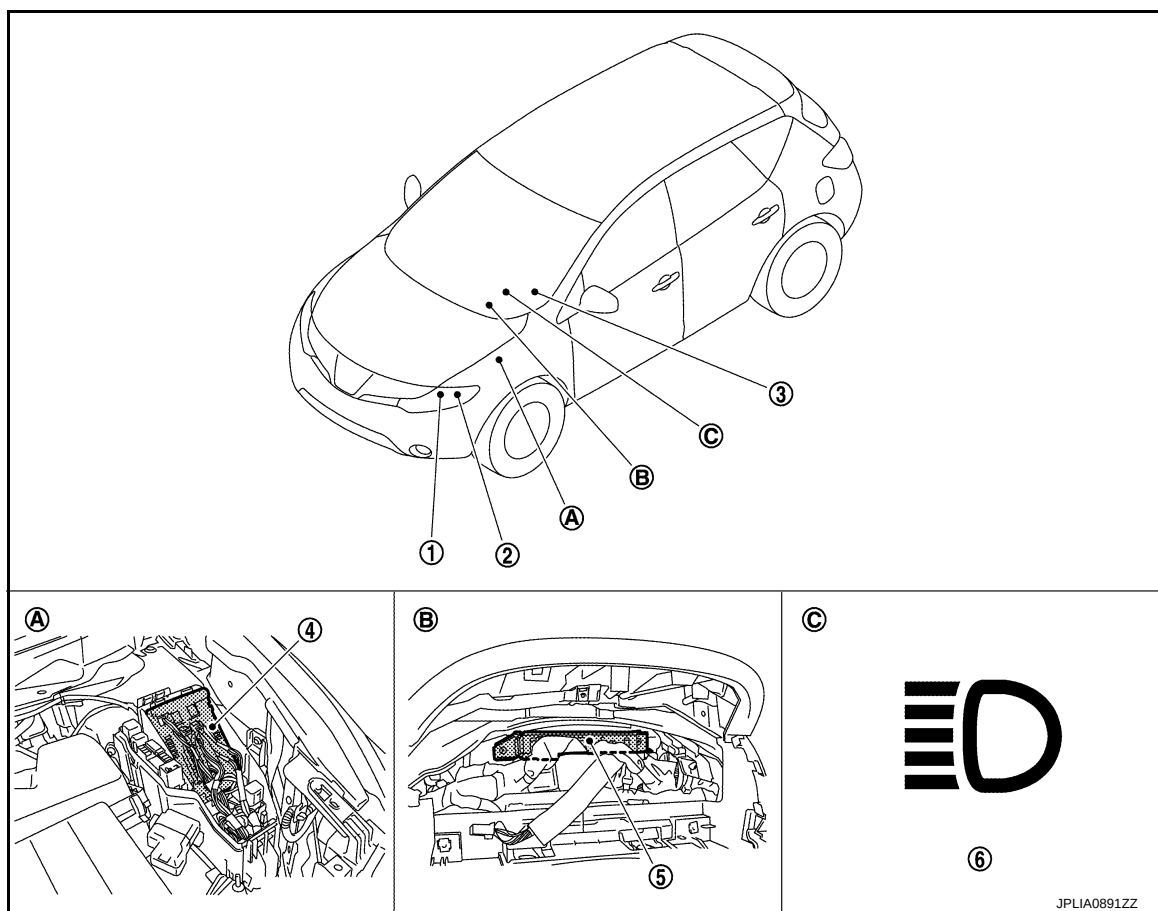
HEADLAMP SYSTEM

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000005515135



- | | | |
|---------------------|---------------------------------|-----------------------------|
| 1. Headlamp (HI) | 2. Headlamp (LO) | 3. Combination switch |
| 4. IPDM E/R | 5. BCM | 6. High beam indicator lamp |
| A. Engine room (LH) | B. Behind the combination meter | C. On the combination meter |

Component Description

INFOID:000000005515136

Part	Description
BCM	• 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-9, "System Description" .
Combination meter (High beam indicator lamp)	Turns the high beam indicator lamp ON according to the request from BCM (with CAN communication).

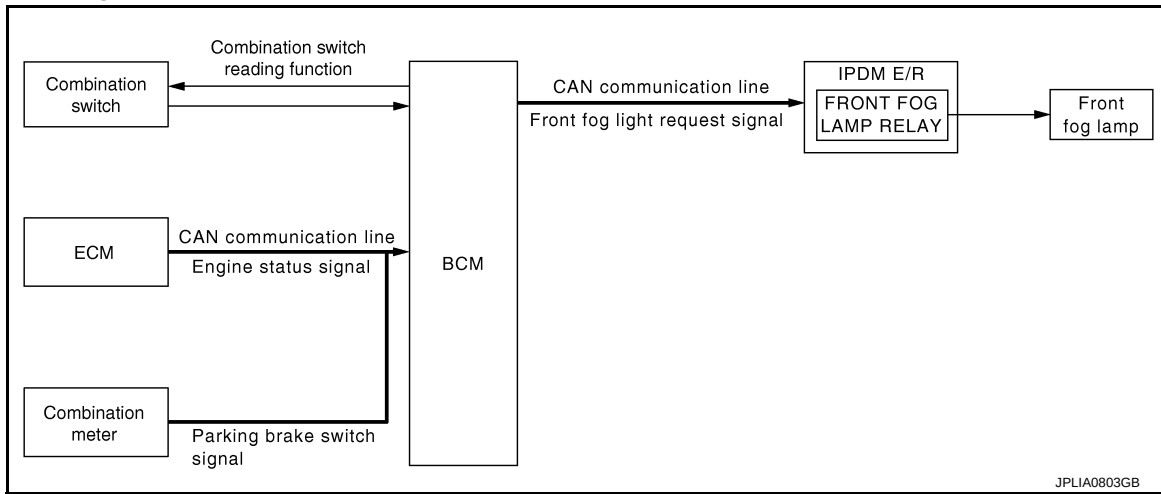
DAYTIME RUNNING LIGHT SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

System Diagram



System Description

INFOID:000000005515138

OUTLINE

- Turns the front fog lamp ON as the daytime running light.
- 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 condition signal (received from ECM with CAN communication)
 - Parking brake switch signal (received from combination meter with CAN communication)
- BCM transmits the front fog light request signal to IPDM E/R with CAN communication according to the daytime running light ON condition.

Daytime running light ON condition

- While the engine running with the parking brake released

Daytime running light OFF condition

- Engine stopped
- Headlamp ON (Passing included)
- 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.

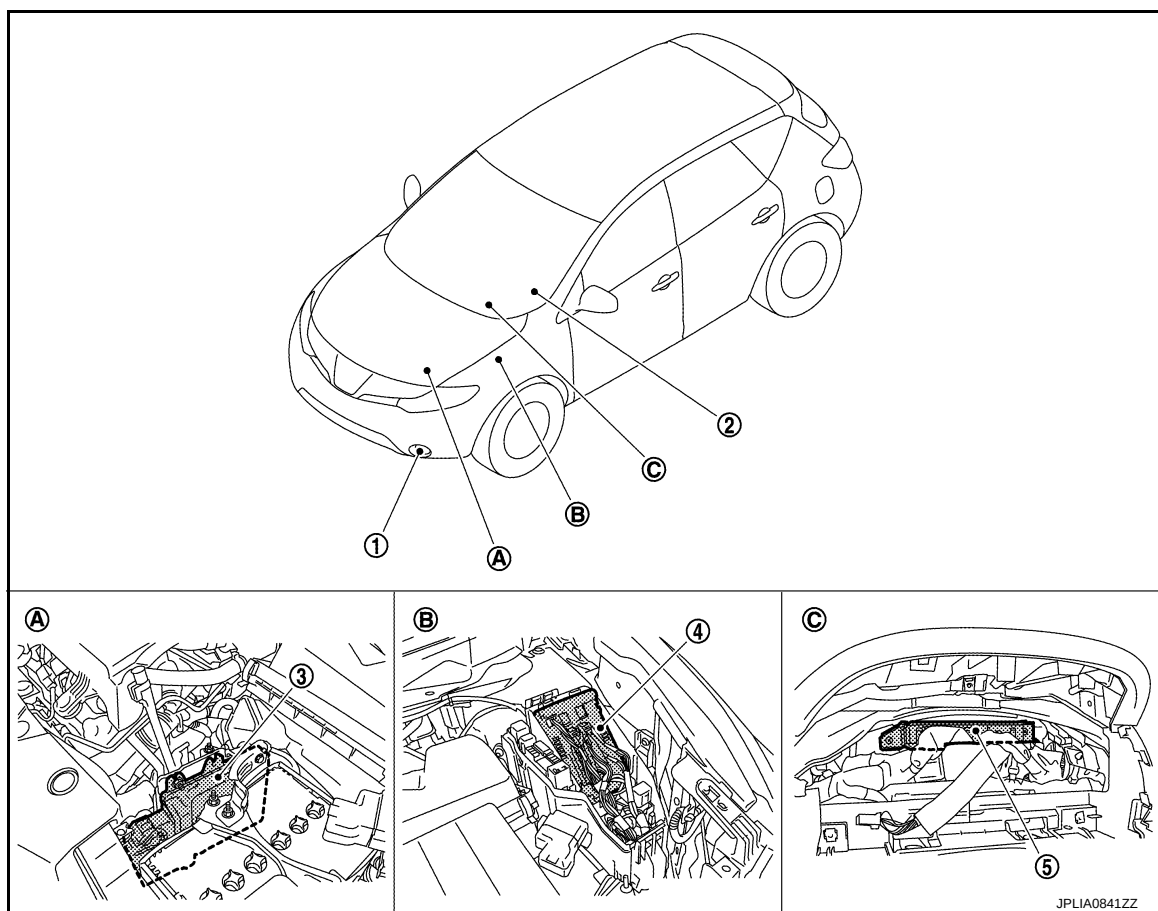
DAYTIME RUNNING LIGHT SYSTEM

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000005515139



- | | | |
|---|-----------------------|---------------------------------|
| 1. Daytime running light (Front fog lamp) | 2. Combination switch | 3. ECM |
| 4. IPDM E/R | 5. BCM | |
| A. Engine room (LH) | B. Engine room (LH) | C. Behind the combination meter |

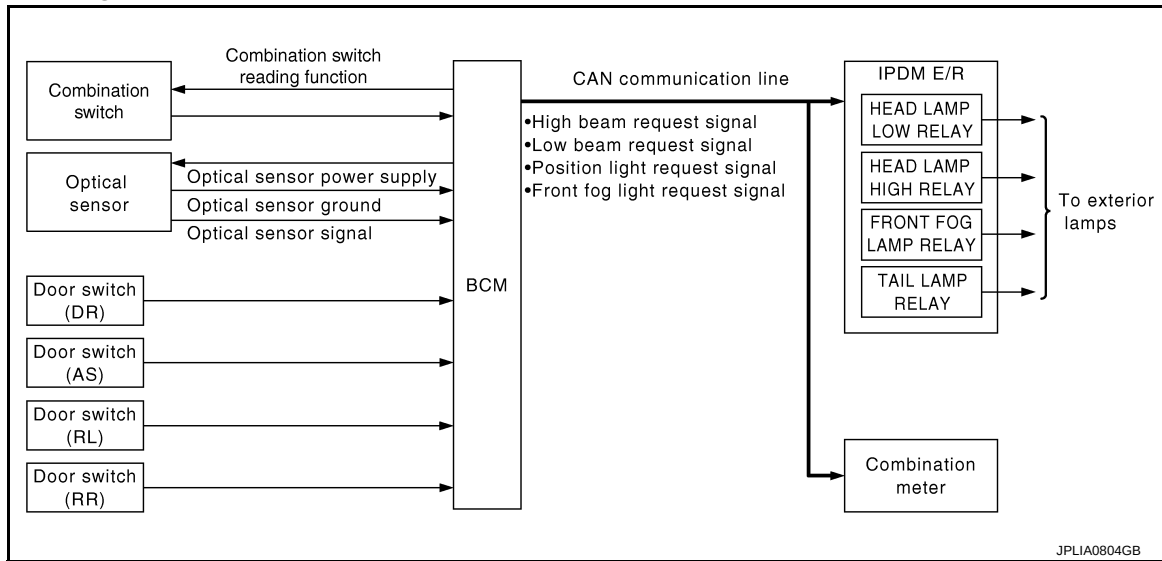
Component Description

INFOID:000000005515140

Part	Description
BCM	• Detects each switch condition with the combination switch reading function. • Judges the headlamp 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-9, "System Description" .
ECM	Transmits the engine condition signal to BCM with CAN communication.
Combination meter	Transmits the parking brake switch signal to BCM with CAN communication.

AUTO LIGHT SYSTEM

System Diagram



System Description

INFOID:000000005575265

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

AUTO LIGHT FUNCTION

- BCM detects the combination switch condition with the combination switch reading function.
- BCM supplies voltage to optical sensor when the 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-III. Refer to [EXL-212, "HEADLAMP : CONSULT-III Function \(BCM - HEAD LAMP\)"](#).

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

AUTO LIGHT SYSTEM

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

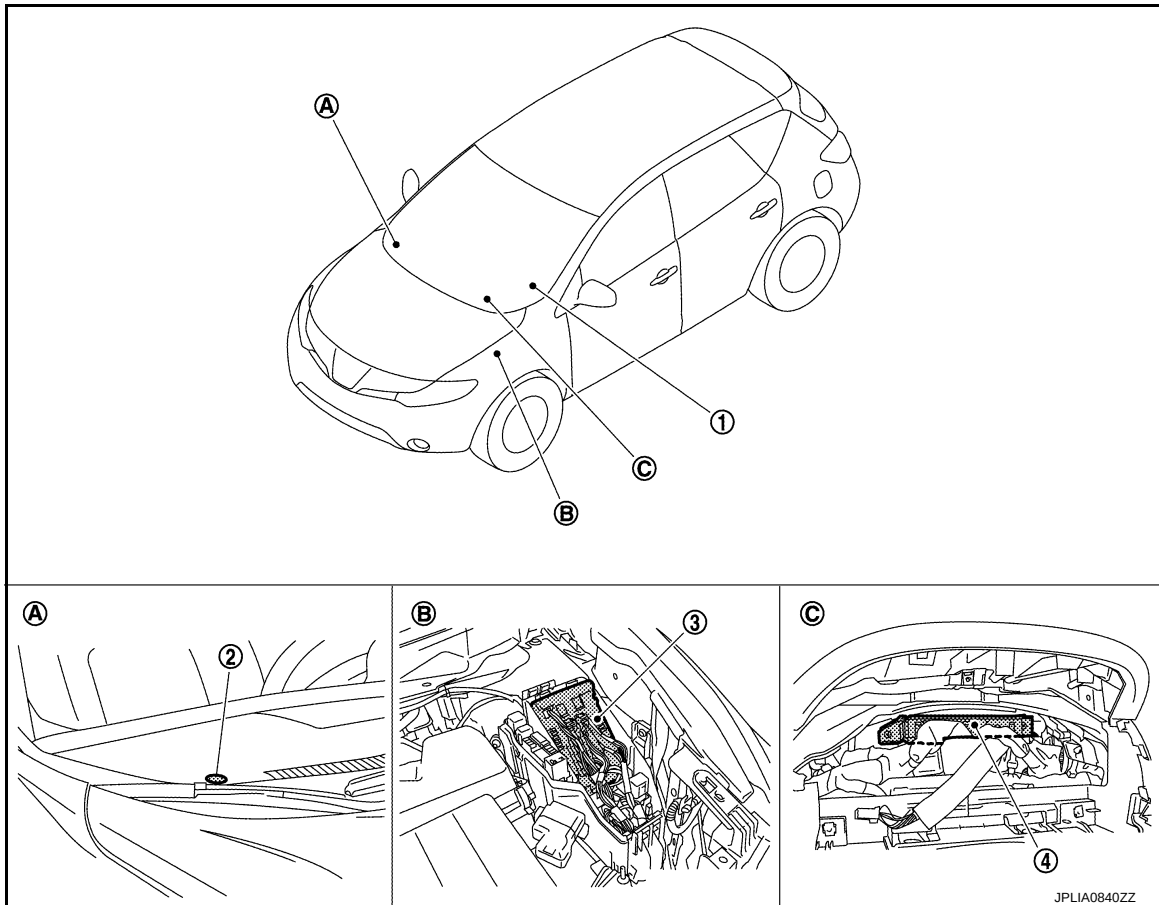
- Turns the exterior lamp OFF with the ignition switch ACC or the light switch OFF.
- *: The preset time is 45 seconds. The timer operating time can be set by CONSULT-III. Refer to [EXL-212, "HEADLAMP : CONSULT-III Function \(BCM - HEAD LAMP\)"](#).

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:000000005575266



- | | | |
|--------------------------------|---------------------|---------------------------------|
| 1. Combination switch | 2. Optical sensor | 3. IPDM E/R |
| 4. BCM | | |
| A. Instrument upper panel (RH) | B. Engine room (LH) | C. Behind the combination meter |

Component Description

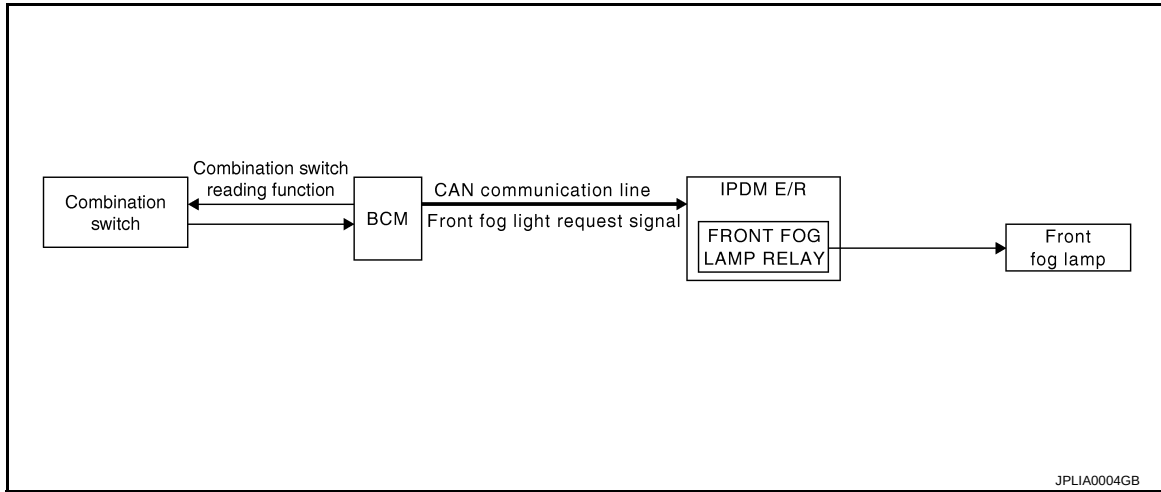
INFOID:000000005575267

Part	Description
BCM	• Detects 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-9, "System Description" .
Optical sensor	Refer to EXL-237, "Description" .

FRONT FOG LAMP SYSTEM

System Diagram

INFOID:000000005515141



System Description

INFOID:000000005515142

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 with CAN communication according to the front fog lamp ON condition.

Front fog lamp ON condition

- Front fog lamp switch ON with headlamp ON (except for the high beam 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.

EXL

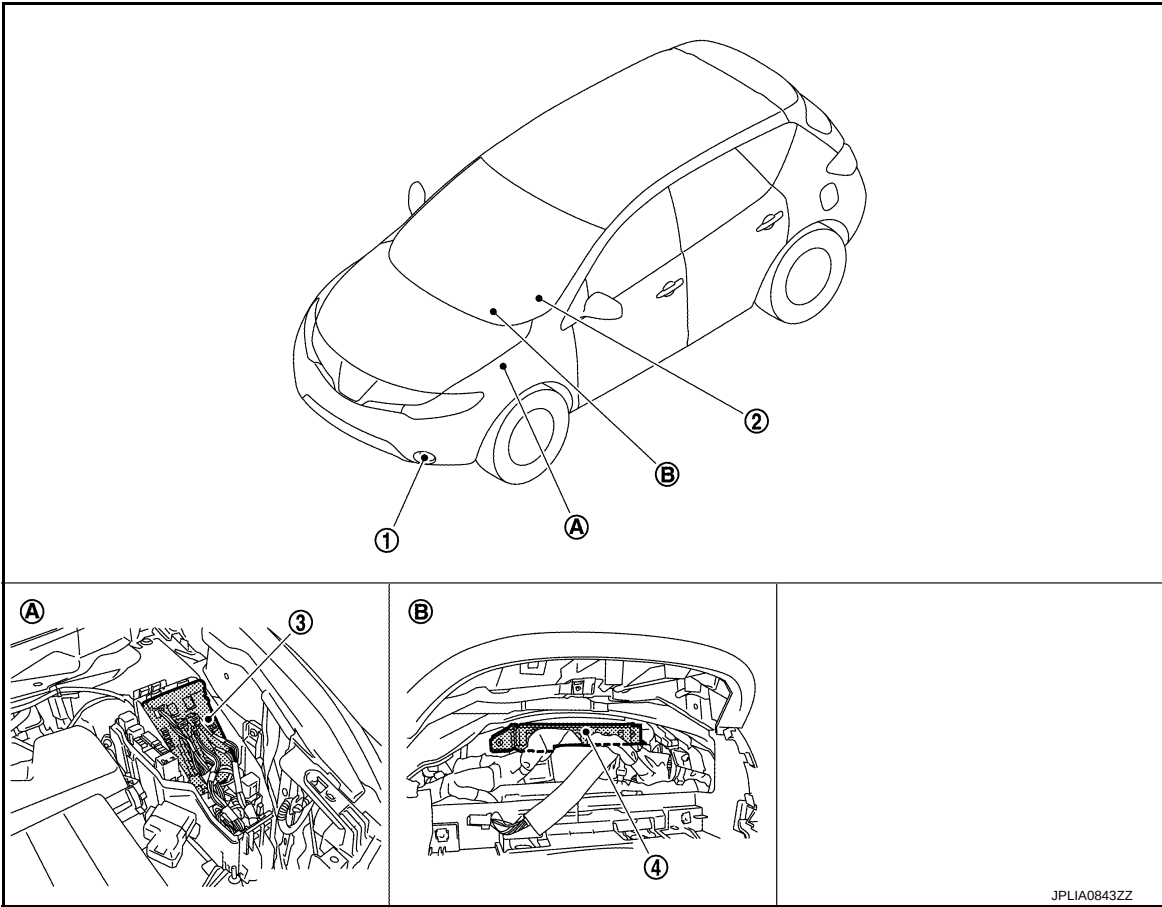
FRONT FOG LAMP SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Component Parts Location

INFOID:000000005515143



1. Front fog lamp
2. Combination switch
3. IPDM E/R
4. BCM
A. Engine room (LH)
B. Behind the combination meter

Component Description

INFOID:000000005515144

Part	Description
BCM	• Detects 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-9, "System Description" .

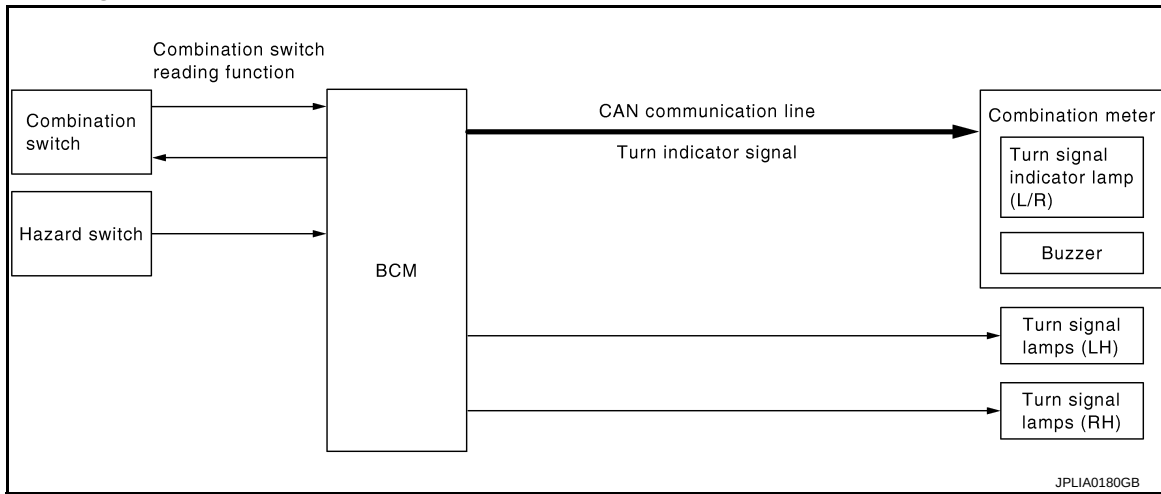
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

System Diagram



System Description

INFOID:0000000005515146

OUTLINE

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

TURN SIGNAL LAMP OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM supplies voltage to the right (left) turn signal lamp circuit when the 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 indicator signal to the combination meter with CAN communication while the turn signal lamp and the hazard warning lamp are operating.
- Combination meter outputs the turn signal sound with the integrated buzzer while blinking the turn signal indicator lamp according to the turn indicator signal.

HIGH FLASHER OPERATION (FAIL-SAFE)

- BCM detects the turn signal lamp circuit status by the terminal 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.

A
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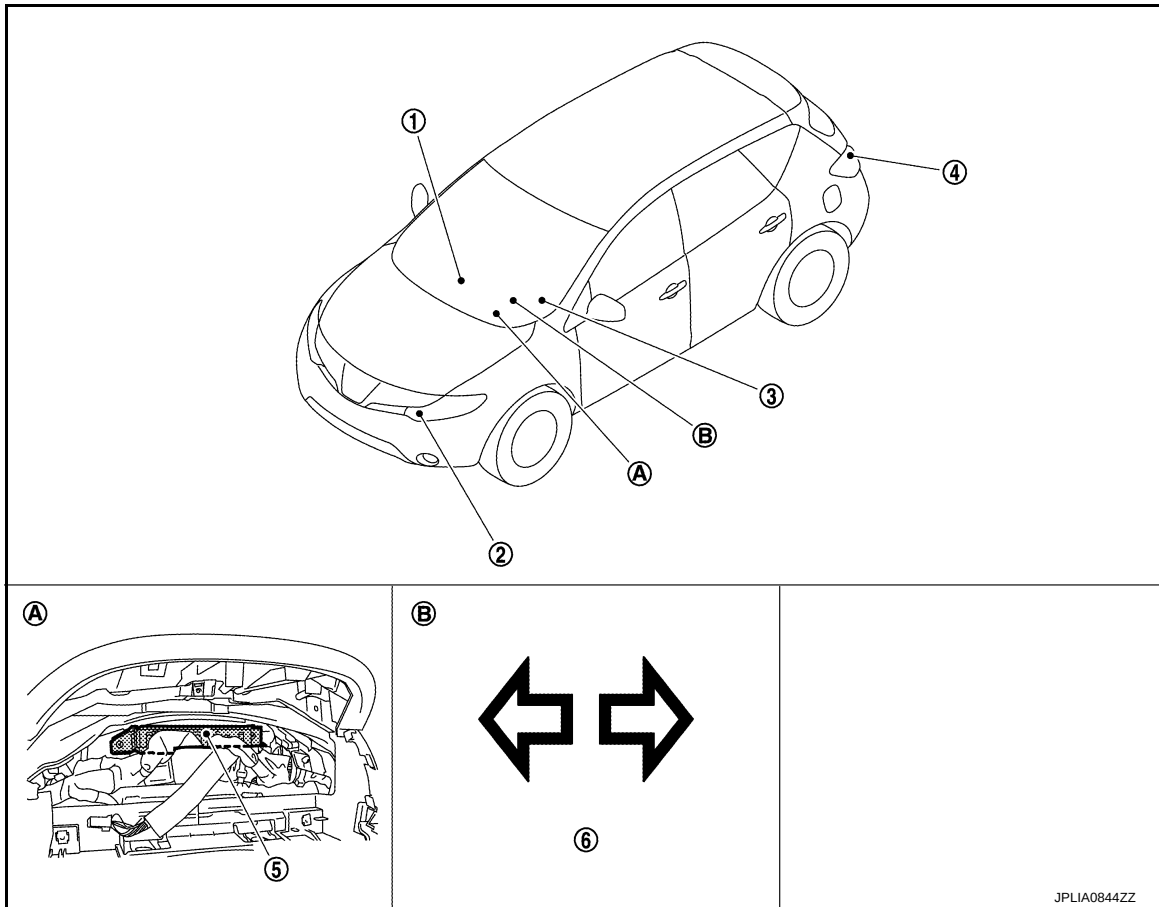
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Component Parts Location

INFOID:000000005515147



- | | | |
|---------------------------------|-----------------------------|-------------------------------|
| 1. Hazard switch | 2. Front turn signal lamp | 3. Combination switch |
| 4. Rear turn signal lamp | 5. BCM | 6. Turn signal indicator lamp |
| A. Behind the combination meter | B. On the combination meter | |

Component Description

INFOID:000000005515148

Part	Description
BCM	• Detects 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-9, "System Description" .
Hazard switch	Inputs the hazard switch ON/OFF signal to BCM.
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).

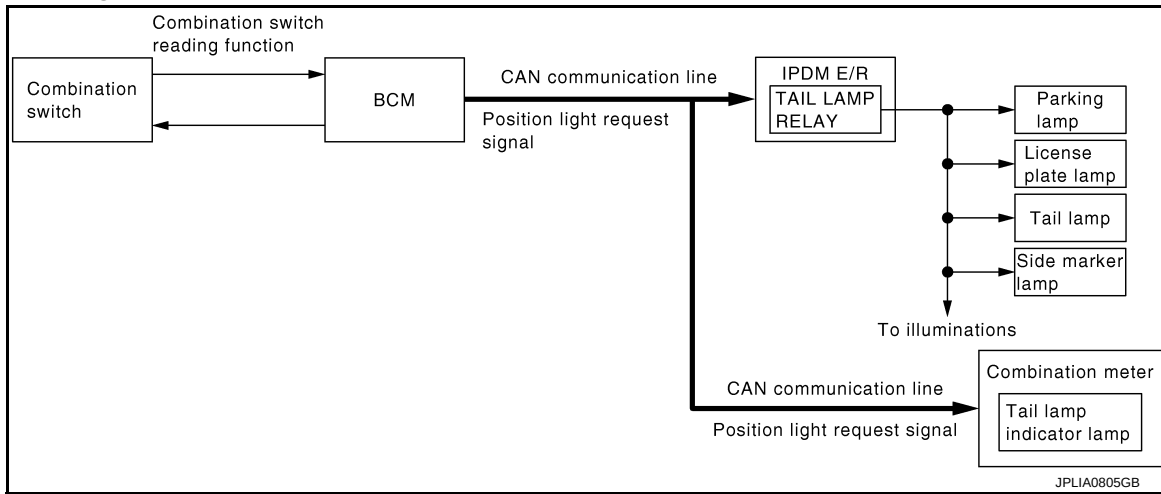
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

System Diagram



System Description

INFOID:0000000005515150

OUTLINE

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

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS OPERATION

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits the position light request signal to IPDM E/R and the combination meter 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
- 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.

EXL

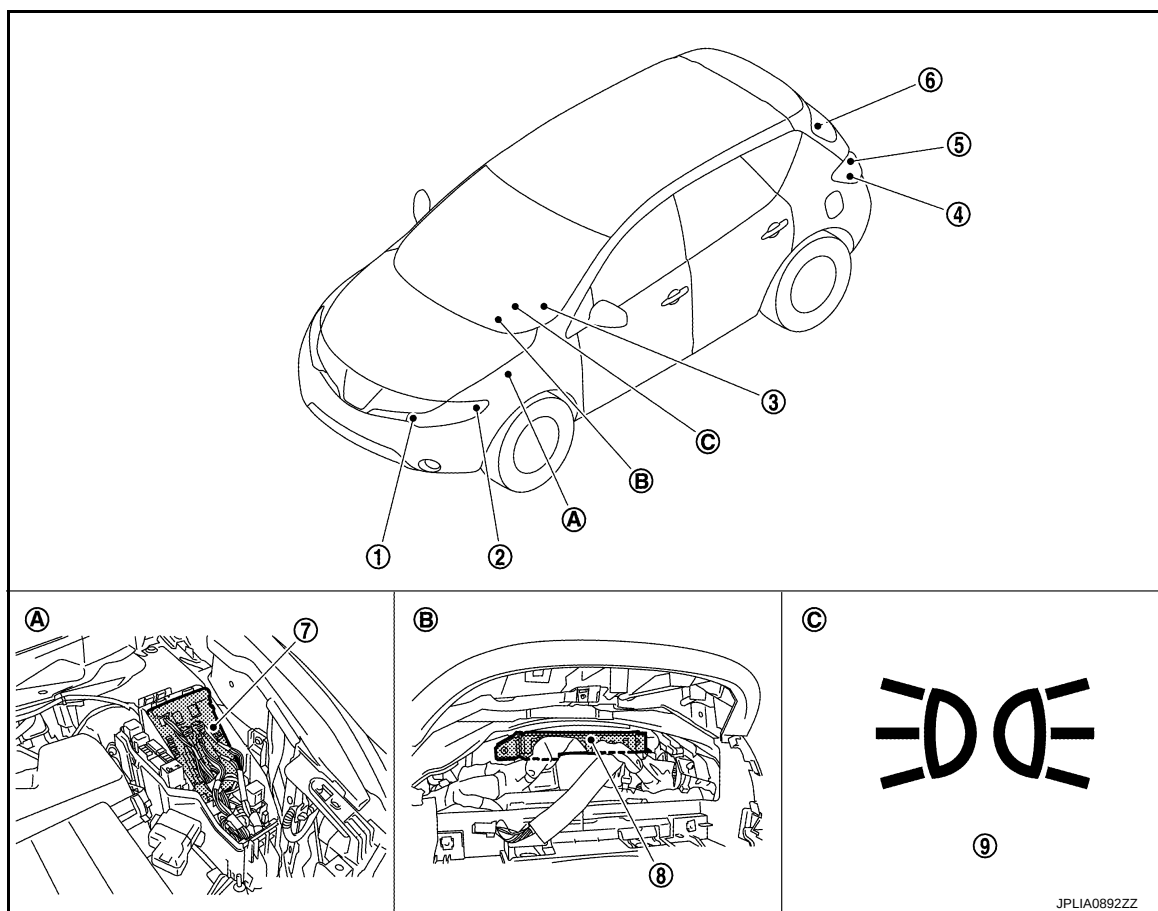
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Component Parts Location

INFOID:000000005515151



- | | | |
|--------------------------|---------------------------------|-----------------------------|
| 1. Parking lamp | 2. Front side marker lamp | 3. Combination switch |
| 4. Rear side marker lamp | 5. Tail lamp | 6. License plate lamp |
| 7. IPDM E/R | 8. BCM | 9. Tail lamp indicator lamp |
| A. Engine room (LH) | B. Behind the combination meter | C. On the combination meter |

Component Description

INFOID:000000005515152

Part	Description
BCM	• Detects each switch condition by the combination switch reading function. • Judges the ON/OFF status of the parking, license plate and tail lamps according to the vehicle condition. - Requests the tail lamp relay ON to IPDM E/R (with CAN communication). - Requests the tail lamp 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-9, "System Description" .
Combination meter (Tail lamp indicator lamp)	Turns the tail lamp indicator lamp ON according to the request from BCM (with CAN communication).

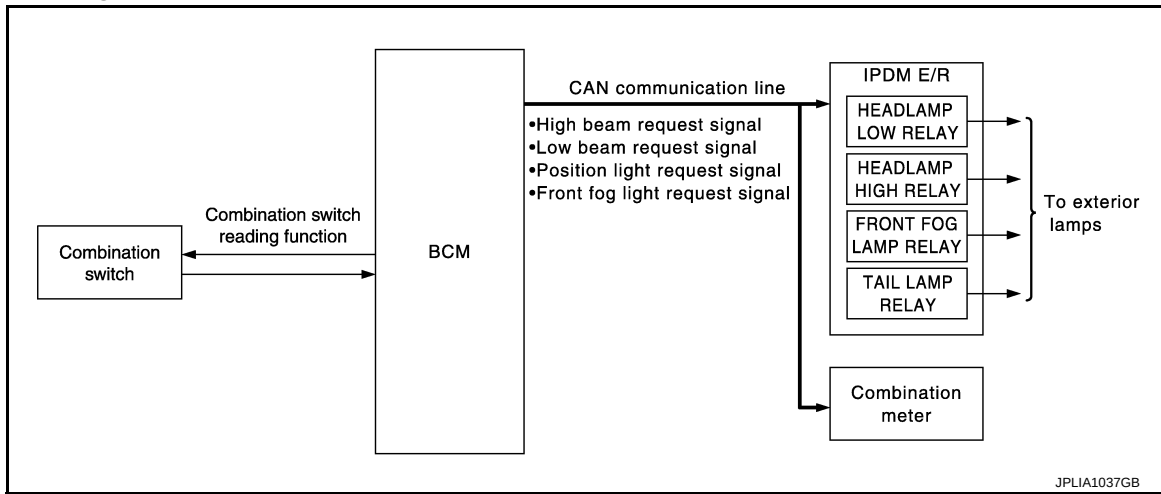
EXTERIOR LAMP BATTERY SAVER SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

EXTERIOR LAMP BATTERY SAVER SYSTEM

System Diagram



System Description

INFOID:000000005515154

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, side marker lamp, tail lamp, license plate lamp and front fog lamp.

EXTERIOR LAMP BATTERY SAVER ACTIVATION

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

NOTE:

- Headlamp control function turns the exterior lamps ON normally when the ignition switch is turned ACC or 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.

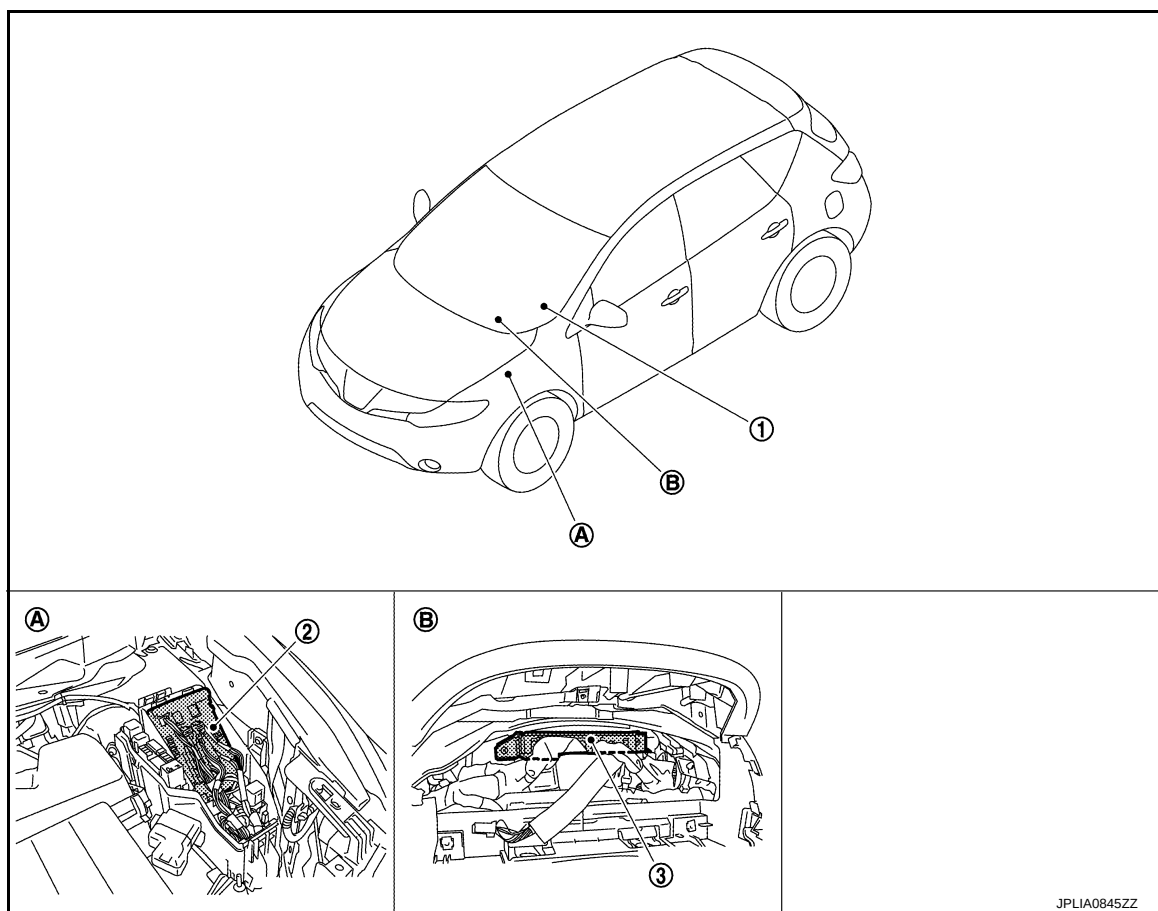
EXTERIOR LAMP BATTERY SAVER SYSTEM

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Component Parts Location

INFOID:000000005515155



1. Combination switch

2. IPDM E/R

3. BCM

A. Engine room (LH)

B. Behind the combination meter

Component Description

INFOID:000000005515156

Part	Description
BCM	• Detects each switch condition by the combination switch reading function. • Activates the battery saver to turn the exterior lamps 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-9. "System Description" .

DIAGNOSIS SYSTEM (BCM)

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)

INFOID:000000005681415

APPLICATION ITEM

CONSULT-III 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. Refer to CONSULT-III operation manual.
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	- 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.

x: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	x	x	x
Rear window defogger	REAR DEFOGGER		x	x
Warning chime	BUZZER		x	x
Interior room lamp timer	INT LAMP	x	x	x
Exterior lamp	HEAD LAMP	x	x	x
Wiper and washer	WIPER	x*1	x	x
Turn signal and hazard warning lamps	FLASHER	x	x	x
—	AIR CONDITONER*2			
- Intelligent Key system - Engine start system	INTELLIGENT KEY	x	x	x
Combination switch	COMB SW		x	
Body control system	BCM	x		
NVIS - NATS	IMMU		x	x
Interior room lamp battery saver	BATTERY SAVER	x	x	x
Back door opener system	TRUNK		x	x
Vehicle security system	THEFT ALM	x	x	x
RAP system	RETAINED PWR		x	
Signal buffer system	SIGNAL BUFFER		x	x
TPMS	TPMS (AIR PRESSURE MONITOR)	x	x	x

NOTE:

- *1: For models with rain sensor this mode is displayed, but is not used.
- *2: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

DIAGNOSIS SYSTEM (BCM)

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

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

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 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" (Vehicle is stopping and selector lever is except P position.)
	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" (Ignition switch OFF with steering is locked.)
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)
	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 • 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.	

HEADLAMP

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

INFOID:000000005515158

WORK SUPPORT

Service item	Setting item	Setting
BATTERY SAVER SET	On*	With the exterior lamp battery saver function
	Off	Without the exterior lamp battery saver function

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Service item	Setting item	Setting	
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.)	

*: Factory setting

DATA MONITOR

Monitor item [Unit]	Description
PUSH SW [On/Off]	The switch status input from push-button ignition switch
ENGINE STATE [Stop/Stall/Crank/Run]	The engine status received from ECM with CAN communication
VEH SPEED 1 [km/h]	The value of the vehicle speed received from combination meter with CAN communication
KEY SW-SLOT [On/Off]	Key switch status input from key slot
TURN SIGNAL R [On/Off]	Each switch status that BCM detects 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]	
RR FOG SW [On/Off]	
DOOR SW-DR [On/Off]	The switch status input from front door switch (driver side)
DOOR SW-AS [On/Off]	The switch status input from front door switch (passenger side)

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Monitor item [Unit]	Description
DOOR SW-RR [On/Off]	The switch status input from rear door switch RH
DOOR SW-RL [On/Off]	The switch status input from rear door switch LH
DOOR SW-BK [On/Off]	NOTE: The item is indicated, but not monitored.
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	NOTE: The item is indicated, but cannot be tested.
	Off	
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-III Function (BCM - FLASHER)

INFOID:000000005515159

WORK SUPPORT

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	

*: Factory setting

DATA MONITOR

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	The switch status input from the request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from the request switch (passenger side)
PUSH SW [On/Off]	The switch status input from the push-button ignition switch
TURN SIGNAL R [On/Off]	Each switch status that BCM detects 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]	Lock signal status received from the remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from the remote keyless entry receiver
RKE-PANIC [On/Off]	Panic alarm signal status received from the remote keyless entry receiver

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:000000005681418

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 marker lamps
- Tail lamps
- Front fog lamps
- Headlamps (LO, HI)
- A/C compressor (magnet clutch)
- Cooling fan

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-97, "WITH AUTOMATIC BACK DOOR : 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.

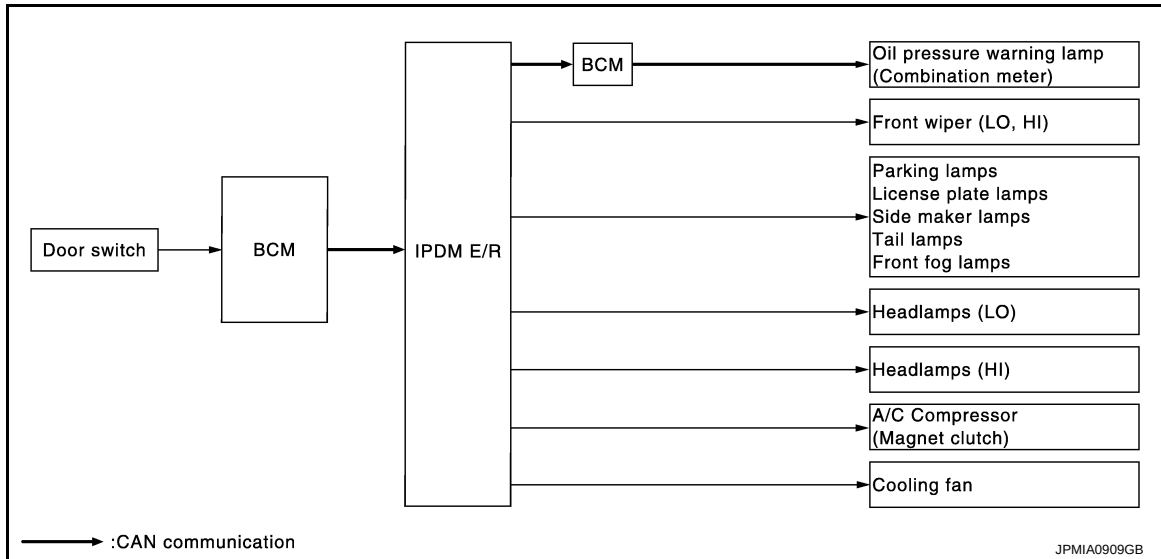
Operation sequence	Inspection location	Operation
1	Oil pressure warning lamp	Blinks continuously during operation of auto active test
2	Front wiper	LO for 5 seconds → HI for 5 seconds
3	• Parking lamps • License plate lamps • Side marker lamps • Tail lamps • Front fog lamps	10 seconds
4	Headlamps	LO ⇔ HI 5 times
5	A/C compressor (magnet clutch)	ON ⇔ OFF 5 times
6	Cooling fan	LO for 5 seconds → MID for 3 seconds → HI for 2 seconds

DIAGNOSIS SYSTEM (IPDM E/R)

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

Concept of auto active test



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

Diagnosis chart in auto active test mode

Symptom	Inspection contents	Possible cause
Any of the following components do not operate • Parking lamps • License plate lamps • Side maker lamps • Tail lamps • Front fog lamps • Headlamp (HI, LO) • Front wiper (HI, LO)	Perform auto active test. Does the applicable system operate?	YES BCM signal input circuit
		NO • Lamp or motor • Lamp or motor ground circuit • Harness or connector between IPDM E/R and applicable system • IPDM E/R
A/C compressor does not operate	Perform auto active test. Does the magnet clutch operate?	YES • A/C amp. signal input circuit • CAN communication signal between A/C amp. and ECM • CAN communication signal between ECM and IPDM E/R
		NO • Magnet clutch • Harness or connector between IPDM E/R and magnet clutch • IPDM E/R
Oil pressure warning lamp does not operate	Perform auto active test. Does the oil pressure warning lamp blink?	YES • Harness or connector between IPDM E/R and oil pressure switch • Oil pressure switch • IPDM E/R
		NO • CAN communication signal between IPDM E/R and BCM • CAN communication signal between BCM and combination meter • Combination meter

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Symptom	Inspection contents		Possible cause
Cooling fan does not operate	Perform auto active test. Does the cooling fan operate?	YES	- ECM signal input circuit - CAN communication signal between ECM and IPDM E/R
		NO	- Harness or connector between IPDM E/R and cooling fan motor - Harness or connector between IPDM E/R and cooling fan relay - Cooling fan motor - Cooling fan relay - IPDM E/R

CONSULT-III Function (IPDM E/R)

INFOID:000000005681419

APPLICATION ITEM

CONSULT-III 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-348, "DTC Index"](#).

DATA MONITOR

Monitor item

Monitor Item [Unit]	MAIN SIGNALS	Description
MOTOR FAN REQ [1/2/3/4]	×	Displays the value of the cooling fan speed request 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.
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.

DIAGNOSIS SYSTEM (IPDM E/R)

[HALOGEN TYPE]

< SYSTEM DESCRIPTION >

Monitor Item [Unit]	MAIN SIG- NALS	Description
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/INHI RLY [Off/ ST ON/INHI 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 CVT shift selector (detention switch) judged by IPDM E/R.
S/L RLY -REQ [Off/On]		Displays the status of the steering lock relay signal received from BCM via CAN communication. NOTE: For models without steering lock unit this item is not monitored.
S/L STATE [LOCK/UNLOCK/UNKWN]		Displays the status of the steering lock judged by IPDM E/R. NOTE: For models without steering lock unit this item is not monitored.
DTRL REQ [Off/On]		NOTE: The item is indicated, but not monitored.
OIL P SW [Open/Close]		Displays the status of the oil pressure switch judged by IPDM E/R.
HOOD SW [Off/On]		NOTE: The item is indicated, but not monitored.
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

Test item	Operation	Description
CORNERING LAMP	Off	NOTE: The item is indicated, but cannot be tested.
	LH	
	RH	
HORN	On	Operates horn relay 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	Operates the cooling fan relay-1.
	3	Operates the cooling fan relay-2.
	4	Operates the cooling fan relay-2 and cooling fan relay-3.

DIAGNOSIS SYSTEM (IPDM E/R)

< SYSTEM DESCRIPTION >

[HALOGEN TYPE]

Test item	Operation	Description
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.

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:0000000005515162

1.CHECK FUSE AND FUSIBLE LINK

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

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

Is the fuse fusing?

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 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:0000000005515163

1.CHECK FUSES AND FUSIBLE LINK

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

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

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

Is the fuse fusing?

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			
Connector	Terminal	Ground	
E9	1		Battery voltage

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		Existed
E10	12		
E11	41		

Does continuity exist?

YES >> INSPECTION END

NO >> Repair the harness or connector.

EXTERIOR LAMP FUSE

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

EXTERIOR LAMP FUSE

Description

INFOID:000000005515164

Fuse list

Unit	Location	Fuse No.	Capacity
Headlamp HI (LH)	IPDM E/R	#54	10 A
Headlamp HI (RH)	IPDM E/R	#55	10 A
Headlamp LO (LH)	IPDM E/R	#56	15 A
Headlamp LO (RH)	IPDM E/R	#57	15 A
Front fog lamp	IPDM E/R	#58	15 A
• Parking lamp • Front side marker lamp	IPDM E/R	#52	10 A
• Tail lamp • Rear side marker lamp • License plate lamp • Each illumination	IPDM E/R	#53	10 A
Stop lamp	FUSE BLOCK (J/B)	#7	10 A
Back-up lamp	FUSE BLOCK (J/B)	#4	10 A

Diagnosis Procedure

INFOID:000000005515165

1.CHECK FUSE

Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Headlamp HI (LH)	IPDM E/R	#54	10 A
Headlamp HI (RH)	IPDM E/R	#55	10 A
Headlamp LO (LH)	IPDM E/R	#56	15 A
Headlamp LO (RH)	IPDM E/R	#57	15 A
Front fog lamp	IPDM E/R	#58	15 A
• Parking lamp • Front side marker lamp	IPDM E/R	#52	10 A
• Tail lamp • Rear side marker lamp • License plate lamp • Each illumination	IPDM E/R	#53	10 A
Stop lamp	FUSE BLOCK (J/B)	#7	10 A
Back-up lamp	FUSE BLOCK (J/B)	#4	10 A

Is the fuse fusing?

- YES >> Repair the applicable circuit. And then replace the fuse.
NO >> The fuse is normal.

HEADLAMP (HI) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

HEADLAMP (HI) CIRCUIT

Component Function Check

INFOID:000000005515166

1.CHECK HEADLAMP (HI) OPERATION

IPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the headlamp switches to the high beam.

CONSULT-III 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-224, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515167

1.CHECK HEADLAMP (HI) OUTPUT VOLTAGE

CONSULT-III 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				Test item	Voltage (Approx.)
(+)			(-)		
IPDM E/R			Ground	EXTERNAL LAMPS	
Connector		Terminal			
RH	E345	89		Hi	Battery voltage
					Off
LH	E345	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 headlamp high harness connector.

HEADLAMP (HI) CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

IPDM E/R		Headlamp high		Continuity
Connector	Terminal	Connector	Terminal	
RH	E345	E317	1	Existed
LH			1	

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 fusing.

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 fusing?

YES >> GO TO 4.

NO >> Replace IPDM E/R.

4.CHECK HEADLAMP HIGH (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	E345	89	Not existed
LH		90	

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 fusing again.)

5.CHECK HEADLAMP (HI) GROUND OPEN CIRCUIT

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

Headlamp high		Ground	Continuity
Connector	Terminal		
RH	E317	2	Existed
LH	E316	2	

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 >

[HALOGEN TYPE]

HEADLAMP (LO) CIRCUIT

Component Function Check

INFOID:000000005515168

1.CHECK HEADLAMP (LO) OPERATION

⊗ IPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the headlamp is turned ON.

Ⓜ CONSULT-III 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-226, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515169

1.CHECK HEADLAMP (LO) OUTPUT VOLTAGE

Ⓜ CONSULT-III ACTIVE TEST

1. Turn the ignition switch OFF.
2. Disconnect the headlamp low 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			Ground	EXTERNAL LAMPS	
Connector		Terminal			
RH	E345	83		Lo	Battery voltage
				Off	0 V
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 headlamp low harness connector.

IPDM E/R		Headlamp low		Continuity
Connector	Terminal	Connector	Terminal	
RH	E345	E321	1	Existed
LH		E320	1	

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 fusing.

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 fusing?

- 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	E345	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 fusing again.)

5.CHECK HEADLAMP (LO) GROUND OPEN CIRCUIT

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

Headlamp low		Ground	Continuity
Connector	Terminal		
RH	E321	2	Existed
LH	E320	2	

Does continuity exist?

- YES >> Replace the headlamp (LO) bulb. (Bulb socket is abnormally.)
NO >> Repair the harnesses or connectors.

A
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FRONT FOG LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

FRONT FOG LAMP CIRCUIT

Component Function Check

INFOID:000000005515170

1.CHECK FRONT FOG LAMP OPERATION

⊗IPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the front fog lamp is turned ON.

ⓅCONSULT-III 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-228, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515171

1.CHECK FRONT FOG LAMP FUSE

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

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

Is the fuse fusing?

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

IPDM E/R			Ground	Continuity
Connector		Terminal		Not existed
RH	E345	86		
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 fusing 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-III 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

[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			Ground	EXTERNAL LAMPS	
Connector		Terminal			
RH	E345	86		Fog	Battery voltage
				Off	0 V
LH		87		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	E345	86	E402	1	Existed
LH		87	E331	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		Existed
RH	E402	2		
LH	E331	2		

Does continuity exist?

YES >> Replace the front fog lamp.

NO >> Repair the harnesses or connectors.

PARKING LAMP CIRCUIT

Component Function Check

INFOID:000000005515172

1.CHECK PARKING LAMP OPERATION

⊗ IPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the parking lamp is turned ON.

Ⓟ CONSULT-III 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-230, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515173

1.CHECK PARKING LAMP FUSE

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

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

Is the fuse fusing?

- 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		Not existed
RH	E346	91		
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 fusing 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-III 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 >

- 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			Ground	EXTERNAL LAMPS	
Connector		Terminal			
RH	E346	91		TAIL	Battery voltage
				Off	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

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

IPDM E/R		Front combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E346	E319	1	Existed
LH		E318	1	

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		Existed
RH	E319	2		
LH	E318	2		

Does continuity exist?

YES >> Replace the front combination lamp.

NO >> Repair the harnesses or connectors.

FRONT SIDE MARKER LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

FRONT SIDE MARKER LAMP CIRCUIT

Component Function Check

INFOID:000000005515174

NOTE:

Check the parking lamp circuit if the parking lamp and the front side marker lamp are not turned ON. Refer to [EXL-45, "Component Function Check"](#).

1.CHECK FRONT SIDE MARKER LAMP OPERATION

⊗IPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the front side marker lamp is turned ON.

ⓂCONSULT-III ACTIVE TEST

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

TAIL : Front side marker lamp ON

Off : Front side marker lamp OFF

Is the front side marker lamp turned ON?

- YES >> Front side marker lamp circuit is normal.
NO >> Refer to [EXL-232, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515175

1.CHECK FRONT SIDE MARKER LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
Front side marker lamp	IPDM E/R	#52	10 A

Is the fuse fusing?

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

2.CHECK FRONT SIDE MARKER LAMP SHORT CIRCUIT

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

IPDM E/R			Ground	Continuity
Connector	Terminal			
RH	E346	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 fusing is found again.)

3.CHECK FRONT SIDE MARKER LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

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

4.CHECK FRONT SIDE MARKER LAMP OUTPUT VOLTAGE

ⓂCONSULT-III ACTIVE TEST

1. Disconnect the front side marker lamp connector.

FRONT SIDE MARKER LAMP CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

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			Ground	EXTERNAL LAMPS	
Connector		Terminal			
RH	E346	91		TAIL	Battery voltage
				Off	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 FRONT SIDE MARKER 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 side marker lamp harness connector.

IPDM E/R		Front side marker lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	E346	E315	2	Existed
LH		E314	2	

Does continuity exist?

YES >> GO TO 6.

NO >> Repair the harnesses or connectors.

6.CHECK FRONT SIDE MARKER LAMP GROUND OPEN CIRCUIT

Check continuity between the front side marker lamp harness connector and the ground.

Front side marker lamp			Ground	Continuity
Connector		Terminal		Existed
RH	E315	1		
LH	E314	1		

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:000000005515176

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

NOTE:

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

Component Function Check

INFOID:000000005515177

1.CHECK TURN SIGNAL LAMP

ⒺCONSULT-III ACTIVE TEST

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

LH : Turn signal lamps (LH) ON

RH : Turn signal lamps (RH) ON

Off : Turn signal lamps OFF

Is the turn signal lamp turned ON?

YES >> Turn signal lamp circuit is normal.

NO >> Refer to [EXL-234, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515178

1.CHECK TURN SIGNAL LAMP BULB

Check the applicable lamp bulb.

Is the bulb normal?

YES >> GO TO 2.

NO >> Replace the bulb.

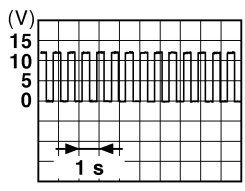
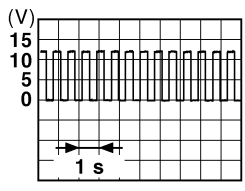
2.CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

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

TURN SIGNAL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

Terminals			Condition	Voltage (Approx.)
(+) (+)		(-) (-)		
BCM			Turn signal switch	
Connector	Terminal			
RH	M119	17	RH	
			OFF	0 V
LH	M119	18	LH	
			OFF	0 V

Is the measurement value normal?

YES >> GO TO 3.

NO >> Replace BCM. Refer to [BCS-95, "Exploded View"](#).

3.CHECK TURN SIGNAL LAMP OPEN CIRCUIT

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

Front turn signal lamp

BCM		Front combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	M119	E319	3	Existed
LH		E318		

Rear turn signal lamp

BCM		Rear combination lamp		Continuity
Connector	Terminal	Connector	Terminal	
RH	M119	B59	2	Existed
LH		B80		

Does continuity exist?

YES >> GO TO 4.

NO >> Repair the harnesses or connectors.

4.CHECK TURN SIGNAL LAMP SHORT CIRCUIT

Check continuity between the BCM harness connector and the ground.

TURN SIGNAL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

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

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 5.

5.CHECK TURN SIGNAL LAMP GROUND OPEN CIRCUIT

Check continuity between the front combination lamp, or the rear combination lamp and the ground.

Front turn signal lamp

Front combination lamp			Ground	Continuity
Connector		Terminal		
RH	E319	2		
LH	E318		Existed	

Rear turn signal lamp

Rear combination lamp			Ground	Continuity
Connector		Terminal		
RH	B59	1		Existed
LH	B80			

Does continuity exist?

YES >> Replace the front combination lamp or the rear combination lamp.

NO >> Repair the harnesses or connectors.

OPTICAL SENSOR

Description

INFOID:000000005575268

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

Component Function Check

INFOID:000000005575269

1.CHECK OPTICAL SENSOR SIGNAL BY CONSULT-III

CONSULT-III 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-237, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005575270

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	
Connector	Terminal		
M17	1		
			5 V

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.)
(+) (−)		Ground	
Optical sensor			
Connector	Terminal		
M17	3		0 V

Is the measurement value normal?

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

OPTICAL SENSOR

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

3.CHECK OPTICAL SENSOR SIGNAL OUTPUT

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		
Connector	Terminal			
M17	2	Ground	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	
M17	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		
M17	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	
M17	3	M123	137	Existed

Does continuity exist?

YES >> Replace BCM.

NO >> Repair the harnesses or connectors.

7.CHECK OPTICAL SENSOR SIGNAL OPEN CIRCUIT

OPTICAL SENSOR

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

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	
M17	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		
M17	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

Component Function Check

INFOID:000000005515179

1.CHECK HAZARD SWITCH SIGNAL BY CONSULT-III

CONSULT-III 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	ON	On
		OFF	Off

Is the item status normal?

YES >> Hazard switch circuit is normal.

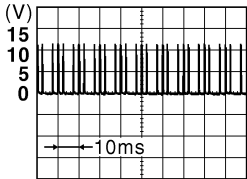
NO >> Refer to [EXL-240, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515180

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	
Connector	Terminal	ON	0 V
		OFF	
M122	110	Ground	

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Is the measurement value normal?

YES >> Replace BCM. Refer to [BCS-95, "Exploded View"](#).

NO >> GO TO 2.

2.CHECK HAZARD SWITCH SIGNAL OPEN CIRCUIT

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

Hazard switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M45	2	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 hazard switch harness connector and the ground.

HAZARD SWITCH

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

Hazard switch		Ground	Continuity
Connector	Terminal		
M45	2		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 hazard switch harness connector and the ground.

Hazard switch		Ground	Continuity
Connector	Terminal		
M45	1		Existed

Does continuity exist?

YES >> Replace the hazard switch.

NO >> Repair the harnesses or connectors.

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TAIL LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TAIL LAMP CIRCUIT

Component Function Check

INFOID:000000005515181

NOTE:

Check the license plate lamp circuit if the tail lamp and the license plate lamp are not turned ON. Refer to [EXL-244, "Component Function Check"](#).

1.CHECK TAIL LAMP OPERATION

IPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the tail lamp is turned ON.

CONSULT-III 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-242, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515182

1.CHECK TAIL LAMP FUSE

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

Unit	Location	Fuse No.	Capacity
Tail lamp	IPDM E/R	#53	10 A

Is the fuse fusing?

YES >> Repair the malfunctioning part before replacing the fuse.

NO >> GO TO 2.

2.CHECK TAIL LAMP OUTPUT VOLTAGE

CONSULT-III 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 LAMPS	Battery voltage
Connector	Terminal		
E10	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.

TAIL LAMP CIRCUIT

[HALOGEN TYPE]

< DTC/CIRCUIT DIAGNOSIS >

2. Disconnect IPDM E/R connector.
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	E10	7	B59	4	Existed
LH			B80	4	

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		Existed
RH	B59	1		
LH	B80	1		

Does continuity exist?

YES >> Replace the rear combination lamp.

NO >> Repair the harnesses or connectors.

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LICENSE PLATE LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

LICENSE PLATE LAMP CIRCUIT

Component Function Check

INFOID:000000005515183

1.CHECK LICENSE PLATE LAMP OPERATION

⊗ IPDM E/R AUTO ACTIVE TEST

1. Activate IPDM E/R auto active test. Refer to [PCS-10, "Diagnosis Description"](#).
2. Check that the license plate lamp is turned ON.

Ⓜ CONSULT-III 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-244, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005515184

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	E10	7	D163	1	Existed
LH			D162	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	D163	2		Existed
LH	D162	2		

Does continuity exist?

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

HEADLAMP SYSTEM

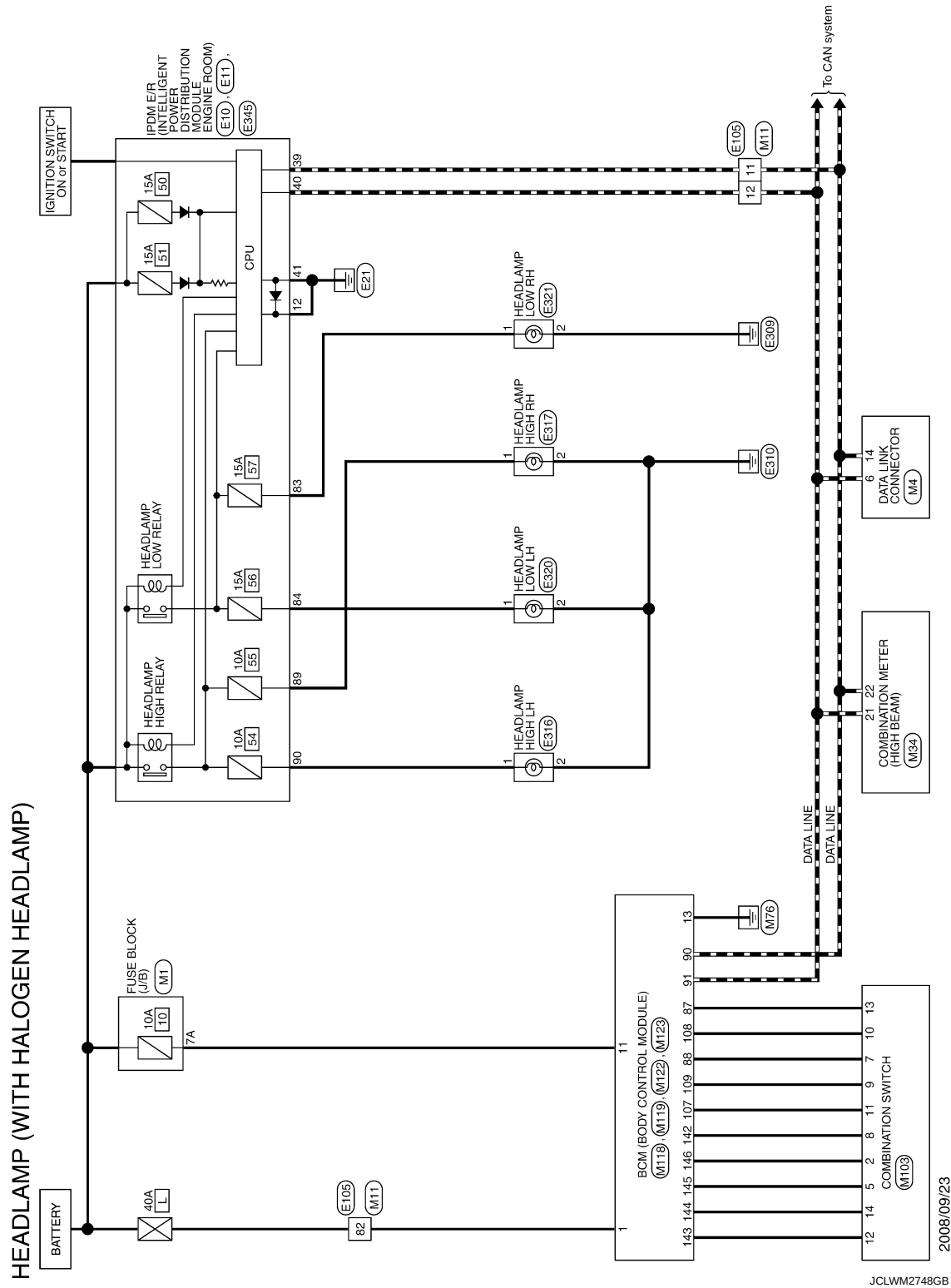
< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

HEADLAMP SYSTEM

Wiring Diagram - HEADLAMP -

INFOID:000000005515185



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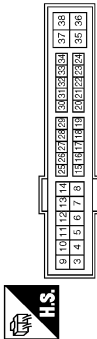
HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

HEADLAMP (WITH HALOGEN HEADLAMP)

Connector No.	E10
Connector Name	ENGINE INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH20FW-CS12-M4-1V



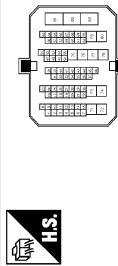
Connector No.	E11
Connector Name	ENGINE INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
4	LG	-
5	Y	-
7	GR	-
10	BR	-
11	P	-
12	B	-
13	SB	-
13	W	-
16	L/Y	-
19	Y	-
20	L	-
21	O	-
22	SB	-
23	GR	-
24	G	-
25	GR	-
26	Y	-
27	W	-
28	SB	-
30	BR	-
32	V	-
33	G	-
34	O	-
35	P	-
36	G	-
38	GR	-

Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B	-
42	SB	-
43	Y	-
44	W	-
45	O	-
46	BR	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3



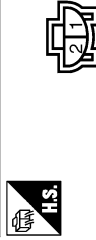
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-

Connector No.	E316
Connector Name	HEADLAMP HIGH LH
Connector Type	UC2FB



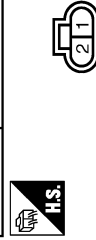
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	B	-

Connector No.	E317
Connector Name	HEADLAMP HIGH RH
Connector Type	UC2FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	B	-

Connector No.	E320
Connector Name	HEADLAMP LOW LH
Connector Type	FFH202FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	B	-

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HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

HEADLAMP (WITH HALOGEN HEADLAMP)

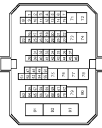
Connector No.	E321
Connector Name	HEADLAMP LOW RH
Connector Type	FH202FB



Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NSG6F14-M2

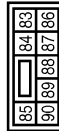


Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH10FW-CS10-M3



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

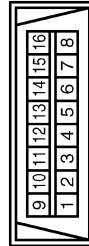
Connector No.	E345
Connector Name	INTELLIGENT POWER DISTRIBUTION MODULE (PARK POOL)
Connector Type	NSB8FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
83	Y	-
84	L	-
86	SB	-
87	GR	-
88	W	-
89	L	-
90	G	-

Terminal No.	Color of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-
24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-

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[HALOGEN TYPE]

Terminal No.	Color of Wire	Signal Name (Specification)
72	B	ROOM ANT2-
73	W	ROOM ANT2+
74	Y	PASSENGER DOOR ANT-
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	P	DRIVER DOOR ANT+
80	SB	IMMOBILIZER ANTENNA CONTROL
81	G	IMMOBILIZER ANTENNA SIGNAL

HEADLAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

HEADLAMP (WITH HALOGEN HEADLAMP)

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



Terminal No.	Color of Wire	Signal Name [Specification]
112	R	RAIN SENSOR SERIAL LINK
113	O	OPTICAL SENSOR
116	GR	FUSE CHECK
118	L	STOP LAMP SW
119	W	DR DOOR UNLOCK SENSOR
121	Y	KEY SLOT SW
123	G	IGN P/B
124	R	PASSENGER DOOR SW
130	BR	REAR DEFOGGER SW
132	G	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	R	LOCK IND
137	P	RECEIVER/SENSOR GND
138	V	RECEIVER/SENSOR POWER SUPPLY
139	O	TIRE PRESS RECEIVER SIGNAL
140	GR	SHIFT N/P
141	O	SECURITY INDICATOR OUTPUT
142	L	COMBI SW OUTPUT 5
143	W	COMBI SW OUTPUT 1
144	P	COMBI SW OUTPUT 2
145	V	COMBI SW OUTPUT 3
146	Y	COMBI SW OUTPUT 4
149	W	TIRE PRESS WARNING CHECK SW
150	SB	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY

JCLWM4151GB

EXL

DAYTIME RUNNING LIGHT SYSTEM

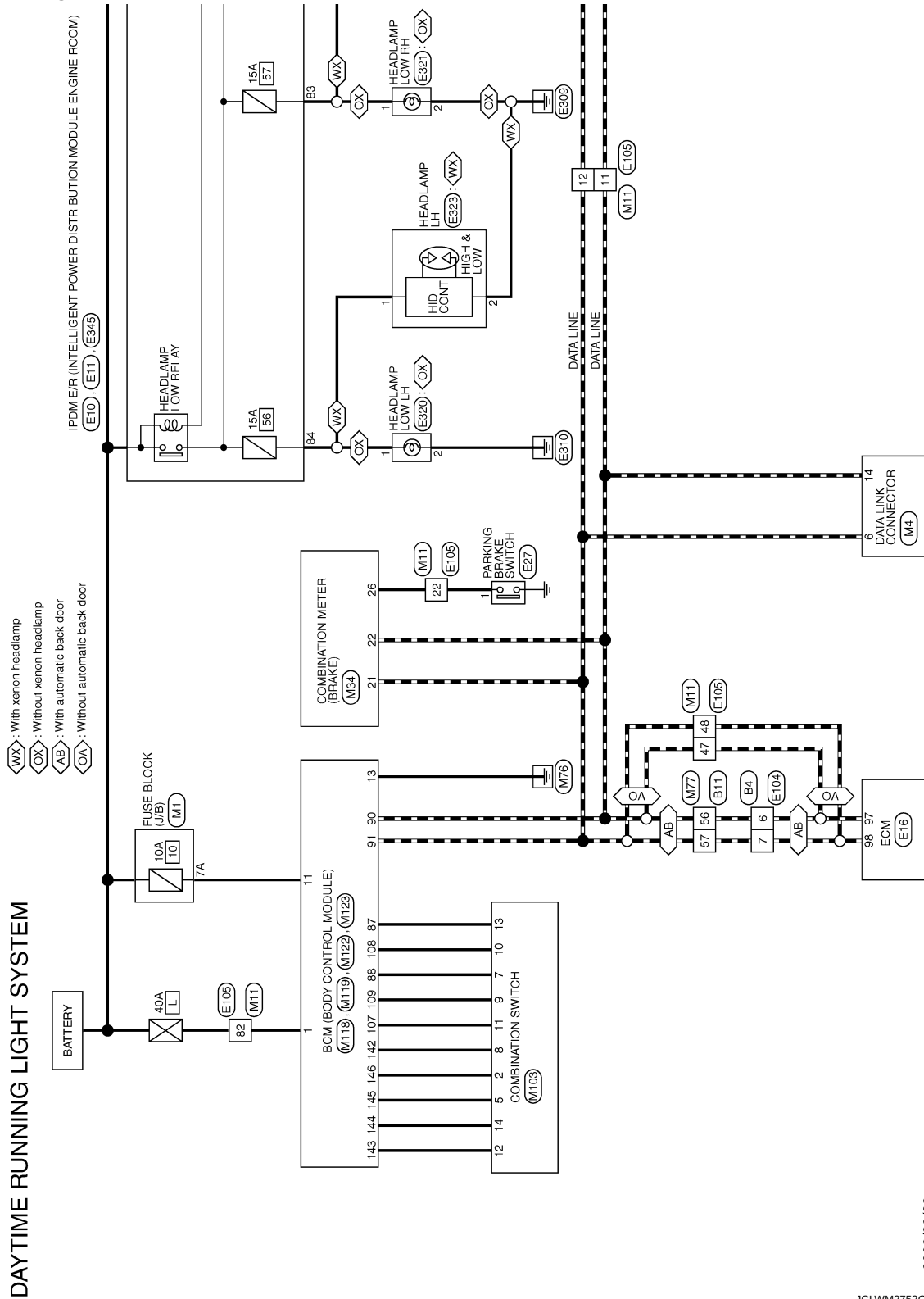
< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

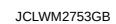
Wiring Diagram - DAYTIME RUNNING LIGHT SYSTEM -

INFOID:000000005712762



[HALOGEN TYPE]

A
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DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	W	-
3	W	-
4	R	-
5	O	-
6	P	-
7	L	-
8	B	-
9	LG	-
10	V	-
11	L	-
12	BR	-
13	P	-
14	BR	-
15	O	-
16	G	-

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS13



Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R/L	-
4	R/W	-
5	SB	-
6	P	-

7	V	-
8	SHIELD	-
9	BR/L	-
10	V/G	-
11	W/L	-
12	W/L	-
13	L	-
14	BR	-
15	SB	-
16	BR	-
17	V	-
18	SB	-
19	R	-
20	P	-
21	LG	-
22	W	-
23	Y	-
24	GR	-
25	Y	-
26	V	-
27	W/L	-
28	P	-
29	O	-
30	BR	-
31	BR	-
32	BR	-
33	SHIELD	-
34	L/O	-
35	LG	-
36	O	-
37	Y	-
38	BR	-
39	G	-
40	L	-
41	GR	-
42	BR	-
43	BR	-
44	L	-
45	GR	-
46	V	-
47	Y	-
48	GR	- [With rear view camera and telephone]
49	BR	- [With rear view camera without telephone]
50	SHIELD	-
51	B	-
52	B	-
53	Y	-
54	LG	-
55	BR	-
56	P	-
57	L	-
58	R	-
59	SHIELD	-
60	B	-
61	R/L	-
62	R/W	-

4	LG	-
5	Y	-
7	GR	-
10	BR	-
11	P	-
12	B	-
13	SB	-
15	W	-
16	L/Y	-
19	Y	-
20	L	-
21	O	-
22	SB	-
23	GR	-
24	G	-
25	GR	-
26	Y	-
27	W	-
28	SB	-
30	BR	-
32	V	-
33	G	-
34	O	-
35	P	-
36	G	-
38	GR	-

Connector No.	E11
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH08FW-NH



42	41	40	39
46	45	44	43

Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B	-
42	SB	-
43	Y	-
44	W	-
45	O	-
46	BR	-

Connector No.	E10
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH08FW-CS12-M4-IV



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
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Terminal No.	Color of Wire	Signal Name [Specification]

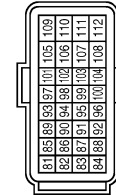
DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	E16
Connector Name	ECM
Connector Type	RN24FB-R28-L-LH



Terminal No.	Color of Wire	Signal Name [Specification]
81	W	APSI1
82	O	APSI2
83	BR	AVCG1-APSI
84	B	GND1-APSI
85	Y	ASCD SW
86	SB	FTPRES
87	GR	AVCG2-APSI
88	O	KLINE
89	L	AVCG2-FTPRES
90	BR	GND1-ASCD SW
91	BR	IGN SW
92	GR	TACHO(CABIN)
93	Y	TF
94	GR	GND1-FTPRES
95	Y	VEH CAN-L
96	P	VEH CAN-H
97	L	GND1-APSI
98	G	NEUT-H
99	R	GND1-TF
100	SB	VEH
101	V	VEH
102	SB	VEH
103	B	GND
104	B	GND
105	W	GND
106	W	GND
107	W	GND
108	W	GND
109	W	GND
110	G	GND
111	B	GND
112	B	GND

Connector No.	E27
Connector Name	PARKING BRAKE SWITCH
Connector Type	PO1FB-A



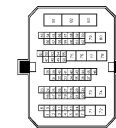
Terminal No.	Color of Wire	Signal Name [Specification]
1	P	

Connector No.	E104
Connector Name	WIRE TO WIRE
Connector Type	NS16FH-CS



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

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	
3	Y	
4	W	
5	LG	
6	GR	
8	G	
11	P	
12	L	
13	Y	
14	O	
15	BR	
20	Y	
21	BR	
22	P	
23	P	
24	L	
25	O	
26	G	
27	V	
28	SB	
29	W	
30	Y	
47	P	
48	L	
49	SB	
50	GR	
51	LG	
52	V	
53	GR	
54	BR	
55	Y	
56	W/L	
60	V	
61	BR	
62	O	
63	L/O	
64	SHIELD	
66	W	

67	BR	-
68	Y	-
69	SB	-
70	GR	-
71	SB	-
72	Y	-
73	L	-
74	W	-
75	BR	-
76	GR	-
77	O	-
78	V	-
79	Y	-
80	R	-
81	W	-
82	LG	-
83	O	-

Connector No.	E320
Connector Name	HEADLAMP LOW LH
Connector Type	PH202FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	
2	B	

JCLWM4153GB

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DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	E321
Connector Name	HEADLAMP LOW RH
Connector Type	FH20FB



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

Connector No.	E323
Connector Name	HEADLAMP LH
Connector Type	EDFGY-RS



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	B	-

Connector No.	E324
Connector Name	HEADLAMP RH
Connector Type	EDFGY-RS



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

Connector No.	E345
Connector Name	ENGINE INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	NS06FW-CS



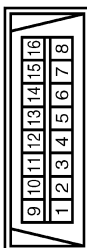
Terminal No.	Color of Wire	Signal Name [Specification]
83	Y	-
84	L	-
86	SR	-
87	GR	-
88	W	-
89	L	-
90	G	-

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	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	ED18FW



Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	THD0FW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-

24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SR	-
55	P	-
56	SR	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-
67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

JCLWM4154GB

DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH4CPV-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

DAYTIME RUNNING LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

DAYTIME RUNNING LIGHT SYSTEM

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



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

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	W	STEP LAMP OUTPUT
8	V	ALL DOOR FUEL ID LOCK OUTPUT
9	G	DRIVER DOOR FUEL ID UNLOCK OUTPUT
10	P	REAR DOOR UNLOCK OUTPUT
11	LG	BAT (F/USE)
13	B	GND
14	O	PUSH-BUTTON IGNITION SW ILL GND
15	L	ACC IND
17	G	TURN SIGNAL RH
18	BR	TURN SIGNAL LH
19	Y	ROOM LAMP TIMER CONTROL

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



Terminal No.	Color of Wire	Signal Name [Specification]
72	B	ROOM ANT2-
73	W	ROOM ANT2+
74	Y	PASSENGER DOOR ANT-
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	P	DRIVER DOOR ANT+
80	SB	IMMOBI ANTENNA CONTROL
81	O	IMMOBI ANTENNA SIGNAL
82	BR	IGN RELAY (F/B) CONT
83	P	KEYLESS ENTRY RECEIVER SIGNAL
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	R	KEY SLOT ILL
93	P	ON IND
95	L	ACC RELAY CONT
96	Y	CVT SHIFT SELECTOR POWER SUPPLY
97	O	S/L CONDITION 1
98	L	S/L CONDITION 2
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER DOOR REQUEST SW
102	Y	BLOWER FAN MOTOR RELAY CONT
103	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	Y	S/L POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW
111	LG	S/L COMM

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



Terminal No.	Color of Wire	Signal Name [Specification]
112	R	RAIN SENSOR SERIAL LINK
113	O	OPTICAL SENSOR
116	GR	FUSE CHECK
118	L	STOP LAMP SW
119	W	DR DOOR UNLOCK SENSOR
121	Y	KEY SLOT SW
123	G	IGN F/B
124	R	PASSENGER DOOR SW
130	BR	REAR DEFOGGER SW
132	G	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	R	LOCK IND
137	P	RECEIVER/SENSOR GND
138	V	RECEIVER/SENSOR POWER SUPPLY
139	O	TIRE PRESS RECEIVER SIGNAL
140	GR	SHIFT N/P
141	O	SECURITY INDICATOR OUTPUT
142	L	COMBI SW OUTPUT 5
143	W	COMBI SW OUTPUT 1
144	P	COMBI SW OUTPUT 2
145	V	COMBI SW OUTPUT 3
146	Y	COMBI SW OUTPUT 4
149	W	TIRE PRESS WARNING CHECK SW
150	SB	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY

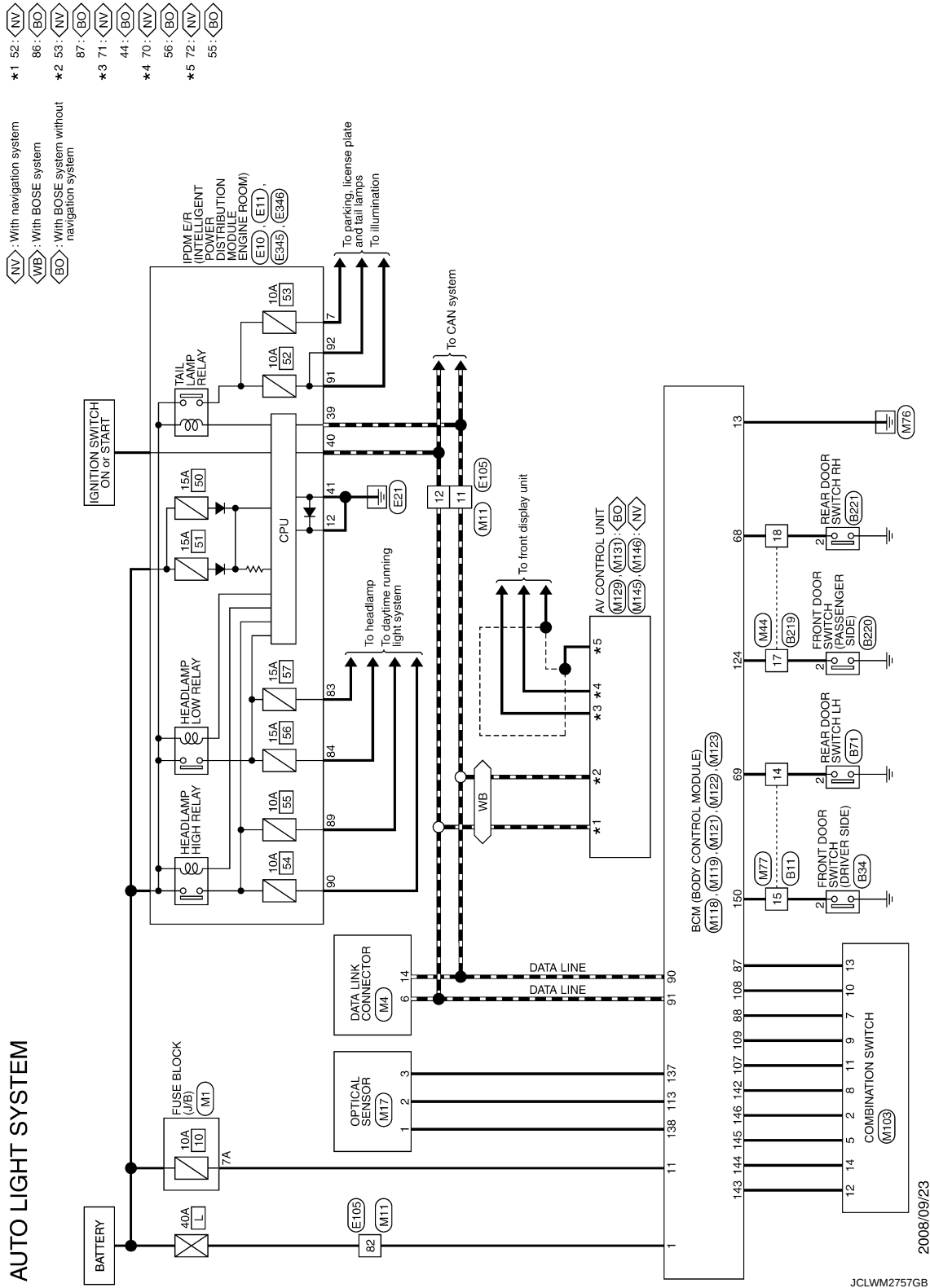
JCLWM4156GB

< DTC/CIRCUIT DIAGNOSIS >

AUTO LIGHT SYSTEM

Wiring Diagram - AUTO LIGHT SYSTEM -

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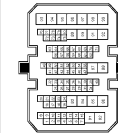
AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

AUTO LIGHT SYSTEM

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS19

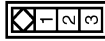


Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	R/L	-
4	R/W	-
5	SB	-
6	P	-
7	V	-
8	SHIELD	-
9	BR/L	-
10	Y/G	-
11	Y/L	-
12	W/L	-
13	L	-
14	BR	-
15	SB	-
16	BR	-
17	V	-
18	SB	-
19	R	-
20	P	-
21	LG	-
22	W	-
23	Y	-
24	GR	-
25	Y	-
27	V	-
28	W/L	-
30	P	-
31	O	-
32	BR	-
34	SB	-
35	SHIELD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

44	BR	-
45	L	-
46	GR	-
47	V	-
48	GR	- [With rear view camera and telephone]
49	BR	- [With rear view camera without telephone]
50	SHIELD	-
51	B	-
52	B	-
53	Y	-
54	LG	-
55	BR	-
56	P	-
57	L	-
58	R	-
59	SHIELD	-
60	B	-
61	R/L	-
62	R/W	-
63	LG	-
64	Y	-
66	GR	-
67	G	-
68	R	-
69	SHIELD	-
70	W/R	-
71	B/R	-
72	Y	-
73	LG	-
74	SB	-
75	L	-
76	G	-
77	R	-
78	SHIELD	-
79	B	-
80	W	-
81	R	-
82	L	-
83	BR	-
84	O	-
85	G	-
86	SB	-
87	R	-
88	G	-
89	GR	-
90	Y	-
91	G	-
92	BR	-
93	G	-
94	V	-
95	BR	-

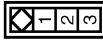
96	GR	-
97	R	-
98	LG	-
99	O	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



Terminal No.	Color of Wire	Signal Name [Specification]
2	SB	-

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



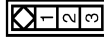
Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-

Connector No.	B219
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



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

Connector No.	B220
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



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

JCLWM4157GB

AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

AUTO LIGHT SYSTEM

Connector No.	B221
Connector Name	REAR DOOR SWITCH RH
Connector Type	AG3FW



1	2	3
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Terminal No.	2
Color of Wire	W
Signal Name [Specification]	-

Connector No.	E10
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-CS12-M4-1V



9	10	11	12	13	14	25	26	27	28	29	30	31	32	33	34	35	36	37	38
3	4	5	6	7	8	15	16	17	18	19	20	21	22	23	24	39	40	41	42

Terminal No.	4	5	7	10	11	12	13	15	16	19	20	21	22	23	24	25	26	27	28	30	32
Color of Wire	LG	Y	GR	BR	P	B	SB	W	L/Y	Y	L	O	SB	GR	G	GR	Y	W	SB	BR	V
Signal Name [Specification]	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

33	G
34	O
35	P
36	G
38	GR

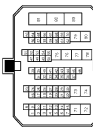
Connector No.	E11
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH10FW-NH



42	41	40	39
46	45	44	43

Terminal No.	39	40	41	42	43	44	45	46
Color of Wire	P	L	B	SB	Y	W	O	BR
Signal Name [Specification]	-	-	-	-	-	-	-	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH7DMH-CS10-M3



Terminal No.	2	3	4	5	6	8	11
Color of Wire	BR	Y	W	LG	GR	G	P
Signal Name [Specification]	-	-	-	-	-	-	-

12	L
13	Y
14	O
15	BR
20	Y
21	BR
22	P
23	P
24	L
25	O
26	G
27	V
28	SB
29	W
30	Y
47	P
48	L
49	SB
50	GR
51	LG
52	V
53	GR
54	BR
55	Y
56	W/L
60	V
61	BR
62	O
63	L/O
64	SHIELD
66	W
67	BR
68	Y
69	SB
70	GR
71	SB
72	Y
73	L
74	W
75	BR
76	GR
77	O
78	V
79	Y
80	R
81	W
82	LG
83	O

Connector No.	E345
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	NS30FW-CS



85	84	83
90	89	88
87	86	

Terminal No.	83	84	86	87	88	89	90
Color of Wire	Y	L	SB	GR	W	L	G
Signal Name [Specification]	-	-	-	-	-	-	-

Connector No.	E348
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH16FW-NH



98	97	96	95	94	93	92	91
103	105	104	103	102	101	100	99

Terminal No.	91	92	99	100	101	102	103
Color of Wire	R	LG	BR	SB	L	B	P
Signal Name [Specification]	-	-	-	-	-	-	-

JCLWM4158GB

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AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

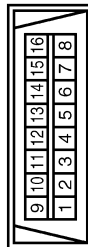
AUTO LIGHT SYSTEM

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	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH17DFW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-
24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-

1	G	-
2	R	-
3	SHIELD	-
4	B	-
5	W	-
6	SHIELD	-
7	L	-
8	R	-
9	SHIELD	-
10	V	-
11	LG	-
12	SHIELD	-
13	P	-
15	LG	-
16	L	-
17	R	-
18	W	-
29	LG	-
30	O	-
31	Y	-
32	V	-

67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

Connector No.	M17
Connector Name	OPTICAL SENSOR
Connector Type	TK03FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	O	-
3	P	-

Connector No.	M44
Connector Name	WIRE TO WIRE
Connector Type	TH02FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
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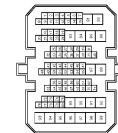
AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

AUTO LIGHT SYSTEM

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19



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

44	V	-
45	P	-
46	R	-
47	Y	-
48	L	-
49	G	-
50	SHIELD	-
51	W	-
52	B	-
53	BR	-
54	B	-
55	G	-
56	P	-
57	L	-
58	SB	-
59	SHIELD	-
60	B	-
61	R	-
62	W	-
63	O	-
64	Y	-
66	L	-
67	R	-
68	G	-
69	SHIELD	-
70	L	-
71	R	-
72	LG	-
73	Y	-
74	R	-
75	P	-
76	L	-
77	BR	-
78	SHIELD	-
79	B	-
80	W	-
81	LG	-
82	L	-
83	W	-
83	GR	-
84	R	-
85	V	-
85	GR	-
86	W	-
87	R	-
88	G	-
89	B	-
90	G	-
91	G	-
92	BR	-
93	P	-
94	V	-

95	O	-
96	SB	-
97	L	-
98	LG	-
99	Y	-

Connector No.	M103
Connector Name	COMBINATION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	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	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (R4P)

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



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

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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



51	50	49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32
71	70	69	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52

AUTO LIGHT SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

AUTO LIGHT SYSTEM

Connector No.	M145
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM)
Connector Type	TH12PW-NH



62	64	66	68	70	72
61	63	65	67	69	71

Terminal No.	Color of Wire	Signal Name [Specification]
21	B	GND
22	Y	BATTERY
23	B	GND
24	Y	BATTERY
25	B	ACC
26	B	MICROPHONE VCC
27	SHIELD	MICROPHONE GND
28	W	MICROPHONE SIGNAL
35	G	IGNITION
36	G	PARKING BRAKE
37	SB	REVERSE
38	V	VEHICLE SPEED (8-PULSE)
40	P	CONNECTION RECOGNITION
42	B	CONTROL SIGNAL
43	B	CONTROL SIGNAL
46	G	AV COMM (H)
48	L	AV COMM (L)
50	R	AV COMM (H)
51	L	AV COMM (L)
52	L	CAN-H
53	P	CAN-L

Connector No.	M146
Connector Name	AV CONTROL UNIT (WITH NAVIGATION SYSTEM)
Connector Type	TH12PW-NH



62	64	66	68	70	72
61	63	65	67	69	71

Terminal No.	Color of Wire	Signal Name [Specification]
61	G	RGB (RED) SIGNAL

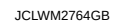
62	R	RGB (GREEN) SIGNAL
63	W	RGB (BLUE) SIGNAL
64	SHIELD	SHIELD
65	B	RGB STNG
66	SHIELD	SHIELD
67	W	RGB AREA (YS) SIGNAL
68	B	HP
69	R	VP
70	R	COMM (CONT->DISP)
71	G	COMM (DISP->CONT)
72	SHIELD	SHIELD

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[HALOGEN TYPE]

FRONT FOG LAMP SYSTEM

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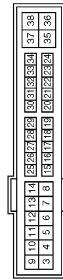
FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

FRONT FOG LAMP

Connector No.	E10
Connector Name	ENGINE IS INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20PW-CS12-M4-1V



Terminal No.	Color of Wire	Signal Name [Specification]
4	LG	-
5	Y	-
7	GR	-
10	BR	-
11	P	-
12	B	-
13	SB	-
15	W	-
16	L/Y	-
19	Y	-
20	L	-
21	O	-
22	SB	-
23	GR	-
24	G	-
25	GR	-
26	Y	-
27	W	-
28	SB	-
30	BR	-
32	V	-
33	G	-
34	O	-
35	P	-
36	G	-
38	GR	-

Connector No.	E11
Connector Name	ENGINE IS INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B	-
42	SB	-
43	Y	-
44	W	-
45	O	-
46	BR	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-

Connector No.	E331
Connector Name	FRONT FOG LAMP LH
Connector Type	FR202FB



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

Connector No.	E344
Connector Name	WIRE TO WIRE
Connector Type	FR202MGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	SB	-

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FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

FRONT FOG LAMP

Connector No.	E345
Connector Name	SMALL INTELLIGENT POWER DISTRIBUTION MODULE (SIPDM)
Connector Type	NS08FW-CS



85	84	83
90	89	88
87	86	

Terminal No.	Color of Wire	Signal Name [Specification]
83	Y	-
84	L	-
86	SB	-
87	GR	-
88	W	-
89	L	-
90	G	-

Connector No.	E401
Connector Name	WIRE TO WIRE
Connector Type	RS02FGY



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

Connector No.	E402
Connector Name	FRONT FOG LAMP RH
Connector Type	FTZ02FB



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

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



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

Terminal No.	Color of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD18FW



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

Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH07FW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-

24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-
67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

JCLWM4164GB

FRONT FOG LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

FRONT FOG LAMP

Connector No.	M103
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-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

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	OUTPUT 2

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



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

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FH-CS



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

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

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



31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70

Terminal No.	Color of Wire	Signal Name [Specification]
72	B	ROOM ANT2-
73	W	ROOM ANT2+
74	Y	PASSENGER DOOR ANT-
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	P	DRIVER DOOR ANT+
80	SB	IMMOBI ANTENNA CONTROL
81	O	IMMOBI ANTENNA SIGNAL
82	BR	IGN RELAY (F/B) CONT

83	P	KEYLESS ENTRY RECEIVER SIGNAL
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	R	KEY SLOT ILL
93	P	ON IND
95	L	ACC RELAY CONT
96	Y	OVT SHIFT SELECTOR POWER SUPPLY
97	O	S/L CONDITION 1
98	L	S/L CONDITION 2
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER DOOR REQUEST SW
102	Y	BLOWER FAN MOTOR RELAY CONT
103	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	Y	S/L POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW
111	LG	S/L COMM

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



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

Terminal No.	Color of Wire	Signal Name [Specification]
112	R	RAIN SENSOR SERIAL LINK
113	O	OPTICAL SENSOR
116	GR	FUSE CHECK
118	L	STOP LAMP SW
119	W	DR DOOR UNLOCK SENSOR
121	Y	KEY SLOT SW
123	G	IGN F/B
124	R	PASSENGER DOOR SW
130	BR	REAR DEFOGGER SW
132	G	POWER WINDOW SW COMM
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	R	LOCK IND
137	P	RECEIVER-SENSOR GND

138	V	RECEIVER/SENSOR POWER SUPPLY
139	O	TIRE PRESS RECEIVER SIGNAL
140	GR	SHIFT N/P
141	O	SECURITY INDICATOR OUTPUT
142	L	COMBI SW OUTPUT 5
143	W	COMBI SW OUTPUT 1
144	P	COMBI SW OUTPUT 2
145	V	COMBI SW OUTPUT 3
146	Y	COMBI SW OUTPUT 4
149	W	TIRE PRESS WARNING CHECK SW
150	SB	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY

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TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

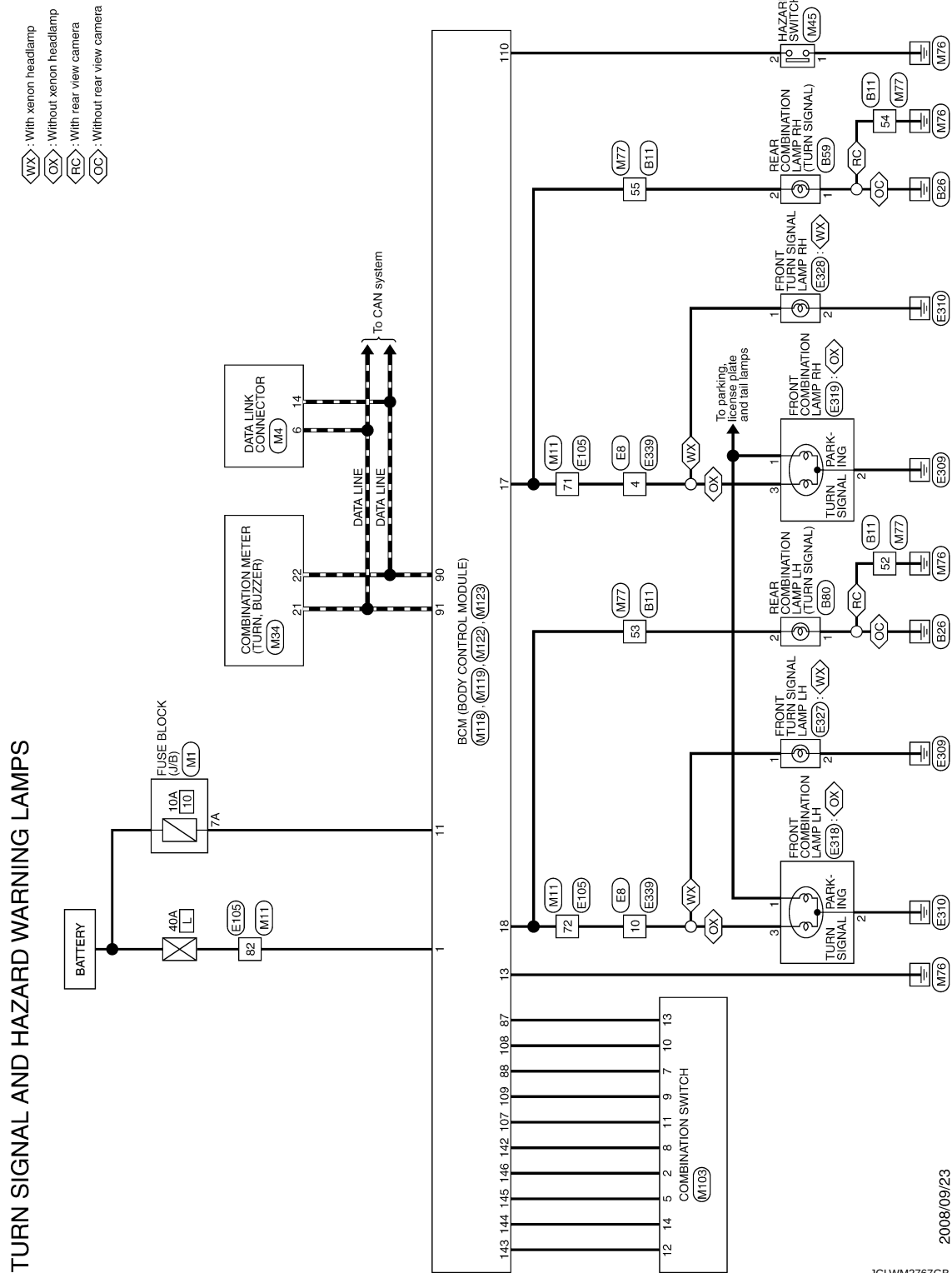
< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

Wiring Diagram - TURN AND HAZARD WARNING LAMPS -

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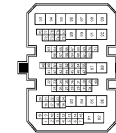
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS 9



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

44	BR	-
45	L	-
46	GR	-
47	Y	-
48	GR	-
49	Y	-
50	SHIELD	-
51	B	-
52	B	-
53	Y	-
54	LG	-
55	BR	-
56	P	-
57	L	-
58	R	-
59	SHIELD	-
60	B	-
61	R/L	-
62	R/W	-
63	LG	-
64	Y	-
66	GR	-
67	G	-
68	R	-
69	SHIELD	-
70	W/R	-
71	B/R	-
72	Y	-
73	LG	-
74	SB	-
75	L	-
76	G	-
77	R	-
78	SHIELD	-
79	B	-
80	W	-
81	R	-
82	L	-
83	BR	-
84	O	-
85	G	-
86	SB	-
87	R	-
88	G	-
89	GR	-
90	Y	-
91	G	-
92	BR	-
93	G	-
94	V	-
95	BR	-

96	GR	-
97	R	-
98	LG	-
99	O	-

Connector No.	B59
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS4MMW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
3	GR	-
4	SB	-
5	O	-
8	G	-
9	W	-
10	Y	-
11	G	-

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
1	B/W	-
2	BR	-
3	P	-
4	L	-

Connector No.	B80
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS4MMW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	Y	-
3	P	-
4	L	-

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EXL

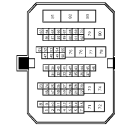
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-
23	P	-
24	L	-
25	O	-
26	G	-
27	V	-
28	SB	-
29	W	-
30	Y	-
43	P	-
48	L	-
49	SB	-
50	GR	-
51	LG	-
52	V	-
53	GR	-
54	BR	-
55	Y	-
56	W/L	-
60	V	-
61	BR	-
62	O	-
63	L/O	-
64	SHIELD	-
66	W	-

67	BR	-
68	Y	-
69	SB	-
70	GR	-
71	SB	-
72	Y	-
73	L	-
74	W	-
75	BR	-
76	GR	-
77	O	-
78	V	-
79	Y	-
80	R	-
81	W	-
82	LG	-
83	O	-

Connector No.	E318
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	Z03FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	B	-
3	Y	-

Connector No.	E319
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	Z03FBR



Terminal No.	Color of Wire	Signal Name [Specification]
-	-	-

1	R	-
2	B	-
3	G	-

Connector No.	E327
Connector Name	FRONT TURN SIGNAL LAMP LH
Connector Type	RS02FGY



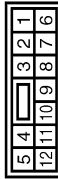
Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	-
2	B	-

Connector No.	E328
Connector Name	FRONT TURN SIGNAL LAMP RH
Connector Type	RS02FGY



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

Connector No.	E339
Connector Name	WIRE TO WIRE
Connector Type	NS12FBR-OS



Terminal No.	Color of Wire	Signal Name [Specification]
3	O	-
4	G	-
5	O	-
8	G	-
9	W	-
10	Y	-
11	R	-

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	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

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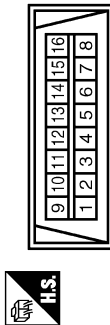
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

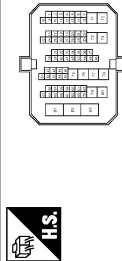
TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

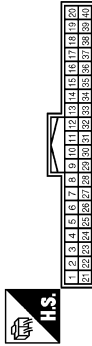
Connector No.	M11
Connector Name	WIRE TO WIPE
Connector Type	TH70FW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-

24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-
67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
2	O	IGN
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL
8	SB	TRIP RESET SWITCH
9	W	SW ILL POWER
10	O	METER CONTROL SW GND
11	L	ENTER SWITCH
12	R	SELECT SWITCH
13	V	ILLUMINATION CONTROL SWITCH (-) (With automatic drive position)
14	Y	ILLUMINATION CONTROL SWITCH (+) (With automatic drive position)
15	BR	AIR BAG
18	L	AMBIENT SENSOR
19	P	AMBIENT SENSOR POWER
20	Y	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	CAN-L
23	B	GROUND
24	W	FUEL LEVEL SENSOR GROUND
25	BR	CHG
26	G	PARKING BRAKE SWITCH
27	V	BRAKE FLUID LEVEL SWITCH
29	R	WASHER LEVEL SWITCH
30	P	VEHICLE SPEED (2-PULSE)
31	V	VEHICLE SPEED (8-PULSE)
32	LG	OD OFF/SPORTS
34	G	FUEL LEVEL SENSOR
35	SB	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
36	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

Connector No.	M45
Connector Name	HAZARD SWITCH
Connector Type	TH40FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	G	-
3	R	-
4	SB	-

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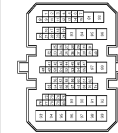
TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19



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

44	V	-
45	P	-
46	R	-
47	Y	-
48	L	-
49	G	-
50	SHIELD	-
51	W	-
52	B	-
53	BR	-
54	B	-
55	G	-
56	P	-
57	L	-
58	SB	-
59	SHIELD	-
60	B	-
61	R	-
62	W	-
63	O	-
64	Y	-
66	L	-
67	R	-
68	G	-
69	SHIELD	-
70	L	-
71	R	-
72	LG	-
73	Y	-
74	R	-
75	P	-
76	L	-
77	BR	-
78	SHIELD	-
79	B	-
80	W	-
81	LG	-
82	L	-
83	W	-
83	GR	-
84	R	-
85	V	-
85	GR	-
86	W	-
87	R	-
88	G	-
89	B	-
90	G	-
91	G	-
92	BR	-
93	P	-
94	V	-

95	O	-
96	SB	-
97	L	-
98	LG	-
99	Y	-

Connector No.	MI03
Connector Name	COMBINATION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	OUTPUT 2

Connector No.	MI18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MI03F-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (E/L)

2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (RAP)

Connector No.	MI19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS18FW-CS



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

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TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

TURN SIGNAL AND HAZARD WARNING LAMPS

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



91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72
111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

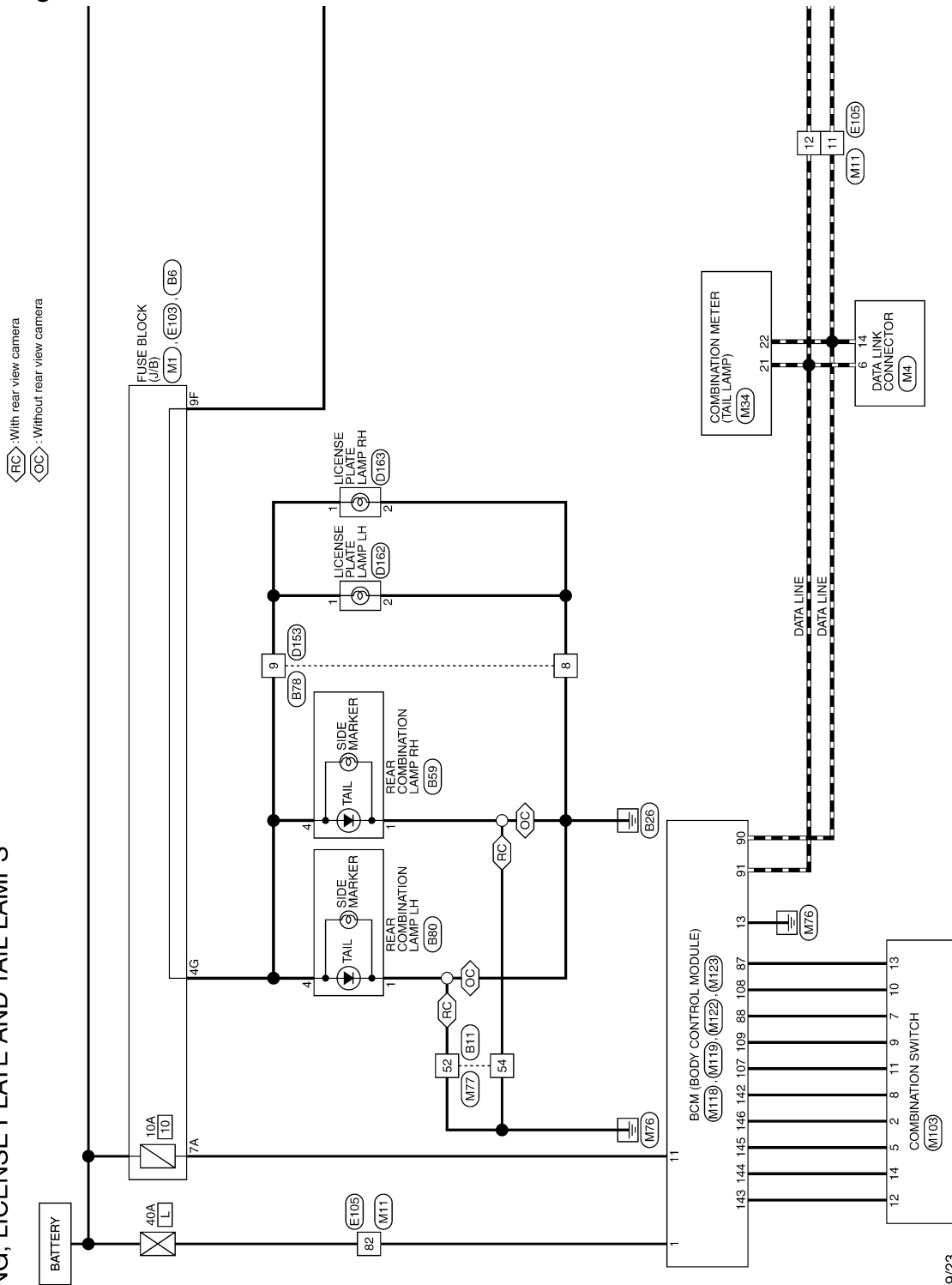
[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

Wiring Diagram - PARKING, LICENSE PLATE AND TAIL LAMPS -

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PARKING, LICENSE PLATE AND TAIL LAMPS



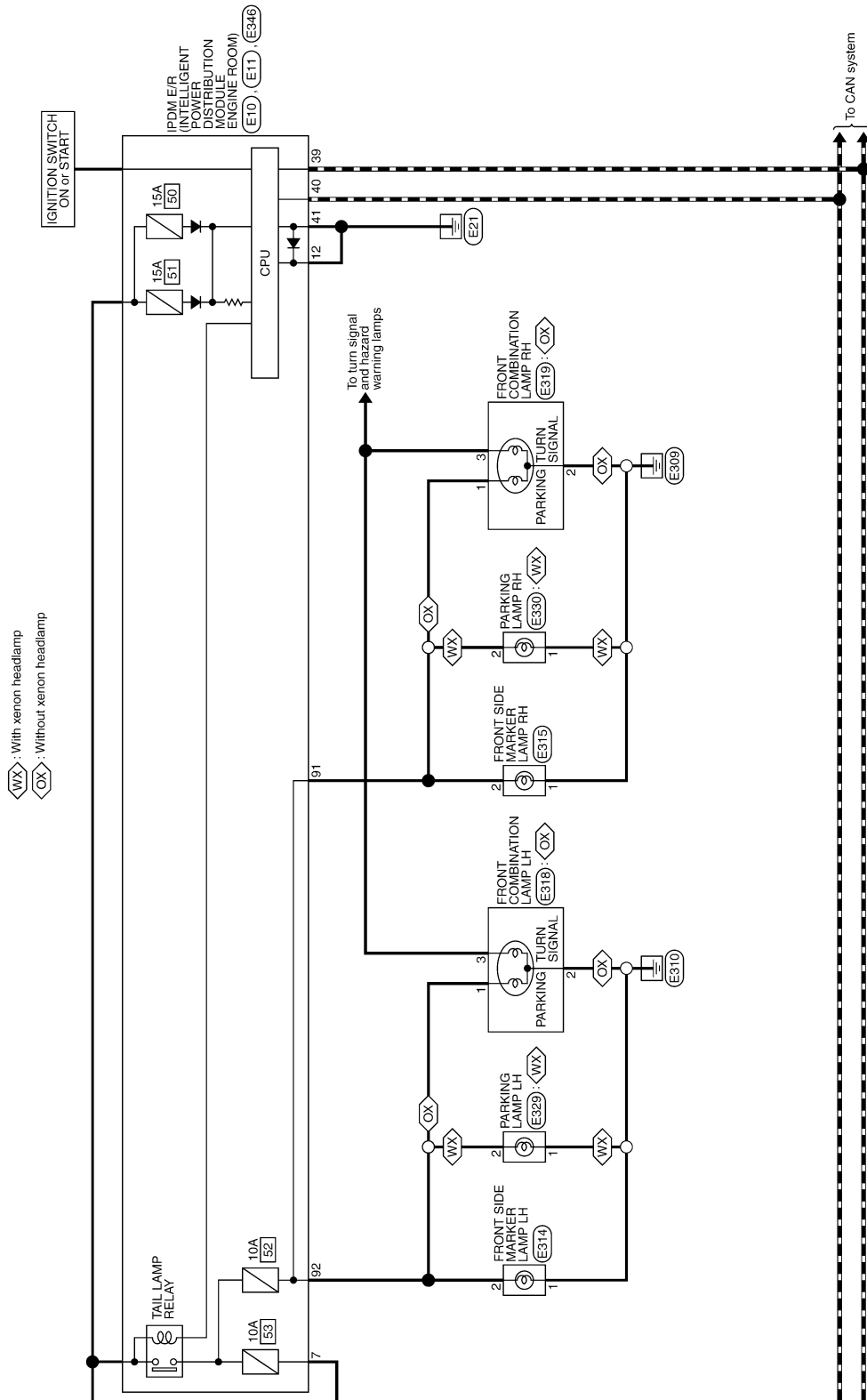
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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]



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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

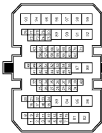
Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FB-CS



5G4G	3G2G1G
12G1G10G9G8G7G6G	

Terminal No.	Color of Wire	Signal Name [Specification]
2G	GR	-
4G	L	-
5G	P	-
10G	Y	-
11G	Y	-

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS19



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

75	L	-
76	G	-
77	R	-
78	SHIELD	-
79	B	-
80	W	-
81	R	-
82	L	-
83	BR	-
84	O	-
85	G	-
86	SB	-
87	R	-
88	G	-
89	GR	-
90	Y	-
91	G	-
92	BR	-
93	G	-
94	V	-
95	BR	-
96	GR	-
97	R	-
98	LG	-
99	O	-

Connector No.	B59
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS4MMW-CS



4	3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	- [With rear view camera]
2	BR	- [Without rear view camera]
3	P	-
4	L	-

Connector No.	B78
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



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

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

Connector No.	B80
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS4MMW-CS



4	3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	Y	-
3	P	-
4	L	-

JCLWM4178GB

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	D183
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	W	-
3	V	-
5	R	-
6	V	-
8	B	-
9	L	-
10	R	-
11	O	-
12	W	-
13	GR	-
14	G	-
15	O	-
16	BR	-

Connector No.	D182
Connector Name	LICENSE PLATE LAMP LH
Connector Type	TK02FBR



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

Connector No.	D183
Connector Name	LICENSE PLATE LAMP RH
Connector Type	TK02FBR



2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	B	-

Connector No.	E10
Connector Name	SPDLE R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH02FW-CS/2-M4-1V



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

Terminal No.	Color of Wire	Signal Name [Specification]
4	LG	-
5	Y	-
7	GR	-
10	BR	-
11	P	-
12	B	-
13	SB	-
15	W	-
16	L/Y	-
19	Y	-
20	L	-
21	O	-
22	SB	-
23	GR	-
24	G	-
25	GR	-
26	Y	-
27	W	-
28	SR	-
30	BR	-

32	V	-
33	G	-
34	O	-
35	P	-
36	G	-
38	GR	-

Connector No.	E11
Connector Name	SPDLE R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH08FW-NH



42	41	40	39
46	45	44	43

Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B	-
42	SB	-
43	Y	-
44	W	-
45	O	-
46	BR	-

Connector No.	E103
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS18FW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1F	L	-
2F	LG	-
4F	BR	-
6F	Y	-
8F	R	-
9F	GR	-

11F	G	-
12F	V	-

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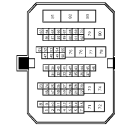
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-
23	P	-
24	L	-
25	O	-
26	G	-
27	V	-
28	SB	-
29	W	-
30	Y	-
43	P	-
48	L	-
49	SB	-
50	GR	-
51	LG	-
52	V	-
53	GR	-
54	BR	-
55	Y	-
56	W/L	-
60	V	-
61	BR	-
62	O	-
63	L/O	-
64	SHIELD	-
66	W	-

67	BR	-
68	Y	-
69	SB	-
70	GR	-
71	SB	-
72	Y	-
73	L	-
74	W	-
75	BR	-
76	GR	-
77	O	-
78	V	-
79	Y	-
80	R	-
81	W	-
82	LG	-
83	O	-

Connector No.	E314
Connector Name	FRONT SIDE MARKER LAMP LH
Connector Type	RK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	LG	-

Connector No.	E315
Connector Name	FRONT SIDE MARKER LAMP RH
Connector Type	RK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-

2	R	-
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Connector No.	E318
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	Z03FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	B	-
3	Y	-

Connector No.	E319
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	Z03FBR



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	G	-

Connector No.	E329
Connector Name	PARKING LAMP LH
Connector Type	RK02FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	LG	-

Connector No.	E330
Connector Name	PARKING LAMP RH
Connector Type	RK02FGY



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

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PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	E346
Connector Name	SWAYLE INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH16FW-NH



98	97	96	95	94	93	92	91
106	105	104	103	102	101	100	99

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



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

Terminal No.	Color of Wire	Signal Name [Specification]
91	R	-
92	LG	-
98	BR	-
100	SB	-
101	L	-
102	B	-
103	P	-

Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

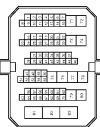
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2



3A	2A	1A
8A	7A	6A

Terminal No.	Color of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH70FW-GS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	O	-
6	G	-
8	R	-
11	P	-
12	L	-
13	V	-
14	Y	-
15	R	-
20	Y	-
21	BR	-
22	G	-
23	P	-

24	Y	-
25	L	-
26	L	-
27	O	-
28	BR	-
29	L	-
30	R	-
47	P	-
48	L	-
49	W	-
50	GR	-
51	LG	-
52	Y	-
53	V	-
54	SB	-
55	P	-
56	SB	-
60	V	-
61	GR	-
62	O	-
63	V	-
64	SHIELD	-
66	W	-
67	R	-
68	W	-
69	P	-
70	G	-
71	G	-
72	BR	-
73	L	-
74	W	-
75	BR	-
76	R	-
77	G	-
78	Y	-
79	G	-
80	R	-
81	W	-
82	W	-
83	O	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
2	O	IGN
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL
8	SB	TRIP RESET SWITCH
9	W	SWILL POWER
10	O	METER CONTROL SW GND
11	L	ENTER SWITCH
12	R	SELECT SWITCH
13	V	ILLUMINATION CONTROL SWITCH (Optional automatic drive position)
14	GR	ILLUMINATION CONTROL SWITCH (Optional automatic drive position)
15	BR	AIR BAG
18	L	AMBIENT SENSOR
19	P	AMBIENT SENSOR POWER
20	Y	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	CAN-L
23	B	GROUND
24	W	FUEL LEVEL SENSOR GROUND
25	BR	CHG
26	G	PARKING BRAKE SWITCH
27	V	BRAKE FLUID LEVEL SWITCH
29	R	WASHER LEVEL SWITCH
30	P	VEHICLE SPEED (2-PULSE)
31	V	VEHICLE SPEED (8-PULSE)
32	LG	OD OFF/SPORTS
34	G	FUEL LEVEL SENSOR
35	SB	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
36	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

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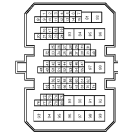
PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19

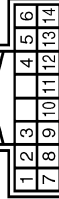


Terminal No.	Color of Wire	Signal Name [Specification]
1	SHIELD	-
2	B	-
3	W	-
4	R	-
5	Y	-
6	W	-
7	G	-
8	SHIELD	-
9	W	-
10	R	-
11	G	-
12	B	-
13	O	-
14	R	-
15	SB	-
16	R	-
17	V	-
18	P	-
19	P	-
20	LG	-
21	Y	-
22	O	-
23	LG	-
24	SB	-
25	Y	-
27	Y	-
28	R	-
30	Y	-
31	W	-
32	BR	-
34	Y	-
35	SHIELD	-
36	G	-
37	Y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

44	V	-
45	P	-
46	R	-
47	Y	-
48	L	-
49	G	-
50	SHIELD	-
51	W	-
52	B	-
53	BR	-
54	B	-
55	G	-
56	P	-
57	L	-
58	SB	-
59	SHIELD	-
60	B	-
61	R	-
62	W	-
63	O	-
64	Y	-
66	L	-
67	R	-
68	G	-
69	SHIELD	-
70	L	-
71	R	-
72	LG	-
73	Y	-
74	R	-
75	P	-
76	L	-
77	BR	-
78	SHIELD	-
79	B	-
80	W	-
81	LG	-
82	L	-
83	W	-
83	GR	-
84	R	-
85	V	-
85	GR	-
86	W	-
87	R	-
88	G	-
89	B	-
90	G	-
91	G	-
92	BR	-
93	P	-
94	V	-

95	O	-
96	SB	-
97	L	-
98	LG	-
99	Y	-

Connector No.	MI03
Connector Name	COMBINATION SWITCH
Connector Type	TH18FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	OUTPUT 2

Connector No.	MI18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	MI03F-LC



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	BAT (E/L)

2	GR	POWER WINDOW POWER SUPPLY (BAT)
3	L	POWER WINDOW POWER SUPPLY (RAP)

Connector No.	MI19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS18FW-CS



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

JCLWM4182GB

PARKING, LICENSE PLATE AND TAIL LAMPS SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

PARKING, LICENSE PLATE AND TAIL LAMPS

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



91	90	89	88	87	86	85	84	83	82	81	80	79	78	77	76	75	74	73	72
111	110	109	108	107	106	105	104	103	102	101	100	99	98	97	96	95	94	93	92

STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

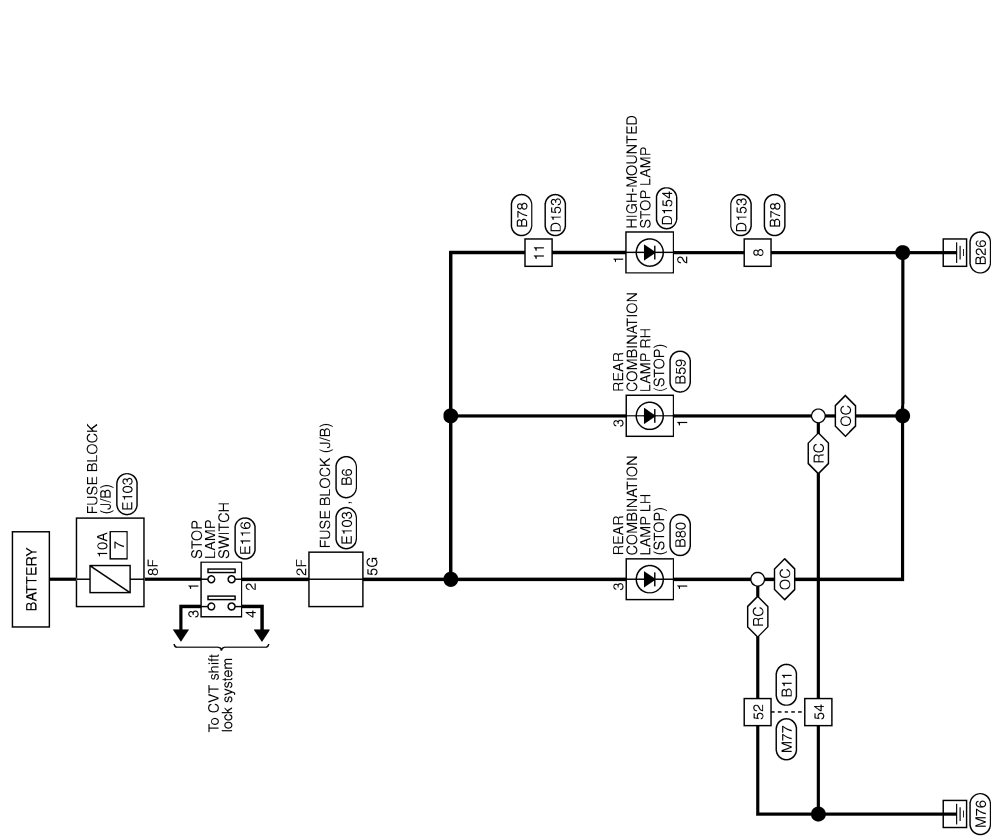
STOP LAMP

Wiring Diagram - STOP LAMP -

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STOP LAMP

RC : With rear view camera
OC : Without rear view camera



2009/08/07

JCLWM4171GB

STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

STOP LAMP

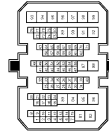
Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
2G	GR	-
4G	L	-
5G	P	-
10G	Y	-
11G	Y	-

Connector No.	B11
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS19



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

18	SB	-
19	P	-
20	P	-
21	LG	-
22	W	-
23	Y	-
24	GR	-
25	Y	-
27	V	-
28	W/L	-
30	P	-
31	O	-
32	BR	-
34	SB	-
35	SHIELD	-
36	L/O	-
37	LG	-
40	Y	-
41	O	-
42	SB	-
43	G	-
44	BR	-
45	L	-
46	GR	-
47	V	-
48	GR	- [With rear view camera and telephone]
49	Y	- [With rear view camera without telephone]
50	SHIELD	-
51	B	-
52	B	-
53	Y	-
54	LG	-
55	BR	-
56	P	-
57	L	-
58	R	-
59	SHIELD	-
60	B	-
61	R/L	-
62	R/W	-
63	LG	-
64	Y	-
66	GR	-
67	G	-
68	R	-
69	SHIELD	-
70	W/R	-
71	B/R	-
72	Y	-
73	LG	-
74	SB	-

75	L	-
76	G	-
77	R	-
78	SHIELD	-
79	B	-
80	W	-
81	R	-
82	L	-
83	BR	-
84	O	-
85	G	-
86	SB	-
87	R	-
88	G	-
89	GR	-
90	Y	-
91	G	-
92	BR	-
93	G	-
94	V	-
95	BR	-
96	GR	-
97	R	-
98	LG	-
99	O	-

Connector No.	B59
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS4MMW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	- [With rear view camera]
2	B/W	- [Without rear view camera]
3	BR	-
4	L	-

Connector No.	B78
Connector Name	WIRE TO WIRE
Connector Type	NS18MW-CS



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

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

Connector No.	B80
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS4MMW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	Y	-
3	P	-
4	L	-

JCLWM4172GB

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STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

STOP LAMP

Connector No.	D153
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	W	-
3	V	-
5	R	-
6	V	-
8	B	-
9	L	-
10	R	-
11	O	-
12	W	-
13	GR	-
14	G	-
15	O	-
16	BR	-

Connector No.	D154
Connector Name	HIGH-MOUNTED STOP LAMP
Connector Type	YZK 7323-1324-F



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	B	-

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



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

Terminal No.	Color of Wire	Signal Name [Specification]
1F	L	-
2F	LG	-
4F	BR	-
6F	Y	-
8F	R	-
9F	GR	-
11F	G	-
12F	V	-

Connector No.	E116
Connector Name	STOP LAMP SWITCH
Connector Type	MD4FW-LC



3	4
1	2

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	LG	-
3	G	-
4	Y	-

JCLWM4173GB

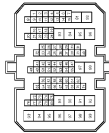
STOP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

STOP LAMP

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS19



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

44	V	-
45	P	-
46	R	-
47	Y	-
48	L	-
49	G	-
50	SHIELD	-
51	W	-
52	B	-
53	BR	-
54	B	-
55	G	-
56	P	-
57	L	-
58	SB	-
59	SHIELD	-
60	B	-
61	R	-
62	W	-
63	O	-
64	Y	-
66	L	-
67	R	-
68	G	-
69	SHIELD	-
70	L	-
71	R	-
72	LG	-
73	Y	-
74	R	-
75	P	-
76	L	-
77	BR	-
78	SHIELD	-
79	B	-
80	W	-
81	LG	-
82	L	-
83	W	-
84	GR	-
85	V	-
86	W	-
87	R	-
88	G	-
89	B	-
90	G	-
91	G	-
92	BR	-
93	P	-
94	V	-

95	O	-
96	SB	-
97	L	-
98	LG	-
99	Y	-

JCLWM4174GB

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BACK-UP LAMP

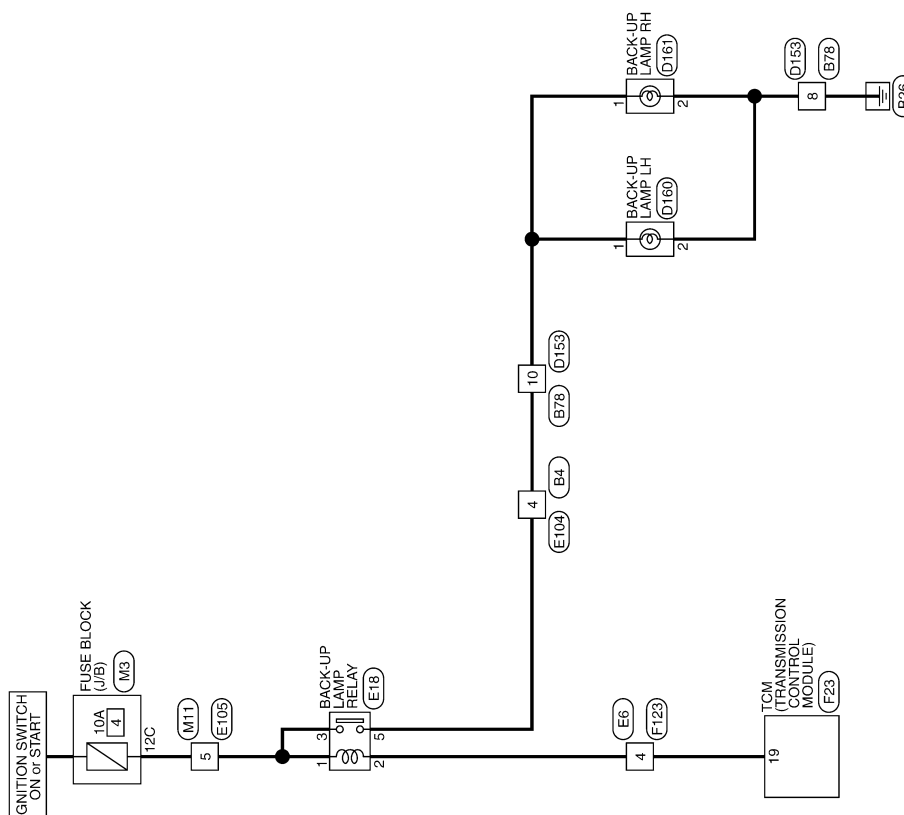
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[HALOGEN TYPE]

BACK-UP LAMP

Wiring Diagram - BACK-UP LAMP -

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BACK-UP LAMP

2008/09/23

JCLWM2777GB

BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

BACK-UP LAMP

Connector No.	B4
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	SB	-
2	W	-
3	W	-
4	R	-
5	O	-
6	P	-
7	L	-
8	B	-
9	LG	-
10	V	-
11	L	-
12	BR	-
13	P	-
14	BR	-
15	O	-
16	G	-

Connector No.	B78
Connector Name	WIRE TO WIRE
Connector Type	NS16MW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	Y	-
3	SB	-
4	R	-
5	V	-
6	B	-

9	L	-
10	P	-
11	P	-
12	W	-
13	GR	-
14	G	-
15	Y	-
16	BR	-

Connector No.	D133
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	W	-
3	V	-
4	P	-
5	R	-
6	V	-
7	B	-
8	L	-
9	R	-
10	O	-
11	W	-
12	GR	-
13	G	-
14	O	-
15	BR	-
16	BR	-

Connector No.	D160
Connector Name	BACK-UP LAMP LH
Connector Type	NS02MW-CS



1	2
---	---

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

Connector No.	D181
Connector Name	BACK-UP LAMP RH
Connector Type	NS02MW-CS



1	2
---	---

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

Connector No.	E6
Connector Name	WIRE TO WIRE
Connector Type	TK16MGY-IV



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

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

Connector No.	E18
Connector Name	BACK-UP LAMP RELAY
Connector Type	MS02FL-M2-LC



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	R	-
3	LG	-
5	R	-

Connector No.	E04
Connector Name	WIRE TO WIRE
Connector Type	NS16FW-CS



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

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

JCLWM4175GB

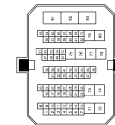
BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

BACK-UP LAMP

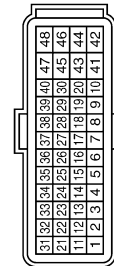
Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH70MW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-
3	Y	-
4	W	-
5	LG	-
6	GR	-
8	G	-
11	P	-
12	L	-
13	Y	-
14	O	-
15	BR	-
20	Y	-
21	BR	-
22	P	-
23	P	-
24	L	-
25	O	-
26	G	-
27	V	-
28	SB	-
29	W	-
30	Y	-
43	P	-
48	L	-
49	SB	-
50	GR	-
51	LG	-
52	V	-
53	GR	-
54	BR	-
55	Y	-
56	W/L	-
60	V	-
61	BR	-
62	O	-
63	L/O	-
64	SHIELD	-
66	W	-

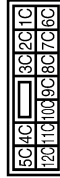
67	BR	-
68	Y	-
69	SB	-
70	GR	-
71	SB	-
72	Y	-
73	L	-
74	W	-
75	BR	-
76	GR	-
77	O	-
78	V	-
79	Y	-
80	R	-
81	W	-
82	LG	-
83	O	-

Connector No.	F23
Connector Name	TGM (TRANSMISSION CONTROL MODULE)
Connector Type	RH40PE-R28-L-RH



Terminal No.	Color of Wire	Signal Name [Specification]
1	P/B	INH SW 2
2	P/L	INH SW 3
3	G/O	INH SW 4
4	GR	INH SW 3 MON
5	B	GND
7	W	SENSOR GND
8	G/W	CLOCK (SEL2)
9	L/R	CHIP SELECT (SEL1)
10	BR/R	DATA I/O (SEL3)
11	BR/W	INH SW 1
13	V	ATF TEMP SENSOR
14	R/W	PRI PRESS SENSOR
15	V/W	SEC PRESS SENSOR
19	G/B	REV LAMP RELAY
20	R/B	STARTER RELAY
25	W/R	SENSOR GND
26	L/O	SENSOR POWER SOURCE(5V)
27	R/G	S/M-D
28	R	S/M-C

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
6C	BR	-
7C	B	-
8C	G	-
9C	GR	-
10C	SB	-
11C	R	-
12C	O	-

29	O/B	S/M-B
30	G/R	S/M-A
31	P	CAN-L
32	L	CAN-H
33	LG	PRI SPEED SENSOR
34	LG/R	SEC SPEED SENSOR
37	V/R	L/USSEL-ON/OFF SOL
38	L/W	L/USSEL-LINEAR SOL
39	W/B	SEC-LINEAR SOL
40	R/Y	PL LINEAR SOL
42	B	GND
46	Y	VIGN
47	L/R	BATT
48	Y	VIGN

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK18FGY-1V



Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
3	G/R	-
4	G/B	-
5	R	-
6	L/R	-
8	P	-
10	Y/B	-
11	BR/W	-
12	BR	-
13	G	-
14	B	-
15	O	-

JCLWM4176GB

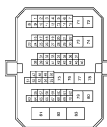
BACK-UP LAMP

< DTC/CIRCUIT DIAGNOSIS >

[HALOGEN TYPE]

BACK-UP LAMP

Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH00PW-CS10-M3



Terminal No.	Color of Wire	Signal Name [Specification]
2	L	-
3	P	-
4	O	-
5	G	-
6	R	-
7	L	-
8	BR	-
9	W	-
10	Y	-
11	G	-
12	P	-
13	O	-
14	R	-
15	L	-
16	BR	-
17	W	-
18	Y	-
19	G	-
20	P	-
21	O	-
22	R	-
23	L	-
24	BR	-
25	W	-
26	Y	-
27	G	-
28	P	-
29	O	-
30	R	-
31	L	-
32	BR	-
33	W	-
34	Y	-
35	G	-
36	P	-
37	O	-
38	R	-
39	L	-
40	BR	-
41	W	-
42	Y	-
43	G	-
44	P	-
45	O	-
46	R	-
47	L	-
48	BR	-
49	W	-
50	Y	-
51	G	-
52	P	-
53	O	-
54	R	-
55	L	-
56	BR	-
57	W	-
58	Y	-
59	G	-
60	P	-
61	O	-
62	R	-
63	L	-
64	BR	-
65	W	-
66	Y	-

67	R	-
68	W	-
69	P	-
70	G	-
71	BR	-
72	L	-
73	W	-
74	BR	-
75	R	-
76	G	-
77	Y	-
78	G	-
79	R	-
80	W	-
81	Y	-
82	W	-
83	O	-

JCLWM4177GB

EXL

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000005681409

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III 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/AUTO	Off
	Front wiper switch INT/AUTO	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
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Monitor Item	Condition	Value/Status
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: For models with BOSE audio system this item is not monitored.	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
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
RKE-LOCK	LOCK button of Intelligent Key is not pressed	Off
	LOCK button of Intelligent Key is pressed	On
RKE-UNLOCK	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed	On
RKE-TR/BD	BACK DOOR OPEN button of Intelligent Key is not pressed	Off
	BACK DOOR OPEN button of Intelligent Key is pressed	On
RKE-PANIC	PANIC button of Intelligent Key is not pressed	Off
	PANIC button of Intelligent Key is pressed	On
RKE-P/W OPEN	UNLOCK button of Intelligent Key is not pressed	Off
	UNLOCK button of Intelligent Key is pressed and held	On

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Monitor Item	Condition	Value/Status
RKE-MODE CHG	LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	On
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
	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
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
BRAKE SW 2	The brake pedal is not depressed	Off
	Stop lamp switch 1 signal circuit is normal	On
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
	Selector lever in P or N position	On
S/L -LOCK NOTE: For models without steering lock unit this item is not displayed.	Steering is unlocked	Off
	Steering is locked	On
S/L -UNLOCK NOTE: For models without steering lock unit this item is not displayed.	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-F/B NOTE: For models without steering lock unit this item is not displayed.	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
UNLK SEN -DR	Driver door is unlocked	Off
	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Monitor Item	Condition	Value/Status	
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off	A
	Ignition switch in ON position	On	
DETE SW -IPDM	Selector lever in any position other than P	Off	B
	Selector lever in P position	On	
SFT PN -IPDM	Selector lever in any position other than P and N	Off	C
	Selector lever in P or N position	On	
SFT P -MET	Selector lever in any position other than P	Off	
	Selector lever in P position	On	D
SFT N -MET	Selector lever in any position other than N	Off	
	Selector lever in N position	On	
ENGINE STATE	Engine stopped	Stop	E
	While the engine stalls	Stall	
	At engine cranking	Crank	F
	Engine running	Run	
S/L LOCK-IPDM NOTE: For models without steering lock unit this item is not displayed.	Steering is unlocked	Off	G
	Steering is locked	On	
S/L UNLK-IPDM NOTE: For models without steering lock unit this item is not displayed.	Steering is locked	Off	H
	Steering is unlocked	On	
S/L RELAY-REQ NOTE: For models without steering lock unit this item is not displayed.	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK.	Off	I
	Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK.	On	J
VEH SPEED 1	While driving	Equivalent to speedometer reading	
VEH SPEED 2	While driving	Equivalent to speedometer reading	K
DOOR STAT-DR	Driver door is locked	LOCK	EXL
	Wait with selective UNLOCK operation (5 seconds)	READY	
	Driver door is unlocked	UNLOCK	
DOOR STAT-AS	Passenger door is locked	LOCK	M
	Wait with selective UNLOCK operation (5 seconds)	READY	
	Passenger door is unlocked	UNLOCK	
ID OK FLAG	Power supply position in LOCK position	Reset	N
	Power supply position in any position other than LOCK	Set	
PRMT ENG STRT	The engine start is prohibited	Reset	
	The engine start is permitted	Set	O
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset	
KEY SW -SLOT	Intelligent Key is not inserted into key slot	Off	P
	Intelligent Key is inserted into key slot	On	
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key	
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

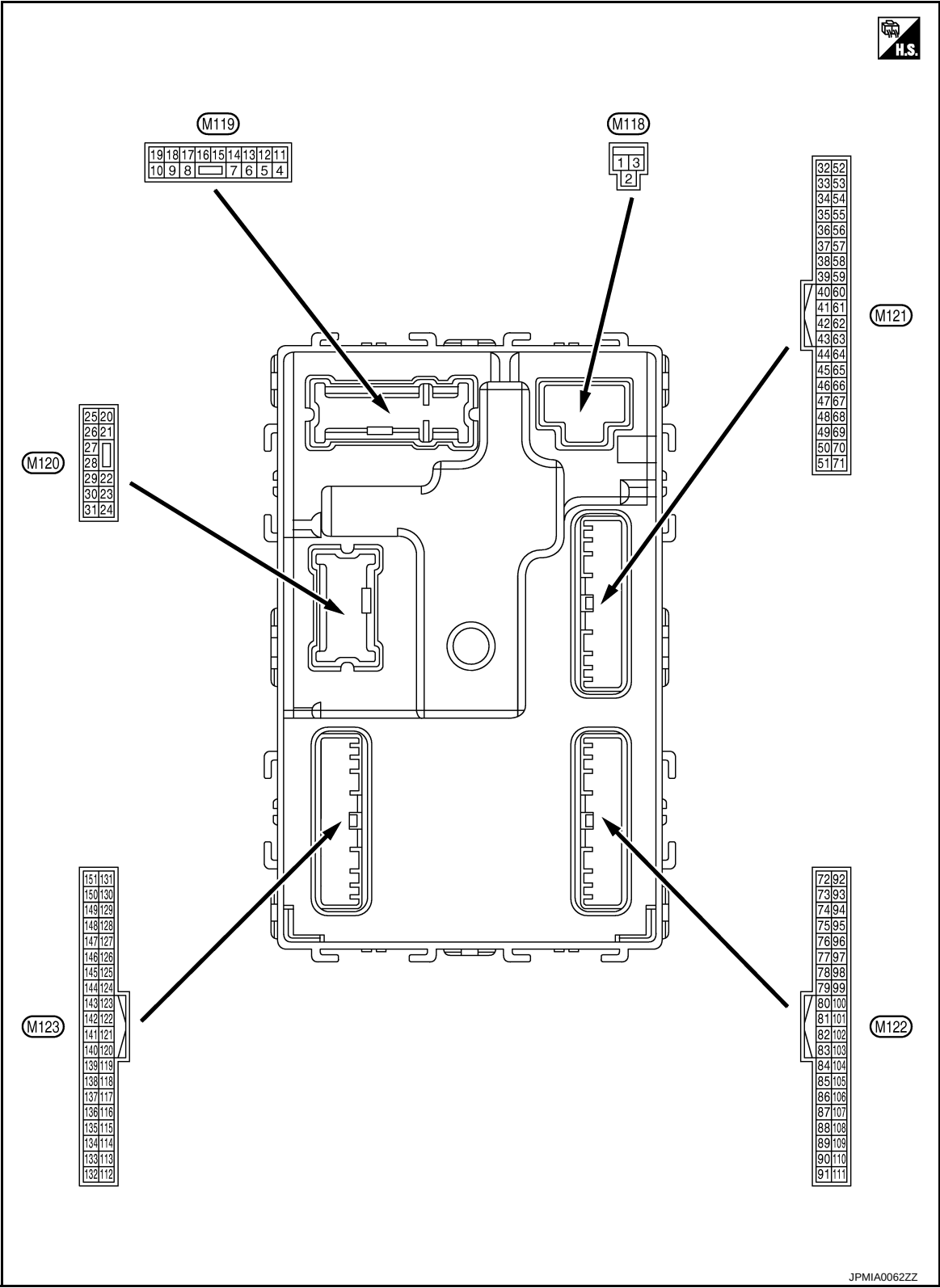
Monitor Item	Condition	Value/Status
CONFIRM ID ALL	The Intelligent Key ID that the key slot receives is not recognized by any Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by any Intelligent Key ID registered to BCM.	Done
CONFIRM ID4	The Intelligent Key ID that the key slot receives is not recognized by the fourth Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the fourth Intelligent Key ID registered to BCM.	Done
CONFIRM ID3	The Intelligent Key ID that the key slot receives is not recognized by the third Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the third Intelligent Key ID registered to BCM.	Done
CONFIRM ID2	The Intelligent Key ID that the key slot receives is not recognized by the second Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the second Intelligent Key ID registered to BCM.	Done
CONFIRM ID1	The Intelligent Key ID that the key slot receives is not recognized by the first Intelligent Key ID registered to BCM.	Yet
	The Intelligent Key ID that the key slot receives is recognized by the first Intelligent Key ID registered to BCM.	Done
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet
	The ID of fourth Intelligent Key is registered to BCM	Done
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet
	The ID of third Intelligent Key is registered to BCM	Done
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet
	The ID of second Intelligent Key is registered to BCM	Done
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet
	The ID of first Intelligent 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
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
	ID of front LH tire transmitter is not registered	Yet
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
	Tire pressure indicator ON	On
BUZZER	Tire pressure warning alarm is not sounding	Off
	Tire pressure warning alarm is sounding	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

TERMINAL LAYOUT

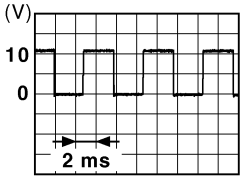


PHYSICAL VALUES

BCM (BODY CONTROL MODULE)

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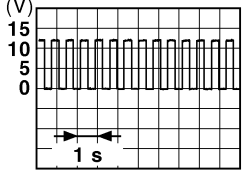
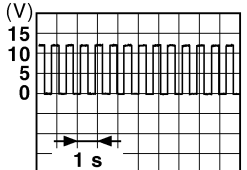
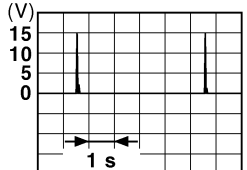
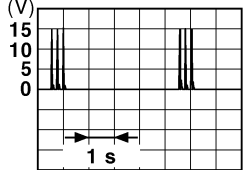
[HALOGEN TYPE]

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 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (L)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4 (P)	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 (G)	Ground	Passenger door UN- LOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (W)	Ground	Step lamp	Output	Step lamp	ON	0 V
					OFF	Battery voltage
8 (V)	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
10 (P)	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 (LG)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (O)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	NOTE: When the illumination brightening/dimming level is in the neutral position  JSNIA0010GB
15 (L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK and ON indicator lamps are not illuminated.)	Battery voltage
					ACC	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

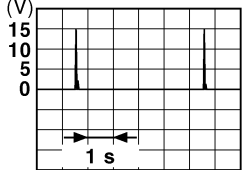
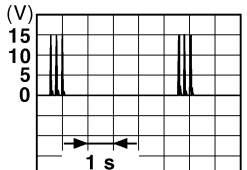
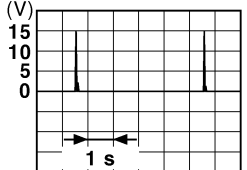
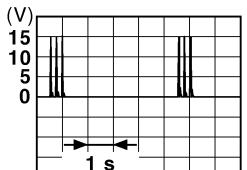
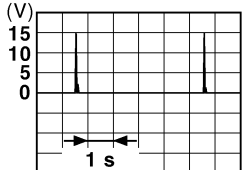
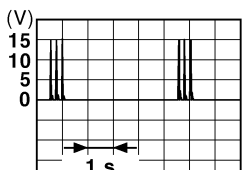
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
17 (G)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 6.5 V
18 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 6.5 V
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
23 (BR)	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
26 (G)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
					ON (Operated)	Battery voltage
34 (B)	Ground	Luggage room antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	
					When Intelligent Key is not in the passenger compartment	

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

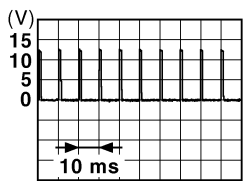
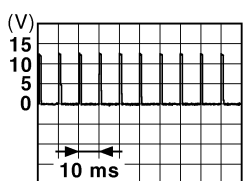
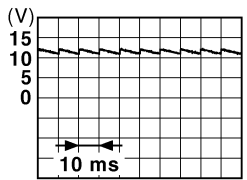
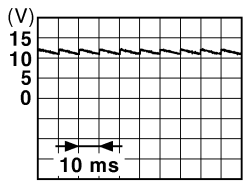
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
35 (W)	Ground	Luggage room antenna (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
38 (L)	Ground	Rear bumper antenna (-)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
39 (BR)	Ground	Rear bumper antenna (+)	Output	When the back door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
47 (L)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
52 (R)	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	0.3 V
				Ignition switch OFF		0 V
61 (R)	Ground	Back door request switch	Input	Back door re- quest switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
64 (GR)	Ground	Warning buzzer	Output	Warning buzzer	Sounding	0 V
					Not sounding	Battery voltage
65 (O)	Ground	Rear wiper stop posi- tion	Input	Rear wiper	In stop position	 JPMIA0016GB 1.0 V
					Not in stop position	0 V
66 (Y)	Ground	Back door switch	Input	Back door switch	OFF (When back door closes)	 JPMIA0011GB 11.8 V
					ON (When back door opens)	0 V
67 (LG)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 JPMIA0011GB 11.8 V

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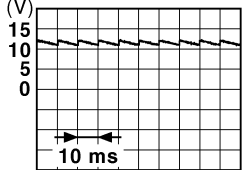
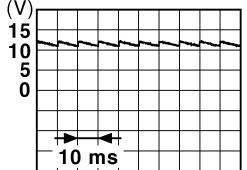
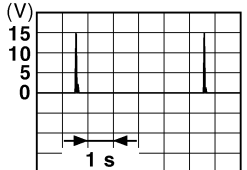
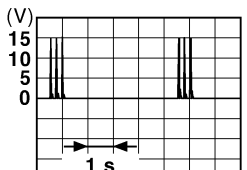
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

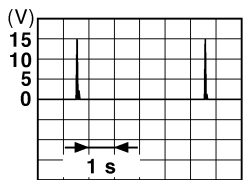
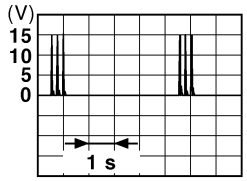
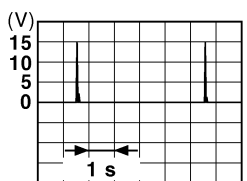
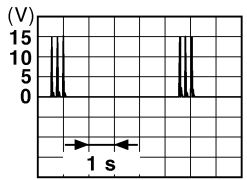
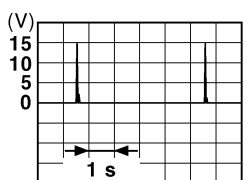
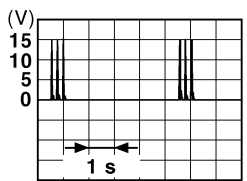
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
68 (W)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	 JPMIA0011GB 11.8 V
				Rear RH door switch	ON (When rear RH door opens)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	 JPMIA0011GB 11.8 V
				Rear LH door switch	ON (When rear LH door opens)	0 V
72 (B)	Ground	Room antenna (-) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compart- ment	 JMKIA0063GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
73 (W)	Ground	Room antenna (+) (Center console)	Output	Ignition switch OFF	 JMKIA0062GB
				When Intelligent Key is not in the passenger compart- ment	 JMKIA0063GB
74 (Y)	Ground	Passenger door an- tenna (-)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	 JMKIA0062GB
				When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
75 (LG)	Ground	Passenger door an- tenna (+)	Output	When the pas- senger door re- quest switch is operated with ig- nition switch OFF	 JMKIA0062GB
				When Intelligent Key is not in the antenna detection area	 JMKIA0063GB

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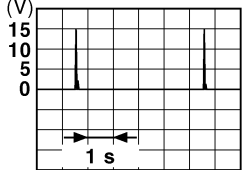
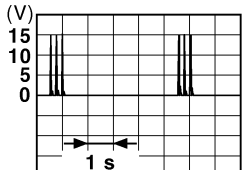
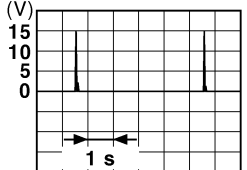
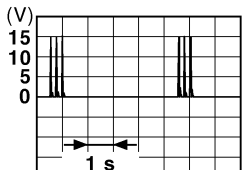
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

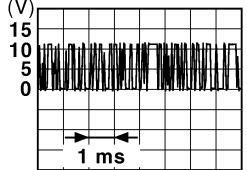
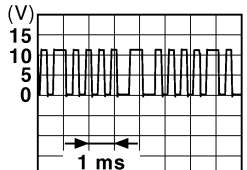
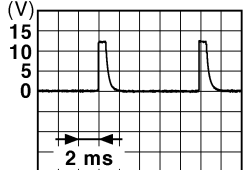
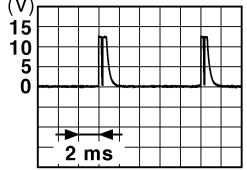
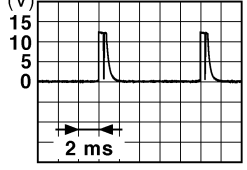
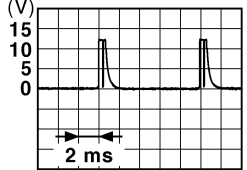
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
76 (V)	Ground	Driver door antenna (-)	Output	When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
77 (P)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
80 (SB)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (O)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (BR)	Ground	Ignition relay [fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

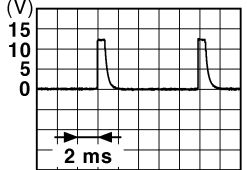
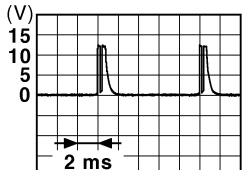
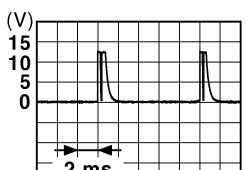
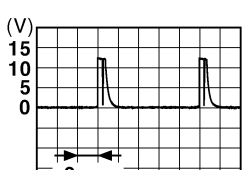
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
83 (P)	Ground	Remote keyless entry receiver communica- tion	Input/ Output	During waiting	 JMKIA0064GB	A
				When operating either button on Intelligent Key	 JMKIA0065GB	B
87 (R)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)  JPMIA0041GB 1.4 V	C
					Front fog lamp switch ON (Wiper intermittent dial 4)  JPMIA0037GB 1.3 V	D
					Rear wiper switch ON (Wiper intermittent dial 4)  JPMIA0039GB 1.3 V	E
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7  JPMIA0040GB 1.3 V	F

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BCM (BODY CONTROL MODULE)

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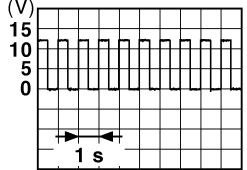
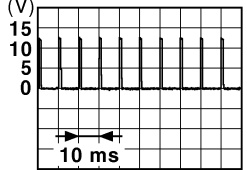
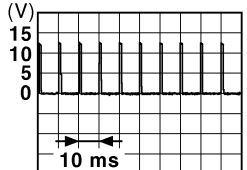
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
88 (GR)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					Rear washer switch ON (Wiper intermittent dial 4)	 JPMIA0039GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	 JPMIA0040GB 1.3 V
89 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button igni- tion switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
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 (R)	Ground	Key slot illumination	Output	Key slot illumination	OFF	0 V
					Blinking	 JPMA0015GB
					ON	Battery voltage
93 (P)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK and ACC indicator lamps are not illuminated.)	Battery voltage
					ON	0 V
95 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (Y)	Ground	CVT shift selector (detention switch) power supply	Output	—	—	Battery voltage
97*1 (O)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	Battery voltage
98*1 (L)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	Battery voltage
					UNLOCK status	0 V
99 (V)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	Battery voltage
100 (P)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMA0016GB
101 (W)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMA0016GB
102 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (L)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage

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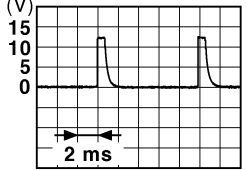
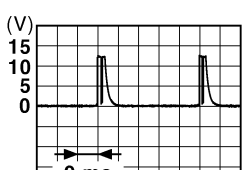
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BCM (BODY CONTROL MODULE)

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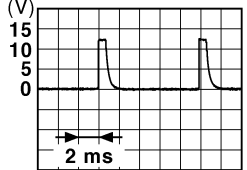
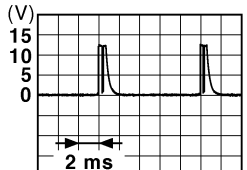
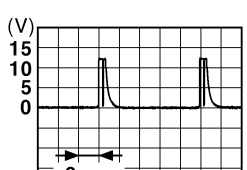
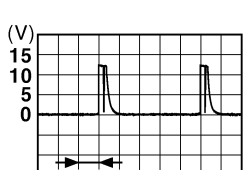
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
106*1 (Y)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC ON	Battery voltage 0 V
107 (O)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Turn signal switch LH	 JPMIA0037GB 1.3 V
					Turn signal switch RH	 JPMIA0036GB 1.3 V
					Front wiper switch LO	 JPMIA0038GB 1.3 V
					Front washer switch ON	 JPMIA0039GB 1.3 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

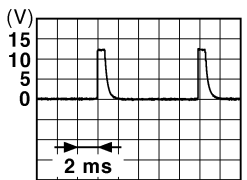
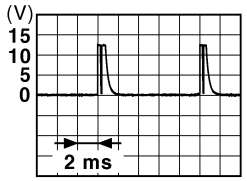
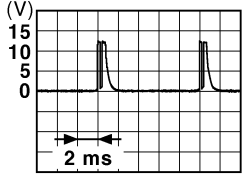
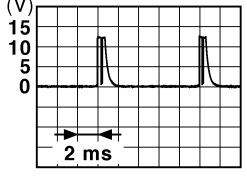
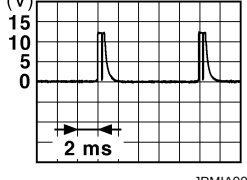
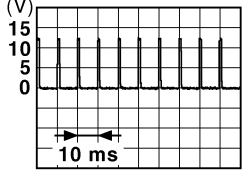
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
108 (P)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)  JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)  JPMIA0038GB 1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)  JPMIA0036GB 1.3 V
					Rear wiper switch INT (Wiper intermittent dial 4)  JPMIA0040GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6  JPMIA0039GB 1.3 V

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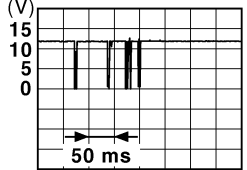
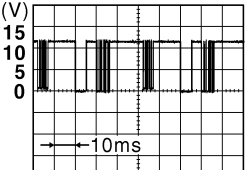
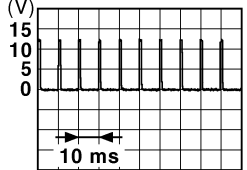
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
109 (SB)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	All switches OFF  JPMIA0041GB 1.4 V
					Lighting switch PASS  JPMIA0037GB 1.3 V
					Lighting switch 2ND  JPMIA0036GB 1.3 V
					Front wiper switch INT/ AUTO  JPMIA0038GB 1.3 V
					Front wiper switch HI  JPMIA0040GB 1.3 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	ON 0 V
				OFF	 JPMIA0012GB 1.1 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
111*1 (LG)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	Battery voltage
					LOCK or UNLOCK	 JMKIA0066GB
					For 15 seconds after UN- LOCK	Battery voltage
					15 seconds or later after UNLOCK	0 V
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		 JPMIA0156GB 8.7 V
113 (O)	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 (GR)	Ground	Stop lamp switch 1	Input	—		Battery voltage
118 (L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is de- pressed)	Battery voltage
119 (W)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (unlock sen- sor switch OFF)	 JPMIA0012GB 1.1 V
					UNLOCK status (unlock sensor switch ON)	0 V
121 (Y)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot		Battery voltage
				When Intelligent Key is not inserted into key slot		0 V
123 (G)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage

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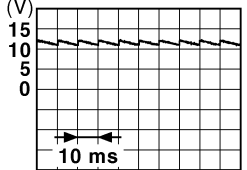
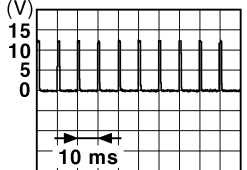
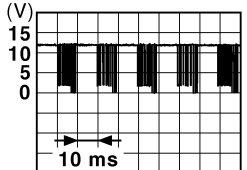
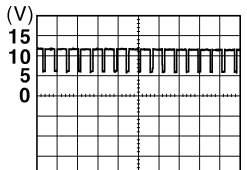
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

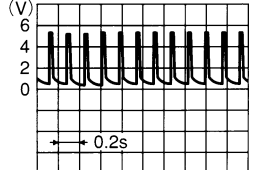
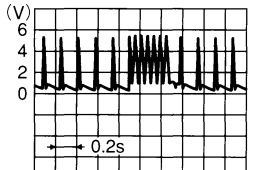
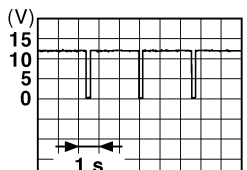
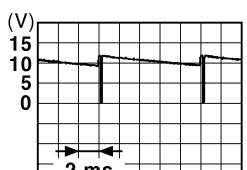
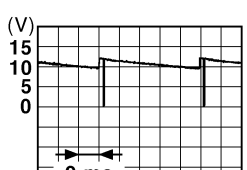
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
124 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	 JPMIA0011GB 11.8 V
					ON (When passenger door opens)	0 V
130*2 (BR)	Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	 JPMIA0012GB 1.1 V
					Rear window defogger switch ON	0 V
132 (G)	Ground	Power window switch communication	Input/ Output	Ignition switch ON		 JPMIA0013GB 10.2 V
				Ignition switch OFF or ACC		Battery voltage
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button igni- tion switch illumi- nation	ON (When tail lamps OFF)	9.5 V
					ON (When tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level.  JPMIA0159GB
					OFF	0 V
134 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF (ACC and ON indica- tor lamps are not illuminat- ed.)	Battery voltage
					ON	0 V
137 (P)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (V)	Ground	Receiver and sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
139 (O)	Ground	Tire pressure receiver communication	Input/ Output	Ignition switch ON	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
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 (O)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB 11.3 V
					OFF	Battery voltage
142 (L)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 1ST	 JPMIA0031GB 10.7 V
					Lighting switch HI	
					Lighting switch 2ND	
					Turn signal switch RH	
143 (W)	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)	 JPMIA0032GB 10.7 V
					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	

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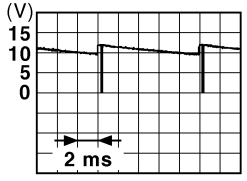
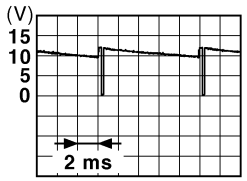
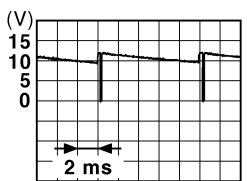
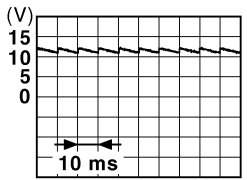
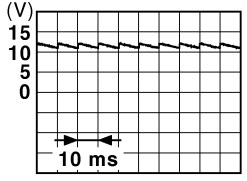
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
144 (P)	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	
145 (V)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front wiper switch INT/ AUTO	
					Front wiper switch LO	
					Lighting switch AUTO	
146 (Y)	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	
149 (W)	Ground	Tire pressure warn- ing check switch	Input	Ignition switch ON		
						11.8 V
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	
					ON (When driver door opens)	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
151 (G)	Ground	Rear window defog- ger relay control	Output	Rear window de- fogger	Active	0 V
					Not activated	Battery voltage

NOTE:

- *1: With steering lock unit
- *2: Without BOSE audio system

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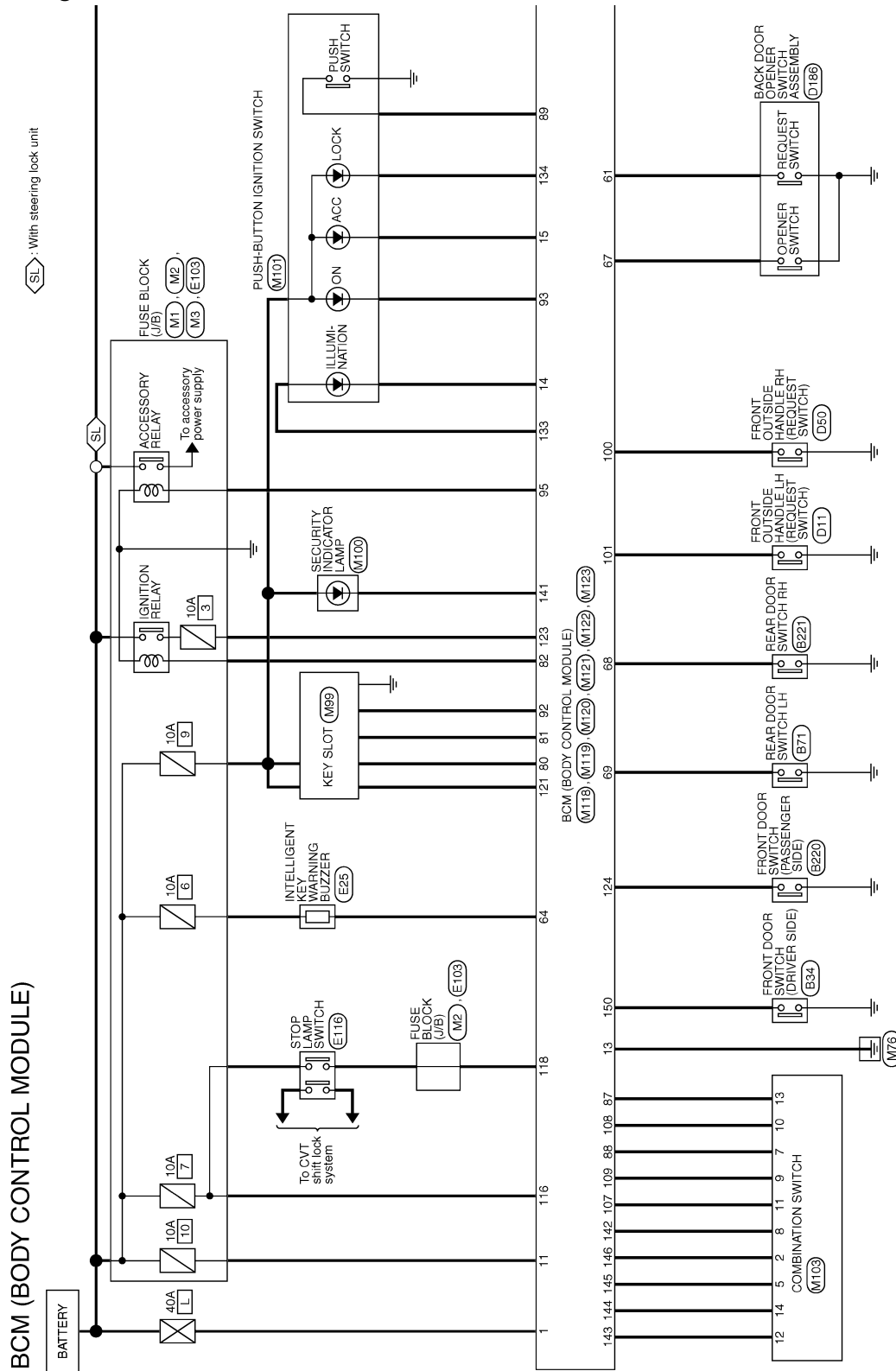
BCM (BODY CONTROL MODULE)

[HALOGEN TYPE]

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - BCM -

INFOID:000000005681410



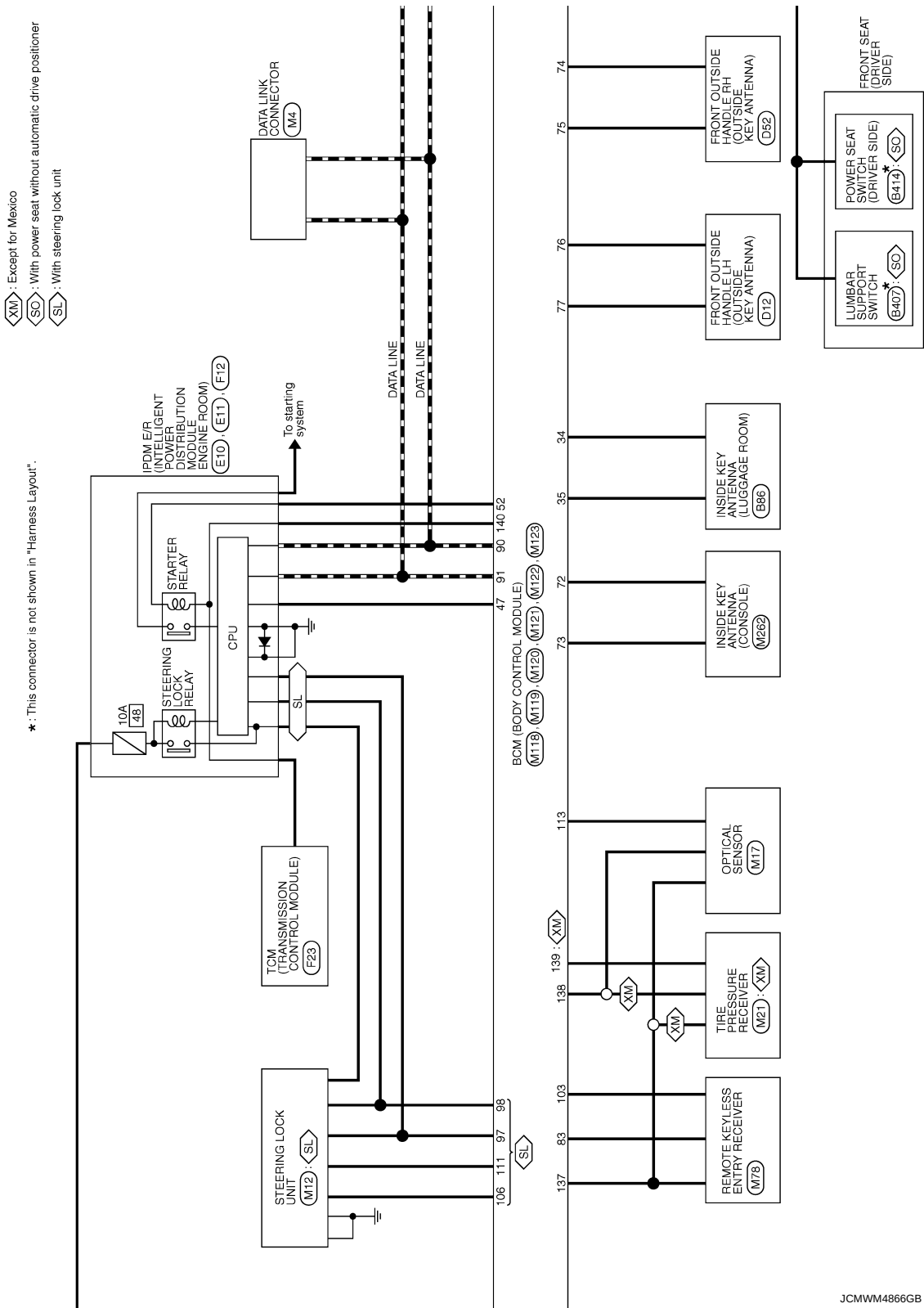
JCMWM4865GB

2009/08/07

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

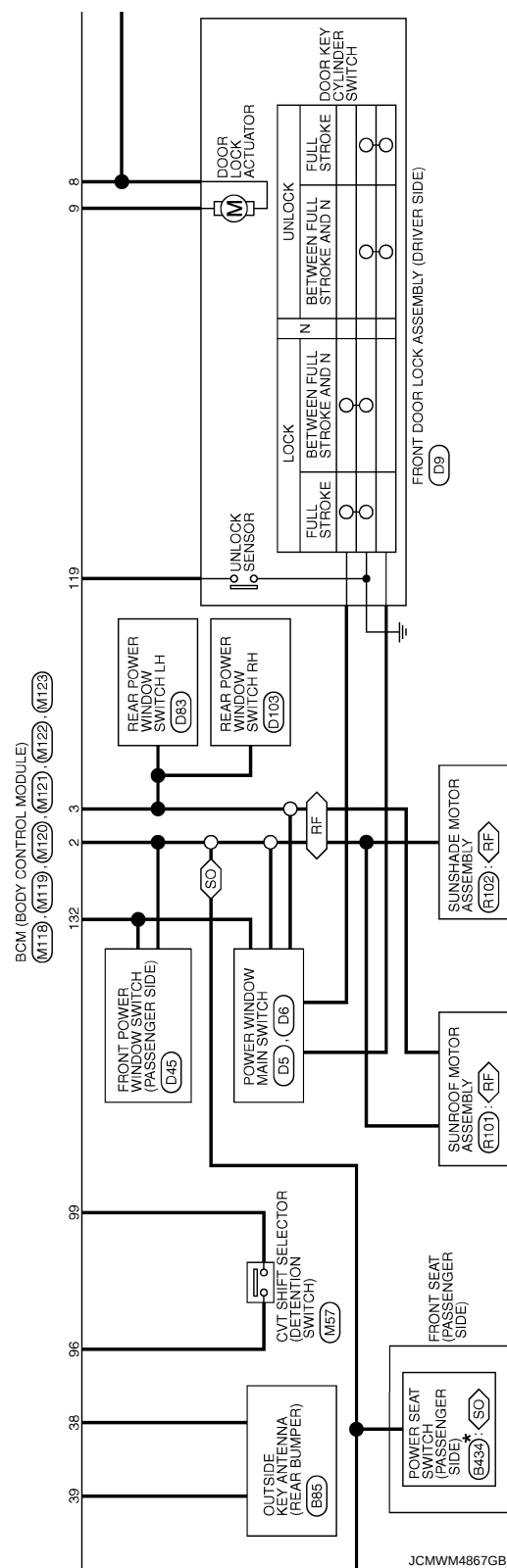
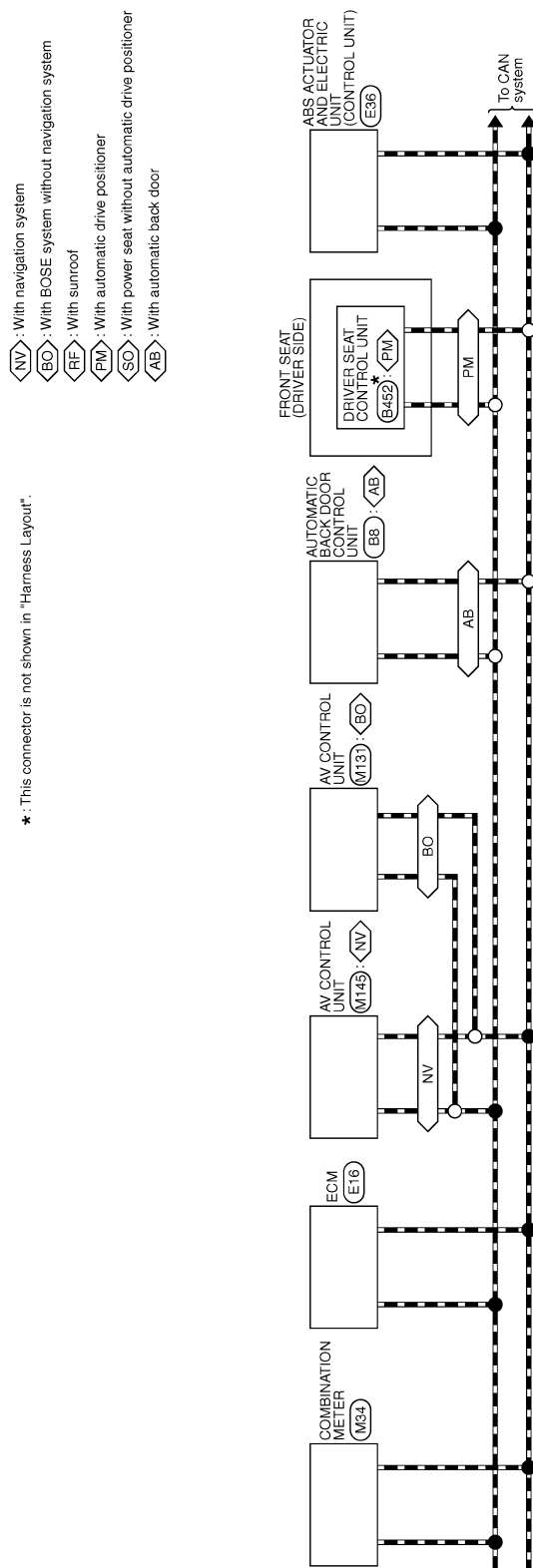


JCMW4866GB

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[HALOGEN TYPE]

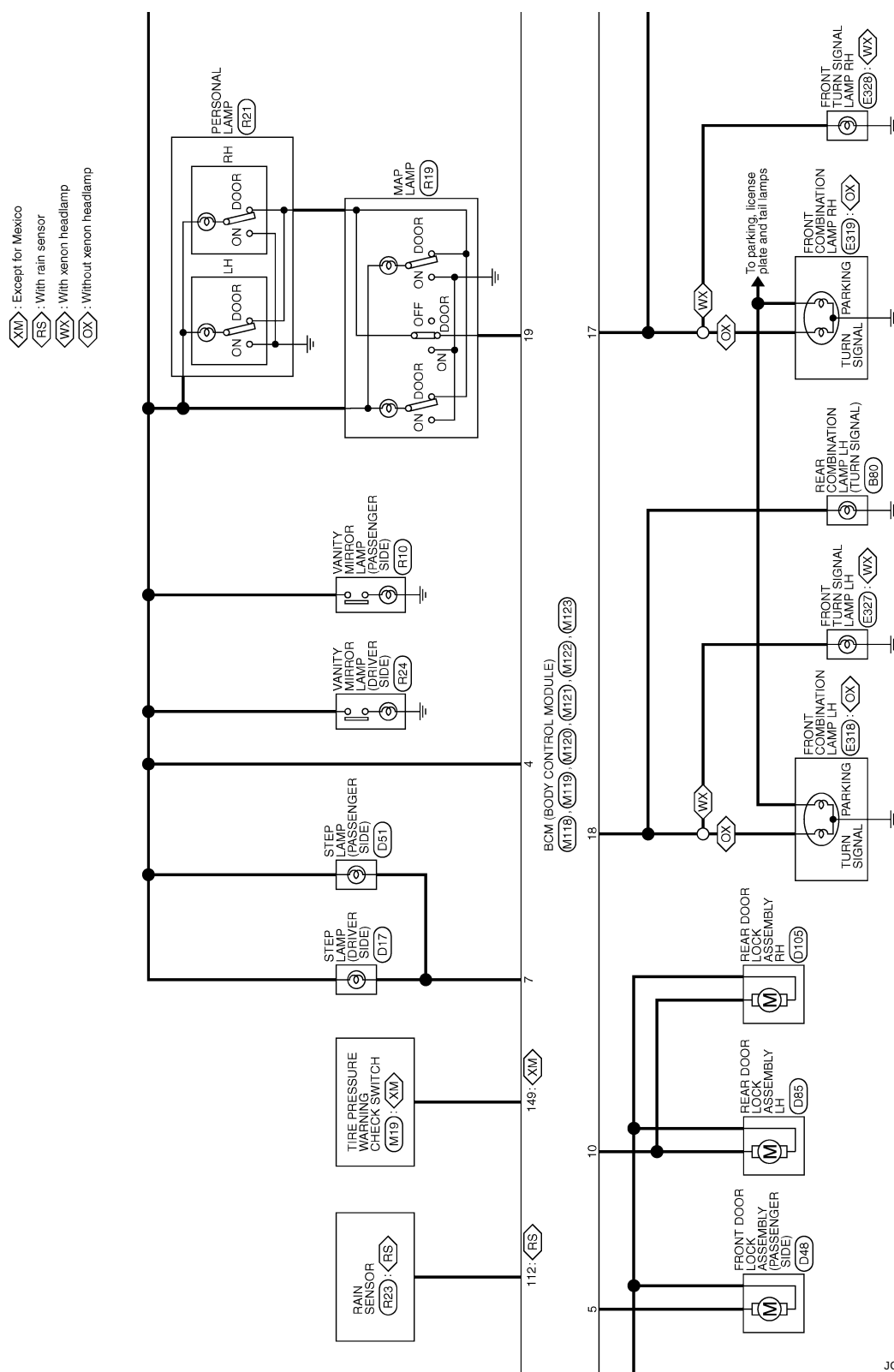
< ECU DIAGNOSIS INFORMATION >



BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]



JCMWM4868GB

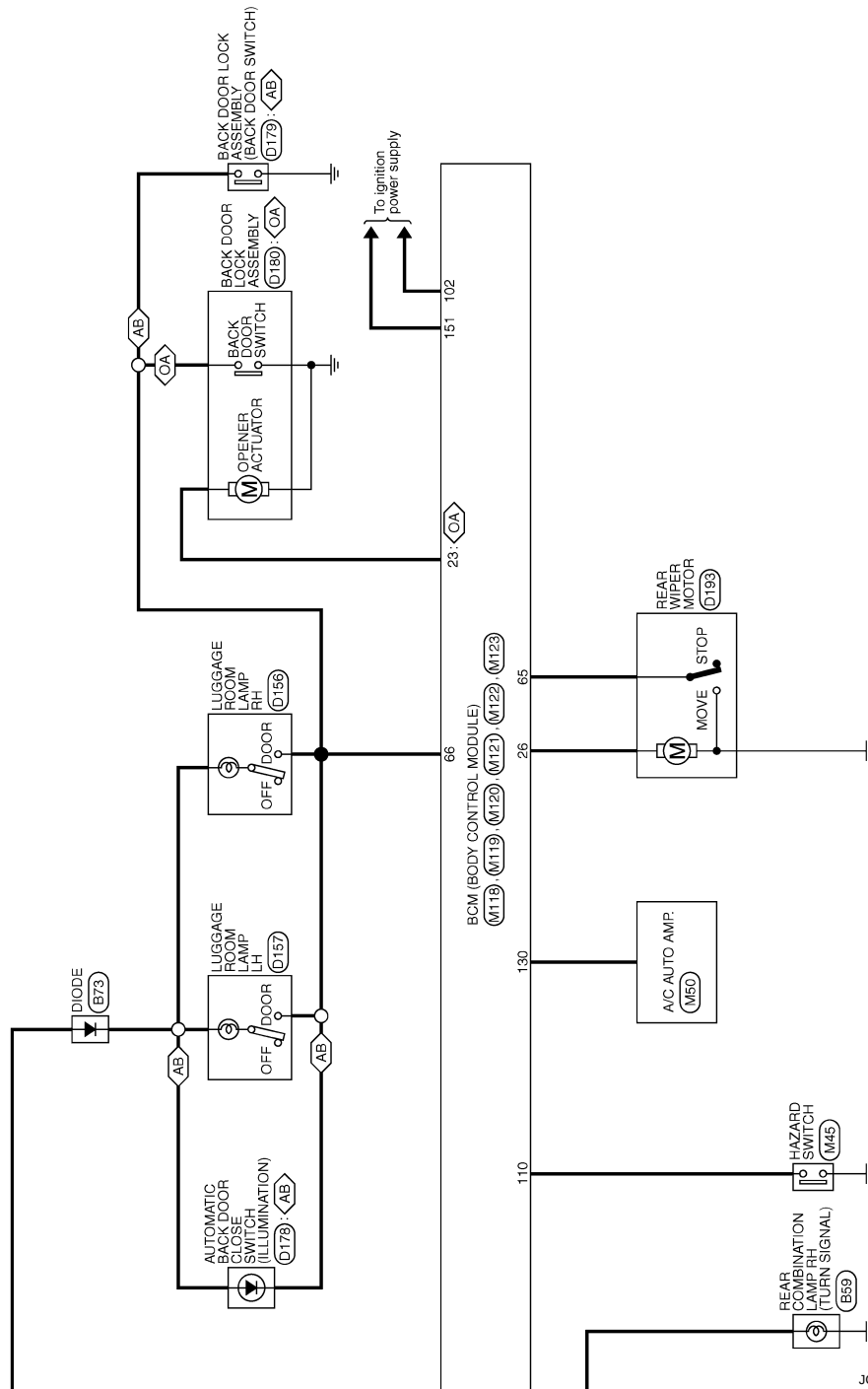
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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

◁AB▷ : With automatic back door
◁OA▷ : Without automatic back door



JCMWM4869GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	B8
Connector Name	AUTOMATIC BACK DOOR CONTROL UNIT
Connector Type	TH20FW-TB8



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	Buzzer
2	Y	ABD SW
4	Y	ABD CLOSE SW
6	L	CAN HI
7	P	CAN LOW
8	LG	HALF LATCH SW
9	GR	IGN
10	SB	BAT
11	V	CLOSURE MTR (CLOSE)
12	R	CLOSURE MTR (OPEN)
14	V	TOUCH SENS LH
15	O	TOUCH SENS GND
16	W	TOUCH SENS RH
17	LG	MAIN SW
19	P	CLOSE SW
20	L	OPEN SW
21	B	GND
22	B	GND
23	GR	GND
24	BR	ENCODER B
25	Y	ENCODER A
26	G	ENCODER PWR

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	A03FW



1	2	3
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Terminal No.	Color of Wire	Signal Name [Specification]
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2	SB	-
---	----	---

Connector No.	B59
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS04MW-GS



4	3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-[With rear view camera]
2	BR	-[Without rear view camera]
3	P	-
4	L	-

Connector No.	B71
Connector Name	REAR DOOR SWITCH LH
Connector Type	A03FW



1	2	3
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Terminal No.	Color of Wire	Signal Name [Specification]
2	BR	-

Connector No.	B73
Connector Name	DIODE
Connector Type	2433S CS902



1	2
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Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	L	-

Connector No.	B80
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS04MW-GS



4	3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	Y	-
3	P	-
4	L	-

Connector No.	B85
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Type	RK02FGY



1	2
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Terminal No.	Color of Wire	Signal Name [Specification]
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1	R	-
2	G	-

Connector No.	B86
Connector Name	INSIDE KEY ANTENNA (LUGGAGE ROOM)
Connector Type	RK02FGY



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

Connector No.	B720
Connector Name	FRONT DOOR SWITCH (PASSENGER SIDE)
Connector Type	A03FW



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

JCMWM4870GB

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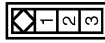
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	B221
Connector Name	REAR DOOR SWITCH RH
Connector Type	MS3FW



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

Connector No.	B407
Connector Name	LUMBAR SUPPORT SWITCH
Connector Type	MS4FBR-CS



Terminal No.	11
Color of Wire	O
Signal Name [Specification]	-
12	LG
13	Y/W
14	Y

Connector No.	B414
Connector Name	POWER SEAT SWITCH (DRIVER SIDE)
Connector Type	MS10FW-CS



Terminal No.	1
Color of Wire	R
Signal Name [Specification]	-

2	B	-
3	G	-
4	G/R	-
5	V	-
6	R/L	-
7	L	-
8	L/W	-
9	L/R	-
10	L/B	-

Connector No.	B434
Connector Name	POWER SEAT SWITCH (PASSENGER SIDE)
Connector Type	MS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	B	-
3	G	-
4	G/R	-
5	V	-
6	B/V	-

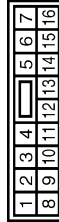
Connector No.	B452
Connector Name	DRIVER SEAT CONTROL UNIT
Connector Type	TH32FW



Terminal No.	Color of Wire	Signal Name [Specification]
11	G/B	-
12	G/W	-
13	R/G	-
14	R/W	-
15	Y/B	-

16	Y/R	-
17	LG/B	-
18	LG/R	-
19	G/Y	-
20	R/Y	-
21	L/Y	-
22	BR/Y	-
23	P	-
24	P/L	-
25	G/O	-
26	L/O	-
27	V	-
28	V/W	-
29	O/L	-
30	BR	-
31	BR/W	-
32	W/L	-
33	W	-

Connector No.	D5
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	MS10FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	W	-
3	BR	-
4	L	-
5	SB	-
6	R	-
7	P	-
8	L	-
9	G	-
10	V	-
11	LG	-
13	Y	-
14	O	-
15	R	-

Connector No.	D6
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	MS30FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
17	B	-
19	LG	-

Connector No.	D9
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	ES06GY-RS



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	G	-
3	P	-
4	B	-
5	R	-
6	L	-

JCMWM4871GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	D11
Connector Name	FRONT OUTSIDE HANDLE LH (REQUEST SWITCH)
Connector Type	RK02FB



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

Connector No.	D12
Connector Name	FRONT OUTSIDE HANDLE LH (OUTSIDE KEY ANTENNA)
Connector Type	RK02MGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	V	-

Connector No.	D17
Connector Name	STEP LAMP (DRIVER SIDE)
Connector Type	C02FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D45
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Type	NS10FH-CS



Terminal No.	Color of Wire	Signal Name [Specification]
3	W	-
4	R	-
8	L	-
9	LG	-
10	P	-
11	B	-
12	Y	-
15	G	-
16	O	-

Connector No.	D48
Connector Name	FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)
Connector Type	E06FGY-RS



Terminal No.	Color of Wire	Signal Name [Specification]
5	V	-
6	G	-

Connector No.	D50
Connector Name	FRONT OUTSIDE HANDLE RH (REQUEST SWITCH)
Connector Type	RK02FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	B	-

Connector No.	D51
Connector Name	STEP LAMP (PASSENGER SIDE)
Connector Type	C02FW



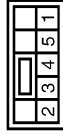
Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	R	-

Connector No.	D52
Connector Name	FRONT OUTSIDE HANDLE RH (OUTSIDE KEY ANTENNA)
Connector Type	RK02MGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	W	-

Connector No.	D63
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	NS03FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	P	-
3	SB	-
4	LG	-
5	L	-

Connector No.	D85
Connector Name	REAR DOOR LOCK ASSEMBLY LH
Connector Type	E06FGY-RS



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	G	-

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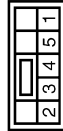
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	D103
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	NS08FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	P	-
3	SB	-
4	LG	-
5	L	-

Connector No.	D105
Connector Name	REAR DOOR LOCK ASSEMBLY RH
Connector Type	ED0FGY-RS



Terminal No.	Color of Wire	Signal Name [Specification]
5	V	-
6	G	-

Connector No.	D156
Connector Name	LUGGAGE ROOM LAMP RH
Connector Type	CJ04FW



Terminal No.	Color of Wire	Signal Name [Specification]
2	W	-
4	LG	-

Connector No.	D157
Connector Name	LUGGAGE ROOM LAMP LH
Connector Type	CJ04FW



Terminal No.	Color of Wire	Signal Name [Specification]
2	W	-
4	LG	-

Connector No.	D178
Connector Name	AUTOMATIC BACK DOOR CLOSE SWITCH
Connector Type	TK08FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	O	-
2	B	-
3	W	-
4	LG	-

Connector No.	D179
Connector Name	BACK DOOR LOCK ASSEMBLY (WITH AUTOMATIC BACK DOOR)
Connector Type	NS08FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	V	-
4	G	-
5	L	-
6	W	-
7	LG	-
8	B	-

Connector No.	D180
Connector Name	BACK DOOR LOCK ASSEMBLY (WITHOUT AUTOMATIC BACK DOOR)
Connector Type	NS04FW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	B	-
3	LG	-
4	B	-

Connector No.	D186
Connector Name	BACK DOOR OPENER SWITCH ASSEMBLY
Connector Type	TT04MM-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	B	-
4	V	-

Connector No.	D193
Connector Name	REAR WIPER MOTOR
Connector Type	CJ04FW-IV



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
3	GR	-
4	O	-

JCMWM4873GB

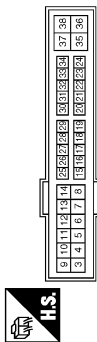
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	E10
Connector Name	SWAYLE IN INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-CS12-M4-1V



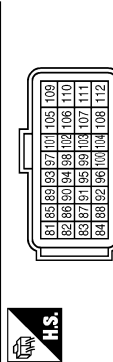
Terminal No.	Color of Wire	Signal Name [Specification]
4	LG	-
5	Y	-
7	GR	-
10	BR	-
11	P	-
12	B	-
13	SB	-
15	W	-
16	L/Y	-
19	Y	-
20	L	-
21	O	-
22	SB	-
23	GR	-
24	G	-
25	GR	-
26	Y	-
27	W	-
28	SB	-
30	BR	-
32	V	-
33	G	-
34	O	-
35	P	-
36	G	-
38	GR	-

Connector No.	E11
Connector Name	SWAYLE IN INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH20FW-HH



Terminal No.	Color of Wire	Signal Name [Specification]
39	P	-
40	L	-
41	B	-
42	SB	-
43	Y	-
44	W	-
45	O	-
46	BR	-

Connector No.	E16
Connector Name	ECM
Connector Type	RH24FB-RZ8-L-LH



Terminal No.	Color of Wire	Signal Name [Specification]
81	W	APSI
82	O	APSD
83	BR	AVCC1-APSD
84	B	GND-APSD
85	Y	ASCD SW
86	SB	FTPRES
87	GR	AVCC2-APSD
88	O	KLINE
91	L	AVCC2-FTPRES
92	BR	GND-ASCD SW
93	BR	IGN SW
94	GR	TACHO(GABIN)
95	Y	TF
96	GR	GND-FTPRES

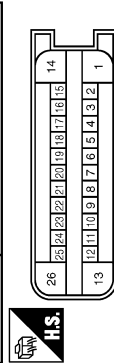
97	P	VEHCAN-L
98	L	VEHCAN-H
100	G	GND-APSD
102	R	NEUT-H
104	SB	GND-TF
105	V	VBR
106	SB	BRAKE
107	B	GND
108	B	GND
109	W	ODCV
110	G	BRCSW
111	B	GND
112	B	GND

Connector No.	E25
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Type	RK03FR



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
3	GR	-

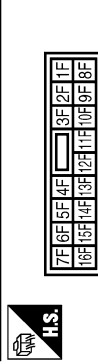
Connector No.	E30
Connector Name	ABS ACTUATOR AND ELECTRO UNIT (CONTROL UNIT)
Connector Type	AE22ZFB-AJZ-LH



Terminal No.	Color of Wire	Signal Name [Specification]
1	R	VALVE/ECU SUPPLY
2	Y	WSS RL SIG(-)
3	L	WSS RL PWRC(-)
4	GR	CLUSTER SUPPLY
5	B	WSS FR PWRC(-)

6	W	WSS FR SIG(-)
7	LG	LIS
8	V	WSS FL SIG(-)
9	W	WSS FL PWRC(-)
10	SB	CLUSTER GND
11	P	WSS FR PWRC(-)
12	V	WSS RR SIG(-)
13	B/W	MOTOR GND
14	G	MOTOR SUPPLY
16	SB	BLS
18	O	DIAG K
19	BR	CAN2 H
20	GR	IGN
21	P	CAN1 L
22	Y	VDC OFF SW
23	L	CAN1 H
25	W	CAN2 L
26	B/W	VALVE/ECU GND

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



Terminal No.	Color of Wire	Signal Name [Specification]
1F	L	-
2F	LG	-
4F	BR	-
8F	Y	-
9F	GR	-
11F	G	-
12F	V	-

JCMWM4874GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	E116
Connector Name	STOP LAMP SWITCH
Connector Type	M04FW-LC



3	4
1	2

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	LG	-
3	G	-
4	Y	-

Connector No.	E318
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	Z03PER



3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	B	-
3	Y	-

Connector No.	E319
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	Z03PER



3	2	1
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Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	B	-
3	G	-

Connector No.	E327
Connector Name	FRONT TURN SIGNAL LAMP LH
Connector Type	RS02FCY



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

Connector No.	E328
Connector Name	FRONT TURN SIGNAL LAMP RH
Connector Type	RS02FCY



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

Connector No.	F12
Connector Name	ENGINE B INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	TH03FW-CS12-M4



53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80
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Terminal No.	Color of Wire	Signal Name [Specification]
48	W	-
49	R/B	-
51	LG	-
52	Y/G	-
53	R/W	-
54	G/W	-
55	W/L	-
56	R/Y	-
57	O	-
58	Y	-
59	W/B	-
60	O	-
72	R/B	-
75	LG	-
76	SB	-
77	GR	-
80	B	-

Connector No.	F23
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	RN40FB-R28-L-RH



31	32	33	34	35	36	37	38	39	40	47	48
21	22	23	24	25	26	27	28	29	30	45	46
11	12	13	14	15	16	17	18	19	20	43	44
1	2	3	4	5	6	7	8	9	10	41	42

Terminal No.	Color of Wire	Signal Name [Specification]
1	P/B	INH SW 2
2	P/L	INH SW 3
3	G/O	INH SW 4
4	GR	INH SW 3 MON
5	B	GND

6	O	K-LINE
7	W	SENSOR GND
8	G/W	CLOCK (SEL2)
9	L/B	CHP SELECT (SEL1)
10	BR/R	DATA I/O (SEL3)
11	BR/W	INH SW 1
13	V	ATF TEMP SENSOR
14	R/W	PRI PRESS SENSOR
15	V/W	SEC PRESS SENSOR
19	G/B	REV LAMP RELAY
20	R/B	STARTER RELAY
25	W/R	SENSOR GND
26	L/O	SENSOR POWER SOURCE(V)
27	R/G	S/M-D
28	R	S/M-C
29	O/B	S/M-B
30	G/R	S/M-A
31	P	CAH-L
32	L	CAH-H
33	LG	PRI SPEED SENSOR
34	LG/R	SEC SPEED SENSOR
37	V/R	L/OASEL-ON/OFF SOL
38	L/W	L/OASEL LINEAR SOL
39	W/B	SEC LINEAR SOL
40	R/Y	PL LINEAR SOL
42	B	GND
46	Y	VIGN
47	L/R	BATT
48	Y	VIGN

JCMWM4875GB

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	Y	-
4A	GR	-
5A	R	-
6A	W	-
7A	LG	-
8A	Y	-

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



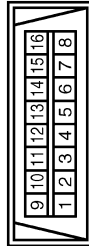
Terminal No.	Color of Wire	Signal Name [Specification]
1B	W	-
3B	L	-
4B	G	-
5B	L	-
6B	Y	-
7B	R	-
8B	R	-
9B	GR	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FW-CS



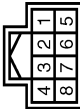
Terminal No.	Color of Wire	Signal Name [Specification]
6C	BR	-
7C	B	-
8C	G	-
9C	GR	-
10C	SB	-
11C	R	-
12C	O	-

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	G	-
14	P	-
16	Y	-

Connector No.	M12
Connector Name	STEERING LOCK UNIT
Connector Type	TK08FW-MH



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	S/L 12V MECHANICAL(V1)
2	LG	S/L COM
3	O	S/L CONDITION 1
5	B	GRD 1
6	B	GRD 2
7	Y	S/L 12V GPN(V2)
8	L	S/L CONDITION 2

Connector No.	M17
Connector Name	OPTICAL SENSOR
Connector Type	TKG3FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-
2	O	-
3	P	-

Connector No.	M19
Connector Name	TIRE PRESSURE WARNING CHECK SWITCH
Connector Type	TK02FW



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

Connector No.	M21
Connector Name	TIRE PRESSURE RECEIVER
Connector Type	TK04FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	P	GRD
2	O	SIGNAL
4	V	POWER

JCMWMM4876GB

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	BAT
2	O	IGN
3	B	GROUND
4	B	GROUND
5	SB	ILLUMINATION CONTROL
6	SB	TRIP RESET SWITCH
7	W	SW ILL POWER
8	O	METER CONTROL SW GND
9	L	ENTER SWITCH
10	R	SELECT SWITCH
11	V	ILLUMINATION CONTROL SWITCH (OFF/ON)
12	Y	ILLUMINATION CONTROL SWITCH (OFF/ON)
13	GR	ILLUMINATION CONTROL SWITCH (OFF/ON)
14	GR	AIR BAG
15	BR	AMBIENT SENSOR
16	L	AMBIENT SENSOR POWER
17	P	AMBIENT SENSOR GROUND
18	Y	CAN-H
19	L	CAN-L
20	P	GROUND
21	B	FUEL LEVEL SENSOR GROUND
22	W	CHG
23	G	PARKING BRAKE SWITCH
24	R	WASHER LEVEL SWITCH
25	P	VEHICLE SPEED (2-PULSE)
26	V	OD OFF/SPORTS
27	G	FUEL LEVEL SENSOR
28	SB	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
29	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)

Connector No.	M45
Connector Name	HAZARD SWITCH
Connector Type	TK04FW



3	1	2	4
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Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	G	-
3	R	-
4	SB	-

Connector No.	M50
Connector Name	A/C AUTO AMP
Connector Type	ISAB0FW



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
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Terminal No.	Color of Wire	Signal Name [Specification]
1	L	CAN-H
2	P	CAN-L
3	L	TX (AMP)/SW (DISP)
4	L	TX (AMP)/SW (DISP)
5	R	LAN SIG
6	R	VACTR
7	O	SUN SENS
8	G	INTAKE SENS
9	R	ACC
10	B	IGN
11	GR	RR DEF F/B
12	GR	RR DEF ON
13	L	FAN PWM
14	P	AMB POWER
15	L	AMB SENS
16	LG	INCAR SENS
17	Y	SENS GND

39	B	GND/POWER
40	Y	BAT

Connector No.	M57
Connector Name	CVT SHIFT SELECTOR
Connector Type	TK10FW



1	2	3	4	5	6	7	8	9
---	---	---	---	---	---	---	---	---

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	B	-
3	P	-
4	Y	-
5	V	-

Connector No.	M78
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	JAB04FB



1	2	3	4
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Terminal No.	Color of Wire	Signal Name [Specification]
1	P	GND
2	P	SIGNAL
3	L	+12V

Connector No.	M89
Connector Name	KEY SLOT
Connector Type	TH12FW-NH



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	BAT
2	SB	GLOCK
3	O	DATA
4	GR	ILL BAT
5	R	ILL
6	B	GND
7	Y	KEY SWITCH SIGNAL

Connector No.	M100
Connector Name	SECURITY INDICATOR LAMP
Connector Type	TK02FBR



1	2
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Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	O	-

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

Connector No.	M101
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08BR



1	2	3
4	5	6
7	8	

Terminal No.	Color of Wire	Signal Name [Specification]
1	B	-
2	O	-
3	W	-
4	BR	-
5	R	-
6	L	-
7	P	-
8	GR	-

Connector No.	M103
Connector Name	COMBINATION SWITCH
Connector Type	TH16TV-NH



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

Terminal No.	Color of Wire	Signal Name [Specification]
1	G	RR
2	Y	OUTPUT 4
3	O	FR
4	W	IGN
5	V	OUTPUT 3
6	B	GND
7	GR	INPUT 3
8	L	OUTPUT 5
9	SB	INPUT 2
10	P	INPUT 4
11	O	INPUT 1
12	W	OUTPUT 1
13	R	INPUT 5
14	P	OUTPUT 2

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



1	3
2	

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

Connector No.	M119
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS16FW-CS



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

Terminal No.	Color of Wire	Signal Name [Specification]
4	P	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	W	STEP LAMP OUTPUT
8	V	ALL DOOR FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR FUEL LID UNLOCK OUTPUT
10	P	REAR DOOR UNLOCK OUTPUT
11	LG	BAT FUSE
13	B	GND
14	O	PUSH-BUTTON IGNITION SW ILL GND
15	L	ACC IND
17	G	TURN SIGNAL RH
18	BR	TURN SIGNAL LH
19	Y	ROOM LAMP TIMER CONTROL

Connector No.	M120
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS



20	21	22	23	24
25	26	27	28	29
30	31			

Terminal No.	Color of Wire	Signal Name [Specification]
23	BR	BACK DOOR OPEN OUTPUT
26	G	REAR WIPER OUTPUT

Connector No.	M121
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH4UGV-NH



51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80

Terminal No.	Color of Wire	Signal Name [Specification]
34	B	LUGGAGE ROOM ANT1-
35	W	LUGGAGE ROOM ANT1+
38	L	REAR BUMPER ANT+
39	BR	REAR BUMPER ANT+
47	L	IGN RELAY PDM E/R CONT
52	R	STARTER RELAY CONT
61	R	BACK DOOR OPENER REQUEST SW
64	GR	REQUEST SW BUZZER
65	O	REAR WIPER STOP POSITION
66	Y	BACK DOOR SW
67	LG	BACK DOOR OPENER SW
68	W	REAR RH DOOR SW
69	R	REAR LH DOOR SW

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



81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100
101	102	103	104	105	106	107	108	109	110

Terminal No.	Color of Wire	Signal Name [Specification]
72	B	ROOM ANT2-
73	W	ROOM ANT2+
74	Y	PASSENGER DOOR ANT-
75	LG	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	P	DRIVER DOOR ANT+
80	SB	IMMOBILIZER ANTENNA CONTROL
81	O	IMMOBILIZER ANTENNA SIGNAL
82	BR	IGN RELAY (F/B) CONT
83	P	KEYLESS ENTRY RECEIVER SIGNAL
87	R	COMBI SW INPUT 5
88	GR	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	R	KEY SLOT ILL
93	P	ON IND
95	L	ACC RELAY CONT
96	Y	CVT SHIFT SELECTOR POWER SUPPLY
97	O	S/L CONDITION 1
98	L	S/L CONDITION 2
99	V	SHIFT P
100	P	PASSENGER DOOR REQUEST SW
101	W	DRIVER FAN REQUEST SW
102	Y	BLOWER FAN MOTOR RELAY CONT
103	L	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	Y	S/L POWER SUPPLY
107	O	COMBI SW INPUT 1
108	P	COMBI SW INPUT 4
109	SB	COMBI SW INPUT 2
110	G	HAZARD SW
111	LG	S/L COMM

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

BCM (BODY CONTROL MODULE)

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



131	130	129	128	127	126	125	124	123	122	121	120	119	118	117	116	115	114	113	112
151	150	149	148	147	146	145	144	143	142	141	140	139	138	137	136	135	134	133	132

BCM (BODY CONTROL MODULE)

Connector No.	R21
Connector Name	PERSONAL LAMP
Connector Type	TH04PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	P/W	-
2	B	-
3	SB	-

Connector No.	R23
Connector Name	RAIN SENSOR
Connector Type	AA030FB



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

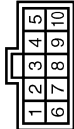
Connector No.	R24
Connector Name	VANITY MIRROR LAMP (DRIVER SIDE)
Connector Type	MC02FW



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

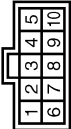
1	B
2	P/W

Connector No.	R101
Connector Name	SUNROOF MOTOR ASSEMBLY
Connector Type	YEA0FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
2	O	GND
3	L	IGN
4	Y	PUSH SW
5	LG	OPEN SW
6	R	BAT
7	P	COMM
8	BR	SPEED(2P)
9	W	2ND SW
10	V	CLOSE SW

Connector No.	R102
Connector Name	SUNSHADE MOTOR ASSEMBLY
Connector Type	YEA0FGY



Terminal No.	Color of Wire	Signal Name [Specification]
1	B	GND
6	G	BAT
7	P	COMM
8	BR	SPEED(2P)

Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

JCMWM4880GB

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
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
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Starter control relay signal • Starter relay status signal
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	5 seconds after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	500 ms after the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (battery voltage) • Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (battery voltage) - P range signal or N range signal (CAN): ON • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Ignition switch is in the ON position - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Display contents of CONSULT	Fail-safe	Cancellation
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent - Steering lock relay signal (Request signal) - Steering lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent - Starter motor relay control signal - Starter relay status signal (CAN)
B2609: S/L STATUS	- Inhibit engine cranking - Inhibit steering lock	When the following steering lock conditions agree - BCM steering lock control status - Steering lock condition No. 1 signal status - Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	500 ms after the following conditions are fulfilled - 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 - Power position changes to ACC - Receives engine status signal (CAN)
B2612: S/L STATUS	- Inhibit engine cranking - Inhibit steering lock	When any of the following conditions are fulfilled - Steering lock unit status signal (CAN) is received normally - The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
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
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E9: S/L STATUS	- Inhibit engine cranking - Inhibit steering lock	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled - Steering condition No. 1 signal: LOCK (0V) - Steering condition No. 2 signal: LOCK (Battery voltage)

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by 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 activating the hazard warning lamp.

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

NOTE:

If rain sensor malfunction is detected when ignition switch is turned OFF ⇒ ON and front wiper switch is INT/AUTO position, BCM operates a fail-safe control.

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

- More than 1 minute is passed after the rear wiper stop.

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

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	• U1000: CAN COMM • U1010: CONTROL UNIT(CAN)
3	• B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING
4	• B2013: ID DISCORD BCM-S/L • B2014: CHAIN OF S/L-BCM • B2553: IGNITION RELAY • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2560: STARTER CONT RELAY • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP SW • B2605: PNP SW • B2606: S/L RELAY • B2607: S/L RELAY • B2608: STARTER RELAY • B2609: S/L STATUS • B260A: IGNITION RELAY • B260B: STEERING LOCK UNIT • B260C: STEERING LOCK UNIT • B260D: STEERING LOCK UNIT • B260F: ENG STATE SIG LOST • B2612: S/L STATUS • B2614: ACC RELAY CIRC • B2615: BLOWER RELAY CIRC • B2616: IGN RELAY CIRC • B2617: STARTER RELAY CIRC • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E9: S/L STATUS • B26EA: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED SIG

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Priority	DTC
5	• C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1734: CONTROL UNIT
6	• B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA

DTC Index

INFOID:000000005681413

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-211, "COMMON ITEM : CONSULT-III 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 page
No DTC is detected. further testing may be required.	—	—	—	—	—
U1000: CAN COMM	—	—	—	—	BCS-38
U1010: CONTROL UNIT(CAN)	—	—	—	—	BCS-39
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-40
B2013: ID DISCORD BCM-S/L*	×	×	—	—	SEC-51
B2014: CHAIN OF S/L-BCM*	×	×	—	—	SEC-52
B2190: NATS ANTENNA AMP	×	—	—	—	SEC-43
B2191: DIFFERENCE OF KEY	×	—	—	—	SEC-46
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-47
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-49
B2195: ANTI SCANNING	×	—	—	—	SEC-50
B2553: IGNITION RELAY	—	×	—	—	PCS-48
B2555: STOP LAMP	—	×	—	—	SEC-55
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-57
B2557: VEHICLE SPEED	×	×	×	—	SEC-59
B2560: STARTER CONT RELAY	×	×	×	—	SEC-60
B2562: LOW VOLTAGE	—	×	—	—	BCS-41
B2601: SHIFT POSITION	×	×	×	—	SEC-61
B2602: SHIFT POSITION	×	×	×	—	SEC-64
B2603: SHIFT POSI STATUS	×	×	×	—	SEC-66
B2604: PNP SW	×	×	×	—	SEC-69

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 page
B2605: PNP SW	×	×	×	—	SEC-71
B2606: S/L RELAY*	×	×	×	—	SEC-73
B2607: S/L RELAY*	×	×	×	—	SEC-74
B2608: STARTER RELAY	×	×	×	—	SEC-76
B2609: S/L STATUS*	×	×	×	—	SEC-78
B260A: IGNITION RELAY	×	×	×	—	PCS-50
B260B: STEERING LOCK UNIT*	—	×	×	—	SEC-82
B260C: STEERING LOCK UNIT*	—	×	×	—	SEC-83
B260D: STEERING LOCK UNIT*	—	×	×	—	SEC-84
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-85
B2612: S/L STATUS*	×	×	×	—	SEC-88
B2614: ACC RELAY CIRC	—	×	×	—	PCS-52
B2615: BLOWER RELAY CIRC	—	×	×	—	PCS-55
B2616: IGN RELAY CIRC	—	×	×	—	PCS-58
B2617: STARTER RELAY CIRC	×	×	×	—	SEC-92
B2618: BCM	×	×	×	—	PCS-61
B2619: BCM*	×	×	×	—	SEC-94
B261A: PUSH-BTN IGN SW	—	×	×	—	SEC-95
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	—	SEC-98
B2622: INSIDE ANTENNA	—	×	—	—	DLK-91
B2623: INSIDE ANTENNA	—	×	—	—	DLK-93
B26E9: S/L STATUS*	×	×	× (Turn ON for 15 seconds)	—	SEC-86
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	—	SEC-87
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	—	—	—	×	
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

NOTE:

*: For models without steering lock unit this DTC is not applied.

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:000000005681424

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
MOTOR FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	1/2/3/4
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
		• 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
IHBT RLY -REQ	Ignition switch ON		Off
	At engine cranking		On

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

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

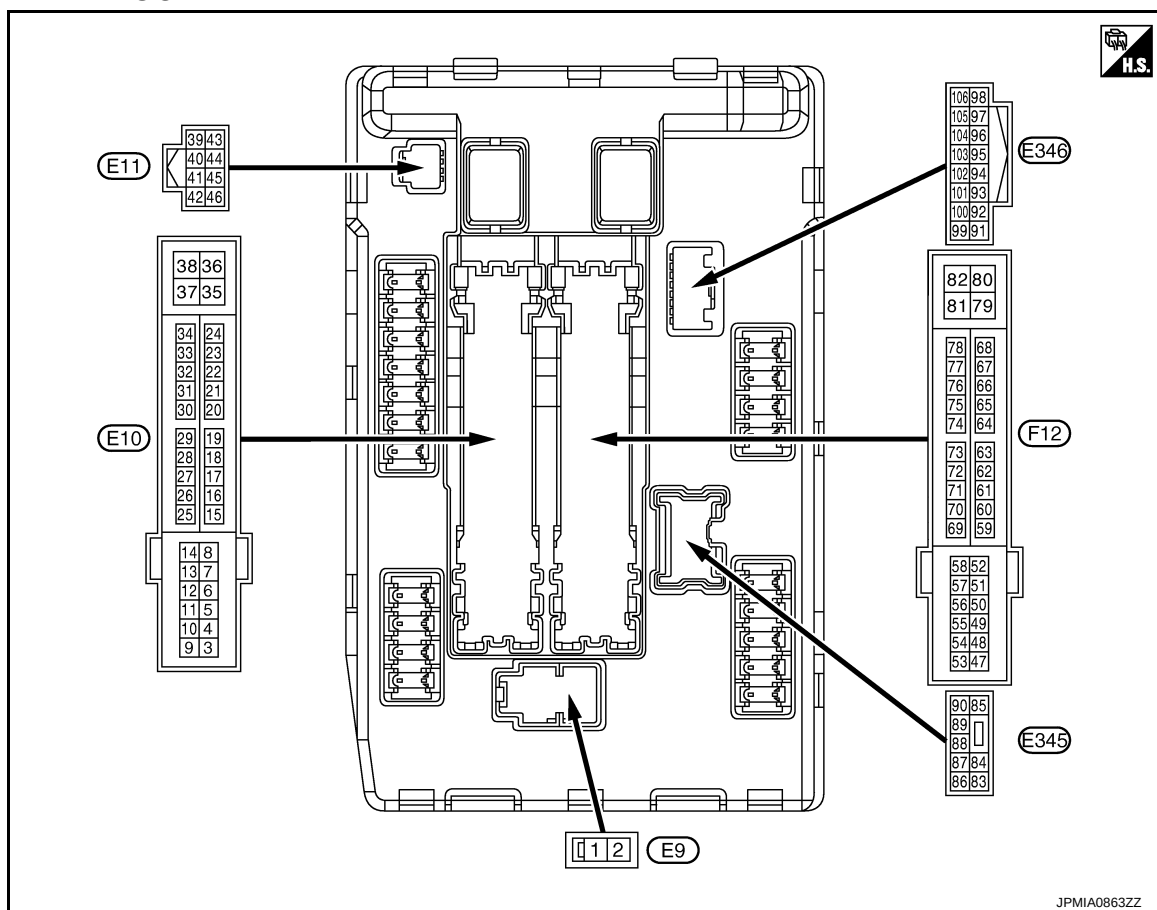
Monitor Item	Condition		Value/Status
ST/INHI RLY	Ignition switch ON		Off
	At engine cranking		INHI ON → ST ON
	The status of starter relay or starter control relay cannot be recognized by the battery voltage malfunction, etc. when the starter relay is ON and the starter control relay is OFF		UNKWN
DETENT SW	Ignition switch ON	- Press the selector button with selector lever in P position - Selector lever in any position other than P	Off
	Release the selector button with selector lever in P position		On
S/L RLY -REQ NOTE: For models without steering lock unit this item is not monitored.	None of the conditions below are present		Off
	- Open the driver door after the ignition switch is turned OFF (for a few seconds) - Press the push-button ignition switch when the steering lock is activated		On
S/L STATE NOTE: For models without steering lock unit this item is not monitored.	Steering lock is activated		LOCK
	Steering lock is deactivated		UNLOCK
	[DTC: B210A] is detected		UNKWN
DTRL REQ	NOTE: The item is indicated, but not monitored.		Off
OIL P SW	Ignition switch OFF, ACC or engine running		Open
	Ignition switch ON		Close
HOOD SW	NOTE: The item is indicated, but not monitored.		Off
HL WASHER REQ	NOTE: The item is indicated, but not monitored.		Off
THFT HRN REQ	Not operating		Off
	- 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

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

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

TERMINAL LAYOUT



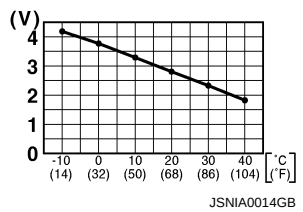
PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (L)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
4 (LG)	Ground	Front wiper LO	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch LO	Battery voltage
5 (Y)	Ground	Front wiper HI	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch HI	Battery voltage
7 (GR)	Ground	Tail, license plate lamps & illuminations	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
10 (BR)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V
				- Ignition switch ON - Ignition switch OFF (For a few seconds after turning igni- tion switch OFF)		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			
11*2 (P)	Ground	Steering lock unit power supply	Output	Ignition switch OFF	A few seconds after opening the driver door	Battery voltage
				Ignition switch LOCK	Press the push-button ignition switch	Battery voltage
				Ignition switch ACC or ON		0 V
12 (B)	Ground	Ground	—	Ignition switch ON		0 V
13 (SB)	Ground	Fuel pump power supply	Output	Approximately 1 second or more after turning the ignition switch ON		0 V
				- Approximately 1 second after turning the ignition switch ON - Engine running		Battery voltage
15 (W)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
16 (L/Y)	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 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
20 (L)	Ground	Ambient sensor ground	Output	Ignition switch ON		0 V
21 (O)	Ground	Ambient sensor	Input	Ignition switch ON NOTE: Changes depending to ambient temperature		
22 (SB)	Ground	Refrigerant pressure sensor ground	Output	Engine running	- Warm-up condition - Idle speed	0 V
23 (GR)	Ground	Refrigerant pressure sensor	Output	Engine running	- Warm-up condition - Both A/C switch and blower fan motor switch ON (Compressor operates)	1.0 - 4.0 V
24 (G)	Ground	Refrigerant pressure sensor power supply	Input	Ignition switch OFF		0 V
				Ignition switch ON		5.0 V
25 (GR)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
26*1 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
27 (W)	Ground	Ignition relay monitor	Input	Ignition switch OFF or ACC		Battery voltage
				Ignition switch ON		0 V
28 (SB)	Ground	Push-button ignition switch	Input	Press the push-button ignition switch		0 V
				Release the push-button ignition switch		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			
30 (BR)	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
32*2 (V)	Ground	Steering lock unit condition-1	Input	Steering lock is activated		0 V
				Steering lock is deactivated		Battery voltage
33*2 (G)	Ground	Steering lock unit condition-2	Input	Steering lock is activated		Battery voltage
				Steering lock is deactivated		0 V
34 (O)	Ground	Cooling fan relay-3 control	Input	Cooling fan stopped		Battery voltage
				Cooling fan at HI operation		0 V
35 (P)	Ground	Cooling fan relay-1 power supply	Input	Cooling fan stopped		Battery voltage
				Cooling fan at LO operation		6.0 V
36 (G)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
38 (GR)	Ground	Cooling fan relay-1 power supply	Output	Cooling fan not operating		0 V
				Cooling fan at LO operation		6.0 V
39 (P)	—	CAN-L	Input/ Output	—		—
40 (L)	—	CAN-H	Input/ Output	—		—
41 (B)	Ground	Ground	—	Ignition switch ON		0 V
42 (SB)	Ground	Cooling fan relay-2 control	Input	Cooling fan stopped		Battery voltage
				- Cooling fan MID operating - Cooling fan HI operating		0 V
43 (Y)	Ground	CVT shift selector (Detention switch)	Input	Ignition switch ON	Press the selector button (selector lever P)	Battery voltage
					- Selector lever in any position other than P - Release the selector button (selector lever P)	0 V
44 (W)	Ground	Horn relay control	Input	The horn is deactivated		Battery voltage
				The horn is activated		0 V
45 (O)	Ground	Horn switch	Input	The horn is deactivated		Battery voltage
				The horn is activated		0 V
46 (BR)	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 (W)	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 (R/B)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V
				- 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 >

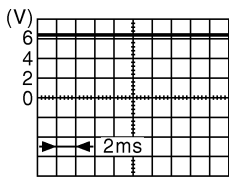
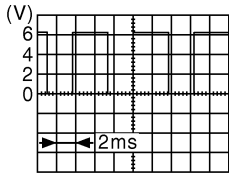
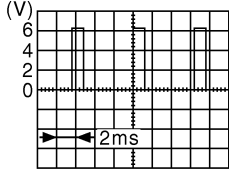
[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
51 (LG)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
52 (Y/G)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
53 (R/W)	Ground	ECM relay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V
				• Ignition switch ON • Ignition switch OFF (For a few seconds after turning igni- tion switch OFF)		Battery voltage
54 (G/W)	Ground	Throttle control motor re- lay power supply	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		0 V
				• Ignition switch ON • Ignition switch OFF (For a few seconds after turning igni- tion switch OFF)		Battery voltage
55 (W/L)	Ground	ECM power supply	Output	Ignition switch OFF		Battery voltage
56 (R/Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
57 (O)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
58 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
69 (W/B)	Ground	ECM relay control	Output	Ignition switch OFF (More than a few seconds after turning ignition switch OFF)		Battery voltage
				• Ignition switch ON • Ignition switch OFF (For a few seconds after turning igni- tion switch OFF)		0 - 1.5 V
70 (O)	Ground	Throttle control motor re- lay control	Output	Ignition switch ON → OFF		0 - 1.0 V ↓ Battery voltage ↓ 0 V
				Ignition switch ON		0 - 1.0 V
72 (R/B)	Ground	Starter relay control	Input	Ignition switch ON	Selector lever in any posi- tion other than P or N	0 V
					Selector lever P or N	Battery voltage
75 (LG)	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 >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
76 (SB)	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 (GR)	Ground	Fuel pump relay control	Output	- Approximately 1 second after turning the ignition switch ON - Engine running	0 - 1.5 V
				Approximately 1 second or more after turning the ignition switch ON	Battery voltage
80 (B)	Ground	Starter motor	Output	At engine cranking	Battery voltage
83 (Y)	Ground	Headlamp LO (RH)	Output	Ignition switch ON	Lighting switch OFF
				Lighting switch 2ND	Battery voltage
84 (L)	Ground	Headlamp LO (LH)	Output	Ignition switch ON	Lighting switch OFF
				Lighting switch 2ND	Battery voltage
86 (SB)	Ground	Front fog lamp (RH)	Output	Lighting switch 2ND	Front fog lamp switch OFF
				- Front fog lamp switch ON - Daytime running light activated (Only for Canada)	Battery voltage
87 (GR)	Ground	Front fog lamp (LH)	Output	Lighting switch 2ND	Front fog lamp switch OFF
				- Front fog lamp switch ON - Daytime running light activated (Only for Canada)	Battery voltage
88 (W)	Ground	Washer pump power supply	Output	Ignition switch ON	Battery voltage

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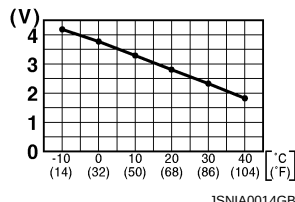
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IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
89 (L)	Ground	Headlamp HI (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					- Lighting switch HI - Lighting switch PASS	Battery voltage
90 (G)	Ground	Headlamp HI (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					- Lighting switch HI - Lighting switch PASS	Battery voltage
91 (R)	Ground	Parking lamp (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
92 (LG)	Ground	Parking lamp (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
99 (BR)	Ground	Ambient sensor ground	Input	Ignition switch ON		0 V
100 (SB)	Ground	Ambient sensor	Output	Ignition switch ON NOTE: Changes depending to ambient temperature		 JSNIA0014GB
101 (L)	Ground	Refrigerant pressure sensor ground	Input	Engine running	- Warm-up condition - Idle speed	0 V
102 (B)	Ground	Refrigerant pressure sensor	Input	Engine running	- Warm-up condition - Both A/C switch and blower fan motor switch ON (Compressor operates)	1.0 - 4.0 V
103 (P)	Ground	Refrigerant pressure sensor power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		5.0 V

*1: AWD models only

*2: Only for models with steering lock unit

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

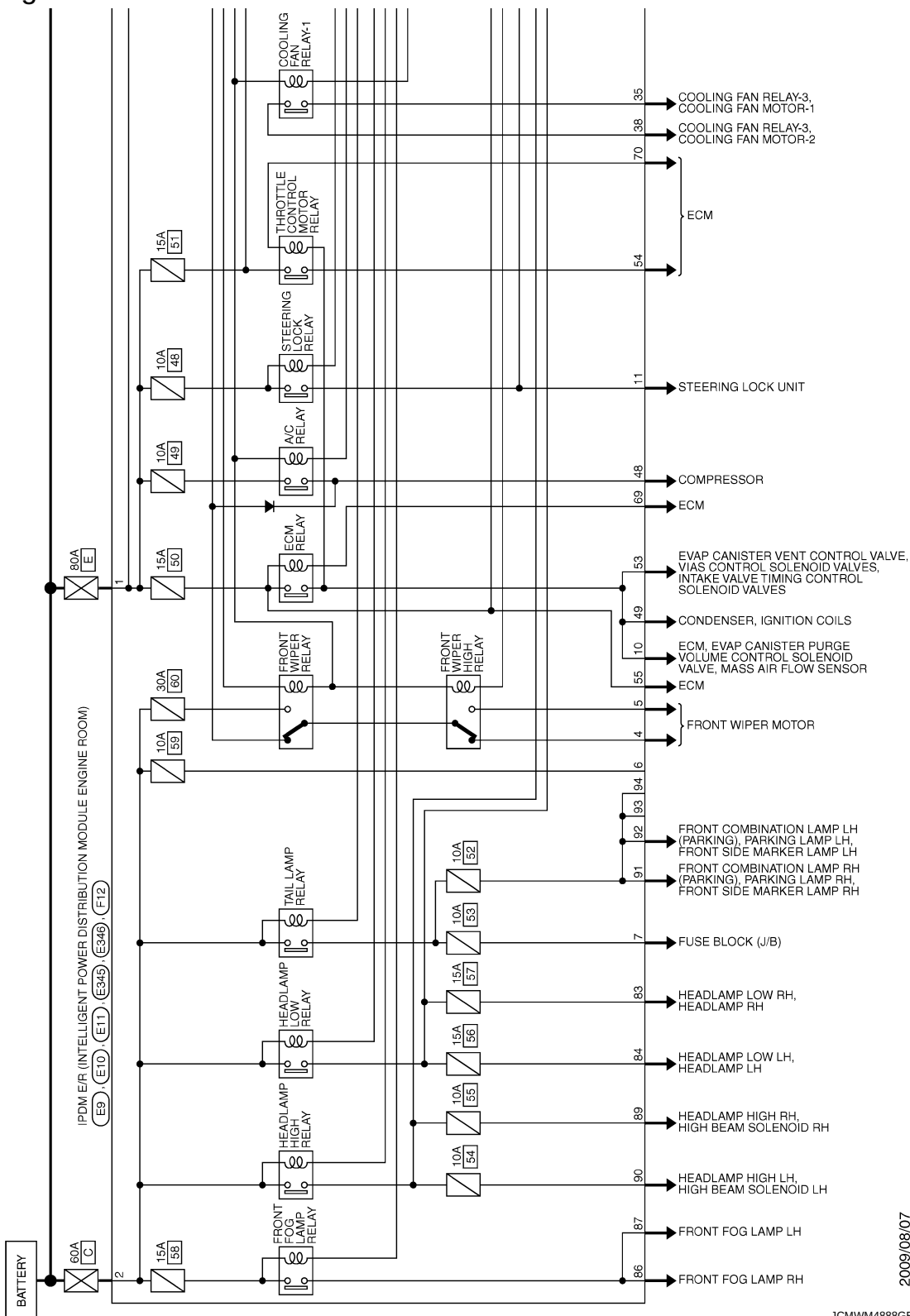
< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Wiring Diagram - IPDM E/R -

INFOID:000000005681425

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



2009/08/07

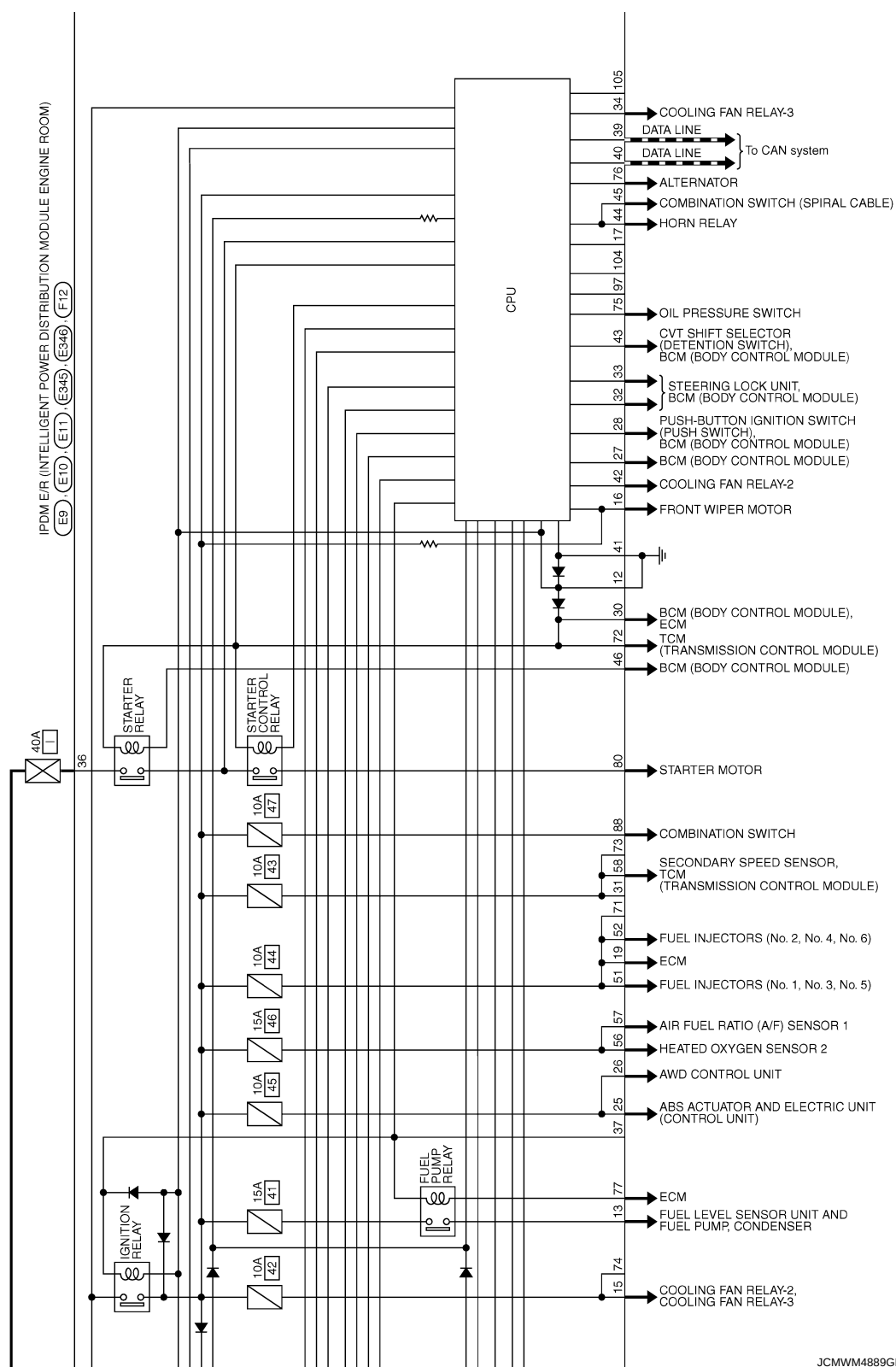
JCMWM4888GB

EXL

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

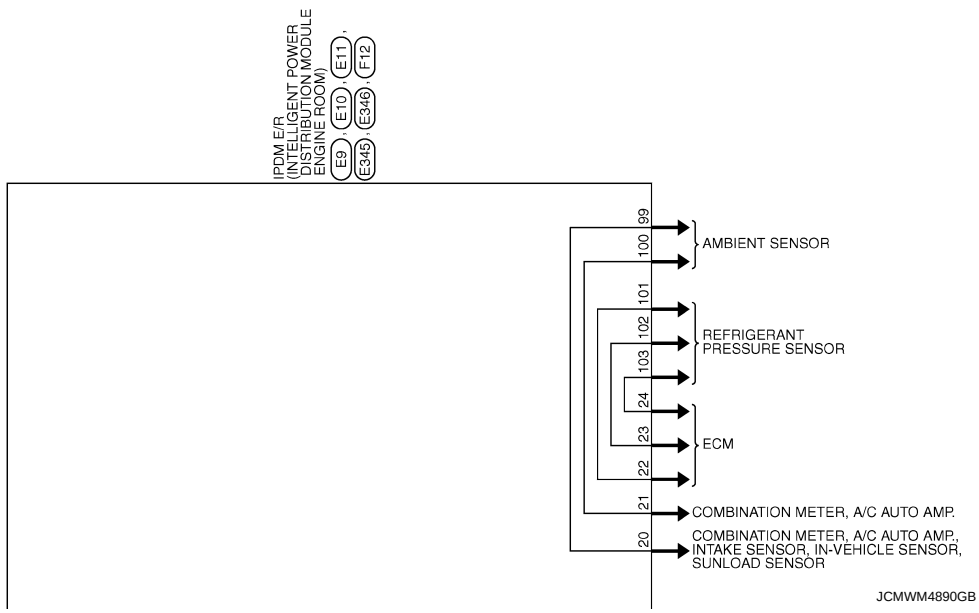
< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]



JCMWM4889GB

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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.	E9	32	V
Connector Name	IPDM E/R INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)	33	G
Connector Type	LOPE-MC	34	O
		35	P
		36	G
		38	GR
		39	GR
		40	L
		41	B
		42	SB
		43	Y
		44	W
		45	O
		46	BR
		47	L
		48	W
		49	R/B
		50	Y/G
		51	LG
		52	Y/G
		53	R/W
		54	G/W
		55	W/L
		56	R/Y
		57	O
		58	Y
		59	W
		60	W/B
		61	O
		62	O
		63	O
		64	O
		65	O
		66	O
		67	O
		68	O
		69	O
		70	O
		71	O
		72	R/B
		73	LG
		74	SB
		75	GR
		76	GR
		77	GR
		78	GR
		79	GR
		80	B
		81	B
		82	B
		83	B
		84	B
		85	B
		86	B
		87	B
		88	B
		89	B
		90	G
		91	R
		92	LG
		93	BR
		94	SB
		95	L
		96	B
		97	P
		98	P
		99	P
		100	P
		101	P
		102	P
		103	P
		104	P
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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

JCMWM4891GB

INFOID:000000005681426

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

< ECU DIAGNOSIS INFORMATION >

[HALOGEN TYPE]

Control part	Fail-safe operation
Cooling fan	• Turns ON the cooling fan relay-2 and the cooling fan relay-3 when ignition switch is turned ON (Cooling fan operates at HI) • Turns OFF the cooling fan relay-1, the cooling fan relay-2 and the cooling fan relay-3 when the ignition switch is turned OFF (Cooling fan does not operate)
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	• 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
• Parking lamps • License plate lamps • Side maker lamps • Illuminations • Tail lamps	• Turns ON the tail lamp relay when the ignition switch is turned ON • Turns OFF the tail lamp relay when the ignition switch is turned OFF
Front wiper	• 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/AUTO mode and the front wiper motor is operating.
Front fog lamps	Front fog lamp relay OFF
Horn	Horn OFF
Ignition relay	The status just before activation of fail-safe is maintained.
Starter motor	Starter control relay OFF
Steering lock unit*	Steering lock relay OFF

*: Only for models with steering lock unit.

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	• 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 auto stop 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 auto stop 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:000000005681427

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	Refer to
No DTC is detected. further testing may be required.	—	—
U1000: CAN COMM CIRCUIT	×	PCS-15
B2098: IGN RELAY ON	×	PCS-16
B2099: IGN RELAY OFF	—	PCS-17
B2108: STRG LCK RELAY ON *	—	SEC-99
B2109: STRG LCK RELAY OFF *	—	SEC-100
B210A: STRG LCK STATE SW *	—	SEC-101
B210B: START CONT RLY ON	—	SEC-105
B210C: START CONT RLY OFF	—	SEC-106
B210D: STARTER RELAY ON	—	SEC-107
B210E: STARTER RELAY OFF	—	SEC-108
B210F: INTRLCK/PNP SW ON	—	SEC-110
B2110: INTRLCK/PNP SW OFF	—	SEC-112

*: For models without steering lock unit this DTC is not applied.

EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[HALOGEN TYPE]

SYMPTOM DIAGNOSIS

EXTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:000000005515201

CAUTION:

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

Symptom		Possible cause	Inspection item
Headlamp (HI) is not turned ON.	One side	- Fuse - Halogen bulb (HI) - Harness between IPDM E/R and the headlamp high - IPDM E/R	Headlamp (HI) circuit Refer to EXL-224 .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON" Refer to EXL-352 .	
Headlamp (HI) is not turned OFF.	When ignition switch is turned ON.		
	When ignition switch is turned OFF.	IPDM E/R	—
High beam indicator lamp is not turned ON. [The headlamp (HI) is turned ON.]		Combination meter	- Combination meter - Data monitor "HI-BEAM IND" - BCM (HEAD LAMP) - Active test "HEADLAMP"
Headlamp (LO) is not turned ON.	One side	- Fuse - Halogen bulb (LO) - Harness between IPDM E/R and the headlamp low - IPDM E/R	Headlamp (LO) circuit Refer to EXL-226 .
	Both sides	Symptom diagnosis "BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer to EXL-353 .	
Headlamp (LO) is not turned OFF.	When ignition switch is turned ON.		
	When ignition switch is turned OFF.	IPDM E/R	—
Headlamp is not turned ON/OFF with the lighting switch AUTO.		- Combination switch - Harness between the combination switch and BCM - BCM	Combination switch Refer to BCS-92 .
		- Optical sensor - Harness between the optical sensor and BCM - BCM	Optical sensor Refer to EXL-237 .
Front fog lamp is not turned ON.	One side	- Front fog lamp bulb - Harness between IPDM E/R and the front fog lamp - Front fog lamp - IPDM E/R	Front fog lamp circuit Refer to EXL-228 .
	Both sides	Symptom diagnosis "BOTH SIDE FRONT FOG LAMPS ARE NOT TURNED ON" Refer to EXL-355 .	
Front fog lamp is not turned ON.			
Parking lamp is not turned ON.		- 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-230 .

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EXTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[HALOGEN TYPE]

Symptom		Possible cause	Inspection item
Front side marker lamp is not turned ON.		- Front side marker lamp bulb - Harness between IPDM E/R and the front side marker lamp - IPDM E/R	Front side marker lamp circuit Refer to EXL-232 .
Parking lamp and front side marker lamp are not turned ON.		- Fuse - Harness between IPDM E/R and the front combination lamp - IPDM E/R	Parking lamp circuit Refer to EXL-230 .
Tail lamp is not turned ON.		- Harness between IPDM E/R and the rear combination lamp - Rear combination lamp	Tail lamp circuit Refer to EXL-242 .
License plate lamp is not turned ON.		- License plate lamp bulb - Harness between IPDM E/R and the license plate lamp - License plate lamp	License plate lamp circuit Refer to EXL-244 .
Tail lamp and the license plate lamp are not turned ON.		- Fuse - Harness between IPDM E/R and the rear combination lamp - IPDM E/R	License plate lamp circuit Refer to EXL-244 .
- Parking lamp, tail lamp, side marker lamp and license plate lamp are not turned ON. - Parking lamp, tail lamp, side marker lamp and 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-354 .	
Tail lamp indicator is not turned ON. (Parking, tail lamps are turned ON.)		Combination meter	- Combination meter - Data monitor "LIGHT IND" - BCM (HEAD LAMP) - Active test "TAIL LAMP"
Turn signal lamp does not blink.	Indicator lamp is normal. (Applicable side performs the high flasher activation.)	- Harness between BCM and each turn signal lamp - Turn signal lamp bulb	Turn signal circuit Refer to EXL-234 .
	Indicator lamp is included.	- Combination switch - Harness between the combination switch and BCM - BCM	Combination switch Refer to BCS-43 .
Turn signal indicator lamp does not blink. (Turn signal indicator lamp is normal.)	One side	Combination meter	—
	Both sides (Always)	- Turn indicator signal - BCM - Combination meter	- Combination meter - Data monitor "TURN IND" - BCM (FLASHER) - Active test "FLASHER"
	Both sides (Only when activating hazard warning lamp with the ignition switch OFF)	- Combination meter power supply and the ground circuit - Combination meter	Combination meter Power supply and the ground circuit Refer to MWI-43 .
- Hazard warning lamp does not activate. - Hazard warning lamp continues activating. (Turn signal is normal.)		- Hazard switch - Harness between the hazard switch and BCM - BCM	Hazard switch Refer to EXL-240 .

NORMAL OPERATING CONDITION

Description

INFOID:000000000575295

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 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:000000005515202

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

Diagnosis Procedure

INFOID:000000005515203

1.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-92, "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-III 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-95, "Exploded View"](#).

3.HEADLAMP (HI) CIRCUIT INSPECTION

Check the headlamp (HI) circuit. Refer to [EXL-224, "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:000000005515204

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

Diagnosis Procedure

INFOID:000000005515205

1.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-92. "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-III 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-95. "Exploded View"](#).

3.HEADLAMP (LO) CIRCUIT INSPECTION

Check the headlamp (LO) circuit. Refer to [EXL-226. "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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EXL

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:000000005515206

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

Diagnosis Procedure

INFOID:000000005515207

1.CHECK FUSE

Check that the following fuse is fusing.

Unit	Location	Fuse No.	Capacity
• Parking lamp • Front side marker lamp	IPDM E/R	#52	10 A
• Tail lamp • License plate lamp • Rear side marker lamp		#53	10 A

Is the fuse fusing?

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

NO >> GO TO 2.

2.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-92, "Symptom Table"](#).

Is the combination switch normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning part.

3.CHECK TAIL LAMP RELAY REQUEST SIGNAL INPUT

CONSULT-III 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 4.

NO >> Replace BCM. Refer to [BCS-95, "Exploded View"](#).

4.TAIL LAMP CIRCUIT INSPECTION

Check the tail lamp circuit. Refer to [EXL-242, "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:000000005515208

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

Diagnosis Procedure

INFOID:000000005515209

1.CHECK FUSE

Check that the following fuse is fusing.

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

Is the fuse fusing?

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

NO >> GO TO 2.

2.COMBINATION SWITCH INSPECTION

Check the combination switch. Refer to [BCS-92, "Symptom Table"](#).

Is the combination switch normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning part.

3.CHECK FRONT FOG LAMP REQUEST SIGNAL INPUT

CONSULT-III DATA MONITOR

1. Select "FR FOG REQ" of IPDM E/R data monitor item.

2. With operating the front fog lamp switch, check the monitor status.

Monitor item	Condition	Monitor status
FR FOG REQ	Front fog lamp switch (With lighting switch 1ST) ON	On
	OFF	Off

Is the item status normal?

YES >> GO TO 4.

NO >> Replace BCM. Refer to [BCS-95, "Exploded View"](#).

4.FRONT FOG LAMP CIRCUIT INSPECTION

Check the front fog lamp circuit. Refer to [EXL-228, "Component Function Check"](#).

Is the front fog lamp circuit normal?

YES >> Replace IPDM E/R.

NO >> Repair or replace the malfunctioning part.

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000005515210

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:

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

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

WARNING:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

FOR MEXICO

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

INFOID:000000005716395

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

WARNING:

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

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

WARNING:

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s)

PRECAUTIONS

< PRECAUTION >

[HALOGEN TYPE]

- with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

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HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[HALOGEN TYPE]

PERIODIC MAINTENANCE

HEADLAMP AIMING ADJUSTMENT

Description

INFOID:000000005515212

PREPARATION BEFORE ADJUSTING

NOTE:

- For details, refer to the regulations in your own country.
- Perform aiming if the vehicle front body has been repaired and/or the front combination lamp assembly has been replaced.

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the luggage room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

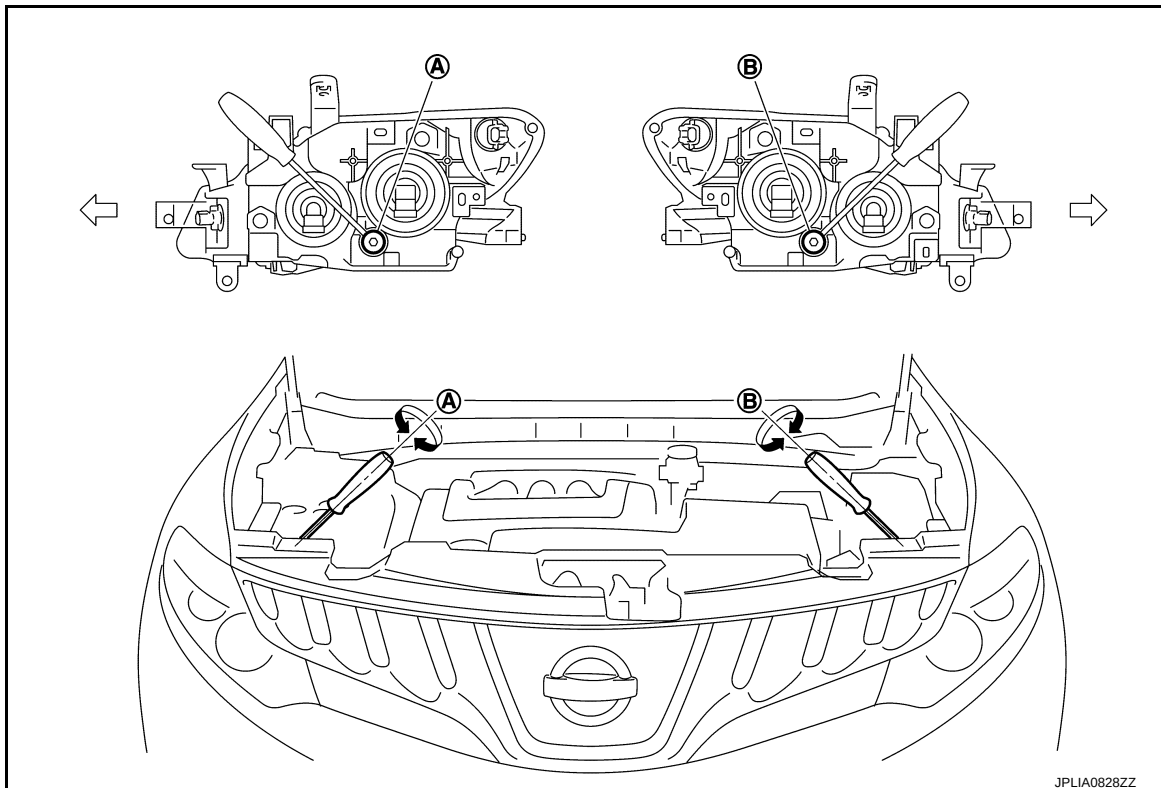
- Wipe out dirt on the headlamp.

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

HEADLAMP AIMING ADJUSTMENT

[HALOGEN TYPE]

< PERIODIC MAINTENANCE >

Adjustment screw		Screw driver rotation	Facing direction
A	Headlamp RH (UP/DOWN)	Clockwise	DOWN
		Counterclockwise	UP
B	Headlamp LH (UP/DOWN)	Clockwise	DOWN
		Counterclockwise	UP

Aiming Adjustment Procedure

INFOID:000000005515213

- 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 bulb center and the screen.

- Start the engine. Turn the headlamp (LO) ON.

NOTE:

Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.

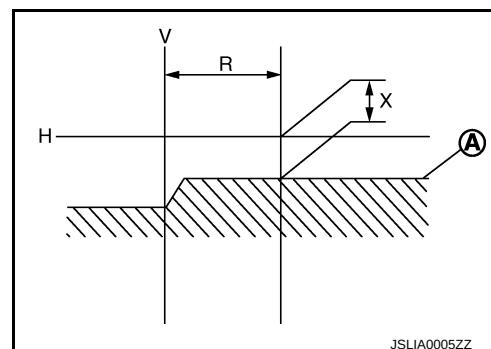
CAUTION:

Never cover the lens surface with a tape etc. The lens is made of resin.

- 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



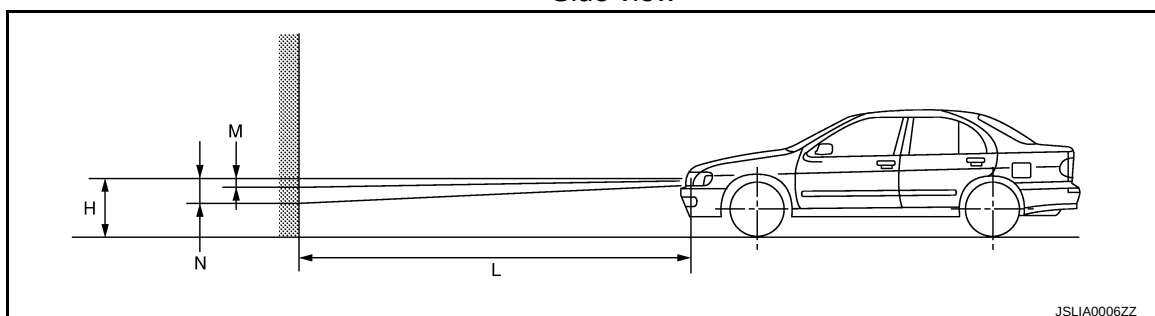
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- Adjust the cutoff line height (X) with the aiming adjustment screw so as to enter in the adjustment range (M–N) according to the horizontal center line of headlamp (H).

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



JSLIA0006ZZ

HEADLAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[HALOGEN TYPE]

Distance between the headlamp : 10 m (32.8 ft)
center and the screen (L)

FRONT FOG LAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[HALOGEN TYPE]

FRONT FOG LAMP AIMING ADJUSTMENT

Description

INFOID:000000005515214

PREPARATION BEFORE ADJUSTING

NOTE:

- For details, refer to the regulations in your own country.

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the luggage room.)

NOTE:

Do not remove the temporary tire, jack and on-vehicle tool.

- Wipe out dirt on the 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.

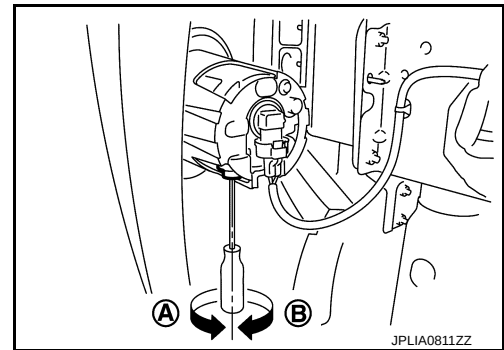
A: UP

B: DOWN

- For the position and direction of the adjusting screw, refer to the figure.

NOTE:

A screwdriver or hexagonal wrench [6 mm (0.24 in)] can be used for adjustment.



Aiming Adjustment Procedure

INFOID:000000005515215

- 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 front fog lamp center and the screen.

- Start the engine. Illuminate the front fog lamp.

CAUTION:

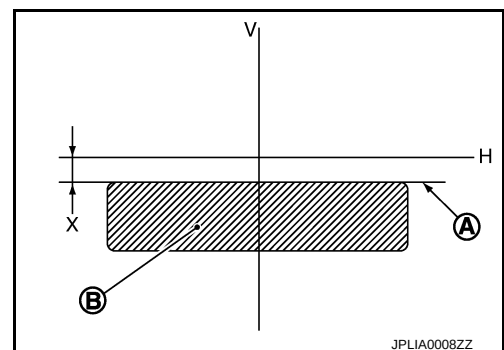
Never cover the lens surface with a tape etc. The lens is made of resin.

NOTE:

Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.

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

Front fog lamp light distribution on the screen



FRONT FOG LAMP AIMING ADJUSTMENT

< PERIODIC MAINTENANCE >

[HALOGEN TYPE]

- 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

FRONT COMBINATION LAMP

< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

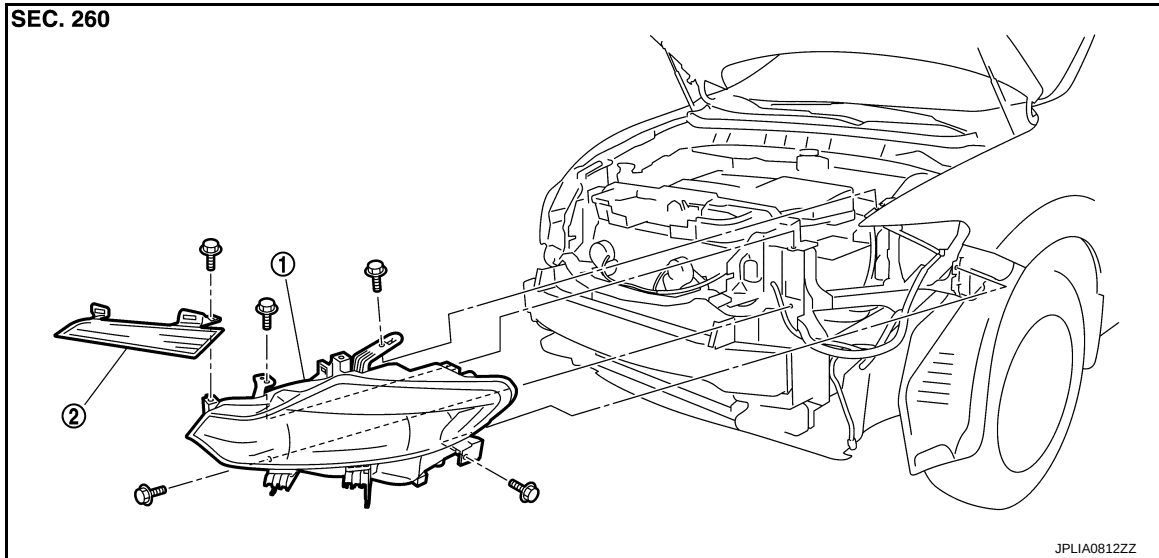
REMOVAL AND INSTALLATION

FRONT COMBINATION LAMP

Exploded View

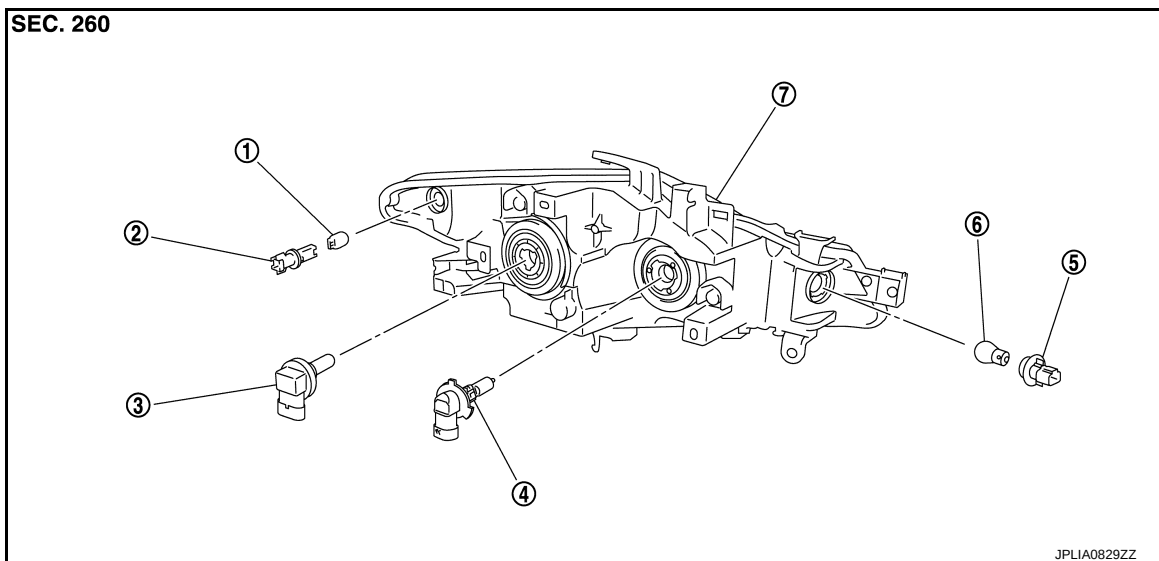
INFOID:000000005515216

REMOVAL



1. Front combination lamp 2. Headlamp extension panel

DISASSEMBLY



1. Front side marker lamp bulb 2. Front side marker lamp bulb socket 3. Halogen bulb (LO)
4. Halogen bulb (HI) 5. Front turn signal/parking lamp bulb socket 6. Front turn signal/parking lamp bulb
7. Headlamp housing assembly

Removal and Installation

INFOID:000000005515217

REMOVAL

CAUTION:
Disconnect the battery negative terminal or remove the fuse.

FRONT COMBINATION LAMP

[HALOGEN TYPE]

< REMOVAL AND INSTALLATION >

1. Remove the front grille. Refer to [EXT-19. "Exploded View"](#).
2. Remove the headlamp extension panel.
3. Remove the front bumper fascia. Refer to [EXT-13. "Exploded View"](#).
4. Remove the headlamp mounting bolts.
5. Remove the harness clips from the headlamp housing.
6. Pull out the headlamp assembly forward the vehicle.
7. 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-358. "Description"](#).

Replacement

INFOID:000000005515218

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.
2. Rotate the bulb counterclockwise and unlock it.
3. Disconnect the headlamp bulb connector.
4. Remove the bulb from the headlamp housing assembly.

HEADLAMP BULB (HI)

1. Rotate the bulb counterclockwise and unlock it.
2. Disconnect the headlamp bulb connector.
3. Remove the bulb from the headlamp housing assembly.

FRONT TURN SIGNAL/PARKING LAMP BULB

1. Remove the front grille. Refer to [EXT-19. "Exploded View"](#).
2. Rotate the front turn signal/parking lamp bulb socket counterclockwise and unlock it.
3. Remove the bulb from the front turn signal/parking lamp bulb socket.

FRONT SIDE MARKER LAMP BULB

1. Remove the fender rubber protector in the engine room.
2. Rotate the front side marker lamp bulb socket counterclockwise and unlock it.
3. Remove the bulb from the front side marker lamp bulb socket.

Disassembly and Assembly

INFOID:000000005515219

DISASSEMBLY

1. Rotate the headlamp bulb (LO) counterclockwise and unlock it
2. Disconnect the headlamp bulb (LO) connector. And remove the bulb from the headlamp housing assembly.
3. Rotate the headlamp bulb (HI) counterclockwise and unlock it
4. Disconnect the headlamp bulb (HI) connector. And remove the bulb from the headlamp housing assembly.
5. Rotate the front turn signal/parking lamp bulb socket counterclockwise and unlock it.
6. Remove the bulb from the front turn signal/parking lamp bulb socket.
7. Rotate the front side marker lamp bulb socket counterclockwise and unlock it.

FRONT COMBINATION LAMP

< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

8. Remove the bulb from the front side marker lamp bulb socket.

ASSEMBLY

Assemble in the reverse order of disassembly.

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FRONT FOG LAMP

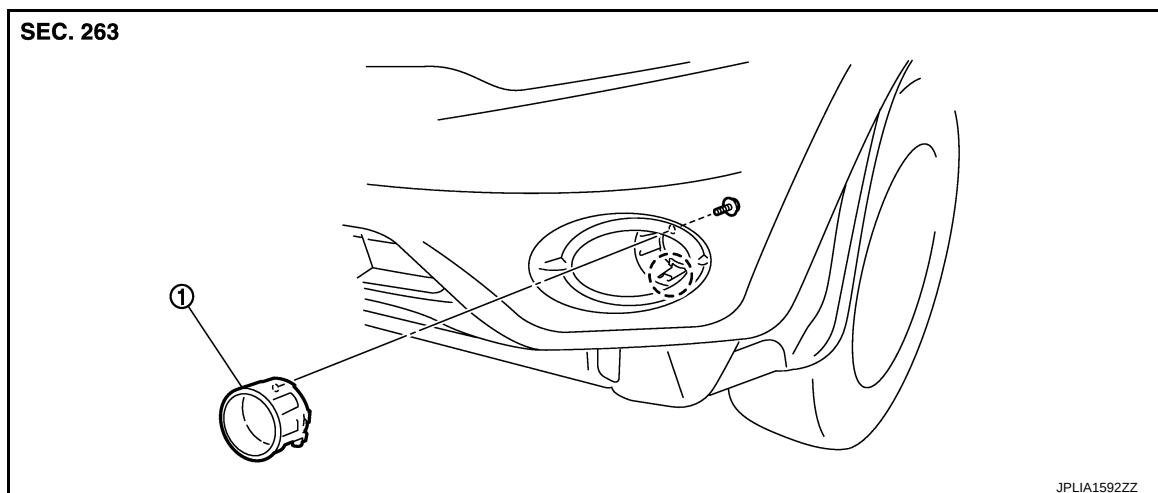
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

FRONT FOG LAMP

Exploded View

INFOID:000000005515220



1. Front fog lamp

○ : Pawl

Removal and Installation

INFOID:000000005515221

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the front fender protector. Keep a service area. Refer to [EXT-24, "FENDER PROTECTOR : Exploded View"](#).
2. Remove the front fog lamp connector.
3. Remove the screw.
4. Disengage the pawl. And then remove the front fog lamp.

INSTALLATION

Installation is the reverse order of removal.

NOTE:

After installation, perform aiming adjustment. Refer to [EXL-361, "Description"](#)

Replacement

INFOID:000000005515222

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.

FRONT FOG LAMP BULB

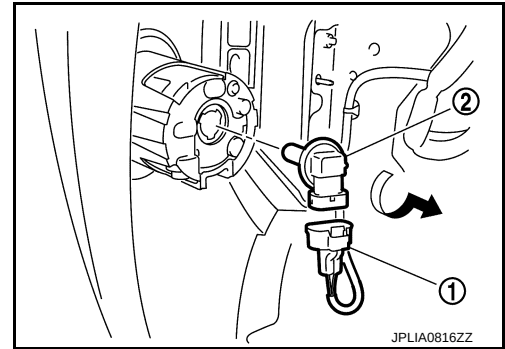
1. Remove the front fender protector. Keep the service area. Refer to [EXT-24, "FENDER PROTECTOR : Exploded View"](#).

FRONT FOG LAMP

< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

2. Remove the front fog lamp bulb connector (1).
3. Rotate the bulb (2) counterclockwise and unlock it.

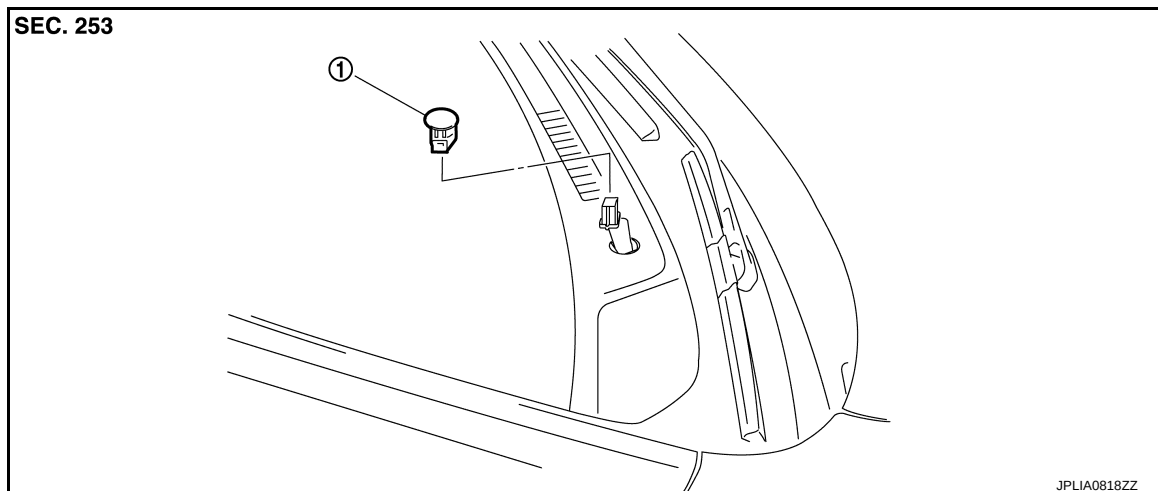


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OPTICAL SENSOR

Exploded View

INFOID:000000005612727



1. Optical sensor

Removal and Installation

INFOID:000000005612728

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.

LIGHTING & TURN SIGNAL SWITCH

< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

LIGHTING & TURN SIGNAL SWITCH

Exploded View

INFOID:000000005515223

Removal and Installation

INFOID:000000005515224

Lighting & turn signal switch is integrated in the combination switch. Refer to [BCS-96, "Exploded View"](#).

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HAZARD SWITCH

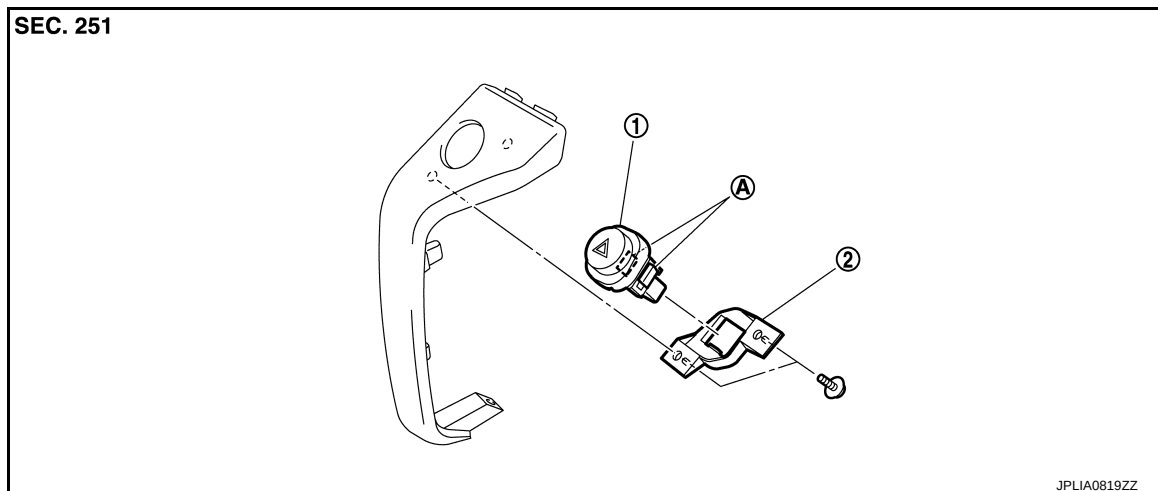
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

HAZARD SWITCH

Exploded View

INFOID:000000005515225



- 1. Hazard switch
- 2. Switch bracket
- A. Pawls

Removal and Installation

INFOID:000000005515226

REMOVAL

1. Remove the instrument stay cover (RH). Refer to [IP-12. "Exploded View"](#).
2. Remove the screws. And then remove the switch bracket from the instrument stay cover.
3. Remove the hazard switch.

INSTALLATION

Install in the reverse order of removal.

REAR COMBINATION LAMP

< REMOVAL AND INSTALLATION >

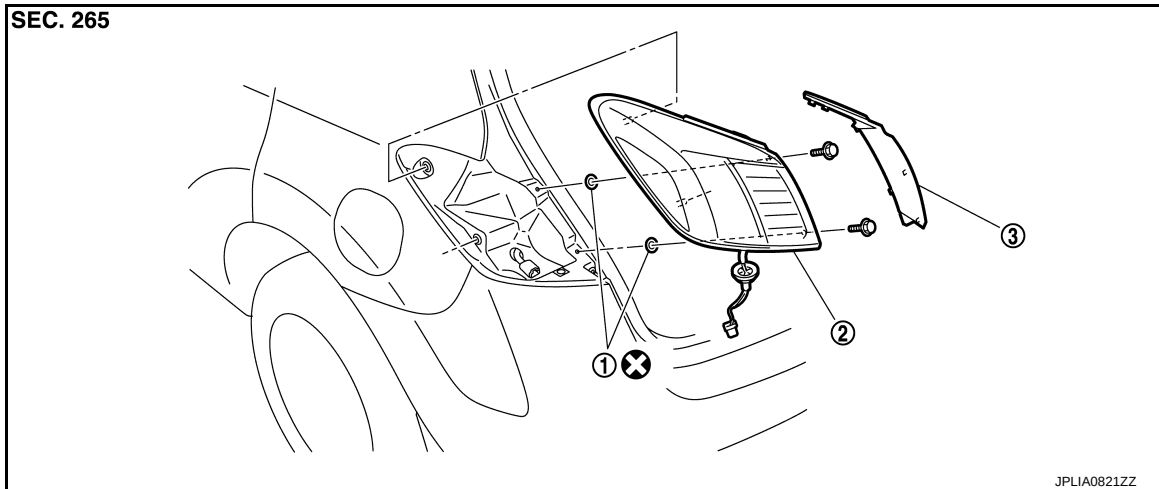
[HALOGEN TYPE]

REAR COMBINATION LAMP

Exploded View

INFOID:000000005515227

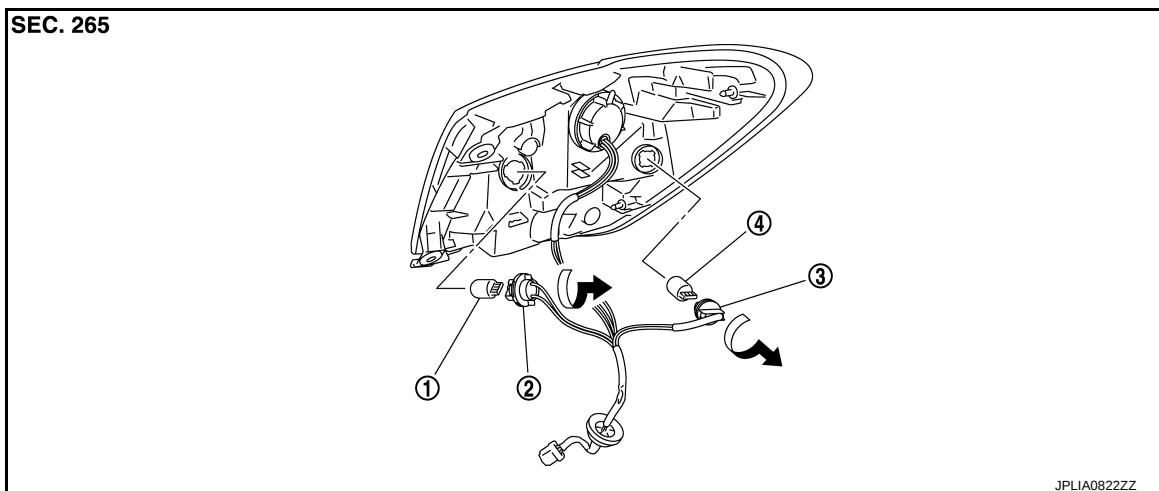
REMOVAL



1. Seal packing 2. Rear combination lamp 3. Rear combination lamp finisher

Refer to [GI-4, "Components"](#) for symbols in the figure.

DISASSEMBLY



1. Rear turn signal lamp bulb 2. Rear turn signal lamp bulb socket 3. Rear side marker lamp bulb socket
4. Rear side marker lamp bulb

Removal and Installation

INFOID:000000005515228

CAUTION:
Disconnect the battery negative terminal or remove the fuse.

REMOVAL

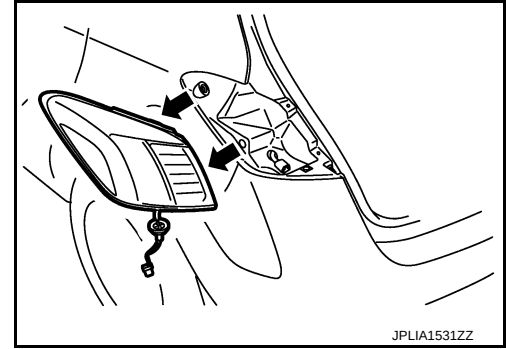
1. Remove the rear combination lamp finisher.
2. Remove the rear combination lamp mounting bolts.

REAR COMBINATION LAMP

< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

3. Pull the rear combination lamp toward outside of the vehicle (←). Remove the rear combination lamp.
4. Disconnect the rear combination lamp connector.



INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:000000005515229

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.

STOP/TAIL LAMP

Replacement integral with rear combination lamp. Refer to [EXL-371. "Exploded View"](#).

REAR SIDE MARKER LAMP BULB

1. Remove the rear combination lamp. Refer to [EXL-371. "Exploded View"](#).
2. Rotate the rear side marker lamp bulb socket counterclockwise, and unlock it.
3. Remove the bulb from the rear side marker lamp bulb socket.

REAR TURN SIGNAL LAMP BULB

1. Remove the rear combination lamp. Refer to [EXL-371. "Exploded View"](#).
2. Rotate the rear turn signal lamp bulb socket counterclockwise, and unlock it.
3. Remove the bulb from the rear turn signal lamp bulb socket.

HIGH-MOUNTED STOP LAMP

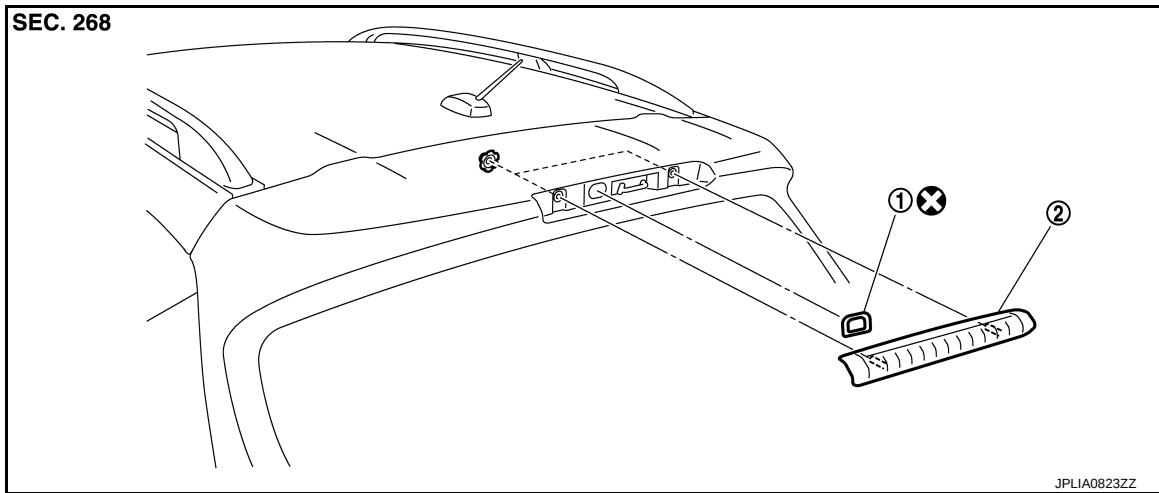
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

HIGH-MOUNTED STOP LAMP

Exploded View

INFOID:000000005515230



1. Seal packing
2. High-mounted stop lamp

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000005515231

CAUTION:

Disconnect battery negative terminal or remove the fuse.

REMOVAL

1. Remove the back door plate. Refer to [INT-38, "Exploded View"](#).
2. Remove the high-mounted stop lamp mounting nuts and connector.
3. Pull the high-mounted stop lamp toward rear of the vehicle. Remove the rear washer tube.
4. Disconnect the high-mounted stop lamp connector.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Seal packing cannot be reused.

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BACK-UP LAMP

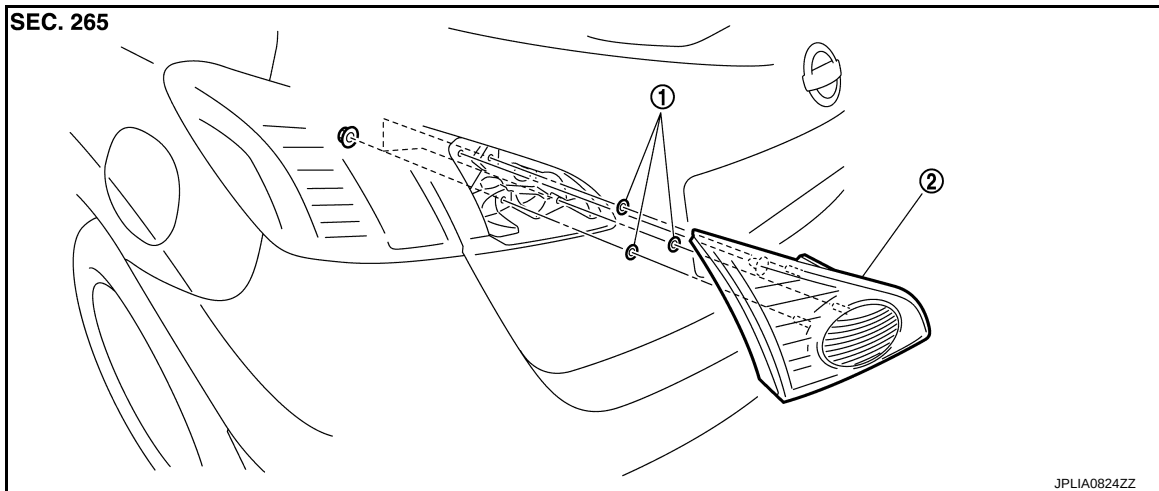
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

BACK-UP LAMP

Exploded View

INFOID:000000005515232



1. Seal packing
2. Back-up lamp

Refer to [GI-4, "Components"](#) for symbols in the figure.

Removal and Installation

INFOID:000000005515233

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the back door finisher inner. Refer to [INT-38, "Exploded View"](#).
2. Remove the back-up lamp mounting nuts and clip.
3. Disconnect the back-up lamp connector. And then remove the back-up lamp.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Seal packing cannot be reused.

Replacement

INFOID:000000005515234

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

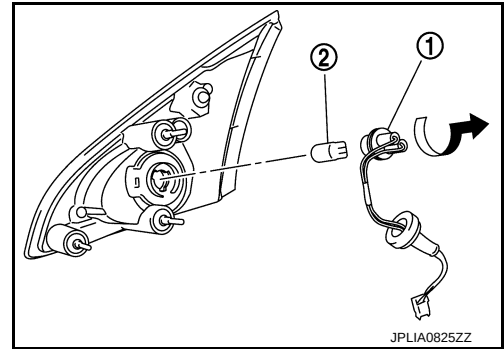
1. Remove the back-up lamp. Refer to [EXL-374, "Exploded View"](#).

BACK-UP LAMP

< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

2. Disconnect the connector, rotate the back-up lamp bulb socket (1) counterclockwise and unlock it.
3. Remove the bulb (2) from the back-up lamp bulb socket.



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LICENSE PLATE LAMP

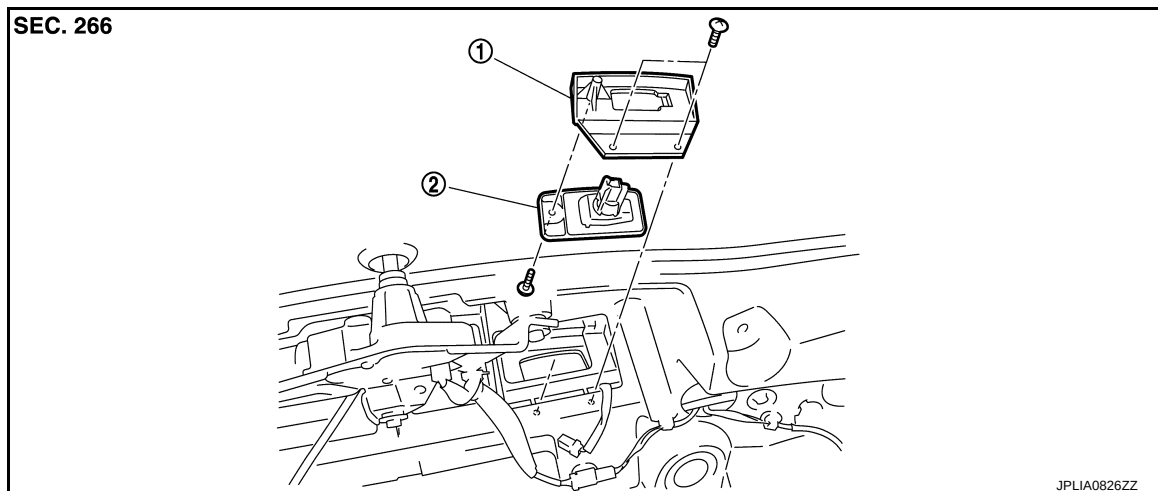
< REMOVAL AND INSTALLATION >

[HALOGEN TYPE]

LICENSE PLATE LAMP

Exploded View

INFOID:000000005515235



1. License plate lamp bracket
2. License plate lamp

Removal and Installation

INFOID:000000005515236

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the back door finisher inner. Refer to [INT-38, "Exploded View"](#).
2. Remove the screw. And then disconnect the license plate lamp connector.
3. Remove the license plate lamp.
4. Remove the screw. And then remove the license plate lamp bracket.

INSTALLATION

Install in the reverse order of removal.

Replacement

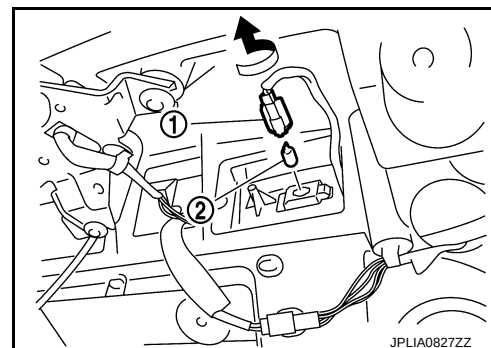
INFOID:000000005515237

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-38, "Exploded View"](#).
2. Turn the license plate lamp bulb socket (1) counterclockwise and unlock it.
3. Remove the bulb (2) from the license plate lamp bulb 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:0000000005515238

Item		Type	Wattage (W)
Front combination lamp	Headlamp (Hl)	HB3	65
	Headlamp (LO)	H11	55
	Front turn signal/parking lamp	1157NA (Amber)	27/8
	Front side marker lamp	WY5W (Amber)	5
Front fog lamp		H8	35
Rear combination lamp	Stop lamp	LED	—
	Tail lamp	LED	—
	Rear turn signal lamp	W21W	21
	Rear side marker lamp	W5W	5
Back-up lamp		W16W	16
License plate lamp		W5W	5
High-mounted stop lamp		LED	—

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