SECTION EXL
EXTERIOR LIGHTING SYSTEM

CONTENTS

LED HEADLAMP

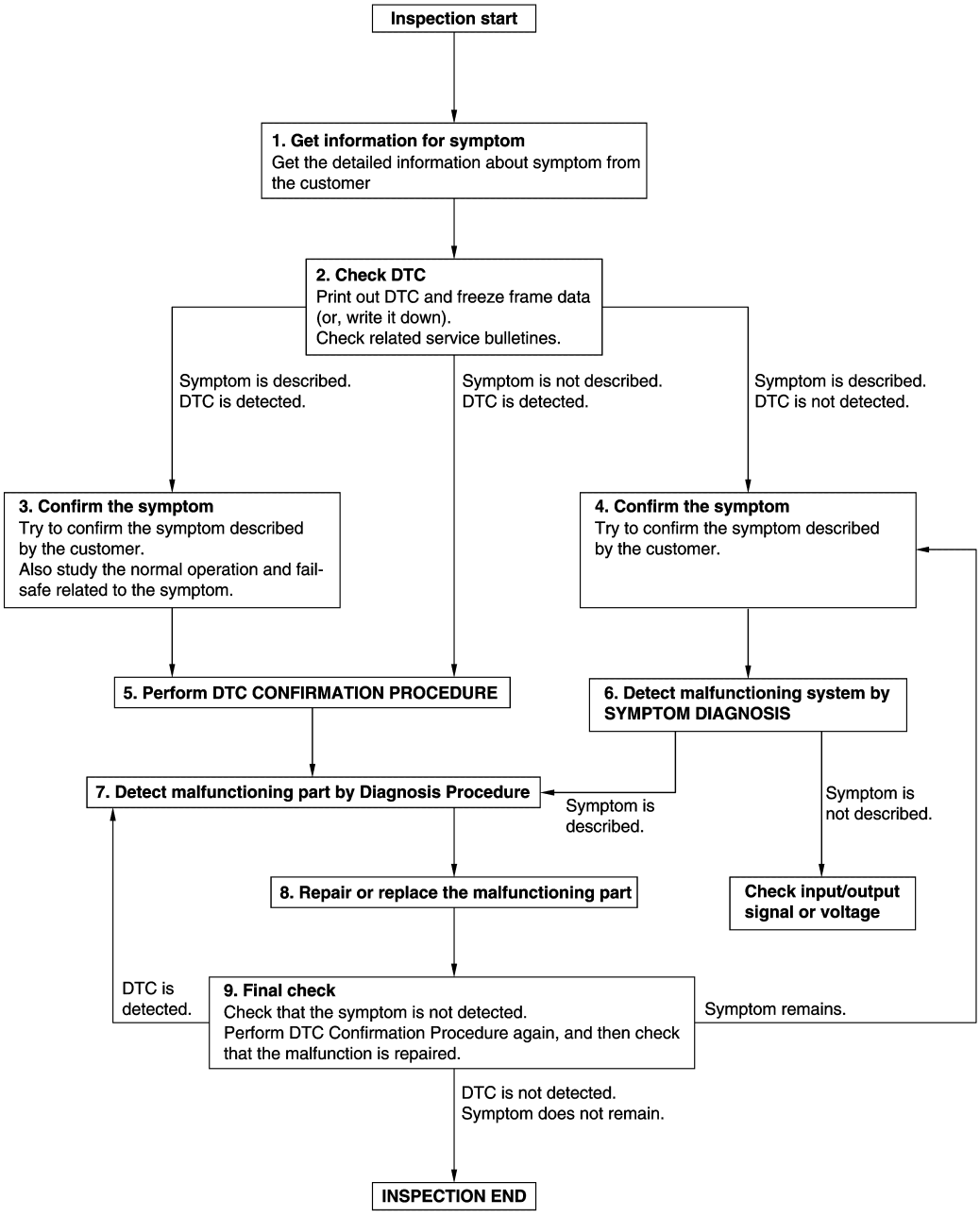
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000011489855

OVERALL SEQUENCE



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DETAILED FLOW

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

1. Check DTC.
2. Perform the following procedure if DTC is detected.

- Record DTC and freeze frame data (Print them out using CONSULT.)
- Erase DTC.
- Study the relationship between the cause detected by DTC and the symptom described by the customer.

3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

Symptom is described, DTC is detected>>GO TO 3.
Symptom is described, DTC is not detected>>GO TO 4.
Symptom is not described, DTC is detected>>GO TO 5.

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Also study the normal operation and fail-safe related to the symptom.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.
Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5.PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time.
If two or more DTCs are detected, refer to DTC INSPECTION PRIORITY CHART, and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
  If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIRMATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.
NO >> Check according to GI-39, "Intermittent Incident".

6.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

Is the symptom described?

YES >> GO TO 7.
NO >> Monitor input data from related sensors or check voltage of related module terminals using CONSULT.

7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.
NO >> Check according to GI-39, "Intermittent Incident".

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 9.

9. FINAL CHECK

When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE again, and then check that the malfunction is repaired securely.
When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Is DTC detected and does symptom remain?

YES-1 >> DTC is detected: GO TO 7.
YES-2 >> Symptom remains: GO TO 4.
NO >> Before returning the vehicle to the customer, always erase DTC.

LED HEADLAMP OPERATION INSPECTION

Work Procedure

INFOID:0000000011489856

1.CHECK START

1. In the cool LED status (wait for more than 10 minutes after turning headlamp OFF), turn ON and turn OFF headlamp for the several times. Check that headlamp operates normally each time.
2. In the cool LED status, turn headlamp ON, wait until headlamp enters to the stable status (approximately 5 minutes after turning headlamp ON), and then check that headlamp operates normally without blinking or flickering.
3. In the warm LED status (turn headlamp ON for more than 15 minutes and wait for 1 minute after turning OFF), turn ON and turn OFF headlamp for the several times. Check that headlamp operates normally each time.
4. Turn headlamp ON for approximately 30 minutes, and then check that headlamp operates normally without difference in brightness between LH and RH, blinking or flickering.

Is the inspection result normal?

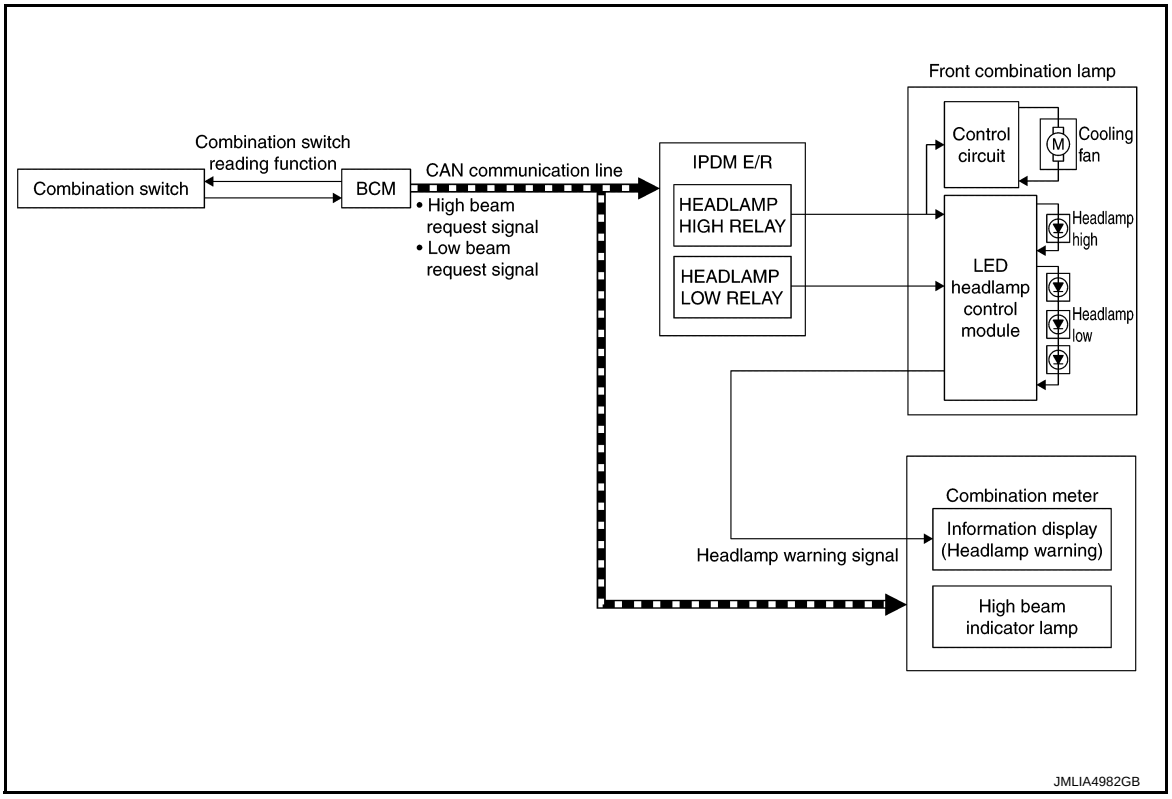
YES >> INSPECTION END
NO >> Refer to EXL-159, "Symptom Table".

SYSTEM DESCRIPTION

HEADLAMP SYSTEM

System Diagram

INFOID:0000000011489857



System Description

INFOID:0000000011489858

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 (When any of the following conditions are satisfied)

- Lighting switch 2ND
- Lighting switch AUTO with the ignition switch ON (auto light function ON judgment)
- Lighting switch PASS

- IPDM E/R turns the integrated headlamp low relay ON according to low beam request signal and supplies power supply to LED headlamp control module.
- LED headlamp control module turns the headlamp (LO) ON according to the power supply from IPDM E/R.

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 (When any of the following conditions are satisfied)

- Lighting switch HI with the lighting switch 2ND
- Lighting switch HI with the lighting switch AUTO and ignition switch ON (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 supplies a power source to the LED headlamp control module and control circuit in the front combination lamp, according to high beam request signal.
- LED headlamp control module turns the headlamp (HI) ON according to the power supply from IPDM E/R.
- When the power source is supplied by the control circuit in the front combination lamp, the voltage is converted to 5 V, and then the cooling fan assembled with the headlamp (HI) operates to cool the headlamp.

HEADLAMP WARNING OPERATION

- BCM transmits the low beam request signal to combination meter with CAN communication when headlamp (LO) ON judgment.
- When LED headlamp control module detects a malfunction of headlamp (LO) circuit, headlamp warning signal is output to combination meter.
- When the ignition switch is ON and the low beam request signal is received, if the headlamp warning signal is input, the headlamp warning is displayed on the information display.

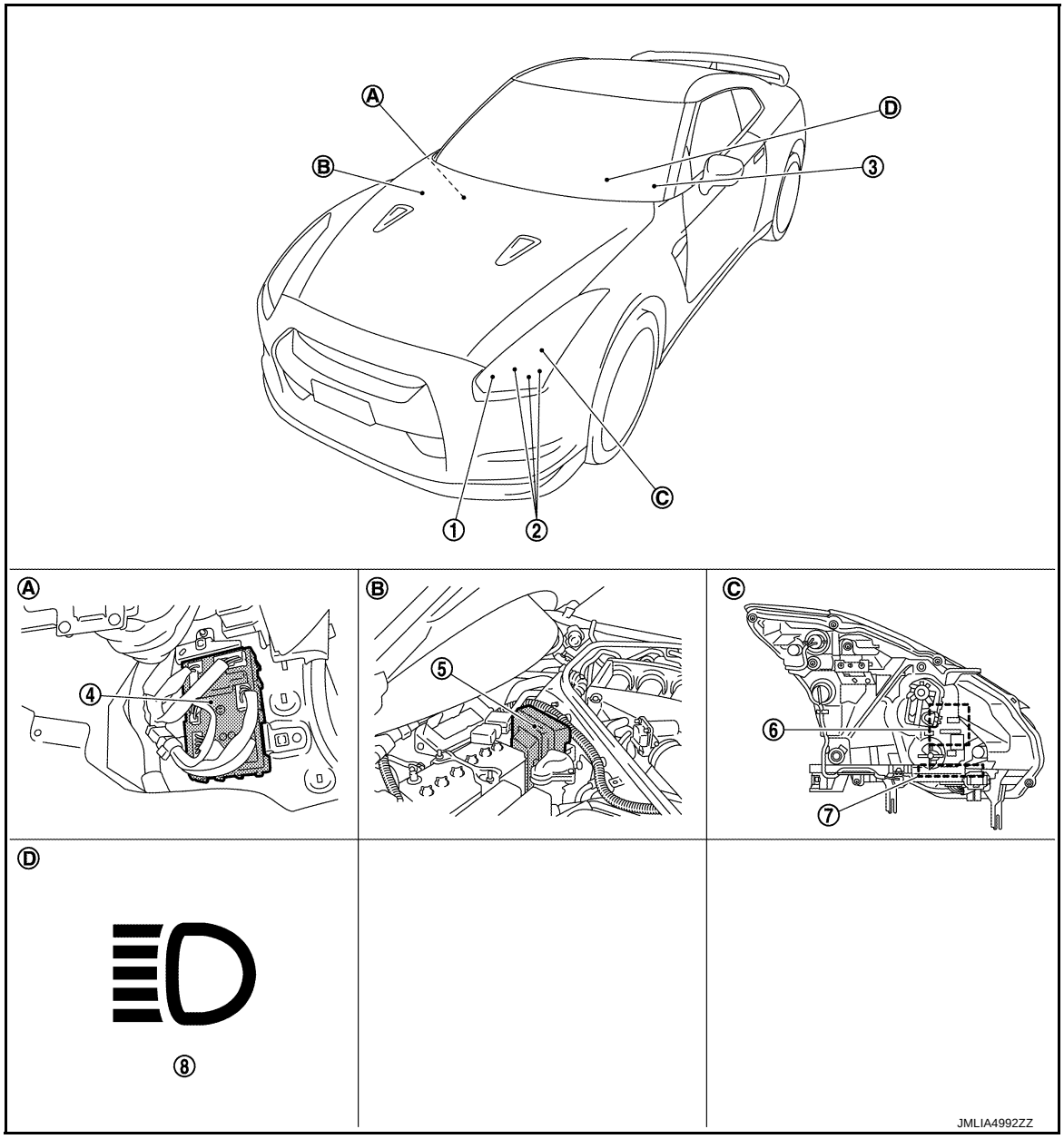
NOTE:

When the headlamp warning signal is received, the most likely cause is a malfunction of the following.

- Headlamp (LO) power supply/ground circuit
- Headlamp warning signal circuit
- Front combination lamp internal circuit
  - LED (Headlamp low)
  - LED headlamp control module
  - Harness

Component Parts Location

INFOID:0000000011489859



1. Headlamp high
2. Headlamp low
3. Combination switch
4. BCM
5. IPDM E/R
6. Cooling fan
7. LED headlamp control module
8. High beam indicator lamp
A. Dash side lower (passenger side)
B. Engine room dash panel (RH)
C. Front combination lamp (back)
D. On the combination meter

Component Description

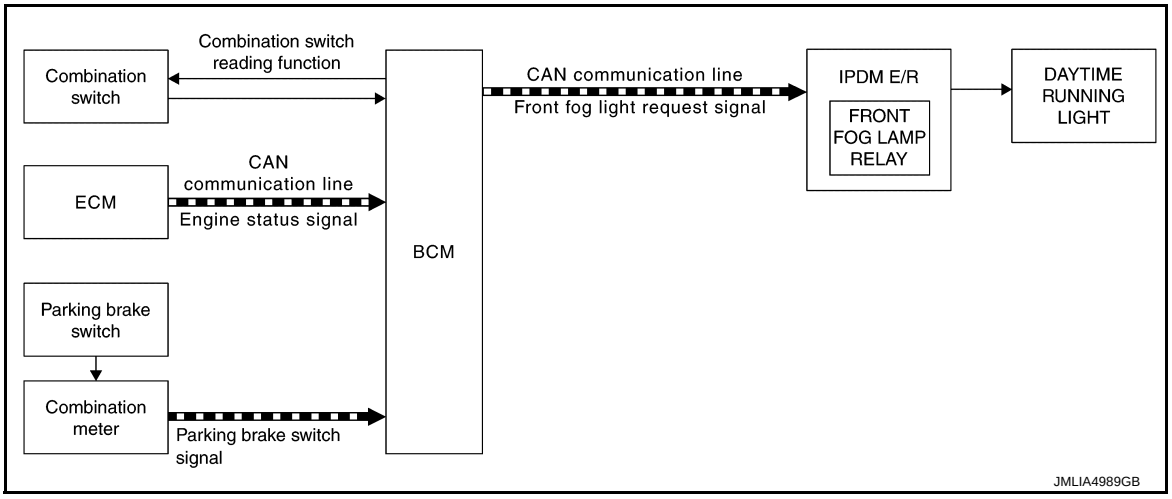
INFOID:0000000011489860

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 (High/Low) 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 meter (High beam indicator lamp)		• Turns the high beam indicator lamp ON according to the request from BCM (with CAN communication). • Inputs headlamp warning signal from LED headlamp control module and turns headlamp warning ON.
Combination switch (Lighting & turn signal switch)		Refer to BCS-9, "System Description".
Front combination lamp	LED headlamp	Refer to EXL-43, "Description".
	Cooling fan	Cool the LED headlamp by operating when the headlamp high ON.
	LED headlamp control module	Refer to EXL-43, "Description".

DAYTIME RUNNING LIGHT SYSTEM

System Diagram

INFOID:0000000011489861



System Description

INFOID:0000000011489862

OUTLINE

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

DAYTIME RUNNING LIGHT OPERATION

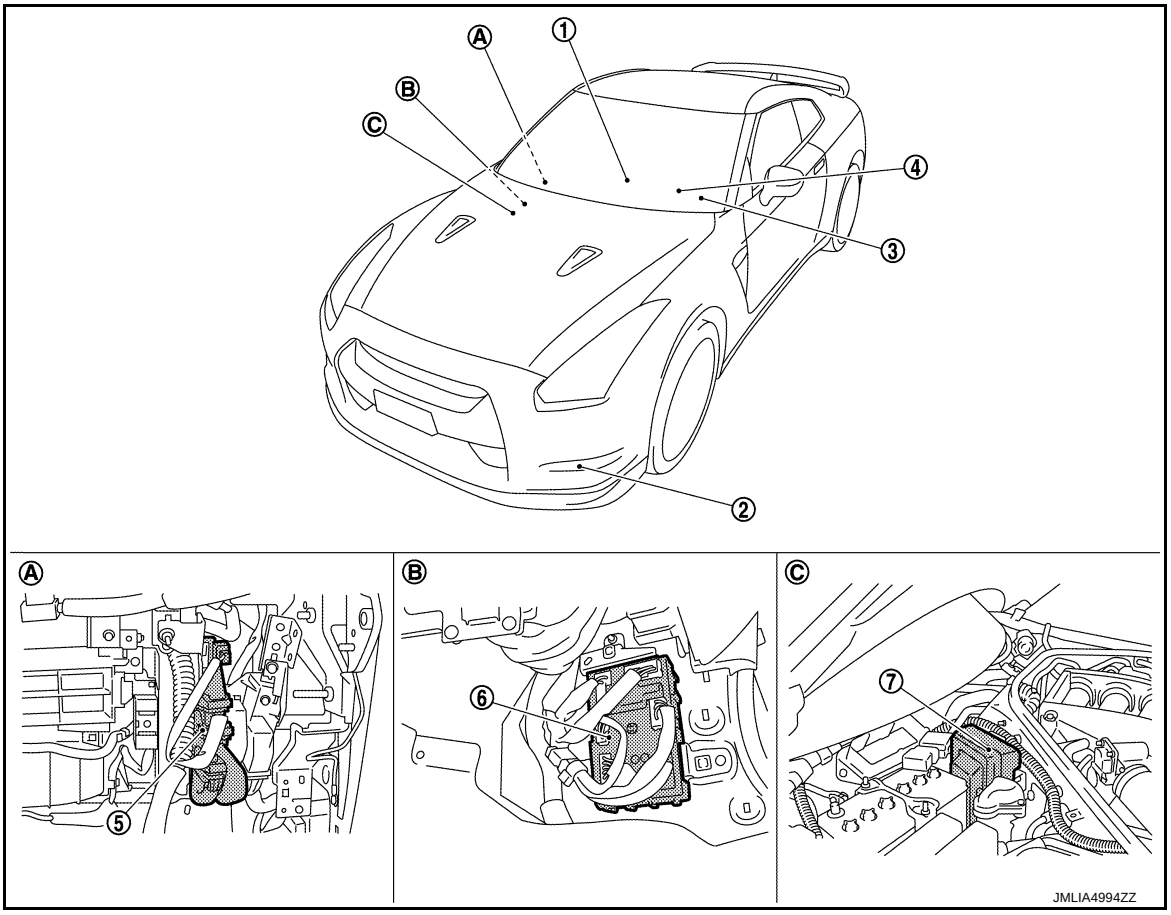
- BCM detects the combination switch condition by the combination switch reading function.
- BCM detects the engine condition by the engine status signal received from ECM with CAN communication.
- BCM detects the parking brake condition by the parking brake switch signal received from combination meter 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

- Engine running with the parking brake released, and any of the following conditions are satisfied
- Lighting switch OFF
- Lighting switch AUTO, and the auto light function OFF judgement
- IPDM E/R turns the integrated front fog lamp relay ON, and turns the daytime running light ON according to the front fog light request signal.

Component Parts Location

INFOID:0000000011489863



1. Parking brake switch
2. Daytime running light
3. Combination switch
4. Combination meter
5. ECM
6. BCM
7. IPDM E/R

A. Over the glove box
B. Dash side lower (passenger side)
C. Engine room dash panel (RH)

Component Description

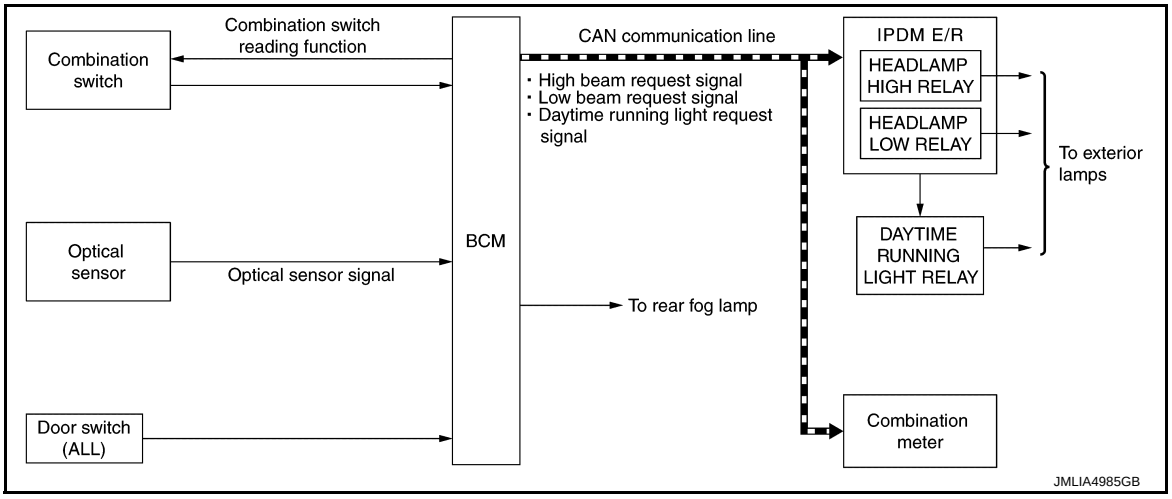
INFOID:0000000011489864

Part	Description
BCM	• Detects each switch condition with the combination switch reading function. • Judges that the daytime running light is turned ON 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).
ECM	Transmits the engine status signal to BCM (with CAN communication).
Combination meter	Transmits the parking brake switch signal to BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Description".

AUTO LIGHT SYSTEM

System Diagram

INFOID:0000000011489865



NOTE:
Rear fog lamp is not used.

System Description

INFOID:0000000011489866

OUTLINE

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

Control by BCM
- Combination switch reading function
- Auto light function
- Delay timer function

Control by IPDM E/R
- Relay control function
- Auto light function automatically turns ON/OFF the exterior lamps*, depending on the outside brightness.

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

NOTE:
Headlamp (HI) depend on the combination switch condition.

AUTO LIGHT FUNCTION

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

NOTE:
As to ON/OFF timing, the sensitivity depends on settings. The settings can be changed using CONSULT. Refer to EXL-28, "HEADLAMP : CONSULT Function (BCM - HEAD LAMP)".

DELAY TIMER FUNCTION

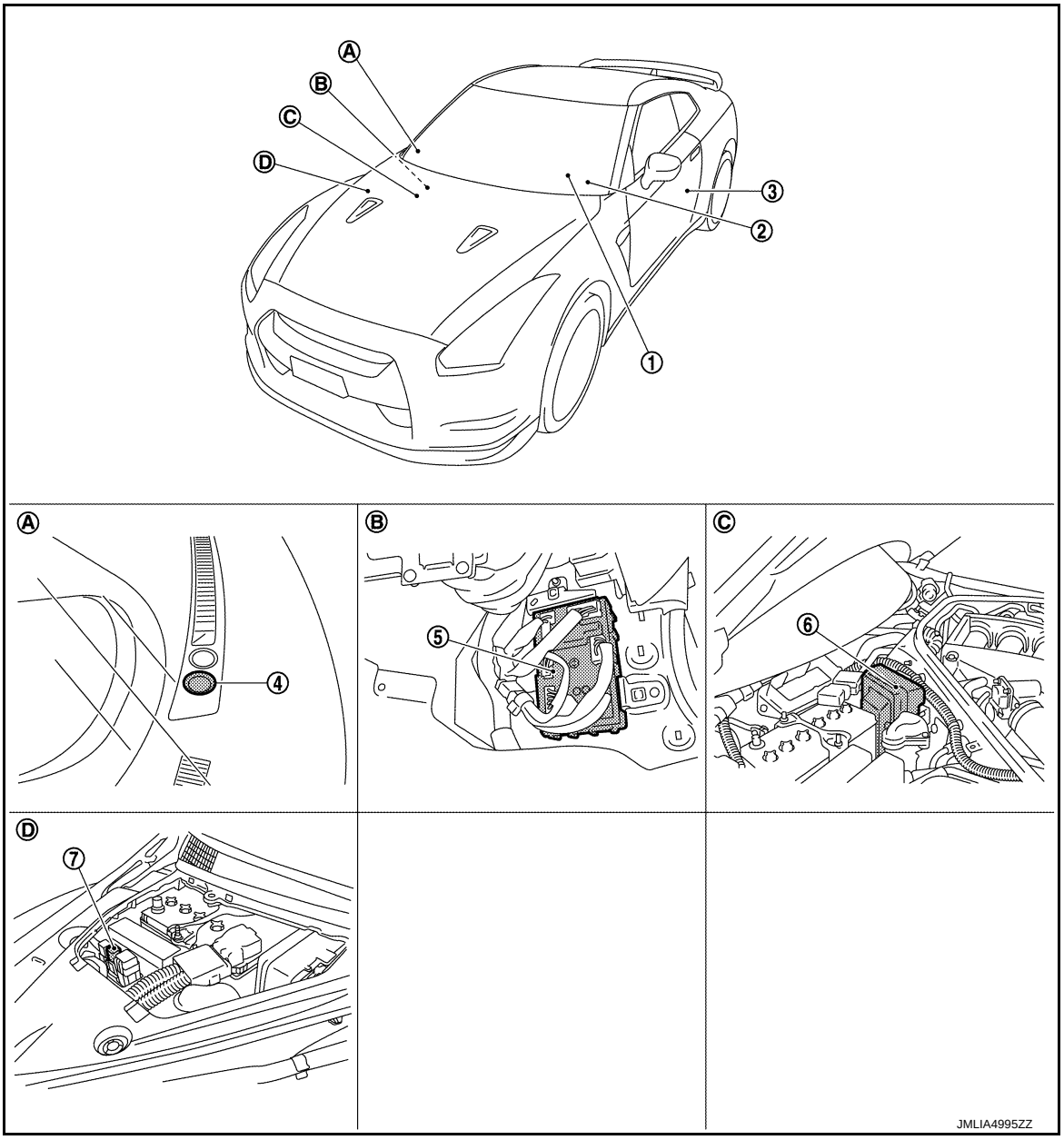
- BCM turns the headlamp (LO) OFF depending on the vehicle condition with the auto light function when the ignition switch is turned OFF.
  - Turns the headlamp (LO) OFF 5 minutes after the ignition switch is turned OFF.
  - Turns the headlamp (LO) OFF 5 minutes after detecting that any door opens. (Door switch ON).
  - Turns the headlamp (LO) OFF a certain period of time* after closing all doors. (Door switch ON → OFF).
- Delay timer function turns OFF, when the ignition switch is other than OFF or the lighting switch is other than AUTO.

*: The preset time is 45 seconds. The timer operating time can be set by CONSULT. Refer to EXL-28, "HEADLAMP : CONSULT Function (BCM - HEAD LAMP)".

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

Component Parts Location

INFOID:0000000011489867



1. Combination meter
2. Combination switch
3. Door switch
4. Optical sensor
5. BCM
6. IPDM E/R
7. Daytime running light relay

A. Instrument upper panel (RH)
B. Dash side lower (passenger side)
C. Engine room dash panel (RH)
D. Engine room dash panel (RH)

Component Description

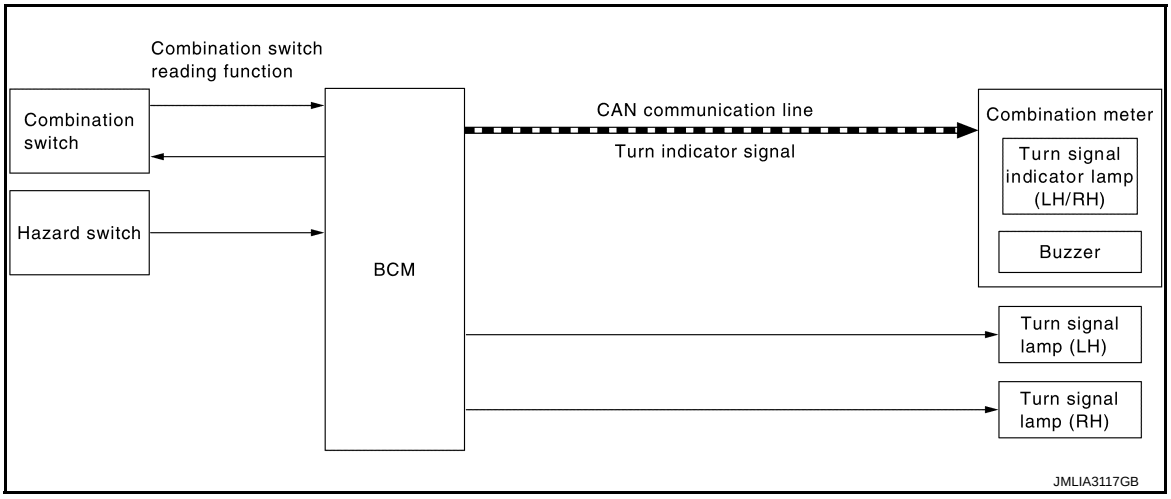
INFOID:0000000011489868

Part	Description
BCM	• Detects each switch condition by the combination switch reading function. • Judges the outside brightness from the optical sensor signal. • Judges the ON/OFF status of the exterior lamp 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 daytime running light 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".
Door switch	Detects door open/close condition.
Optical sensor	Refer to EXL-62, "Description".
Daytime running light relay	Supplies the voltage to the load with the controlled by IPDM E/R.

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

System Diagram

INFOID:0000000011489869



System Description

INFOID:0000000011489870

OUTLINE

Turn signal lamp and 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 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 circuits when the hazard switch is ON. BCM blinks the hazard warning lamp.

TURN SIGNAL INDICATOR LAMP AND TURN SIGNAL OPERATION

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

3-TIME FLASHER FUNCTION

- By a short touch of the turn signal lever, BCM blinks the turn signal lamps 3 times in the selected direction.
- Cancels the operation when short touch of the turn signal lever in the reverse direction during the 3-time flasher function operation.

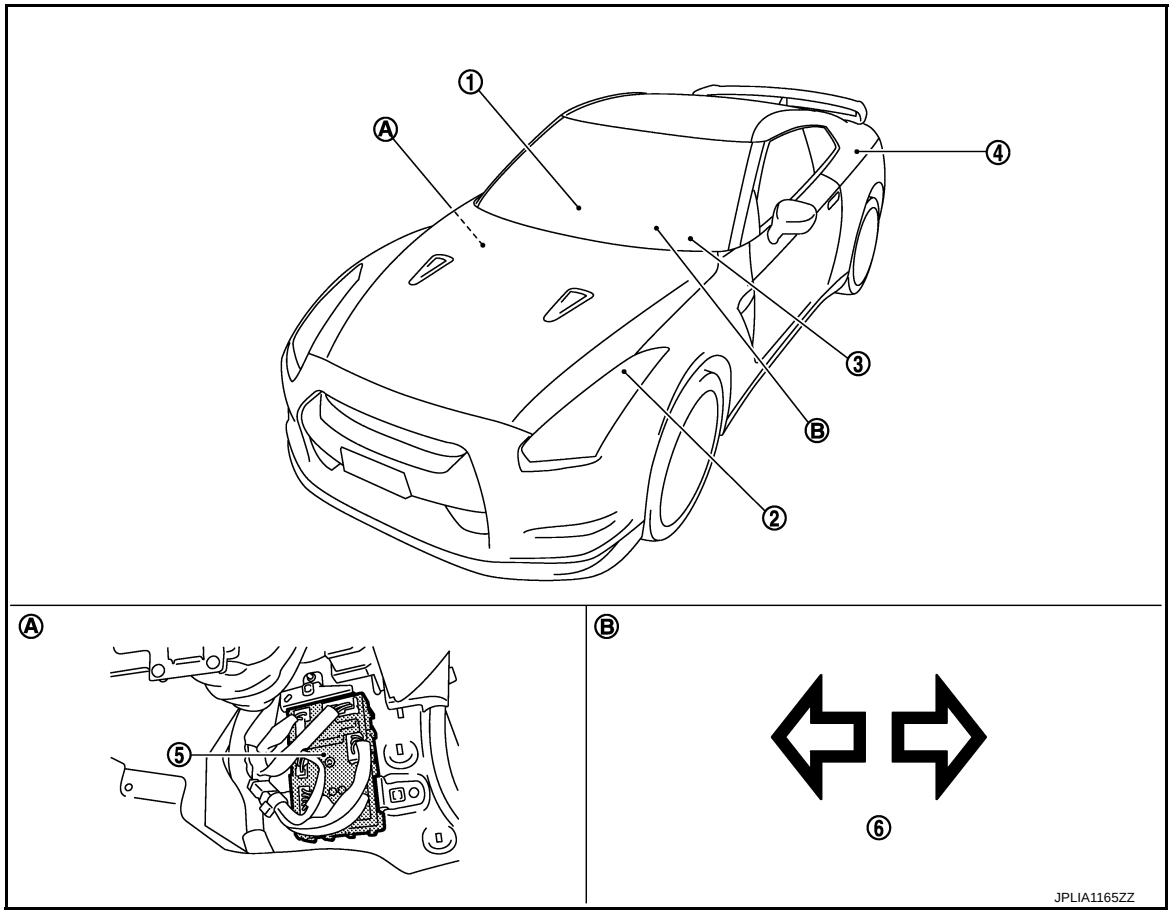
HIGH FLASHER OPERATION

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

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

Component Parts Location

INFOID:0000000011489871



1. Hazard switch
2. Front turn signal lamp
3. Combination switch
4. Rear turn signal lamp
5. BCM
6. Turn signal indicator lamp
A. Dash side lower (Passenger side)
B. On the combination meter

Component Description

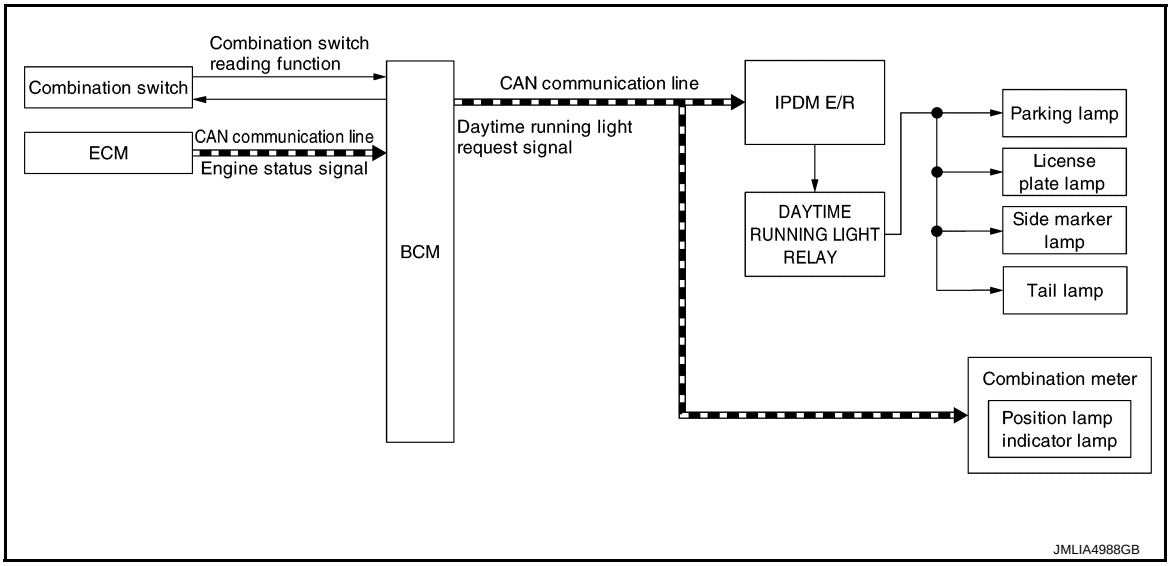
INFOID:0000000011489872

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 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).
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Description".
Hazard switch (Set-up switch)	Refer to EXL-65, "Description".

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS SYSTEM

System Diagram

INFOID:0000000011489873



System Description

INFOID:0000000011489874

OUTLINE

Parking, license plate, side marker and tail lamps are controlled by combination switch reading function and parking, license plate, side marker and tail lamps 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 detects vehicle condition depending on the engine status signal (received from ECM via CAN communication).
- BCM transmits the daytime running light request signal to IPDM E/R and the combination meter via CAN communication according to the parking, license plate, side marker and tail lamps ON condition.

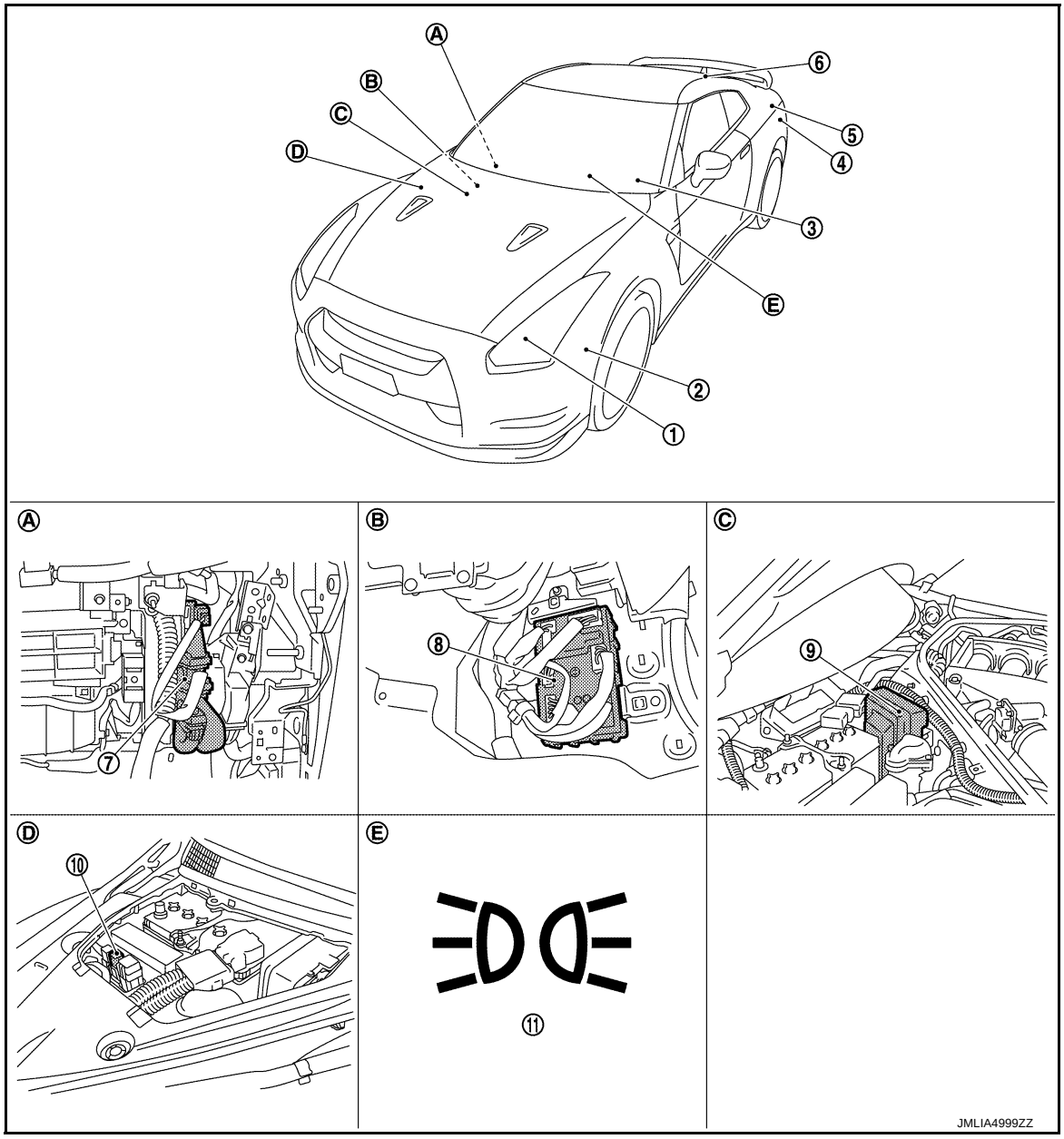
Parking, license plate, side marker and tail lamps ON condition (When any of the following conditions are satisfied)

- Lighting switch 1ST
- Lighting switch 2ND
- Lighting switch AUTO with the ignition switch ON (auto light function ON judgment)
- Engine running

- IPDM E/R turns the daytime running light relay ON and turns the parking, license plate, side marker and tail lamps ON according to the daytime running light request signal.
- Combination meter turns the position lamp indicator lamp ON according to the daytime running light request signal.

Component Parts Location

INFOID:0000000011489875



1. Parking lamp
2. Front side marker lamp
3. Combination switch
4. Rear side marker lamp
5. Tail lamp
6. License plate lamp
7. ECM
8. BCM
9. IPDM E/R
10. Daytime running light relay
11. Position lamp indicator lamp
- A. Over the glove box
- B. Dash side lower (passenger side)
- C. Engine room dash panel (RH)
- D. Engine room dash panel (RH)
- E. On the combination meter

Component Description

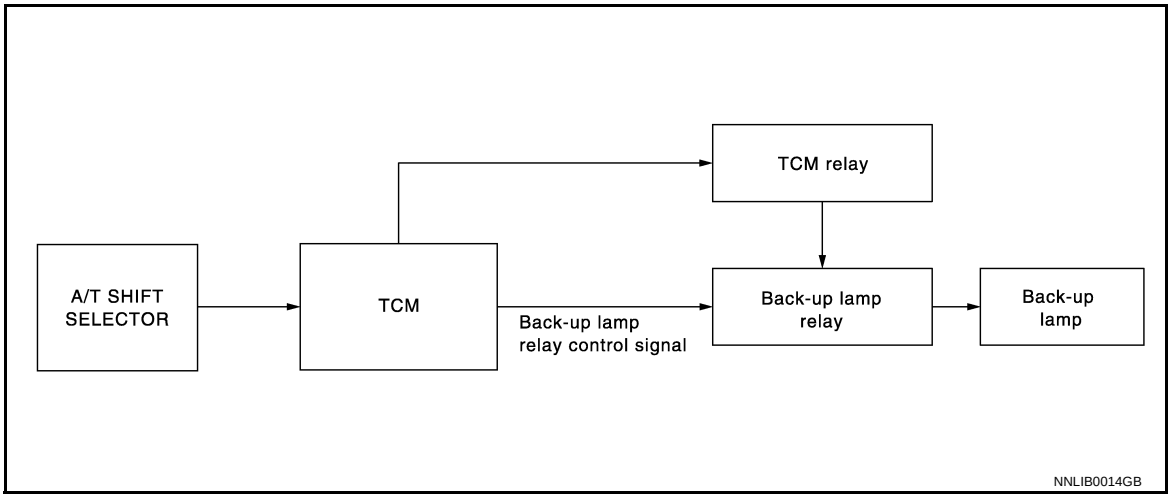
INFOID:0000000011489876

Part	Description
BCM	• Detects each switch condition by the combination switch reading function. • Judges the ON/OFF status of the parking, license plate, side marker and tail lamps according to the vehicle condition. - Requests the daytime running light relay ON to IPDM E/R (with CAN communication). - Requests the position lamp indicator lamp ON to the combination meter (with CAN communication).
IPDM E/R	Controls the daytime running light relay and supplies voltage to the load according to the request from BCM (with CAN communication).
Combination meter (Position lamp indicator lamp)	Turns the position lamp indicator lamp ON according to the request from BCM (with CAN communication).
ECM	ECM transmits engine status signal to BCM via CAN communication.
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Description".
Daytime running light relay	Supplies the voltage to the load with the controlled by IPDM E/R.

BACK-UP LAMP SYSTEM

System Diagram

INFOID:0000000011489877



System Description

INFOID:0000000011489878

OUTLINE

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

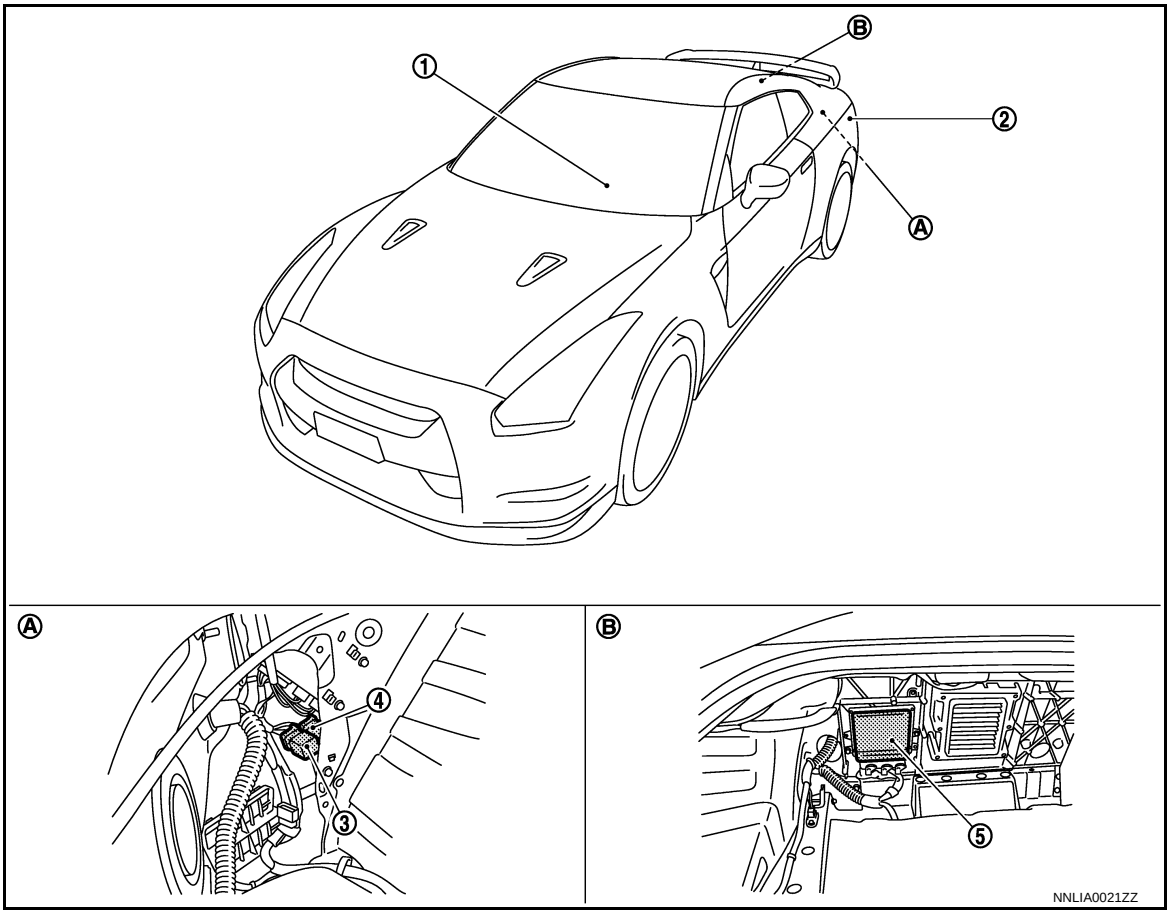
BACK-UP LAMP OPERATION

- TCM detects the A/T shift selector condition.
- TCM turns the back-up lamp relay ON according to the back-up lamp ON condition.

Back-up lamp ON condition (When all of the following conditions are satisfied)
- Ignition switch ON
- Shift position “R”

Component Parts Location

INFOID:0000000011489879



1. A/T shift selector
2. Back-up lamp
3. TCM relay
4. Back-up lamp relay
5. TCM
A. Inside of rear wheel house finisher (LH)
B. Inside of trunk front finisher

Component Description

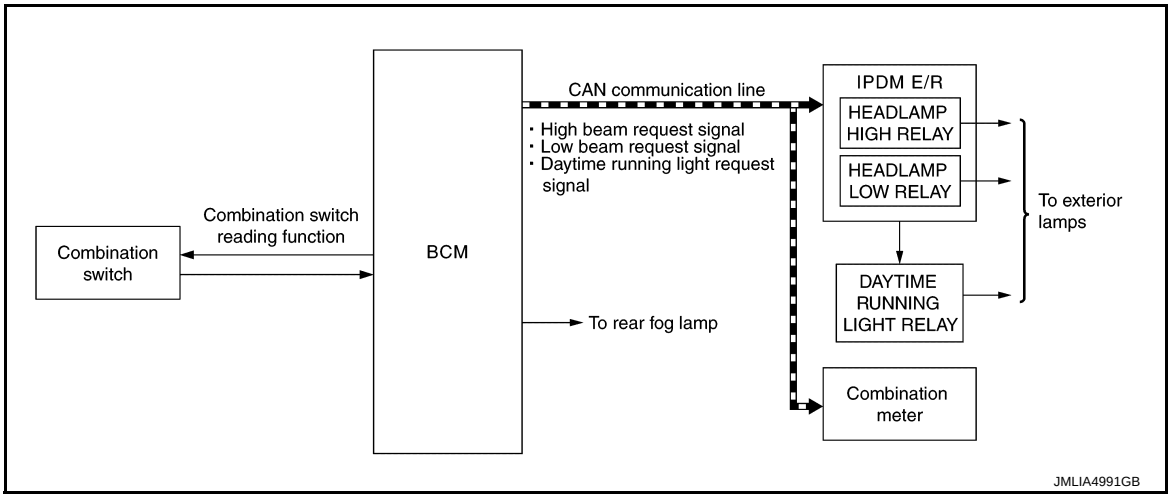
INFOID:0000000011489880

Part	Description
TCM	• Detects the A/T shift selector condition. • Judges the back-up lamp relay ON/OFF by shift lever position status.
A/T shift selector	Refer to TM-23, "Main Device (GT-R certified NISSAN dealer)".

EXTERIOR LAMP BATTERY SAVER SYSTEM

System Diagram

INFOID:0000000011489881



NOTE:
Rear fog lamp is not used.

System Description

INFOID:0000000011489882

OUTLINE

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

Control by BCM
- Combination switch reading function
- Exterior lamp battery saver function

Control by IPDM E/R
- Relay control function
- BCM turns the exterior lamp OFF*, according to the vehicle status when ignition switch is turned OFF while exterior lamp is ON, for preventing battery discharge.

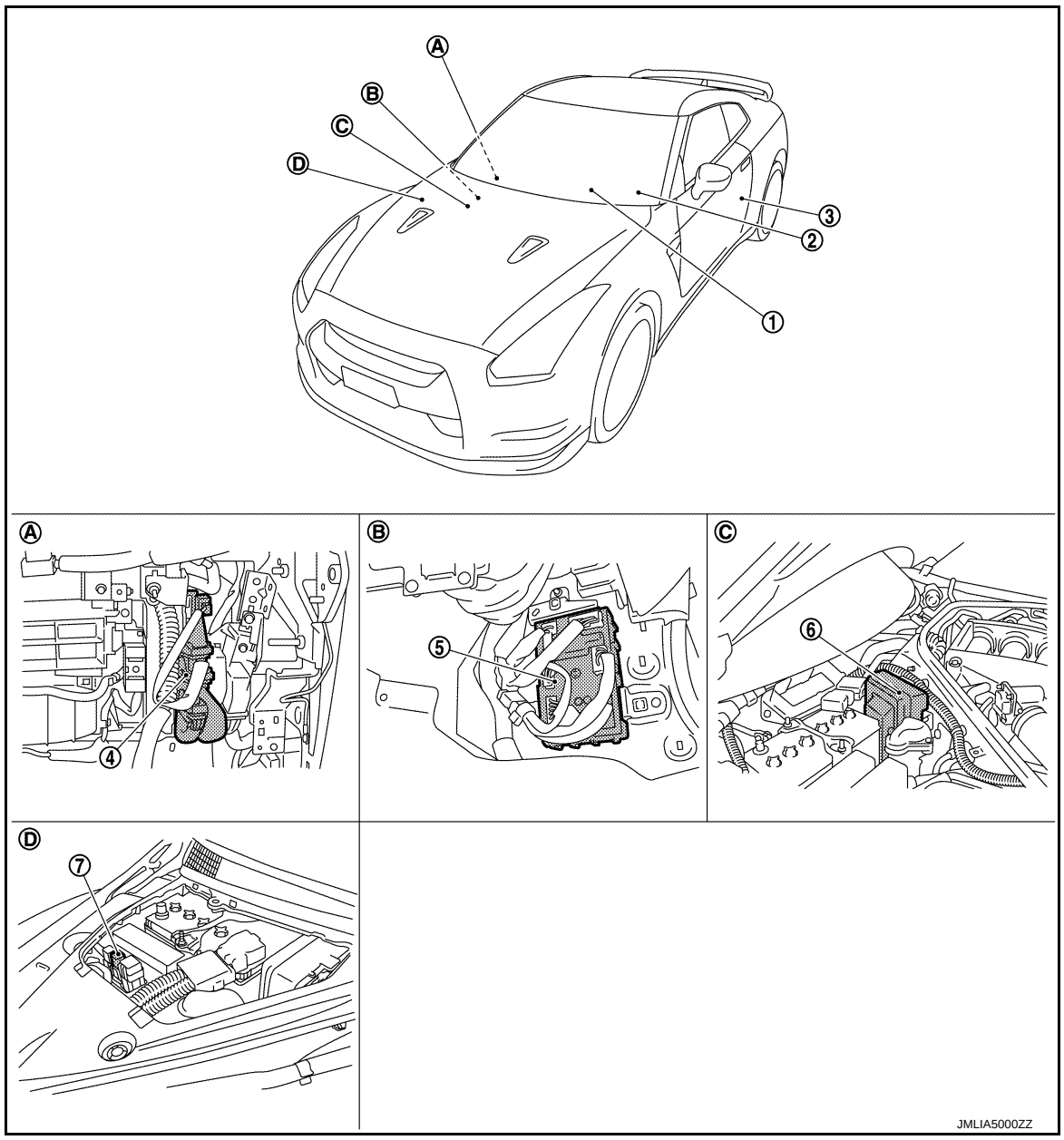
*: Headlamp (LO/HI), parking lamp, license plate lamp, side marker lamp and tail lamp.

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.
- When in any of following conditions (after the exterior lamp battery saver is activated), exterior lamps can be turned ON.
  - Ignition switch is turned from OFF→ACC/ON
  - Lighting switch is changed

Component Parts Location

INFOID:0000000011489883



1. Combination meter
2. Combination switch
3. BCM
4. IPDM E/R
5. Daytime running light relay
A. Dash side lower (Passenger side)
B. Engine room dash panel (RH)
C. Engine room dash panel (RH)

Component Description

INFOID:0000000011489884

Part	Description
BCM	• Detects each switch condition by the combination switch reading function. • Judges the exterior lamp OFF according to the vehicle condition. Requests each relay OFF to IPDM E/R (with CAN communication).
IPDM E/R	Controls the integrated relay and daytime running light relay according to the request from BCM (with CAN communication).

Part	Description
Combination switch (Lighting & turn signal switch)	Refer to BCS-9, "System Description".
Daytime running light relay	Supplies the voltage to the load with the controlled by IPDM E/R.

DIAGNOSIS SYSTEM (BCM)
COMMON ITEM
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000011795855

APPLICATION ITEM
CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	• Read and save the vehicle specification. • Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION
BCM can perform the following functions for each system.
NOTE:
It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

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

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

FREEZE FRAME DATA (FFD)
The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

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 shift 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 Function (BCM - HEAD LAMP)

INFOID:0000000011489886

WORK SUPPORT

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

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.	

*: Factory setting

DATA MONITOR

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

Monitor item [Unit]	Description
PUSH SW [On/Off]	Indicates [ON/OFF] condition of push-button ignition switch
ENGINE STATE [Stop/Stall/Crank/Run]	Indicates [STOP/STALL/CRANK/RUN] condition of engine states
VEH SPEED 1 [km/h]	Display the vehicle speed signal received from combination meter by numerical value [Km/h]
KEY SW -SLOT [On/Off]	Indicates [ON/OFF] condition of key slot
TURN SIGNAL R [On/Off]	Each switch status that BCM judges from the combination switch reading function
TURN SIGNAL L [On/Off]	
TAIL LAMP SW [On/Off]	
HI BEAM SW [On/Off]	
HEAD LAMP SW1 [On/Off]	
HEAD LAMP SW2 [On/Off]	
PASSING SW [On/Off]	
AUTO LIGHT SW [On/Off]	
FR FOG SW [On/Off]	**NOTE:** This item is displayed, but cannot be monitored
RR FOG SW [On/Off]	**NOTE:** This item is displayed, but cannot be monitored
DOOR SW-DR [On/Off]	Indicated [ON/OFF] condition of driver side door switch
DOOR SW-AS [On/Off]	Indicated [ON/OFF] condition of passenger side door switch
DOOR SW-RR [On/Off]	**NOTE:** This item is displayed, but cannot be monitored

Monitor item [Unit]	Description
DOOR SW-RL [On/Off]	**NOTE:** This item is displayed, but cannot be monitored
DOOR SW-BK [On/Off]	**NOTE:** This item is displayed, but cannot be 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 and combination meter with CAN communication to turn the illumination ON
	Off	Stops the position light request signal transmission
HEAD LAMP	Hi	Transmits the high beam request signal to IPDM E/R and combination meter with CAN communication to turn the headlamp (HI) and high beam indicator lamp
	Low	Transmits the low beam request signal to IPDM E/R with CAN communication to turn the headlamp (LO)
	Off	Stops the high & low beam request signal transmission
RR FOG LAMP	On	**NOTE:** This item is displayed, but cannot be tested
	Off	
CORNERING LAMP	RH	**NOTE:** This item is displayed, but cannot be tested
	LH	
	Off	
ILL DIM SIGNAL	On	**NOTE:** This item is displayed, but cannot be tested
	Off	

FLASHER

FLASHER : CONSULT Function (BCM - FLASHER)

INFOID:0000000011489887

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

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

Monitor item [Unit]	Description
REQ SW -DR [On/Off]	Indicated [ON/OFF] condition of door request switch (driver side)
REQ SW -AS [On/Off]	Indicated [ON/OFF] condition of door request switch (passenger side)

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

ACTIVE TEST

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

DIAGNOSIS SYSTEM (IPDM E/R)

Diagnosis Description

INFOID:0000000011795856

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.

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

Operation Procedure

1. Close the hood and lift the wiper arms from the windshield. (Prevent windshield damage due to wiper operation)
   NOTE:
   When auto active test is performed with hood opened, sprinkle water on windshield beforehand.
2. Turn the ignition switch OFF.
3. Turn the ignition switch ON, and within 20 seconds, press the driver door switch 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. 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-63, "Component Function Check".**
- **Do not start the engine.**

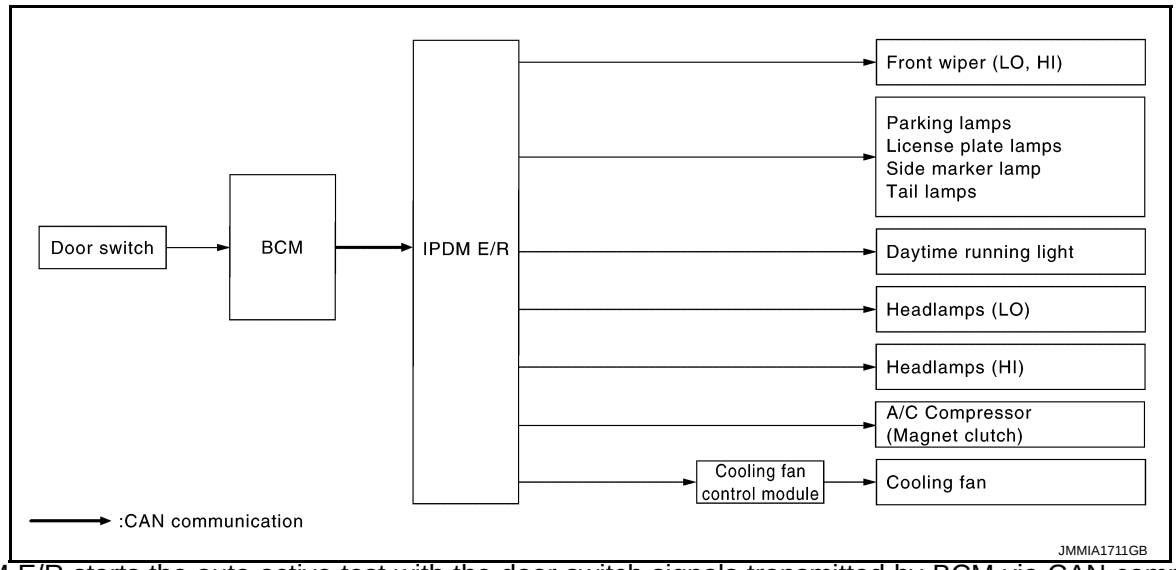
Inspection in Auto Active Test Mode

When auto active test mode is actuated, the following 5 steps are repeated 3 times.

Operation sequence	Inspection location	Operation
1	Front wiper	LO for 5 seconds → HI for 5 seconds
2	• Parking lamps • License plate lamps • Side marker lamps • Tail lamps • Daytime running light	10 seconds
3	Headlamps	LO ⇔ HI 5 times
4	A/C compressor (magnet clutch)	ON ⇔ OFF 5 times
5*	Cooling fan	MID for 5 seconds → HI for 5 seconds

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

Concept of auto active test



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

Diagnosis chart in auto active test mode

Symptom	Inspection contents		Possible cause
Any of the following components do not operate • Headlamp (HI, LO) • Front wiper (HI, LO) • Daytime running light	Perform auto active test. Does the applicable system operate?	YES	BCM signal input circuit
		NO	• Lamp or motor • Lamp or motor ground circuit • Harness or connector between IPDM E/R and applicable system • IPDM E/R
Any of the following components do not operate • Parking lamps • License plate lamps • Tail lamps • Side marker lamps	Perform auto active test. Does the applicable system operate?	YES	BCM signal input circuit
		NO	• Lamp • Lamp ground circuit • Harness or connector between daytime running light relay and applicable system • Harness or connector between IPDM E/R and daytime running relay • Daytime running relay power supply circuit • IPDM E/R • Daytime running light relay
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

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	• Cooling fan • Harness or connector between cooling fan and cooling fan control module • Cooling fan control module • Harness or connector between IPDM E/R and cooling fan control module • Cooling fan relay • Harness or connector between IPDM E/R and cooling fan relay • IPDM E/R

CONSULT Function (IPDM E/R)

INFOID:0000000011795857

APPLICATION ITEM

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

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

SELF DIAGNOSTIC RESULT

Refer to PCS-32, "DTC Index".

DATA MONITOR

NOTE:

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

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

Monitor Item [Unit]	MAIN SIGNALS	Description
WIP PROT [Off/BLOCK]	×	Displays the status of the front wiper fail-safe operation judged by IPDM E/R.
IGN RLY1 -REQ [Off/On]		Displays the status of the ignition switch ON signal received from BCM via CAN communication.
IGN RLY [Off/On]	×	Displays the status of the ignition relay judged by IPDM E/R.
PUSH SW [Off/On]		Displays the status of the push-button ignition switch judged by IPDM E/R.
INTER/NP SW [Off/On]		Displays the status of the shift position judged by IPDM E/R.
ST RLY CONT [Off/On]		Displays the status of the starter relay status signal received from BCM via CAN communication.
IHBT RLY -REQ [Off/On]		Displays the status of the starter control relay signal received from BCM via CAN communication.
ST/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 A/T shift selector (detention switch) judged by IPDM E/R.
S/L RLY -REQ [Off/On]		Displays the status of the steering lock relay request signal received from BCM via CAN communication.
S/L STATE [LOCK/UNLOCK/UNKWN]		Displays the status of the steering lock judged by IPDM E/R.
DTRL REQ [Off/On]	×	Displays the status of the daytime running light request signal received from BCM via CAN communication.
OIL P SW [Open/Close]		**NOTE:** The item is indicated, but not monitored.
HOOD SW [Off/On]		Displays the status of the hood switch judged by IPDM E/R.
HL WASHER REQ [Off/On]		**NOTE:** The item is indicated, but not monitored.
THFT HRN REQ [Off/On]		Displays the status of the theft warning horn request signal received from BCM via CAN communication.
HORN CHIRP [Off/On]		Displays the status of the horn reminder signal received from BCM via CAN communication.
CRNRNG LMP REQ [Off/On]		**NOTE:** The item is indicated, but not monitored.

ACTIVE TEST

Test item	Operation	Description
CORNERING LAMP	Off	**NOTE:** The item is indicated, but cannot be tested.
	LH	
	RH	
HORN	On	Operates horn relay 1 and horn relay 2 for 20 ms.
FRONT WIPER	Off	OFF
	Lo	Operates the front wiper relay.
	Hi	Operates the front wiper relay and front wiper high relay.

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

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:0000000011489890

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	I
	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	
Connector	Terminal		
M118	1		Battery voltage
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:0000000011489891

1.CHECK FUSES AND FUSIBLE LINK

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

Signal name	Fuses and fusible link No.
Battery power supply	C
	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 the IPDM E/R harness connector and the ground.

Terminals			Voltage (Approx.)
(+)		(–)	
IPDM E/R			
Connector	Terminal	Ground	
E4	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 the IPDM E/R harness connectors and the ground.

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

Does continuity exist?

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

HEADLAMP (HI) CIRCUIT

Component Function Check

INFOID:0000000011489892

1.CHECK HEADLAMP (HI) OPERATION

With CONSULT
1. Select “EXTERNAL LAMPS” in “Active Test” mode of “IPDM E/R” using CONSULT.
2. With operating the test items, check that the headlamp (HI) blinks.

Hi	**: Headlamp (HI) blinks (ON/OFF is repeated 1 second each.)**
Off	**: Headlamp (HI) OFF**

Without CONSULT
1. Start IPDM E/R auto active test. Refer to PCS-9, "Diagnosis Description".
2. Check that the headlamp (HI) blinks.

Is the inspection result normal?

YES >> Headlamp (HI) circuit is normal.
NO >> Refer to EXL-39, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489893

1.CHECK HEADLAMP (HI) FUSE

1. Turn 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)		#54	

Is the inspection result normal?

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

2.CHECK HEADLAMP (HI) OUTPUT VOLTAGE

With CONSULT
1. Disconnect front combination lamp connector.
2. Turn ignition switch ON.
3. Select “EXTERNAL LAMPS” in “Active Test” mode of “IPDM E/R” using CONSULT.
4. With operating the test items, check voltage between IPDM E/R harness connector and ground.

+			-	Test item		Voltage (Approx.)
IPDM E/R						
Connector		Terminal				
RH	E8	89	Ground	EXTERNAL LAMPS	Hi	Battery voltage (Repeated 1 second)
					Off	0 V
LH		90			Hi	Battery voltage (Repeated 1 second)
					Off	0 V

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

3.CHECK HEADLAMP (HI) POWER SUPPLY CIRCUIT

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

IPDM E/R			Front combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	E8	89	E59	7	Existed
LH		90	E40		

Is the inspection result normal?

YES >> Perform the LED headlamp diagnosis. Refer to EXL-43, "Diagnosis Procedure".
NO >> Repair or replace harness.

HEADLAMP (LO) CIRCUIT

Component Function Check

INFOID:0000000011489894

1.CHECK HEADLAMP (LO) OPERATION

With CONSULT
1. Select “EXTERNAL LAMPS” in “Active Test” mode of “IPDM E/R” using CONSULT.
2. With operating the test items, check that the headlamp (LO) is turned ON.

Lo : Headlamp (LO) ON
Off : Headlamp (LO) OFF

Without CONSULT
1. Start IPDM E/R auto active test. Refer to PCS-9, "Diagnosis Description".
2. Check that the headlamp (LO) is turned ON.

Is the inspection result normal?

YES >> Headlamp (LO) circuit is normal.
NO >> Refer to EXL-41, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489895

1.CHECK HEADLAMP (LO) FUSE

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

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

Is the inspection result normal?

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

2.CHECK HEADLAMP (LO) OUTPUT VOLTAGE

With CONSULT
1. Disconnect front combination lamp connector.
2. Turn ignition switch ON.
3. Select “EXTERNAL LAMPS” in “Active Test” mode of “IPDM E/R” using CONSULT.
4. With operating the test items, check voltage between IPDM E/R harness connector and ground.

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

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

3.CHECK HEADLAMP (LO) POWER SUPPLY CIRCUIT

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

IPDM E/R			Front combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	E8	83	E59	5	Existed
LH		84	E40		

Is the inspection result normal?

YES >> Perform the LED headlamp diagnosis. Refer to EXL-43, "Diagnosis Procedure".
NO >> Repair or replace harness.

LED HEADLAMP

Description

INFOID:0000000011489896

LED HEADLAMP

Outline

- Semiconductor device (Light emitting diode: LED), which is illuminated when forward bias electric voltage is applied, is adopted as the source of light instead of halogen bulb or xenon bulb.
- Comparing to halogen headlamp or xenon headlamp, LED headlamp is electrically power saving, durable, and is illuminated in the similar color to the sunlight. Bright, natural, and eye-friendly visibility can be obtained.

PRECAUTIONS FOR TROUBLE DIAGNOSIS

Representative malfunction examples are; “Light does not turn ON”, “Light blinks”, and “Brightness is inadequate.” Such malfunctions, however, occasionally by occur LED control module malfunction or lamp case malfunction. Specify the malfunctioning part with diagnosis procedure.

CAUTION:

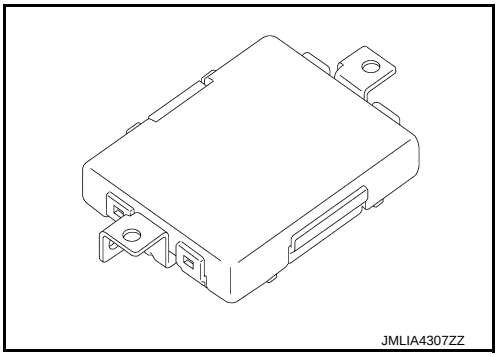
- **Never touch the harness, LED headlamp control module, the inside and metal part of lamp when turning the headlamp ON or operating the lighting switch, for preventing electrical shock.**
- **Never work with wet hands, for preventing electrical shock.**
- **Never perform LED headlamp control module circuit diagnosis with a circuit tester or an equivalent.**
- **Temporarily install the headlamps on the vehicle. Always connect power supply 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.**
- **Always check for deformation or hole of headlamp housing and engagement of bulb cover. Otherwise, water may enter into headlamp because of damage of headlamp housing and contact to LED headlamp control module connector. The normal operation may be inhibited when short circuit to power supply is detected.**

NOTE:

Turn the switch OFF once before turning ON, if the ON/OFF is inoperative.

LED HEADLAMP CONTROL MODULE

- LED headlamp control module is integrated in the front combination lamp and turns the LED headlamp ON according to the request from IPDM E/R.
- Outputs the headlamp warning signal to the combination meter.



Diagnosis Procedure

INFOID:0000000011489897

1.CHECK LED HEADLAMP GROUND CIRCUIT

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

Front combination lamp			—	Continuity
Connector		Terminal		
RH	E59	1	Ground	Existed
LH	E40			

Is the inspection result normal?

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

2.CHECK LED HEADLAMP

Install the normal front combination lamp to the applicable headlamp. Check that the headlamp is turned ON. Refer to EXL-7, "Work Procedure".

Is the headlamp turned ON?

YES >> Replace front combination lamp. Refer to EXL-171, "Removal and Installation".
NO >> LED headlamp is normal.

HEADLAMP WARNING

Component Function Check

INFOID:0000000011489898

1.CHECK HEADLAMP WARNING OPERATION

1. Turn ignition switch ON.
2. Check that headlamp warning on combination meter is not displayed when lighting switch is turned 2ND.

Is the inspection result normal?

YES >> Headlamp warning is normal.
NO >> Refer to EXL-45, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489899

1.CHECK HEADLAMP WARNING LAMP SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect front combination lamp connector.
3. Turn ignition switch ON.
4. Check voltage between front combination lamp harness connector and ground.

+			-	Voltage (Approx.)
Front combination lamp				
Connector		Terminal		
RH	E59	3	Ground	12 V
LH	E40			

Is the inspection result normal?

YES >> Replace front combination lamp. Refer to EXL-171, "Removal and Installation".
NO >> GO TO 2.

2.CHECK HEADLAMP WARNING LAMP SIGNAL CIRCUIT

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

Combination meter			Front combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	M53	16	E59	3	Existed
LH		39	E40		

Is the inspection result normal?

YES >> Replace combination meter. Refer to MWI-114, "Removal and Installation".
NO >> Repair or replace harness.

DAYTIME RUNNING LIGHT CIRCUIT

Component Function Check

INFOID:0000000011489900

1.CHECK DAYTIME RUNNING LIGHT OPERATION

With CONSULT
1. Select “EXTERNAL LAMPS” in “Active Test” mode of “IPDM E/R” using CONSULT.
2. With operating the test items, check that the daytime running light is turned ON.

Fog : Daytime running light ON
Off : Daytime running light OFF

Without CONSULT
1. Start IPDM E/R auto active test. Refer to PCS-9, "Diagnosis Description".
2. Check that the daytime running light is turned ON.

Is the measurement normal?

YES >> Daytime running light circuit is normal.
NO >> Refer to EXL-46, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489901

1.CHECK DAYTIME RUNNING LIGHT FUSE

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

Unit	Location	Fuse No.	Capacity
Daytime running light	IPDM E/R	#58	15 A

Is the inspection result normal?

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

2.CHECK FRONT FOG LIGHT REQUEST SIGNAL

With CONSULT
1. Turn ignition switch ON.
2. Select “FR FOG REQ” in “Data Monitor” mode of “IPDM E/R” using CONSULT.
3. With operating the daytime running light ON condition, check the monitor status.

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

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace BCM. Refer to BCS-89, "Removal and Installation".

3.CHECK DAYTIME RUNNING LIGHT OUTPUT VOLTAGE

With CONSULT
1. Turn ignition switch OFF.
2. Disconnect daytime running light connector.
3. Turn ignition switch ON.
4. Select “EXTERNAL LAMPS” in “Active Test” mode of “IPDM E/R” using CONSULT.
5. With operating the test items, check the voltage between IPDM E/R harness connector and ground.

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

Is the inspection result normal?

YES >> GO TO 4.
NO >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".

4. CHECK DAYTIME RUNNING LIGHT POWER SUPPLY CIRCUIT

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

IPDM E/R			Daytime running light		Continuity
Connector		Terminal	Connector	Terminal	
RH	E8	86	E54	3	Existed
LH		87	E24		

Is the inspection result normal?

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

5. CHECK DAYTIME RUNNING LIGHT GROUND CIRCUIT

Check continuity between daytime running light harness connector and ground.

Daytime running light			—	Continuity
Connector		Terminal		
RH	E54	2	Ground	Existed
LH	E24			

Is the inspection result normal?

YES >> Replace daytime running light. Refer to EXL-174, "Removal and Installation".
NO >> Repair or replace harness.

DAYTIME RUNNING LIGHT RELAY CIRCUIT

Component Function Check

INFOID:0000000011489902

1.CHECK DAYTIME RUNNING LIGHT RELAY OPERATION

Check that parking, license plate, side marker, and tail lamps are turned ON when lighting switch is turned 1ST.

Is the inspection result normal?

YES >> Daytime running light relay circuit is normal.
NO >> Refer to EXL-48, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489903

1.CHECK DAYTIME RUNNING LIGHT RELAY FUSE AND FUSIBLE LINK

1. Turn ignition switch OFF and lighting switch OFF.
2. Check that the following fuse and fusible link are not fusing.

Unit	Location	Fuse No.	Capacity
Daytime running light relay	IPDM E/R	#59	10 A

Is the inspection result normal?

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

2.CHECK DAYTIME RUNNING LIGHT RELAY POWER SUPPLY

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

+		-	Voltage (Approx.)
Daytime running light relay			
Connector	Terminal		
E86	1	Ground	Battery voltage
	3		

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 3.

3.CHECK DAYTIME RUNNING LIGHT RELAY POWER SUPPLY CIRCUIT

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

IPDM E/R		Daytime running light relay		Continuity
Connector	Terminal	Connector	Terminal	
E5	6	E86	1	Existed
			3	

Is the inspection result normal?

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

4.CHECK DAYTIME RUNNING LIGHT RELAY

Check daytime running light relay. Refer to EXL-49, "Component Inspection".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace daytime running light relay.

5. CHECK DAYTIME RUNNING LIGHT RELAY CONTROL SIGNAL CIRCUIT

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

IPDM E/R		Daytime running light relay		Continuity
Connector	Terminal	Connector	Terminal	
E9	105	E86	2	Existed

Is the inspection result normal?

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

Component Inspection

INFOID:0000000011489904

1. CHECK DAYTIME RUNNING LIGHT RELAY

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

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

Is the inspection result normal?

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

PARKING LAMP CIRCUIT

Component Function Check

INFOID:0000000011489905

1.CHECK PARKING LAMP OPERATION

Check that parking lamp is turned ON when lighting switch is turned 1ST.

Is the inspection result normal?

YES >> Parking lamp circuit is normal.
NO >> Refer to EXL-50, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489906

1.CHECK PARKING LAMP POWER SUPPLY CIRCUIT

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

Daytime running light relay			Front combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	E86	5	E59	8	Existed
LH			E40		

Is the inspection result normal?

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

2.CHECK PARKING LAMP GROUND CIRCUIT

Check continuity between front combination lamp harness connector and ground.

Front combination lamp			—	Continuity
Connector		Terminal		
RH	E59	4	Ground	Existed
LH	E40			

Is the inspection result normal?

YES >> Replace front combination lamp. Refer to EXL-171, "Removal and Installation".
NO >> Repair or replace harness.

FRONT SIDE MARKER LAMP CIRCUIT

Component Function Check

INFOID:0000000011489907

1.CHECK FRONT SIDE MARKER LAMP OPERATION

Check that front side marker lamp is turned ON when lighting switch is turned 1ST.

Is the inspection result normal?

YES >> Front side marker lamp circuit is normal.
NO >> Refer to EXL-51, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489908

1.CHECK FRONT SIDE MARKER LAMP BULB

1. Turn ignition switch OFF and lighting switch OFF.
2. Check the applicable front side marker lamp bulb.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace bulb. Refer to EXL-176, "Replacement".

2.CHECK FRONT SIDE MARKER LAMP POWER SUPPLY CIRCUIT

1. Remove daytime running light relay.
2. Disconnect front side marker lamp connector.
3. Check continuity between daytime running light relay harness connector and front side marker lamp harness connector.

Daytime running light relay			Front side marker lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	E86	5	E68	1	Existed
LH			E53		

Is the inspection result normal?

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

3.CHECK FRONT SIDE MARKER LAMP GROUND CIRCUIT

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

Front side marker lamp			—	Continuity
Connector		Terminal		
RH	E68	2	Ground	Existed
LH	E53			

Is the inspection result normal?

YES >> Check corresponding front side marker lamp bulb socket. Repair or replace if necessary.
NO >> Repair or replace harness.

TAIL LAMP CIRCUIT

Component Function Check

INFOID:0000000011489909

1.CHECK TAIL LAMP OPERATION

Check that tail lamp is turned ON when lighting switch is turned 1ST.

Is the inspection result normal?

YES >> Tail lamp circuit is normal.
NO >> Refer to EXL-52, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489910

1.CHECK TAIL LAMP POWER SUPPLY CIRCUIT

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

Daytime running light relay			Rear combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	E86	5	B240	2	Existed
LH			B57		

Is the inspection result normal?

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

2.CHECK TAIL LAMP GROUND CIRCUIT

Check continuity between rear combination lamp harness connector and ground.

Rear combination lamp			—	Continuity
Connector		Terminal		
RH	B240	3	Ground	Existed
LH	B57			

Is the inspection result normal?

YES >> Replace rear combination lamp. Refer to EXL-181, "Removal and Installation".
NO >> Repair or replace harness.

REAR SIDE MARKER LAMP CIRCUIT

Component Function Check

INFOID:0000000011489911

1.CHECK REAR SIDE MARKER LAMP OPERATION

Check that rear side marker lamp is turned ON when lighting switch is turned 1ST.

Is the inspection result normal?

YES >> Rear side marker lamp circuit is normal.
NO >> Refer to EXL-53, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489912

1.CHECK REAR SIDE MARKER LAMP POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF and lighting switch OFF.
2. Remove daytime running light relay.
3. Disconnect rear side marker lamp connector.
4. Check continuity between daytime running light relay harness connector and rear side marker lamp harness connector.

Daytime running light relay			Rear side marker lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	E86	5	E372	1	Existed
LH			E371		

Is the inspection result normal?

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

2.CHECK REAR SIDE MARKER LAMP GROUND CIRCUIT

Check continuity between rear side marker lamp harness connector and ground.

Rear side marker lamp			—	Continuity
Connector		Terminal		
RH	E372	2	Ground	Existed
LH	E371			

Is the inspection result normal?

YES >> Replace rear side marker lamp. Refer to EXL-183, "Removal and Installation".
NO >> Repair or replace harness.

LICENSE PLATE LAMP CIRCUIT

Component Function Check

INFOID:0000000011489913

1.CHECK LICENSE PLATE LAMP OPERATION

Check that license plate lamp is turned ON when lighting switch is turned 1ST.

Is the inspection result normal?

YES >> License plate lamp circuit is normal.
NO >> Refer to EXL-54, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489914

1.CHECK LICENSE PLATE LAMP BULB

1. Turn ignition switch OFF and lighting switch OFF.
2. Check the applicable license plate lamp bulb.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace bulb. Refer to EXL-186, "Replacement".

2.CHECK LICENSE PLATE LAMP POWER SUPPLY CIRCUIT

1. Remove daytime running light relay.
2. Disconnect license plate lamp connector.
3. Check continuity between daytime running light relay harness connector and license plate lamp harness connector.

Daytime running light relay			License plate lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	E86	5	B154	1	Existed
LH			B152		

Is the inspection result normal?

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

3.CHECK LICENSE PLATE LAMP GROUND CIRCUIT

Check continuity between license plate lamp harness connector and ground.

License plate lamp			—	Continuity
Connector		Terminal		
RH	B154	2	Ground	Existed
LH	B152			

Is the inspection result normal?

YES >> Check corresponding license plate lamp bulb socket. Repair or replace if necessary.
NO >> Repair or replace harness.

BACK-UP LAMP CIRCUIT

Component Function Check

INFOID:0000000011489915

1.CHECK BACK-UP LAMP OPERATION

With CONSULT
1. Turn ignition switch ON.
2. Select “REVERSE LAMP RELAY” in “Active Test” mode of “TRANSMISSION” using CONSULT.
3. With operating the test items, check that the back-up lamp is turned ON.

On : Back-up lamp ON
Off : Back-up lamp OFF

Is the inspection result normal?

YES >> Back-up lamp circuit is normal.
NO >> Refer to EXL-55, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489916

1.CHECK BACK-UP LAMP BULB

1. Turn ignition switch OFF.
2. Check the applicable back-up lamp bulb.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace bulb. Refer to EXL-182, "Replacement".

2.CHECK FUSE

Check that the following fuses are not fusing.

Unit	Location	Fuse No.	Capacity
Back-up lamp relay	Fuse block (J/B)	#4	10 A
TCM		#9	

Is the inspection result normal?

YES >> GO TO 3.
NO >> Replace the blown fuse after repairing the affected circuit if a fuse is blown.

3.CHECK BACK-UP LAMP RELAY POWER SUPPLY

With CONSULT
1. Turn ignition switch ON.
2. Select “REVERSE LAMP RELAY” in “Active Test” mode of “TRANSMISSION” using CONSULT.
3. With operating the test items, check voltage between back-up lamp relay harness connector and ground.

+		-	Test item		Voltage (Approx.)
Back-up lamp relay					
Connector	Terminal				
B55	7	Ground	REVERSE LAMP RELAY	On	Battery voltage
				Off	0 V

Is the inspection result normal?

YES >> GO TO 9.
NO >> GO TO 4.

4.CHECK BACK-UP LAMP RELAY POWER SUPPLY

1. Turn ignition switch OFF.
2. Remove back-up lamp relay.

3. Turn ignition switch ON.
4. Check voltage between back-up lamp relay harness connector and ground.

+		-	Voltage
Back-up lamp relay			
Connector	Terminal		
B55	1	Ground	Battery voltage
	6		

Is the inspection result normal?

YES >> GO TO 7.
NO-1 >> When the back-up lamp relay terminal 1 is abnormal: GO TO 5.
NO-2 >> When the back-up lamp relay terminal 6 is abnormal: Repair or replace harness.

5. CHECK TCM RELAY POWER SUPPLY

1. Turn ignition switch OFF.
2. Remove TCM relay.
3. Turn ignition switch ON.
4. Check voltage between TCM relay harness connector and ground.

+		-	Voltage
TCM relay			
Connector	Terminal		
B54	5	Ground	Battery voltage

Is the inspection result normal?

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

6. CHECK BACK-UP LAMP RELAY POWER SUPPLY CIRCUIT

Check continuity between TCM relay harness connector and back-up lamp relay harness connector.

TCM relay		Back-up lamp relay		Continuity
Connector	Terminal	Connector	Terminal	
B54	3	B55	1	Existed

Is the inspection result normal?

YES >> Replace TCM relay.
NO >> Repair or replace harness.

7. CHECK BACK-UP LAMP RELAY CONTROL SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect TCM connector.
3. Check continuity between back-up lamp relay harness connector and TCM harness connector.

Back-up lamp relay		TCM		Continuity
Connector	Terminal	Connector	Terminal	
B55	2	B45	10	Existed

Is the inspection result normal?

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

8. CHECK BACK-UP LAMP RELAY

Check back-up lamp relay. Refer to EXL-57, "Component Inspection".

Is the inspection result normal?

YES >> Replace TCM. Refer to TM-373, "Removal and Installation (GT-R certified NISSAN dealer)".
NO >> Replace back-up lamp relay.

9. CHECK BACK-UP LAMP POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Remove back-up lamp relay.
3. Disconnect rear combination lamp connector.
4. Check continuity between back-up lamp relay harness connector and rear combination lamp harness connector.

Back-up lamp relay			Rear combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	B55	7	B240	6	Existed
LH			B57		

Is the inspection result normal?

YES >> GO TO 10.
NO >> Repair or replace harness.

10. CHECK BACK-UP LAMP GROUND CIRCUIT

Check continuity between rear combination lamp harness connector and ground.

Rear combination lamp			—	Continuity
Connector		Terminal		
RH	B240	3	Ground	Existed
LH	B57			

Is the inspection result normal?

YES >> Check corresponding back-up lamp bulb socket and harness. Repair or replace if necessary.
NO >> Repair or replace harness.

Component Inspection

INFOID:0000000011489917

1. CHECK BACK-UP LAMP RELAY

1. Turn ignition switch OFF.
2. Remove back-up lamp relay.
3. Apply battery voltage to back-up lamp relay between terminals 1 and 2.
4. Check continuity of back-up lamp relay terminals.

Back-up lamp relay		Condition		Continuity
Terminal				
6	7	Battery voltage	Apply	Existed
			Not apply	Not existed

Is the inspection result normal?

YES >> INSPECTION END
NO >> Replace back-up lamp relay.

TURN SIGNAL LAMP CIRCUIT

Component Function Check

INFOID:0000000011489918

1.CHECK TURN SIGNAL LAMP

With CONSULT
1. Select “FLASHER” of “BCM” using CONSULT.
2. Select “FLASHER” in “Active Test” mode.
3. With operating the test items, check that the turn signal lamps blink.

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

Is the inspection result normal?

YES >> Turn signal lamp circuit is normal.
NO >> Refer to EXL-58, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489919

1.CHECK TURN SIGNAL LAMP BULB

Check the applicable turn signal lamp bulb.

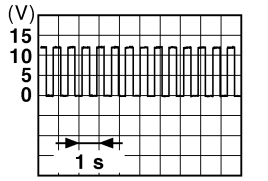
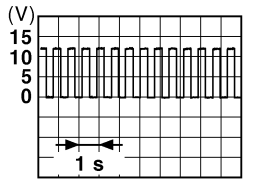
Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace bulb. Refer to EXL-172, "Replacement" (front turn signal lamp) or EXL-182, "Replacement" (rear turn signal lamp).

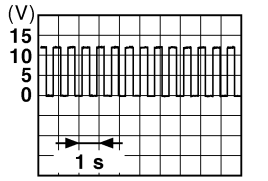
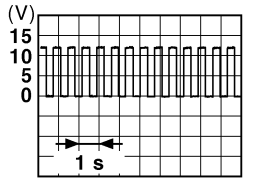
2.CHECK TURN SIGNAL LAMP OUTPUT VOLTAGE

With CONSULT
1. Turn ignition switch OFF.
2. Disconnect the following connectors.
- Front combination lamp
- Rear combination lamp
3. Turn ignition switch ON.
4. Select “FLASHER” of “BCM” using CONSULT.
5. Select “FLASHER” in “Active Test” mode.
6. With operating the test items, check voltage between BCM harness connector and ground.

Front turn signal lamp

+			-	Test item		Voltage (Approx.)
BCM						
Connector		Terminal				
RH	M119	17	Ground	FLASHER	RH	 PKID0926E
					Off	0 V
LH		18			LH	 PKID0926E
					Off	0 V

Rear turn signal lamp

+			-	Test item		Voltage (Approx.)
BCM						
Connector		Terminal				
RH	M120	20	Ground	FLASHER	RH	 PKID0926E
					Off	0 V
LH		25			LH	 PKID0926E
					Off	0 V

Is the inspection result normal?

YES >> GO TO 4.
NO >> GO TO 3.

3. CHECK TURN SIGNAL LAMP POWER SUPPLY CIRCUIT (SHORT)

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

Front turn signal lamp

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

Rear turn signal lamp

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

Is the inspection result normal?

YES >> Check each bulb socket for internal short circuit, and if check result is normal, replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

4. CHECK TURN SIGNAL LAMP POWER SUPPLY CIRCUIT (OPEN)

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

Front turn signal lamp

BCM			Front combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	M119	17	E59	6	Existed
LH		18	E40		

Rear turn signal lamp

BCM			Rear combination lamp		Continuity
Connector		Terminal	Connector	Terminal	
RH	M120	20	B240	4	Existed
LH		25	B57		

Is the inspection result normal?

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

5. CHECK TURN SIGNAL LAMP GROUND CIRCUIT

Check continuity between front combination lamp or rear combination lamp harness connector and ground.

Front turn signal lamp

Front combination lamp			—	Continuity
Connector		Terminal		
RH	E59	2	Ground	Existed
LH	E40			

Rear turn signal lamp

Rear combination lamp			—	Continuity
Connector		Terminal		
RH	B240	3	Ground	Existed
LH	B57			

Is the inspection result normal?

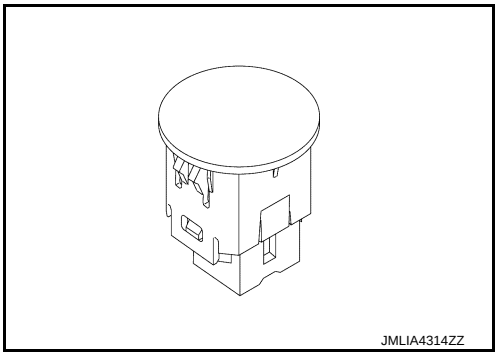
YES >> Check corresponding rear turn signal lamp bulb socket and harness. Repair or replace if necessary.
NO >> Repair or replace harness.

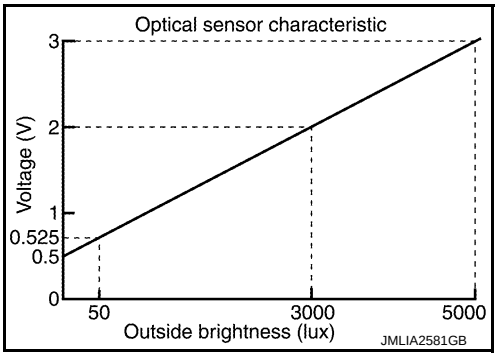
OPTICAL SENSOR

Description

INFOID:0000000011489920

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





Component Function Check

INFOID:0000000011489921

1.CHECK OPTICAL SENSOR SIGNAL BY CONSULT

With CONSULT
1. Turn ignition switch ON.
2. Select “HEAD LAMP” of “BCM” using CONSULT.
3. Select “OPTI SEN (DTCT)” in “Data Monitor” mode.
4. Turn lighting switch AUTO.
5. With the optical sensor illuminating, check the monitor status.

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

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

Is the inspection result normal?

YES >> Optical sensor is normal.
NO >> Refer to EXL-62, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489922

1.CHECK OPTICAL SENSOR POWER SUPPLY INPUT

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

+		-	Voltage (Approx.)
Optical sensor			
Connector	Terminal		
M97	1	Ground	5 V

Is the inspection result normal?

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

2.CHECK OPTICAL SENSOR GROUND INPUT

Check voltage between optical sensor harness connector and ground.

+		-	Voltage (Approx.)
Optical sensor			
Connector	Terminal		
M97	3	Ground	0 V

Is the inspection result normal?

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

3.CHECK OPTICAL SENSOR SIGNAL OUTPUT

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

+		-	Condition		Voltage (Approx.)
Optical sensor					
Connector	Terminal				
M97	2	Ground	Optical sensor	When illuminating	3.1 V or more*
				When shutting off light	0.6 V or less

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

Is the inspection result normal?

YES >> GO TO 7.
NO >> Replace optical sensor. Refer to EXL-178, "Removal and Installation".

4.CHECK OPTICAL SENSOR POWER SUPPLY CIRCUIT (OPEN)

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M97	1	M123	138	Existed

Is the inspection result normal?

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

5.CHECK OPTICAL SENSOR POWER SUPPLY CIRCUIT (SHORT)

Check continuity between optical sensor harness connector and ground.

Optical sensor		—	Continuity
Connector	Terminal		
M97	1	Ground	Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

6. CHECK OPTICAL SENSOR GROUND CIRCUIT

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M97	3	M123	137	Existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

7. CHECK OPTICAL SENSOR SIGNAL CIRCUIT (OPEN)

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

Optical sensor		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M97	2	M123	113	Existed

Is the inspection result normal?

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

8. CHECK OPTICAL SENSOR SIGNAL CIRCUIT (SHORT)

Check continuity between optical sensor harness connector and ground.

Optical sensor		—	Continuity
Connector	Terminal		
M97	2	Ground	Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

HAZARD SWITCH

Description

INFOID:0000000011489923

Hazard switch is integrated in the set-up switch. Hazard switch inputs the signals to BCM when pressing the switch.

Component Function Check

INFOID:0000000011489924

1.CHECK HAZARD SWITCH SIGNAL BY CONSULT

With CONSULT
1. Turn ignition switch ON.
2. Select “FLASHER” of “BCM” using CONSULT.
3. Select “HAZARD SW” in “Data Monitor” mode.
4. With operating the hazard switch, check the monitor status.

Monitor item	Condition		Monitor status
HAZARD SW	Hazard switch	ON	On
		OFF	Off

Is the inspection result normal?

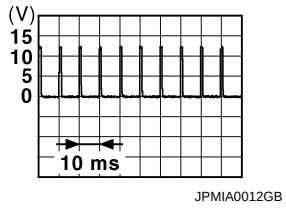
YES >> Hazard switch circuit is normal.
NO >> Refer to EXL-65, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000011489925

1.CHECK HAZARD SWITCH SIGNAL INPUT

1. Turn ignition switch OFF.
2. Disconnect set-up switch connector.
3. Check voltage between set-up switch connector and ground.

+		-	Voltage (Approx.)
Set-up switch			
Connector	Terminal		
M73	13	Ground	 JPMIA0012GB 1.1 V

Is the inspection result normal?

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

2.CHECK HAZARD SWITCH SIGNAL CIRCUIT (OPEN)

1. Disconnect BCM connector.
2. Check continuity between set-up switch harness connector and BCM harness connector.

Set-up switch		BCM		Continuity
Connector	Terminal	Connector	Terminal	
M73	13	M122	110	Existed

Is the inspection result normal?

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

3.CHECK HAZARD SWITCH SIGNAL CIRCUIT (SHORT)

Check continuity between set-up switch harness connector and ground.

Set-up switch		—	Continuity
Connector	Terminal		
M73	13	Ground	Not existed

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-89, "Removal and Installation".
NO >> Repair or replace harness.

4.CHECK HAZARD SWITCH GROUND CIRCUIT

Check continuity between set-up switch harness connector and ground.

Set-up switch		—	Continuity
Connector	Terminal		
M73	17	Ground	Existed

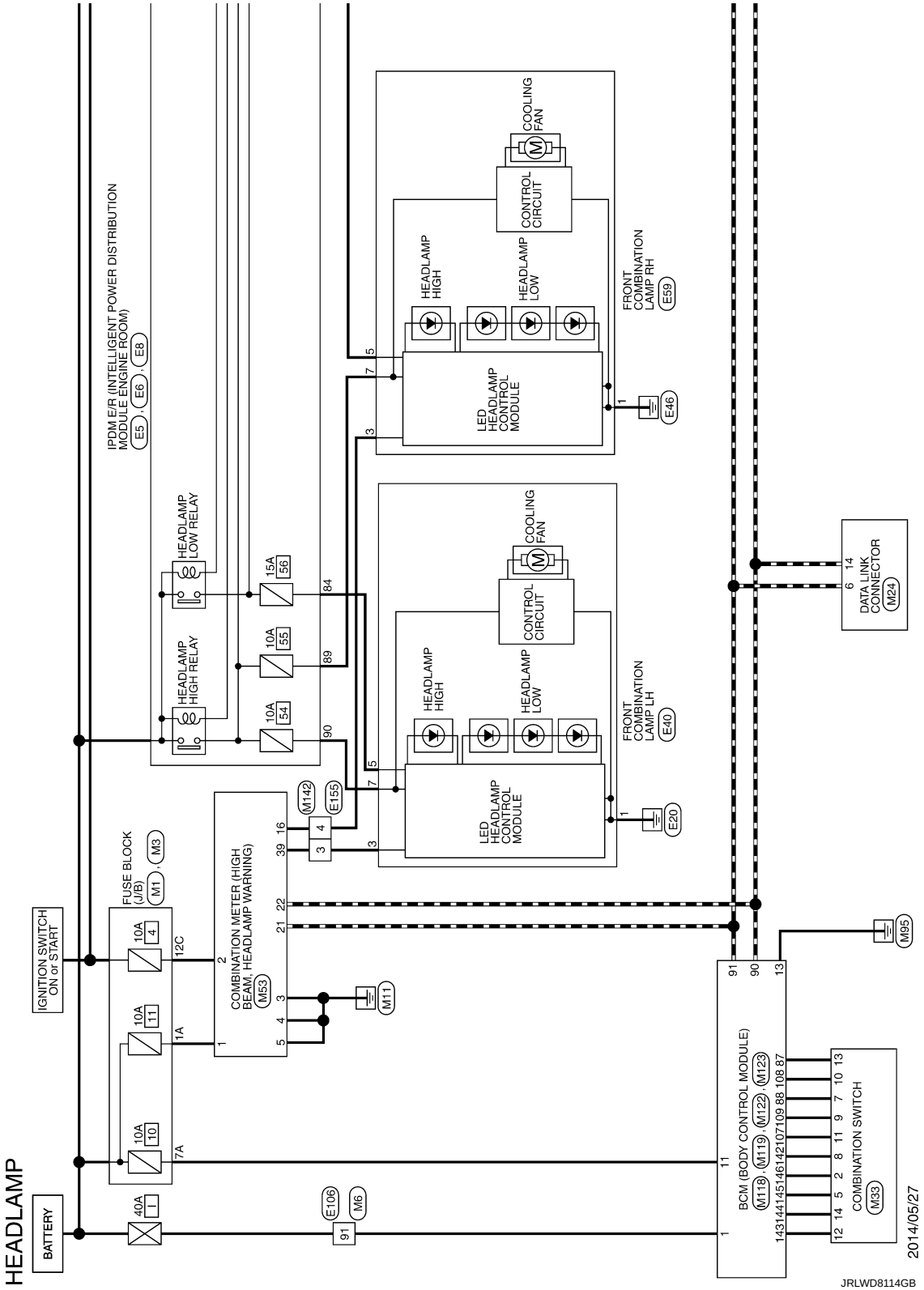
Is the inspection result normal?

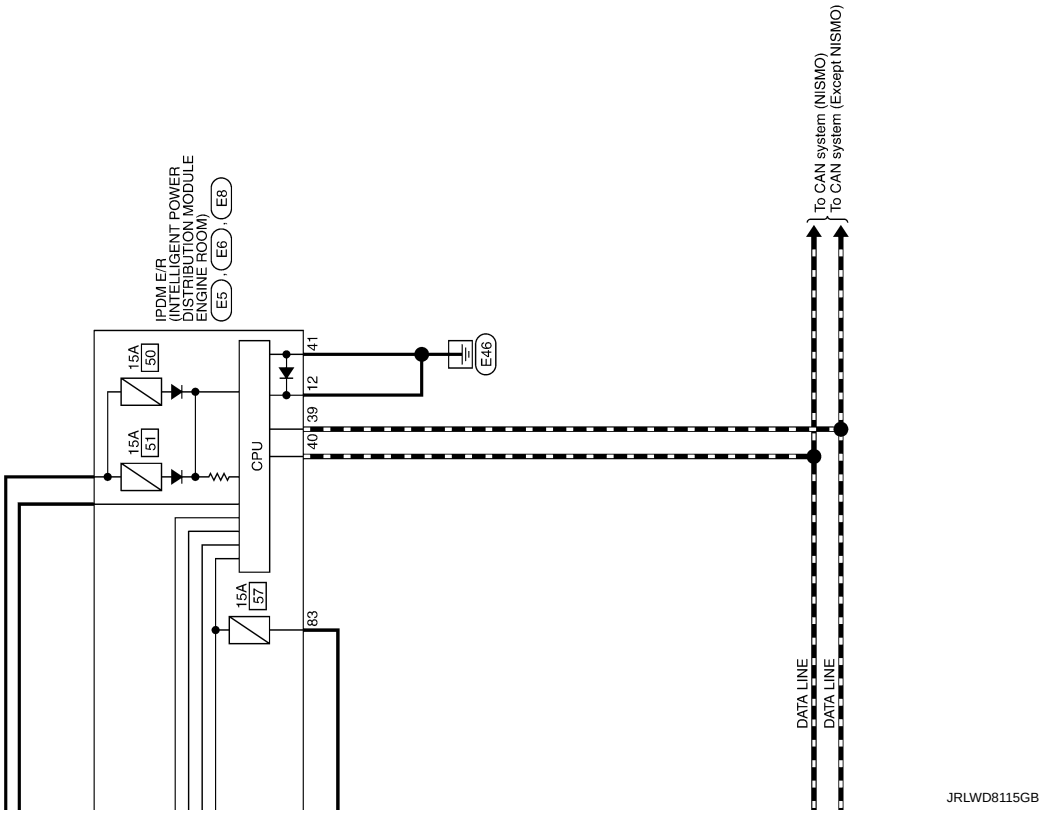
YES >> Replace set-up switch. Refer to IP-13, "Removal and Installation".
NO >> Repair or replace harness.

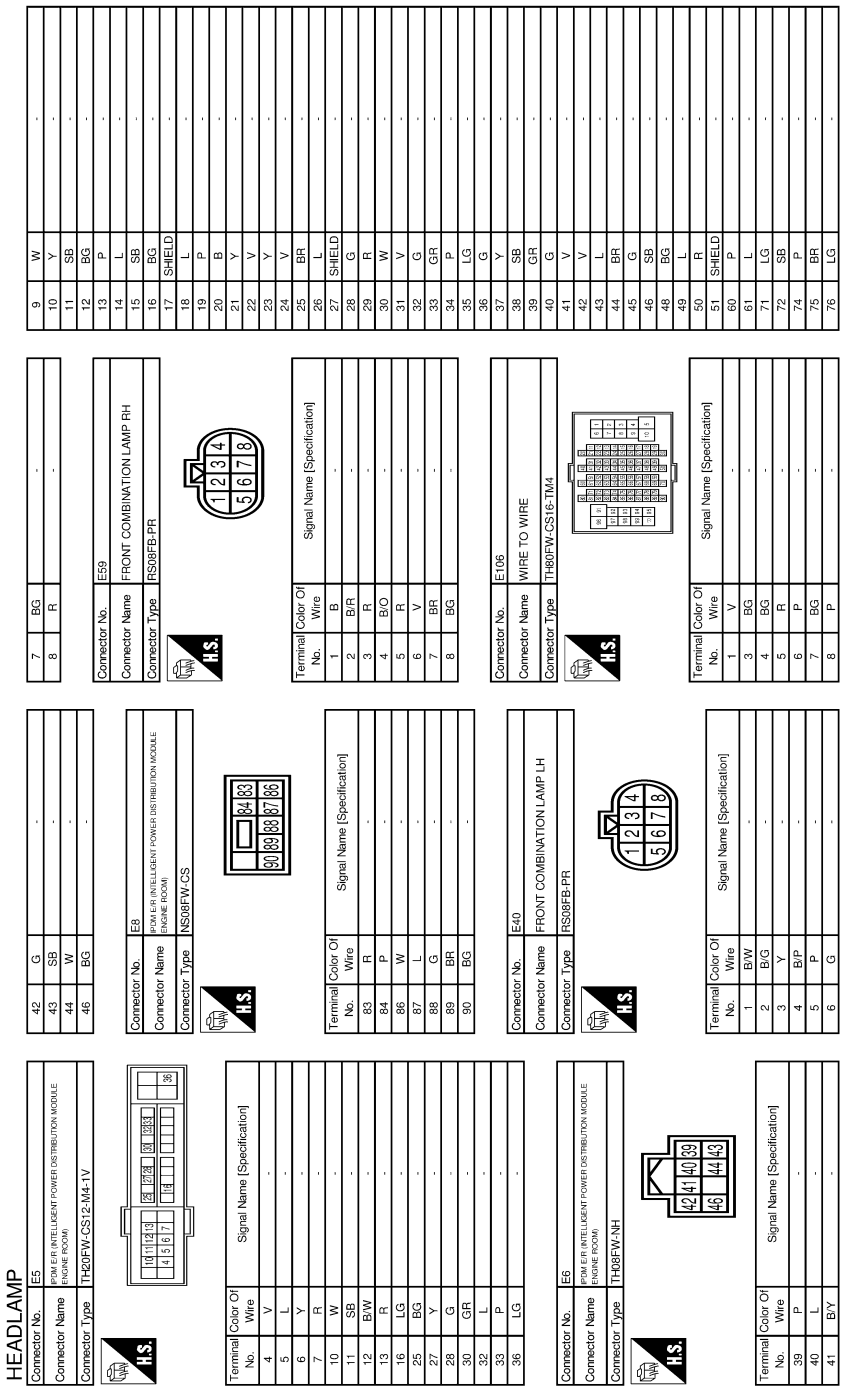
HEADLAMP SYSTEM

Wiring Diagram - HEADLAMP -

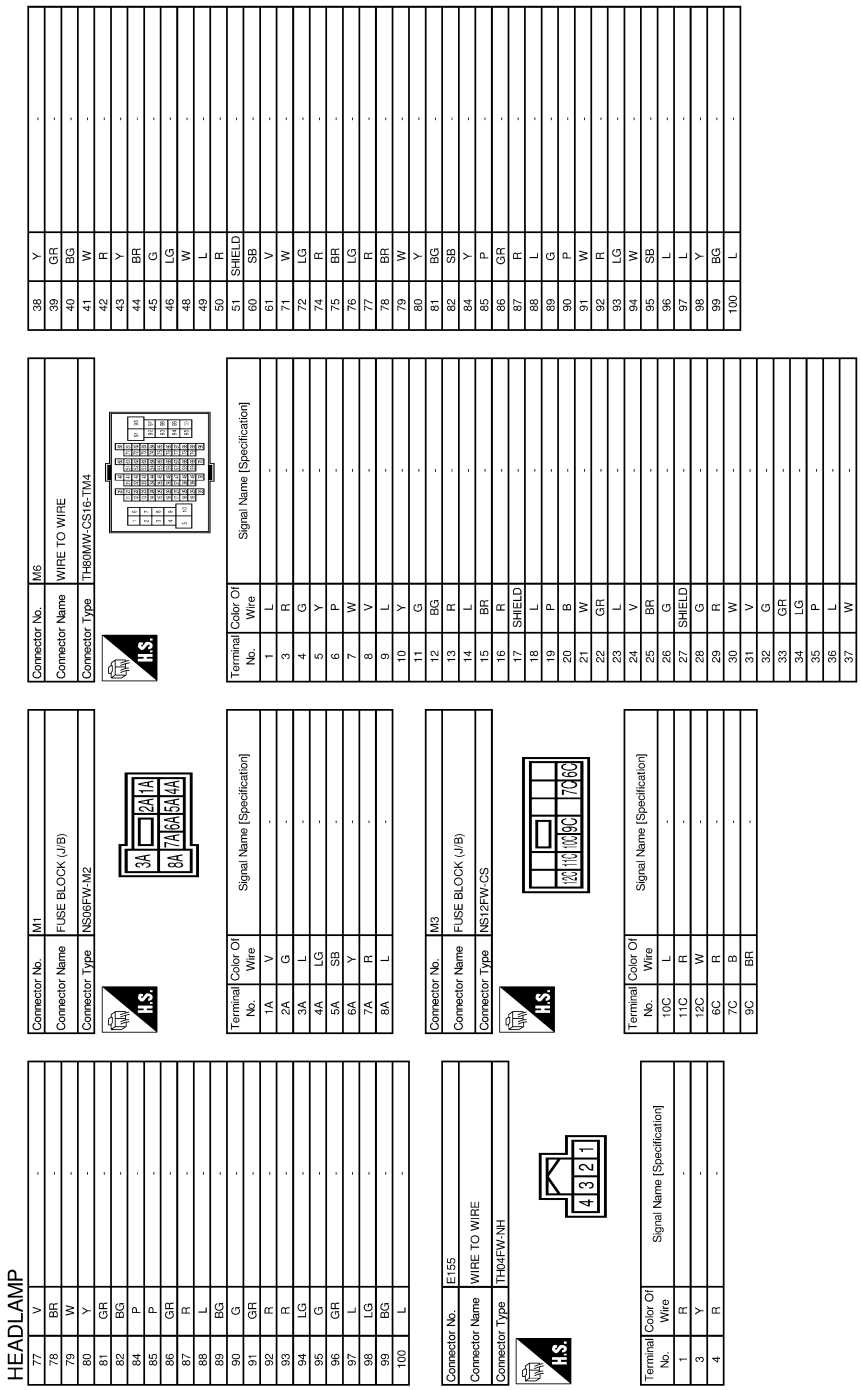
INFOID:0000000011489926



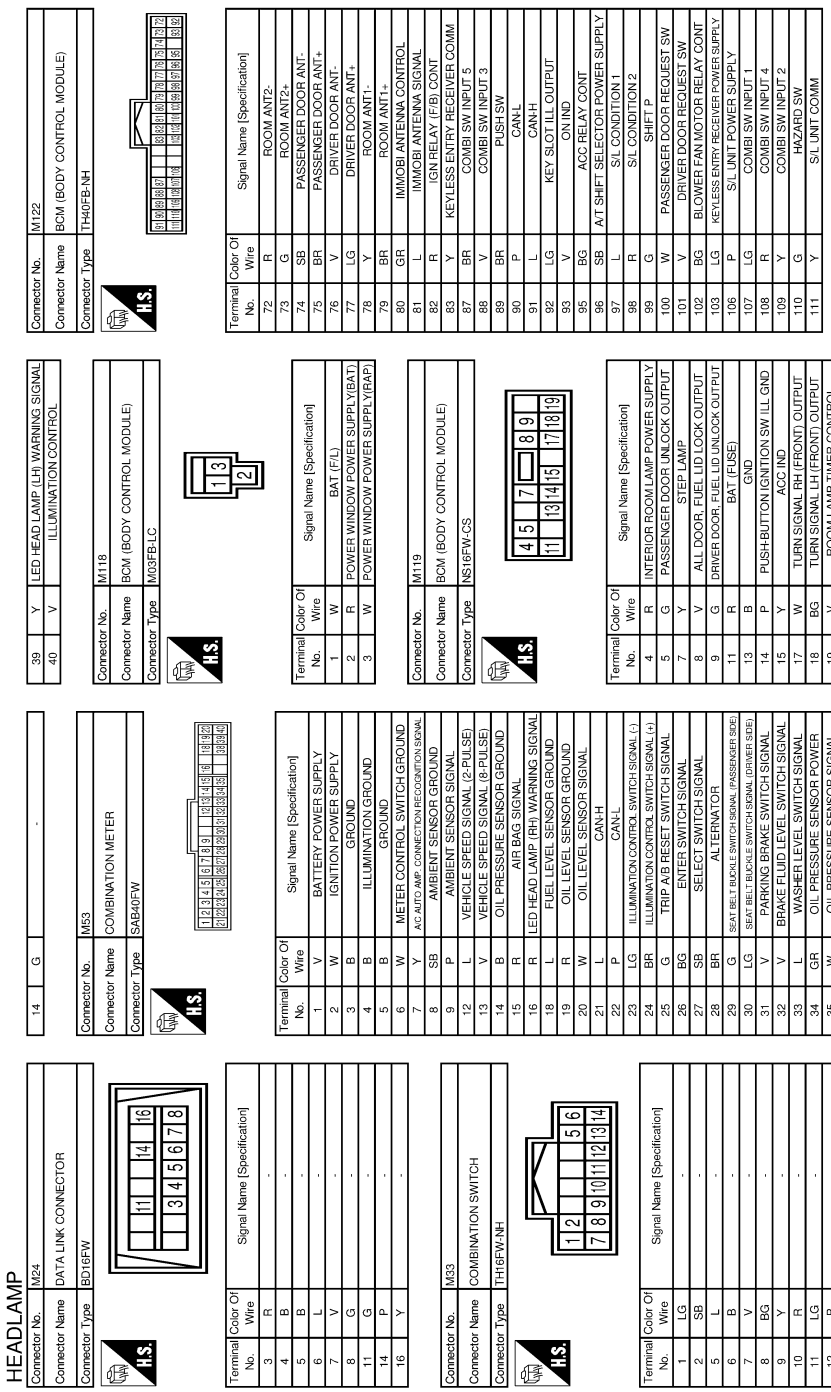

IPDM E/R
(INTELLIGENT POWER
DISTRIBUTION MODULE
ENGINE ROOM)
E5, E6, E8
15A 50
15A 51
15A 57
CPU
41
12
39
40
83
E46
To CAN system (NISMO)
To CAN system (Except NISMO)
DATA LINE
DATA LINE
JRLWD8115GB



JRLWE4723GB



JRLWE4724GB



JRLWE4725GB

HEADLAMP

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

H.S.

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

Connector No.	M142
Connector Name	WIRE TO WIRE
Connector Type	TH24MW-NH

H.S.

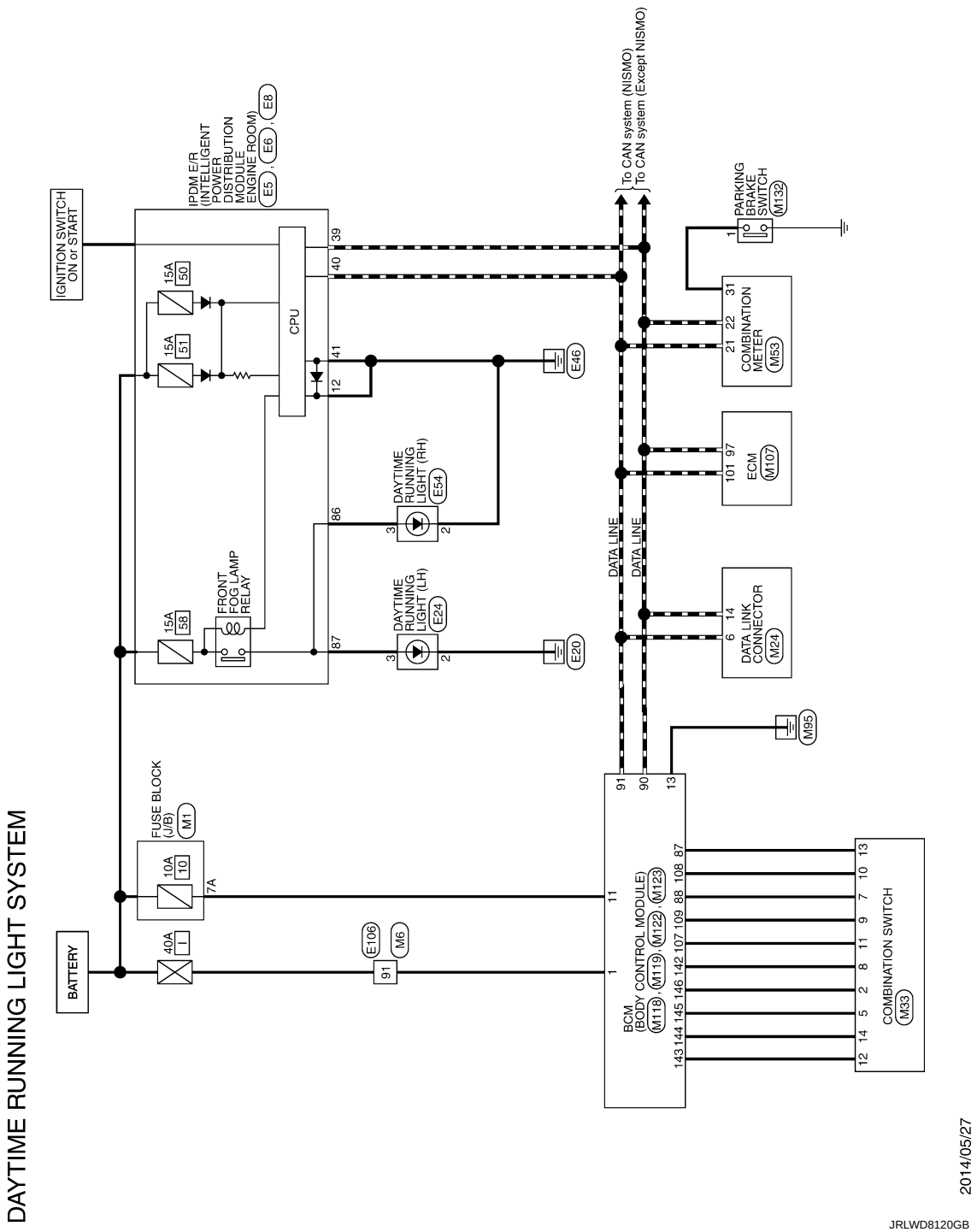
Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
3	Y	-
4	R	-

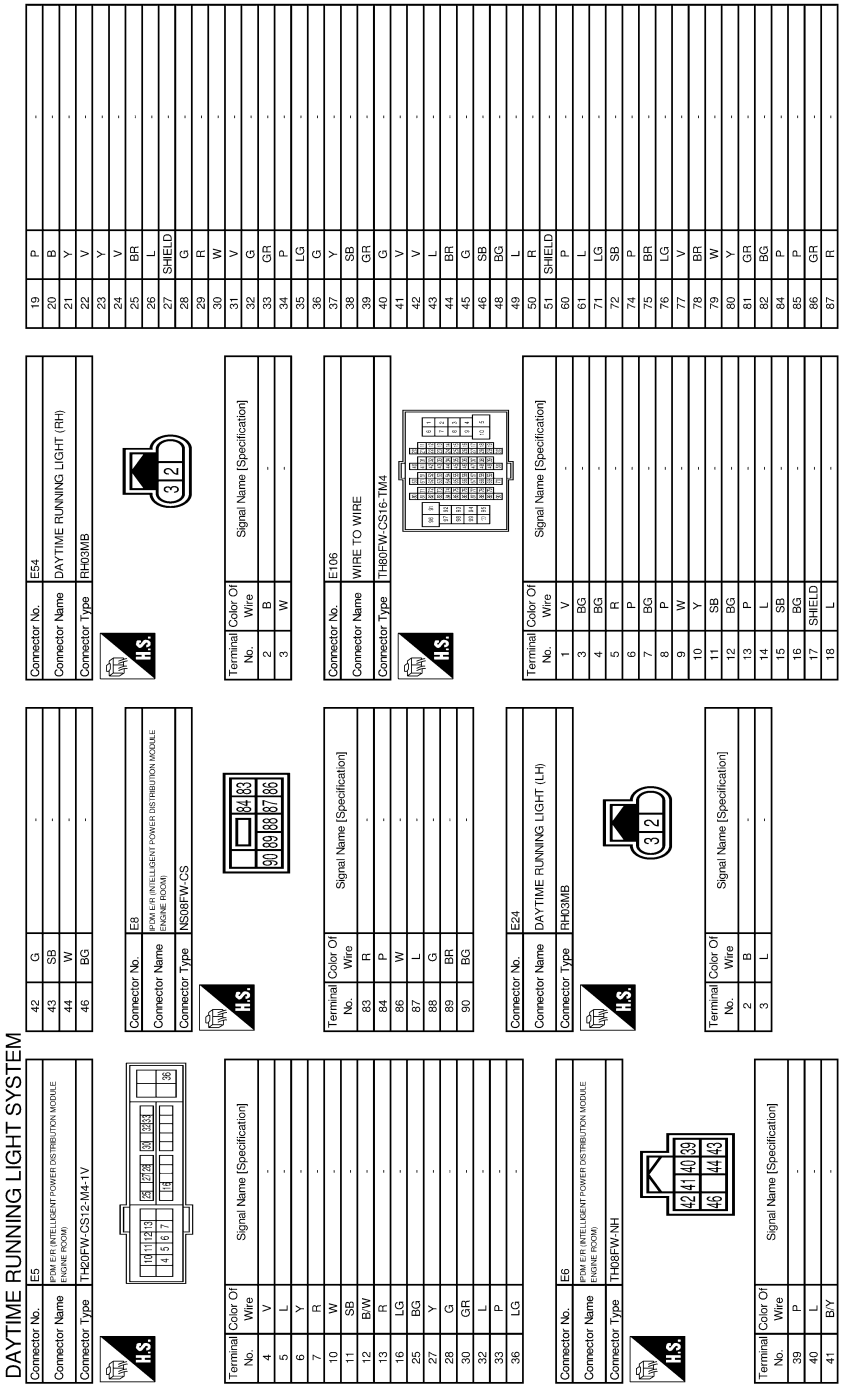
JRLWE4726GB

DAYTIME RUNNING LIGHT SYSTEM

Wiring Diagram - DAYTIME RUNNING LIGHT SYSTEM -

INFOID:0000000011489927



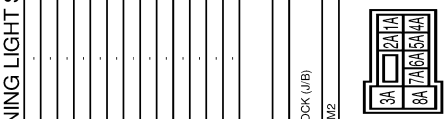


JRLWE4873GB

DAYTIME RUNNING LIGHT SYSTEM

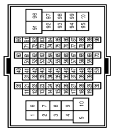
88	L	-
89	BG	-
90	G	-
91	GR	-
92	R	-
93	R	-
94	LG	-
95	G	-
96	GR	-
97	L	-
98	LG	-
99	BG	-
100	L	-

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



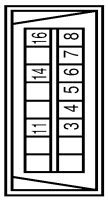
Terminal No.	Color Of Wire	Signal Name [Specification]
1A	Y	-
2A	G	-
3A	L	-
4A	LG	-
5A	SB	-
6A	Y	-
7A	R	-
8A	L	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



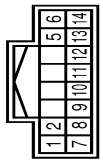
Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
3	R	-
4	G	-
5	Y	-
6	P	-
7	W	-
8	V	-
9	L	-
10	Y	-
11	G	-
12	BG	-
13	R	-
14	L	-
15	BR	-
16	R	-
17	SHIELD	-
18	L	-
19	P	-
20	B	-
21	W	-
22	GR	-
23	L	-
24	V	-
25	BR	-
26	G	-
27	SHIELD	-
28	G	-
29	R	-
30	W	-
31	V	-
32	G	-
33	GR	-
34	LG	-
35	P	-
36	L	-
37	W	-
38	Y	-
39	GR	-
40	BG	-
41	W	-
42	R	-
43	Y	-
44	BR	-
45	G	-
46	LG	-
48	W	-
49	L	-
50	R	-
51	SHIELD	-
60	SB	-
61	V	-
71	W	-
72	LG	-
74	R	-
75	BR	-
76	LG	-
77	R	-
78	BR	-
79	W	-
80	Y	-
81	BG	-
82	SB	-
84	Y	-
85	P	-
86	GR	-
87	R	-
88	L	-
89	G	-
90	P	-
91	W	-
92	R	-
93	LG	-
94	W	-
95	SB	-
96	L	-
97	L	-
98	Y	-
99	BG	-
100	L	-

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



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

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH



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

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DAYTIME RUNNING LIGHT SYSTEM

14	G	-

39	Y	LED HEAD LAMP (LH) WARNING SIGNAL
40	V	ILLUMINATION CONTROL

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

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

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	BATTERY POWER SUPPLY
2	W	IGNITION POWER SUPPLY
3	B	GROUND
4	B	ILLUMINATION GROUND
5	B	GROUND
6	W	METER CONTROL SWITCH GROUND
7	Y	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
8	SB	AMBIENT SENSOR GROUND
9	P	AMBIENT SENSOR SIGNAL
12	L	VEHICLE SPEED SIGNAL (2-PULSE)
13	V	VEHICLE SPEED SIGNAL (8-PULSE)
14	B	OIL PRESSURE SENSOR GROUND
15	R	AIR BAG SIGNAL
16	R	LED HEAD LAMP (RH) WARNING SIGNAL
18	L	FUEL LEVEL SENSOR GROUND
19	R	OIL LEVEL SENSOR GROUND
20	W	OIL LEVEL SENSOR SIGNAL
21	L	CAN-H
22	P	CAN-L
23	LG	ILLUMINATION CONTROL SWITCH SIGNAL (-)
24	BR	ILLUMINATION CONTROL SWITCH SIGNAL (+)
25	G	TRIP A/B RESET SWITCH SIGNAL
26	BG	ENTER SWITCH SIGNAL
27	SB	SELECT SWITCH SIGNAL
28	BR	ALTERNATOR
29	G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
30	LG	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
31	V	PARKING BRAKE SWITCH SIGNAL
32	V	BRAKE FLUID LEVEL SWITCH SIGNAL
33	L	WASHER LEVEL SWITCH SIGNAL
34	GR	OIL PRESSURE SENSOR POWER
35	W	OIL PRESSURE SENSOR SIGNAL
38	BG	FUEL LEVEL SENSOR SIGNAL

Connector No.	M107
Connector Name	ECM
Connector Type	RH24FGY-RZ8-R-LH-Z

H.S.

128					124		122								108	104	100	96						
127															111	107	103	99						
126					122		118	114	110	106					112	108	104	100						
					121		117	113	109	105					113	109	105	101						

Terminal No.	Color Of Wire	Signal Name [Specification]
97	P	CAN COMMUNICATION LINE
99	SB	SENSOR POWER SUPPLY
100	BR	SENSOR POWER SUPPLY
101	L	CAN COMMUNICATION LINE
102	G	ASCD STEERING SWITCH
103	GR	SENSOR GROUND
104	P	ACCELERATOR PEDAL POSITION SENSOR 1
105	W	ECM RELAY (SELF SHUT-OFF)
106	LG	IGNITION SWITCH
107	BG	SENSOR GROUND
108	L	ACCELERATOR PEDAL POSITION SENSOR 2
109	L	SAVALVERLY
110	P	STOP LAMP SWITCH
111	GR	PNP SIGNAL
113	SB	ENGINE SPEED OUTPUT SIGNAL
114	V	DATA LINK CONNECTOR
117	R	ASCD BRAKE SWITCH
118	W	POWER SUPPLY FOR ECM (BACK-UP)
120	BR	SAPM/PRLY
121	P	POWER SUPPLY FOR ECM
122	V	POWER SUPPLY FOR ECM
124	B	ECM GROUND
126	L	FUEL PUMP RELAY
127	G	THROTTLE CONTROL MOTOR RELAY
128	B	ECM GROUND

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

H.S.

	1	3	
		2	

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

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

H.S.

4	5		7			8	9	
11		13	14	15		17	18	19

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

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

H.S.

61	65	69	73	77			85	89	93	97	101	105	109	113	117	121	125	129	133	137	141	145	149	153
111	115	119	123	127			135	139	143	147	151	155	159	163	167	171	175	179	183	187	191	195	199	203

Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2-
73	G	ROOM ANT2+
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	IMMOBI ANTENNA CONTROL
81	L	IMMOBI ANTENNA SIGNAL
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL OUTPUT
93	V	ON IND
95	BG	ACC RELAY CONT
96	SB	A/T SHIFT SELECTOR POWER SUPPLY
97	L	S/L CONDITION 1
98	R	S/L CONDITION 2
99	G	SHIFT P
100	W	PASSENGER DOOR REQUEST SW
101	V	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	P	S/L UNIT POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW
111	Y	S/L UNIT COMM

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DAYTIME RUNNING LIGHT SYSTEM

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

H.S.

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

Connector No.	M132
Connector Name	PARKING BRAKE SWITCH
Connector Type	P01FB-A

H.S.

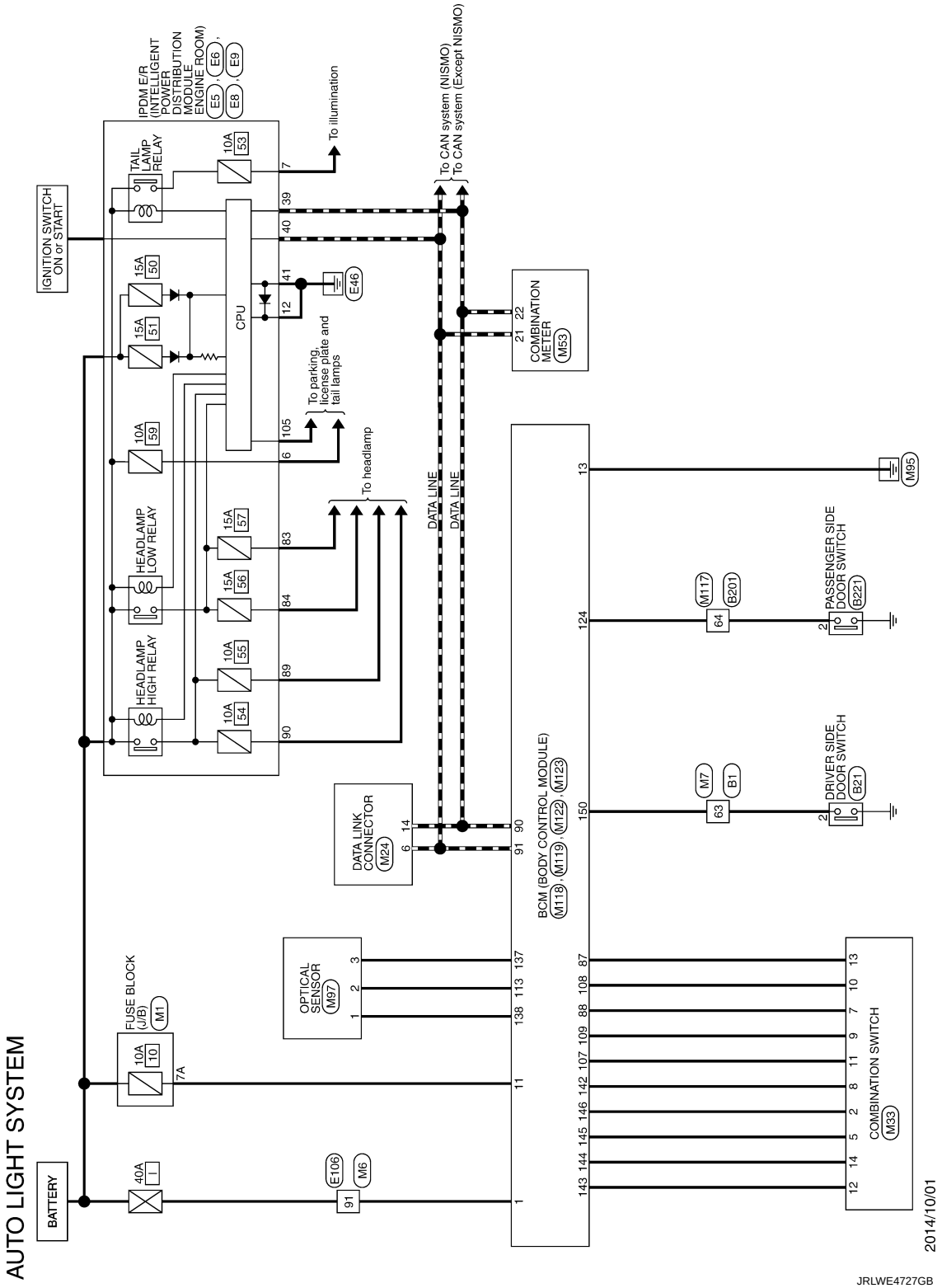
Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-

JRLWE4876GB

AUTO LIGHT SYSTEM

Wiring Diagram - AUTO LIGHT SYSTEM -

INFOID:0000000011489928



AUTO LIGHT SYSTEM

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	V	-
7	W	-
8	W	-
9	Y	-
10	R	-
11	Y	-
12	GR	-
13	BG	-
14	Y	-
15	BR	-
16	R	-
17	W	-
18	BR	-
20	GR	-
21	SB	-
22	W	-
23	G	-
24	BG	-
25	L	-
26	P	-
27	GR	-
28	BG	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	G	-
40	LG	-
41	Y	-
42	SB	-
43	P	-
47	R	-
48	B	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	LG	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	SB	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	SB	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	BR	-
93	SB	-
94	GR	-
95	BG	-
96	Y	-
97	Y	-
98	LG	-
99	R	-
100	G	-

Connector No.	B21
Connector Name	DRIVER SIDE DOOR SWITCH
Connector Type	A03FW

H.S.

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

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	BG	-
9	W	-
10	R	-
31	V	-
32	LG	-
33	BR	-
34	L	-
40	P	-
41	GR	-
42	Y	-
43	Y	-
44	V	-
45	W	-
51	SB	-
52	G	-
53	BR	-
54	V	-
60	R	-
61	P	-
62	L	-
63	LG	-
64	GR	-
69	P	-
70	L	-
71	R	-
80	L	-
81	SB	-
82	V	-
83	B	-
84	Y	-
85	BR	-
86	SHIELD	-
87	W	-
96	Y	-
98	BG	-
99	BR	-
100	W	-

Connector No.	B221
Connector Name	PASSENGER SIDE DOOR SWITCH
Connector Type	A03FW

H.S.

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

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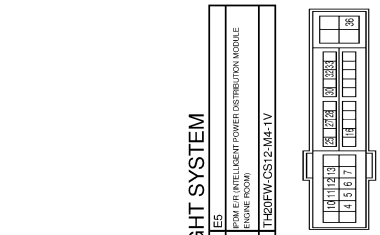
AUTO LIGHT SYSTEM

Connector No.	E5
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH20FW-CS12-M4-1V



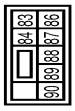
Terminal No.	Color Of Wire	Signal Name [Specification]
4	V	-
5	L	-
6	Y	-
7	R	-
10	W	-
11	SB	-
12	B/W	-
13	R	-
16	LG	-
25	BG	-
27	Y	-
28	G	-
30	GR	-
32	L	-
33	P	-
36	LG	-

Connector No.	E6
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/Y	-
42	G	-

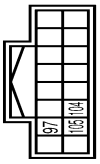
43	SB	-
44	W	-
46	BG	-

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



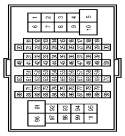
Terminal No.	Color Of Wire	Signal Name [Specification]
83	R	-
84	P	-
86	W	-
87	L	-
88	G	-
89	BR	-
90	BG	-

Connector No.	E9
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH16FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
97	Y	-
104	LG	-
105	GR	-

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



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

38	SB	-
39	GR	-
40	G	-
41	V	-
42	V	-
43	L	-
44	BR	-
45	G	-
46	SB	-
48	BG	-
49	L	-
50	R	-
51	SHIELD	-
60	P	-
61	L	-
71	LG	-
72	SB	-
74	P	-
75	BR	-
76	LG	-
77	V	-
78	BR	-
79	W	-
80	Y	-
81	GR	-
82	BG	-
84	P	-
85	P	-
86	GR	-
87	R	-
88	L	-
89	BG	-
90	G	-
91	GR	-
92	R	-
93	R	-
94	LG	-
95	G	-
96	GR	-
97	L	-
98	LG	-
99	BG	-
100	L	-

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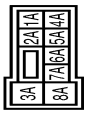
AUTO LIGHT SYSTEM

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

H.S.



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

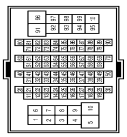
Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
3	R	-
4	G	-
5	Y	-
6	P	-
7	W	-
8	V	-
9	L	-
10	Y	-
11	G	-
12	BG	-
13	R	-
14	L	-
15	BR	-
16	R	-
17	SHIELD	-
18	L	-
19	P	-
20	B	-
21	W	-
22	GR	-
23	L	-
24	V	-
25	BR	-
26	G	-
27	SHIELD	-
28	G	-
29	R	-
30	W	-
31	V	-
32	G	-
33	GR	-
34	LG	-
35	P	-
36	L	-
37	W	-
38	Y	-
39	GR	-
40	BG	-
41	W	-
42	R	-
43	Y	-
44	BR	-
45	G	-
46	LG	-
48	W	-
49	L	-
50	R	-
51	SHIELD	-
60	SB	-
61	V	-
71	W	-
72	LG	-
74	R	-
75	BR	-
76	LG	-
77	R	-
78	BR	-
79	W	-
80	Y	-
81	BG	-
82	SB	-
84	Y	-
85	P	-
86	GR	-
87	R	-
88	L	-
89	G	-
90	P	-
91	W	-
92	R	-
93	LG	-
94	W	-
95	SB	-
96	L	-
97	L	-
98	Y	-
99	BG	-
100	L	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	L	-
7	W	-
8	W	-
9	G	-
10	R	-
11	W	-
12	SB	-
13	G	-
14	W	-
15	BR	-
16	R	-
17	BG	-
18	SB	-
20	GR	-
21	L	-
22	R	-
23	G	-
24	BR	-
25	L	-
26	LG	-
27	W	-
28	R	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	W	-
40	BG	-
41	R	-
42	V	-
43	W	-
47	G	-
48	R	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	GR	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit] - [With active noise control unit]
72	V	-
73	LG	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit] - [With active noise control unit]
82	G	-

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AUTO LIGHT SYSTEM

83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	LG	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	LG	-
93	Y	-
94	G	-
95	R	-
96	Y	-
97	R	-
98	G	-
99	L	-
100	W	-

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

H.S.

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

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	SB	-
5	L	-
6	B	-
7	V	-
8	BG	-
9	Y	-
10	R	-
11	LG	-
12	P	-
13	BR	-
14	G	-

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	BATTERY POWER SUPPLY
2	W	IGNITION POWER SUPPLY
3	B	GROUND
4	B	ILLUMINATION GROUND
5	B	GROUND
6	W	METER CONTROL SWITCH GROUND
7	Y	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
8	SB	AMBIENT SENSOR GROUND
9	P	AMBIENT SENSOR SIGNAL
12	L	VEHICLE SPEED SIGNAL (2-PULSE)
13	V	VEHICLE SPEED SIGNAL (8-PULSE)
14	B	OIL PRESSURE SENSOR GROUND
15	R	AIR BAG SIGNAL
16	R	LED HEAD LAMP (RH) WARNING SIGNAL
18	L	FUEL LEVEL SENSOR GROUND
19	R	OIL LEVEL SENSOR GROUND
20	W	OIL LEVEL SENSOR SIGNAL
21	L	CAN-H
22	P	CAN-L
23	LG	ILLUMINATION CONTROL SWITCH SIGNAL (-)
24	BR	ILLUMINATION CONTROL SWITCH SIGNAL (+)
25	G	TRIP A/B RESET SWITCH SIGNAL
26	BG	ENTER SWITCH SIGNAL
27	SB	SELECT SWITCH SIGNAL
28	BR	ALTERNATOR
29	G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
30	LG	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
31	V	PARKING BRAKE SWITCH SIGNAL
32	V	BRAKE FLUID LEVEL SWITCH SIGNAL
33	L	WASHER LEVEL SWITCH SIGNAL
34	GR	OIL PRESSURE SENSOR POWER
35	W	OIL PRESSURE SENSOR SIGNAL
38	BG	FUEL LEVEL SENSOR SIGNAL
39	Y	LED HEAD LAMP (LH) WARNING SIGNAL
40	V	ILLUMINATION CONTROL

Connector No.	M97
Connector Name	OPTICAL SENSOR
Connector Type	TK03FW

H.S.

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

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	G	-
9	W	-
10	L	-
31	Y	-
32	LG	-
33	BR	-
34	L	-
40	G	-
41	R	-
42	SB	-
43	L	-
44	R	-
45	G	-
51	SB	-
52	BG	-
53	R	-
54	GR	-
60	L	-
61	P	-
62	L	-
63	Y	-
64	LG	-
69	P	-
70	L	-
71	Y	-
80	L	-
81	G	-
82	BR	-
83	B	-
84	V	-
85	SB	-
86	SHIELD	-
87	W	-
96	Y	-

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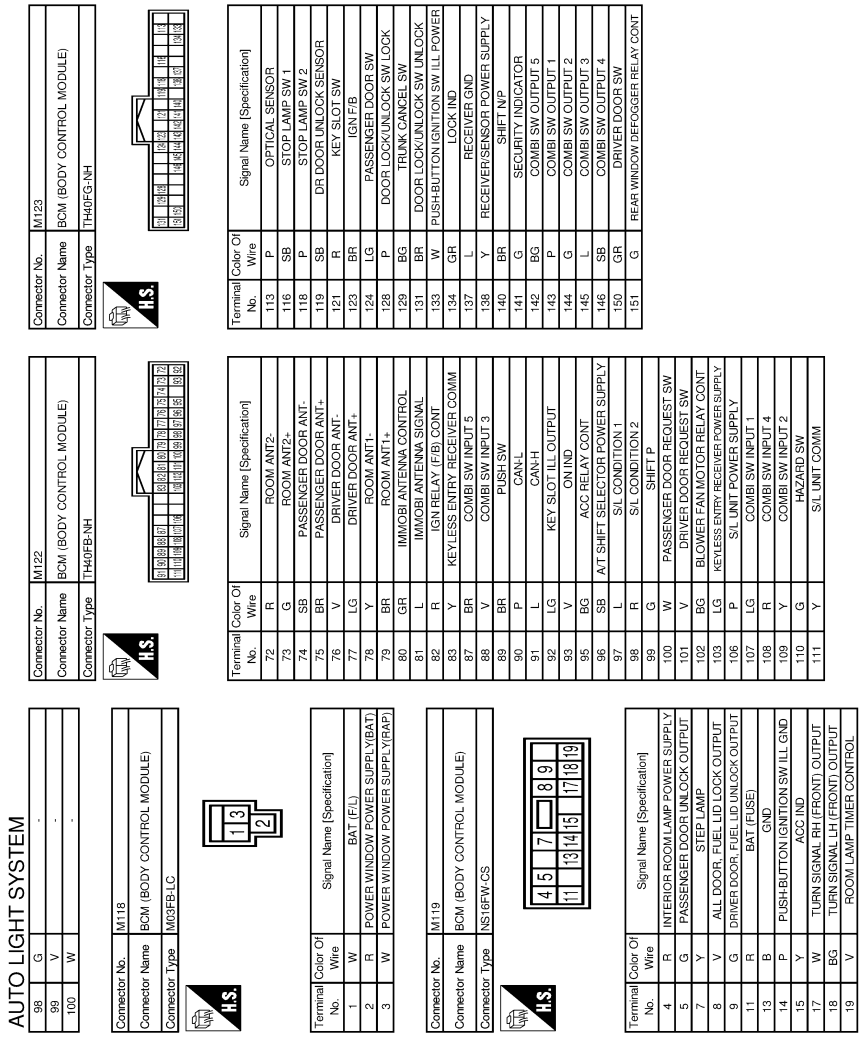

JRLWE4732GB

TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM

Wiring Diagram - TURN SIGNAL AND HAZARD WARNING LAMPS -

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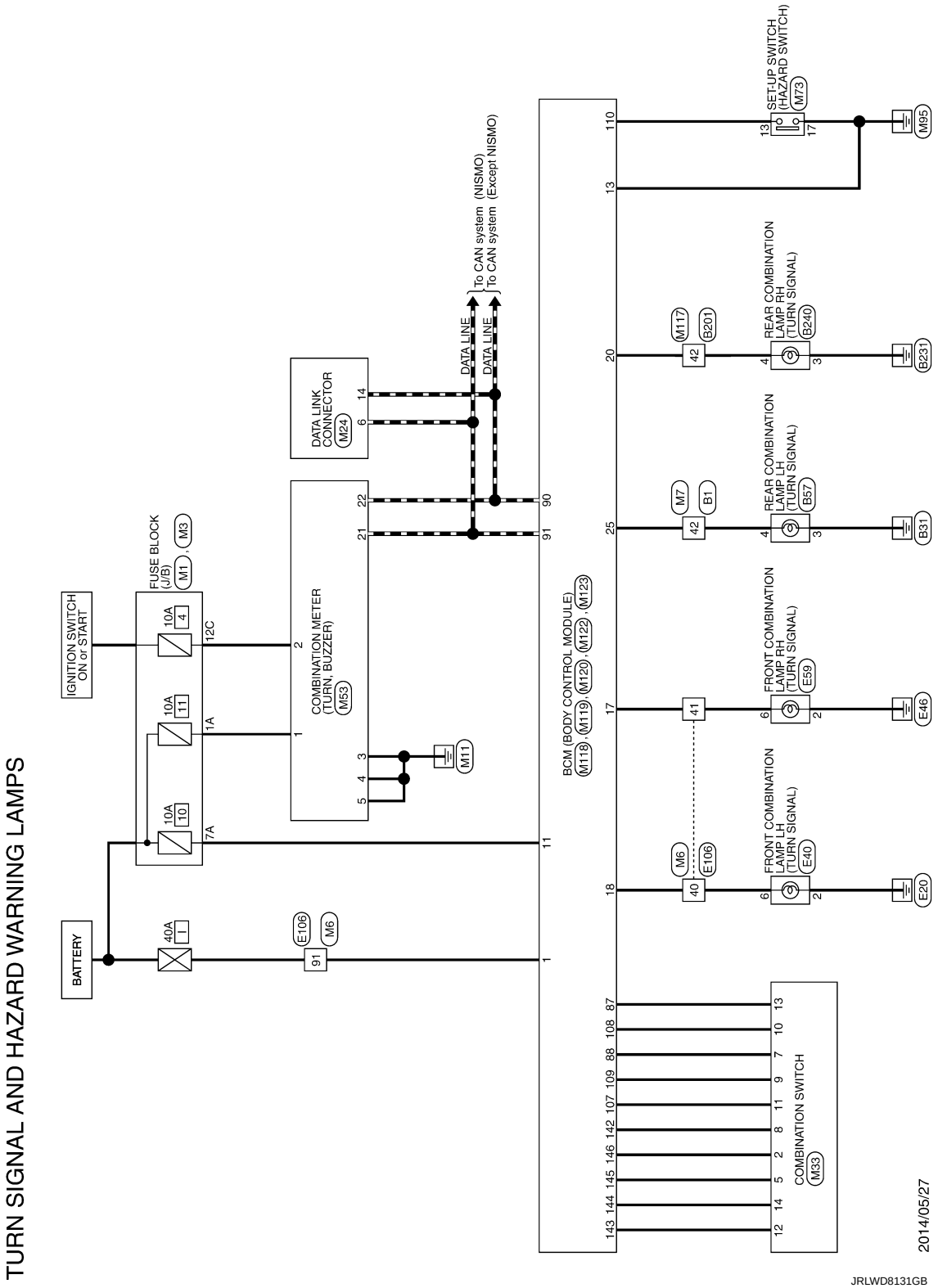
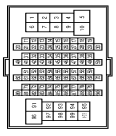


TURN SIGNAL AND HAZARD WARNING LAMPS

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

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	V	-
7	W	-
8	W	-
9	Y	-
10	R	-
11	Y	-
12	GR	-
13	BG	-
14	Y	-
15	BR	-
16	R	-
17	W	-
18	BR	-
20	GR	-
21	SB	-
22	W	-
23	G	-
24	BG	-
25	L	-
26	P	-
27	GR	-
28	BG	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	G	-
40	LG	-
41	Y	-
42	SB	-
43	P	-
47	R	-
48	B	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	LG	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	SB	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	SB	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	BR	-
93	SB	-
94	GR	-
95	BG	-
96	Y	-
97	Y	-
98	LG	-
99	R	-
100	G	-

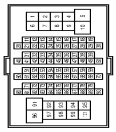
Connector No.	B57
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS06MW-CS

H.S.

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

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

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	BG	-
9	W	-
10	R	-
31	V	-
32	LG	-
33	BR	-
34	L	-
40	P	-
41	GR	-
42	Y	-
43	Y	-
44	V	-
45	W	-
51	SB	-
52	G	-
53	BR	-
54	V	-
60	R	-
61	P	-
62	L	-
63	LG	-
64	GR	-
69	P	-
70	L	-
71	R	-
80	L	-
81	SB	-
82	V	-
83	B	-
84	Y	-
85	BR	-
86	SHIELD	-
87	W	-
96	Y	-
98	BG	-
99	BR	-
100	W	-

Connector No.	B240
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS06MW-CS

H.S.

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

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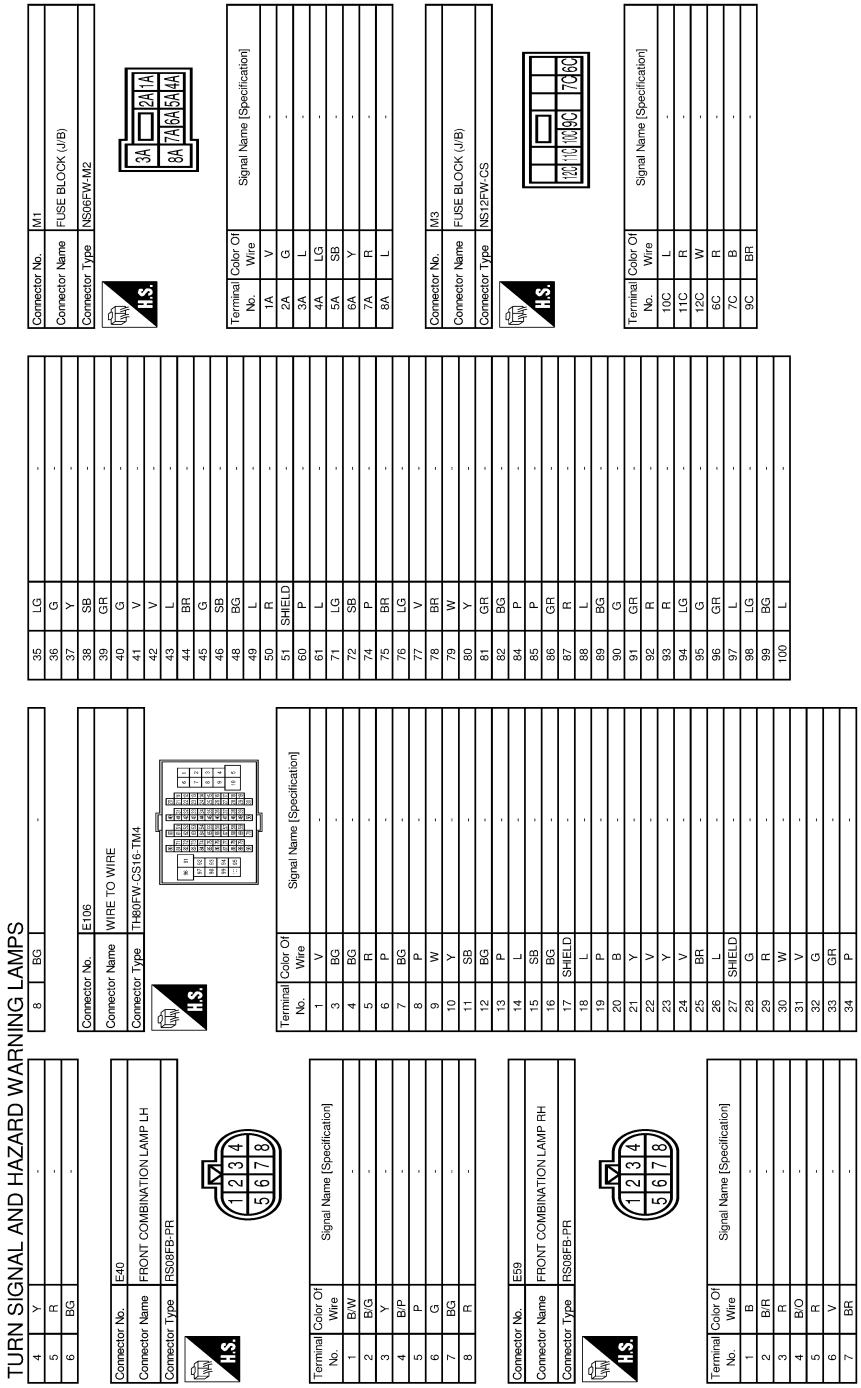


JRLWE4734GB

TURN SIGNAL AND HAZARD WARNING LAMPS

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
3	R	-
4	G	-
5	Y	-
6	P	-
7	W	-
8	V	-
9	L	-
10	Y	-
11	G	-
12	BG	-
13	R	-
14	L	-
15	BR	-
16	R	-
17	SHIELD	-
18	L	-
19	P	-
20	B	-
21	W	-
22	GR	-
23	L	-
24	V	-
25	BR	-
26	G	-
27	SHIELD	-
28	G	-
29	R	-
30	W	-
31	V	-
32	G	-
33	GR	-
34	LG	-
35	P	-
36	L	-
37	W	-
38	Y	-
39	GR	-
40	BG	-
41	W	-
42	R	-
43	Y	-
44	BR	-
45	G	-
46	LG	-
48	W	-
49	L	-
50	R	-
51	SHIELD	-
60	SB	-
61	V	-
71	W	-
72	LG	-
74	R	-
75	BR	-
76	LG	-
77	R	-
78	BR	-
79	W	-
80	Y	-
81	BG	-
82	SB	-
84	Y	-
85	P	-
86	GR	-
87	R	-
88	L	-
89	G	-
90	P	-
91	W	-
92	R	-
93	LG	-
94	W	-
95	SB	-
96	L	-
97	L	-
98	Y	-
99	BG	-
100	L	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	L	-
7	W	-
8	W	-
9	G	-
10	R	-
11	W	-
12	SB	-
13	G	-
14	W	-
15	BR	-
16	R	-
17	BG	-
18	SB	-
20	GR	-
21	L	-
22	R	-
23	G	-
24	BR	-
25	L	-
26	LG	-
27	W	-
28	R	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	W	-
40	BG	-
41	R	-
42	V	-
43	W	-
47	G	-
48	R	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	GR	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	LG	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	LG	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	LG	-
93	Y	-
94	G	-
95	R	-
96	Y	-
97	R	-
98	G	-
99	L	-
100	W	-

JRLWE4735GB

TURN SIGNAL AND HAZARD WARNING LAMPS

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

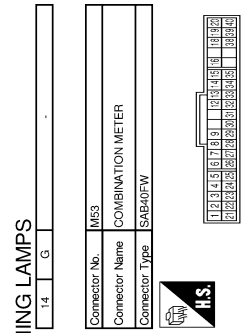
Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-
4	B	-
5	B	-
6	L	-
7	V	-
8	G	-
11	G	-
14	P	-
16	Y	-

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH

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

Connector No.	M24		
Connector Name	DATA LINK CONNECTOR		
Connector Type	BD16FW		
14	G	-	

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	SAB40FW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	BATTERY POWER SUPPLY
2	W	IGNITION POWER SUPPLY
3	B	GROUND
4	B	ILLUMINATION GROUND
5	B	GROUND
6	W	METER CONTROL SWITCH GROUND
7	Y	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
8	SB	AMBIENT SENSOR GROUND
9	P	AMBIENT SENSOR SIGNAL
12	L	VEHICLE SPEED SIGNAL (2-PULSE)
13	V	VEHICLE SPEED SIGNAL (8-PULSE)
14	B	OIL PRESSURE SENSOR GROUND
15	R	AIR BAG SIGNAL
16	R	LED HEAD LAMP (RH) WARNING SIGNAL
18	L	FUEL LEVEL SENSOR GROUND
19	R	OIL LEVEL SENSOR GROUND
20	W	OIL LEVEL SENSOR SIGNAL
21	L	CAN-H
22	P	CAN-L
23	LG	ILLUMINATION CONTROL SWITCH SIGNAL (-)
24	BR	ILLUMINATION CONTROL SWITCH SIGNAL (+)
25	G	TRIP A/B RESET SWITCH SIGNAL
26	BG	ENTER SWITCH SIGNAL
27	SB	SELECT SWITCH SIGNAL
28	BR	ALTERNATOR
29	G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
30	LG	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
31	V	PARKING BRAKE SWITCH SIGNAL
32	V	BRAKE FLUID LEVEL SWITCH SIGNAL
33	L	WASHER LEVEL SWITCH SIGNAL
34	GR	OIL PRESSURE SENSOR POWER
35	W	OIL PRESSURE SENSOR SIGNAL
38	BG	FUEL LEVEL SENSOR SIGNAL

39	Y	LED HEAD LAMP (LH) WARNING SIGNAL
40	V	ILLUMINATION CONTROL

Connector No.	M73
Connector Name	SET-UP SWITCH
Connector Type	TK24FW-1V

Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	VDC TOP POSITION LED
2	R	ILL+
3	W	VDC TOP POSITION LED
4	V	ILL GND
5	L	VDC UP SW
6	P	E-SUS R MODE SW SIG
8	LG	E-SUS COMF MODE LAMP SIG
10	G	SAVE MODE LAMP SIGNAL
11	W	R MODE SWITCH SIGNAL
12	GR	VDC DN SW
13	G	HAZARD SW
16	R	R MODE LAMP SIGNAL
17	B	SW GND
18	G	IGN
19	BG	E-SUS R MODE LAMP SIG
23	BR	SAVE MODE SWITCH SIGNAL
24	R	E-SUS COMF MODE SW SIG

Connector No.	M117
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

Terminal No.	Color Of Wire	Signal Name [Specification]
6	G	-
7	V	-
8	G	-
9	W	-
10	L	-
31	Y	-
32	LG	-
33	BR	-
34	L	-
40	G	-
41	R	-
42	SB	-
43	L	-
44	R	-
45	G	-
51	SB	-
52	BG	-
53	R	-
54	GR	-
60	L	-
61	P	-
62	L	-
63	Y	-
64	LG	-
69	P	-
70	L	-
71	Y	-
80	L	-
81	G	-
82	BR	-
83	B	-
84	V	-
85	SB	-
86	SHIELD	-
87	W	-
96	Y	-

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TURN SIGNAL AND HAZARD WARNING LAMPS

98	G	-
99	V	-
100	W	-

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

H.S.

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

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

H.S.

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

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
20	SB	TURN SIGNAL RH (REAR) OUTPUT
23	G	TRUNK LID OPEN OUTPUT
25	V	TURN SIGNAL LH (REAR) OUTPUT
30	BG	TRUNK ROOM LAMP OUTPUT

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2-
73	G	ROOM ANT2+
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	IMMOBI ANTENNA CONTROL
81	L	IMMOBI ANTENNA SIGNAL
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL OUTPUT
93	V	ON IND
95	BG	ACC RELAY CONT
96	SB	A/T SHIFT SELECTOR POWER SUPPLY
97	L	S/L CONDITION 1
98	R	S/L CONDITION 2
99	G	SHIFT P
100	W	PASSENGER DOOR REQUEST SW
101	V	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	P	S/L UNIT POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW
111	Y	S/L UNIT COMM

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

H.S.

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

JRLWE4737GB

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS SYSTEM

Wiring Diagram - PARKING, LICENSE PLATE AND TAIL LAMPS -

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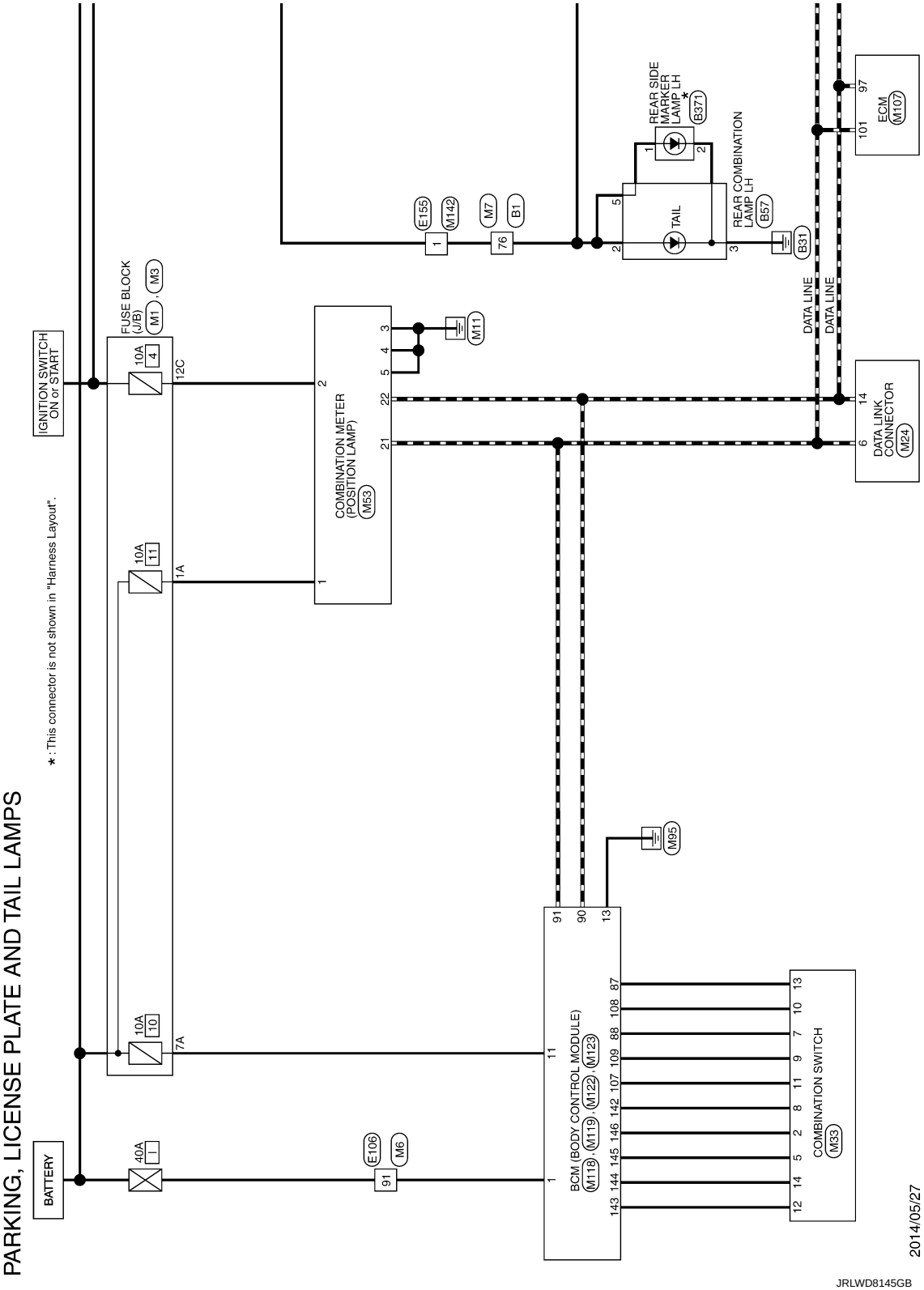
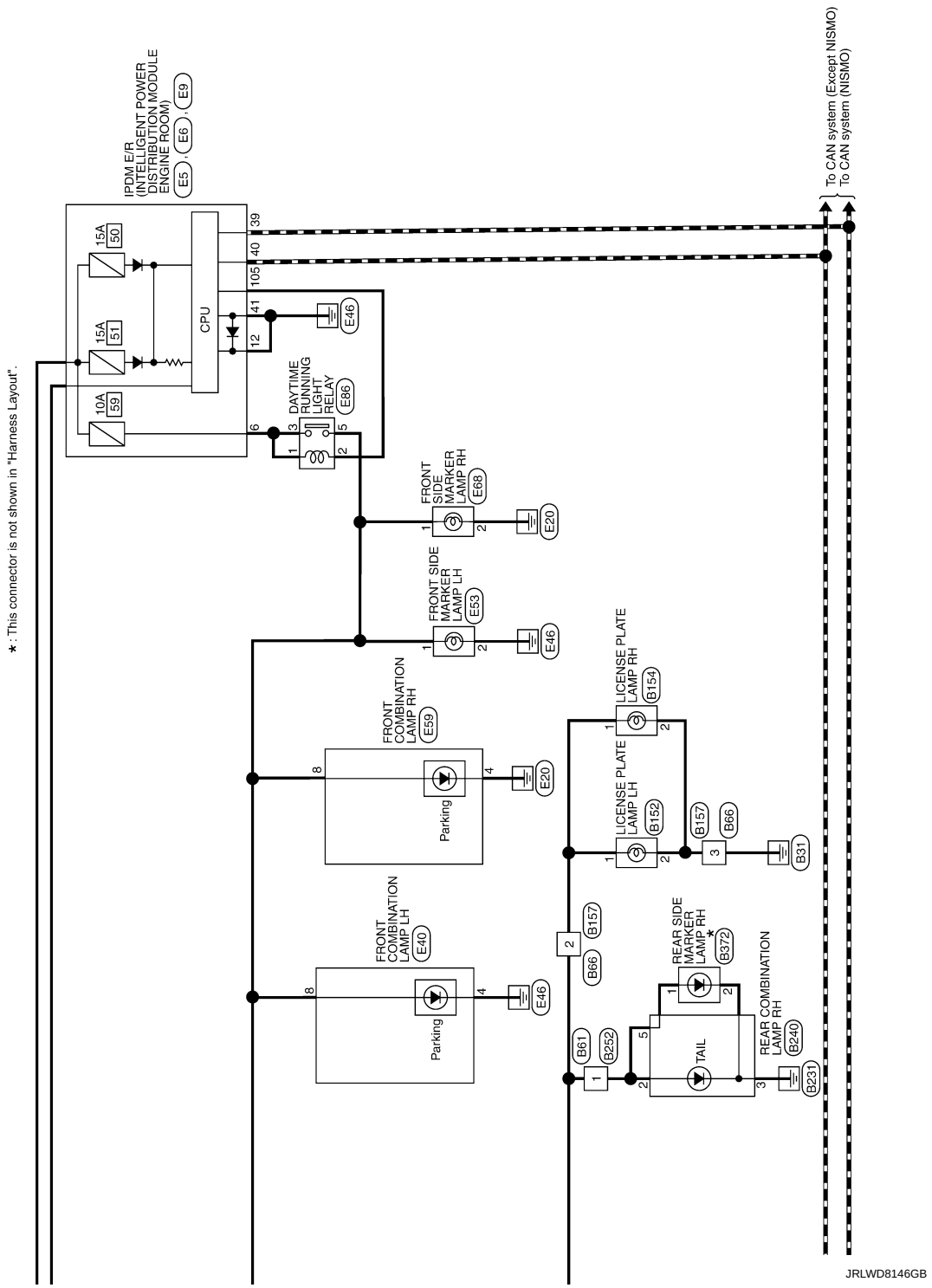
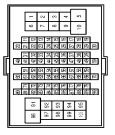



IPDM E/R
(INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E5, E6, E9
CPU
15A 50
15A 51
10A 59
39
40
105
41
12
6
E46
DAYTIME RUNNING LIGHT RELAY
E86
FRONT SIDE MARKER LAMP RH
E68
E20
FRONT SIDE MARKER LAMP LH
E53
E46
FRONT COMBINATION LAMP RH
E59
Parking
E20
FRONT COMBINATION LAMP LH
E40
Parking
E46
LICENSE PLATE LAMP RH
B154
LICENSE PLATE LAMP LH
B152
B157
B66
B31
B157
B66
REAR SIDE MARKER LAMP RH*
B372
TAIL
REAR COMBINATION LAMP RH
B240
B61
B252
B231
To CAN system (Except NISMO)
To CAN system (NISMO)
*: This connector is not shown in "Harness Layout".
JRLWD8146GB

PARKING, LICENSE PLATE AND TAIL LAMPS

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

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	V	-
7	W	-
8	W	-
9	Y	-
10	R	-
11	Y	-
12	GR	-
13	BG	-
14	Y	-
15	BR	-
16	R	-
17	W	-
18	BR	-
20	GR	-
21	SB	-
22	W	-
23	G	-
24	BG	-
25	L	-
26	P	-
27	GR	-
28	BG	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	G	-
40	LG	-
41	Y	-
42	SB	-
43	P	-
47	R	-
48	B	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	LG	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	SB	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	SB	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	BR	-
93	SB	-
94	GR	-
95	BG	-
96	Y	-
97	Y	-
98	LG	-
99	R	-
100	G	-

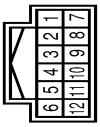
Connector No.	B57
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS06MW-CS

H.S.

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

Connector No.	B61
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	G	-
4	G	-
5	V	-
6	W	-
7	V	-
8	L	-
9	BG	-
10	GR	-
11	LG	-

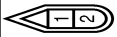
Connector No.	B66
Connector Name	WIRE TO WIRE
Connector Type	RH10MB

H.S.

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

Connector No.	B152
Connector Name	LICENSE PLATE LAMP LH
Connector Type	RK02FBR

H.S.



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

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PARKING, LICENSE PLATE AND TAIL LAMPS

Connector No.	B154
Connector Name	LICENSE PLATE LAMP RH
Connector Type	RK02FBR

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

Connector No.	B157
Connector Name	WIRE TO WIRE
Connector Type	RH10FB

Terminal No.	Color Of Wire	Signal Name [Specification]
2	R	-
3	B	-
4	W	-
5	B	-
6	G	-
7	R	-
8	B	-
9	W	-
10	SHIELD	-

Connector No.	B240
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS06MW-CS

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

Connector No.	B252
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	Y	-
3	SB	-
4	G	-
5	V	-
6	W	-
7	R	-
8	G	-
9	BG	-
10	GR	-
11	LG	-
12	SHIELD	-

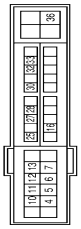
Connector No.	B371
Connector Name	REAR SIDE MARKER LAMP LH
Connector Type	RS02MBR

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

Connector No.	B372
Connector Name	REAR SIDE MARKER LAMP RH
Connector Type	RS02MBR

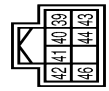
Terminal No.	Color Of Wire	Signal Name [Specification]
1	-	-
2	-	-

Connector No.	E5
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	V	-
5	L	-
6	Y	-
7	R	-
10	W	-
11	SB	-
12	B/W	-
13	R	-
16	LG	-
25	BG	-
27	Y	-
28	G	-
30	GR	-
32	L	-
33	P	-
36	LG	-

Connector No.	E6
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/Y	-
42	G	-

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PARKING, LICENSE PLATE AND TAIL LAMPS

43	SB	-
44	W	-
46	BG	-

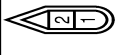
Connector No.	E9
Connector Name	IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH16FW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
97	Y	-
104	LG	-
105	GR	-

Connector No.	E40
Connector Name	FRONT COMBINATION LAMP LH
Connector Type	RS08FB-PR

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

Connector No.	E53
Connector Name	FRONT SIDE MARKER LAMP LH
Connector Type	RK02FBR-DGY



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

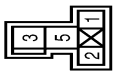
Connector No.	E59
Connector Name	FRONT COMBINATION LAMP RH
Connector Type	RS08FB-PR

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

Connector No.	E68
Connector Name	FRONT SIDE MARKER LAMP RH
Connector Type	RK02FBR-DGY

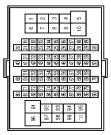
Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	B	-

Connector No.	E86
Connector Name	DAYTIME RUNNING LIGHT RELAY
Connector Type	MS02FL-M2-LC



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

Connector No.	E106
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



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

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PARKING, LICENSE PLATE AND TAIL LAMPS

38	SB
39	GR
40	G
41	V
42	V
43	L
44	BR
45	G
46	SB
48	BG
49	L
50	R
51	SHIELD
60	P
61	L
71	LG
72	SB
74	P
75	BR
76	LG
77	V
78	BR
79	W
80	Y
81	GR
82	BG
84	P
85	P
86	GR
87	R
88	L
89	BG
90	G
91	GR
92	R
93	R
94	LG
95	G
96	GR
97	L
98	LG
99	BG
100	L

Connector No.	E155
Connector Name	WIRE TO WIRE
Connector Type	TH24FW-NH

H.S.

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

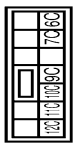
Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS06FW-M2

H.S.

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

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

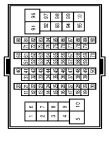
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
10C	L	-
11C	R	-
12C	W	-
6C	R	-
7C	B	-
9C	BR	-

Connector No.	M6
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.



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

16	R
17	SHIELD
18	L
19	P
20	B
21	W
22	GR
23	L
24	V
25	BR
26	G
27	SHIELD
28	G
29	R
30	W
31	V
32	G
33	GR
34	LG
35	P
36	L
37	W
38	Y
39	GR
40	BG
41	W
42	R
43	Y
44	BR
45	G
46	LG
48	W
49	L
50	R
51	SHIELD
60	SB
61	V
71	W
72	LG
74	R
75	BR
76	LG
77	R
78	BR
79	W
80	Y
81	BG
82	SB
84	Y
85	P

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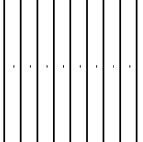
86	GR	-
87	R	-
88	L	-
89	G	-
90	P	-
91	W	-
92	R	-
93	LG	-
94	W	-
95	SB	-
96	L	-
97	L	-
98	Y	-
99	BG	-
100	L	-

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

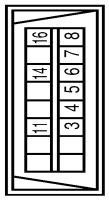
H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	L	-
7	W	-
8	W	-
9	G	-
10	R	-
11	W	-
12	SB	-
13	G	-
14	W	-
15	BR	-
16	R	-
17	BG	-
18	SB	-
20	GR	-
21	L	-
22	R	-
23	G	-
24	BR	-
25	L	-
26	LG	-
27	W	-
28	R	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	W	-
40	BG	-
41	R	-
42	V	-
43	W	-
47	G	-
48	R	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	GR	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	LG	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	LG	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	LG	-
93	Y	-
94	G	-
95	R	-
96	Y	-
97	R	-
98	G	-
99	L	-
100	W	-

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

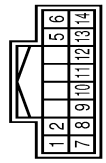
H.S.



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

Connector No.	M33
Connector Name	COMBINATION SWITCH
Connector Type	TH16FW-NH

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	SB	-
5	L	-
6	B	-
7	V	-
8	BG	-
9	Y	-
10	R	-
11	LG	-
12	P	-
13	BR	-
14	G	-

Connector No.	M53
Connector Name	COMBINATION METER
Connector Type	SAB40FW

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	BATTERY POWER SUPPLY
2	W	IGNITION POWER SUPPLY
3	B	GROUND
4	B	ILLUMINATION GROUND
5	B	GROUND
6	W	METER CONTROL SWITCH GROUND
7	Y	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
8	SB	AMBIENT SENSOR GROUND

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9	P	AMBIENT SENSOR SIGNAL
12	L	VEHICLE SPEED SIGNAL (2-PULSE)
13	V	VEHICLE SPEED SIGNAL (8-PULSE)
14	B	OIL PRESSURE SENSOR GROUND
15	R	AIR BAG SIGNAL
16	R	LED HEAD LAMP (RH) WARNING SIGNAL
18	L	FUEL LEVEL SENSOR GROUND
19	R	OIL LEVEL SENSOR GROUND
20	W	OIL LEVEL SENSOR SIGNAL
21	L	CAN-H
22	P	CAN-L
23	LG	ILLUMINATION CONTROL SWITCH SIGNAL (-)
24	BR	ILLUMINATION CONTROL SWITCH SIGNAL (+)
25	G	TRIP A/B RESET SWITCH SIGNAL
26	BG	ENTER SWITCH SIGNAL
27	SB	SELECT SWITCH SIGNAL
28	BR	ALTERNATOR
29	G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
30	LG	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
31	V	PARKING BRAKE SWITCH SIGNAL
32	V	BRAKE FLUID LEVEL SWITCH SIGNAL
33	L	WASHER LEVEL SWITCH SIGNAL
34	GR	OIL PRESSURE SENSOR POWER
35	W	OIL PRESSURE SENSOR SIGNAL
38	BG	FUEL LEVEL SENSOR SIGNAL
39	Y	LED HEAD LAMP (LH) WARNING SIGNAL
40	V	ILLUMINATION CONTROL

105	W	ECM RELAY (SELF SHUT-OFF)
106	LG	IGNITION SWITCH
107	BG	SENSOR GROUND
108	L	ACCELERATOR PEDAL POSITION SENSOR 2
109	L	SAVALVERLY
110	P	STOP LAMP SWITCH
111	GR	PNP SIGNAL
113	SB	ENGINE SPEED OUTPUT SIGNAL
114	V	DATA LINK CONNECTOR
117	R	ASCD BRAKE SWITCH
118	W	POWER SUPPLY FOR ECM (BACK-UP)
120	BR	SAPMPRLY
121	P	POWER SUPPLY FOR ECM
122	V	POWER SUPPLY FOR ECM
124	B	ECM GROUND
126	L	FUEL PUMP RELAY
127	G	THROTTLE CONTROL MOTOR RELAY
128	B	ECM GROUND

80	GR	IMMOBI ANTENNA CONTROL
81	L	IMMOBI ANTENNA SIGNAL
82	R	IGN RELAY (F/B) CONT
83	Y	KEYLESS ENTRY RECEIVER COMM
87	BR	COMBI SW INPUT 5
88	V	COMBI SW INPUT 3
89	BR	PUSH SW
90	P	CAN-L
91	L	CAN-H
92	LG	KEY SLOT ILL OUTPUT
93	V	ON IND
95	BG	ACC RELAY CONT
96	SB	A/T SHIFT SELECTOR POWER SUPPLY
97	L	S/L CONDITION 1
98	R	S/L CONDITION 2
99	G	SHIFT P
100	W	PASSENGER DOOR REQUEST SW
101	V	DRIVER DOOR REQUEST SW
102	BG	BLOWER FAN MOTOR RELAY CONT
103	LG	KEYLESS ENTRY RECEIVER POWER SUPPLY
106	P	S/L UNIT POWER SUPPLY
107	LG	COMBI SW INPUT 1
108	R	COMBI SW INPUT 4
109	Y	COMBI SW INPUT 2
110	G	HAZARD SW
111	Y	S/L UNIT COMM

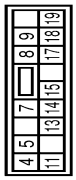
Connector No. M107
Connector Name ECM
Connector Type RH24FGY-RZ8-R-LH-Z

Terminal No.	Color Of Wire	Signal Name [Specification]
97	P	CAN COMMUNICATION LINE
99	SB	SENSOR POWER SUPPLY
100	BR	SENSOR POWER SUPPLY
101	L	CAN COMMUNICATION LINE
102	G	ASCD STEERING SWITCH
103	GR	SENSOR GROUND
104	P	ACCELERATOR PEDAL POSITION SENSOR 1

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

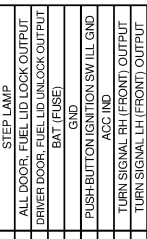
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (F/L)
2	R	POWER WINDOW POWER SUPPLY (BAT)
3	W	POWER WINDOW POWER SUPPLY (RAP)

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



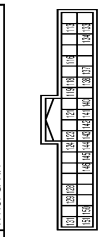
Terminal No.	Color Of Wire	Signal Name [Specification]
4	R	INTERIOR ROOM LAMP POWER SUPPLY
5	G	PASSENGER DOOR UNLOCK OUTPUT
7	Y	STEP LAMP
8	V	ALL DOOR, FUEL LID LOCK OUTPUT
9	G	DRIVER DOOR, FUEL LID UNLOCK OUTPUT
11	R	BAT (FUSE)
13	B	GND
14	P	PUSH-BUTTON IGNITION SW ILL GND
15	Y	ACC IND
17	W	TURN SIGNAL RH (FRONT) OUTPUT
18	BG	TURN SIGNAL LH (FRONT) OUTPUT
19	V	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	R	ROOM ANT2-
73	G	ROOM ANT2+
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+

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



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	R	KEY SLOT SW
123	BR	IGN F/B
124	LG	PASSENGER DOOR SW
128	P	DOOR LOCK/UNLOCK SW LOCK

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PARKING, LICENSE PLATE AND TAIL LAMPS

129	BG	TRUNK CANCEL SW
131	BR	DOOR LOCK/UNLOCK SW UNLOCK
133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	L	RECEIVER GND
138	Y	RECEIVER/SENSOR POWER SUPPLY
140	BR	SHIFT N/P
141	G	SECURITY INDICATOR
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

Connector No.	M142
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH

H.S.

1 2 3 4

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

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BACK-UP LAMP

Wiring Diagram - BACK-UP LAMP -

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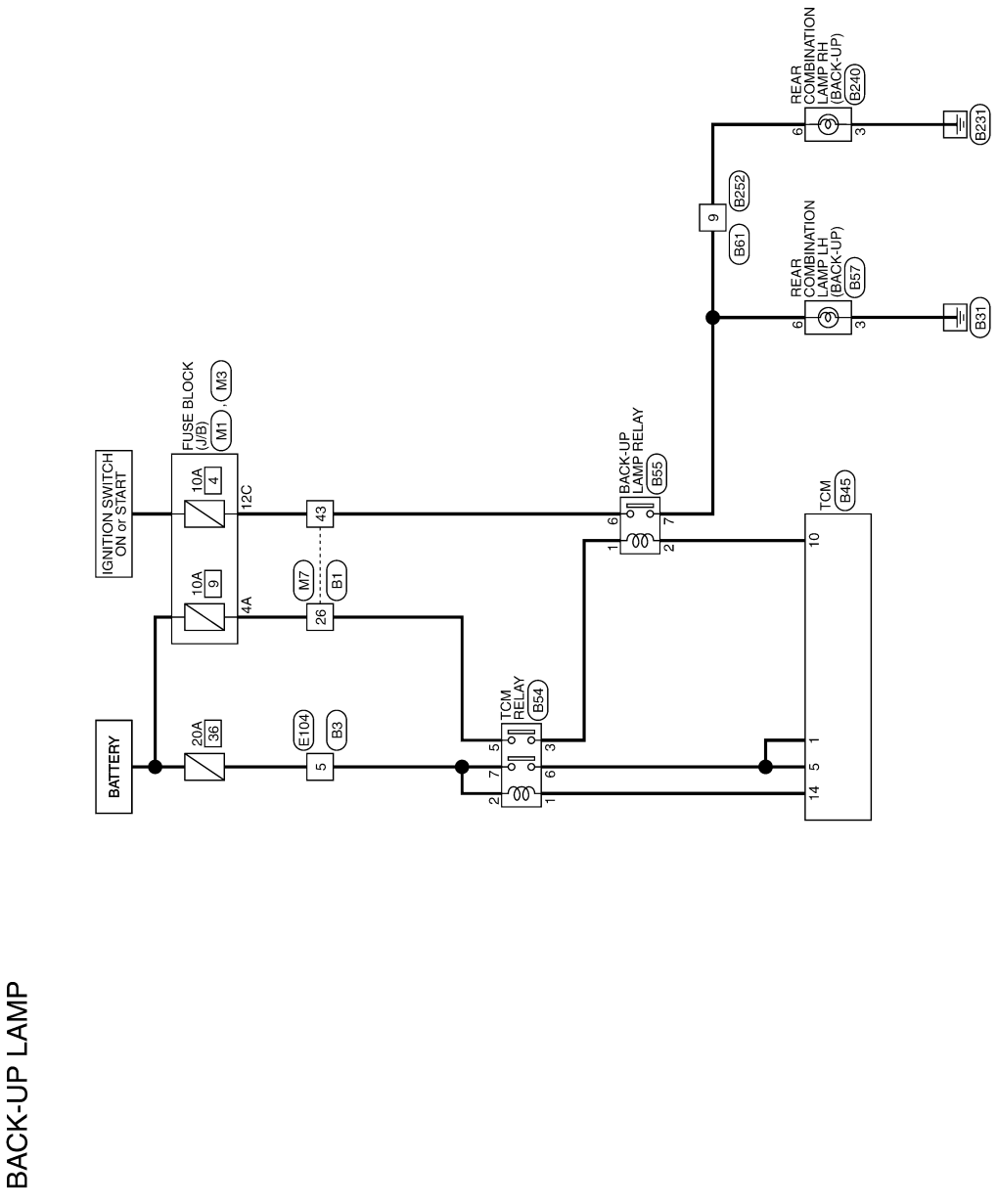

BACK-UP LAMP

BACK-UP LAMP

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

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	V	-
7	W	-
8	W	-
9	Y	-
10	R	-
11	Y	- [Without active noise control unit]
12	GR	- [With active noise control unit]
13	BG	-
14	Y	-
15	BR	-
16	R	-
17	W	-
18	BR	-
20	GR	-
21	SB	-
22	W	-
23	G	-
24	BG	-
25	L	-
26	P	-
27	GR	-
28	BG	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	G	-
40	LG	-
41	Y	-
42	SB	-
43	P	-
47	R	-
48	B	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	LG	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	SB	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	SB	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	BR	-
93	SB	-
94	GR	-
95	BG	-
96	Y	-
97	Y	-
98	LG	-
99	R	-
100	G	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	NS12FW-CS

H.S.

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

Connector No.	B45
Connector Name	TCM
Connector Type	RH40FB-RZ8-L-LH-Z

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	POWER SUPPLY (MEMORY BACK-UP)-2
3	B	GROUND
4	B	GROUND
5	W	POWER SUPPLY (MEMORY BACK-UP)-3
7	B	GROUND
8	B	GROUND
9	P	POWER SUPPLY (MEMORY BACK-UP)-1
10	LG	BACK-UP LAMP SIGNAL
11	L	CAN-H
14	V	POWER OFF
15	P	CAN-L
16	W	STOP LAMP SWITCH SIGNAL
17	Y	IGNITION SWITCH SIGNAL
19	GR	STARTER RELAY SIGNAL
23	BR	AUTO MANUAL RANGE CHANGE SWITCH 1 SIGNAL
25	L	RANGE SENSOR POWER SOURCE 1
26	LG	RANGE SENSOR POWER SOURCE 2
27	G	RANGE SENSOR NO.- SIGNAL
28	V	AUTO MANUAL RANGE CHANGE SWITCH 2 SIGNAL
31	SB	ENGINE SPEED SIGNAL
33	V	RANGE SENSOR NO.1 SIGNAL
34	BG	SAVE MODE SWITCH SIGNAL
35	G	RANGE SENSOR NO.3 SIGNAL
37	GR	R MODE SWITCH SIGNAL
38	R	RANGE SENSOR NO.2 SIGNAL
39	W	PADDLE SHIFTER (SHIFT-UP SWITCH) SIGNAL
42	L	PADDLE SHIFTER (SHIFT-DOWN SWITCH) SIGNAL
43	P	RANGE SENSOR NO.4 SIGNAL
44	GR	RANGE SENSOR NO.5 SIGNAL
45	BG	R MODE LAMP SIGNAL
46	W	SHIFT LOCK SOLENOID CONTROL SIGNAL
47	G	SAVE MODE LAMP SIGNAL

Connector No.	B54
Connector Name	TCM RELAY
Connector Type	M06FBR-R-LC

H.S.

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

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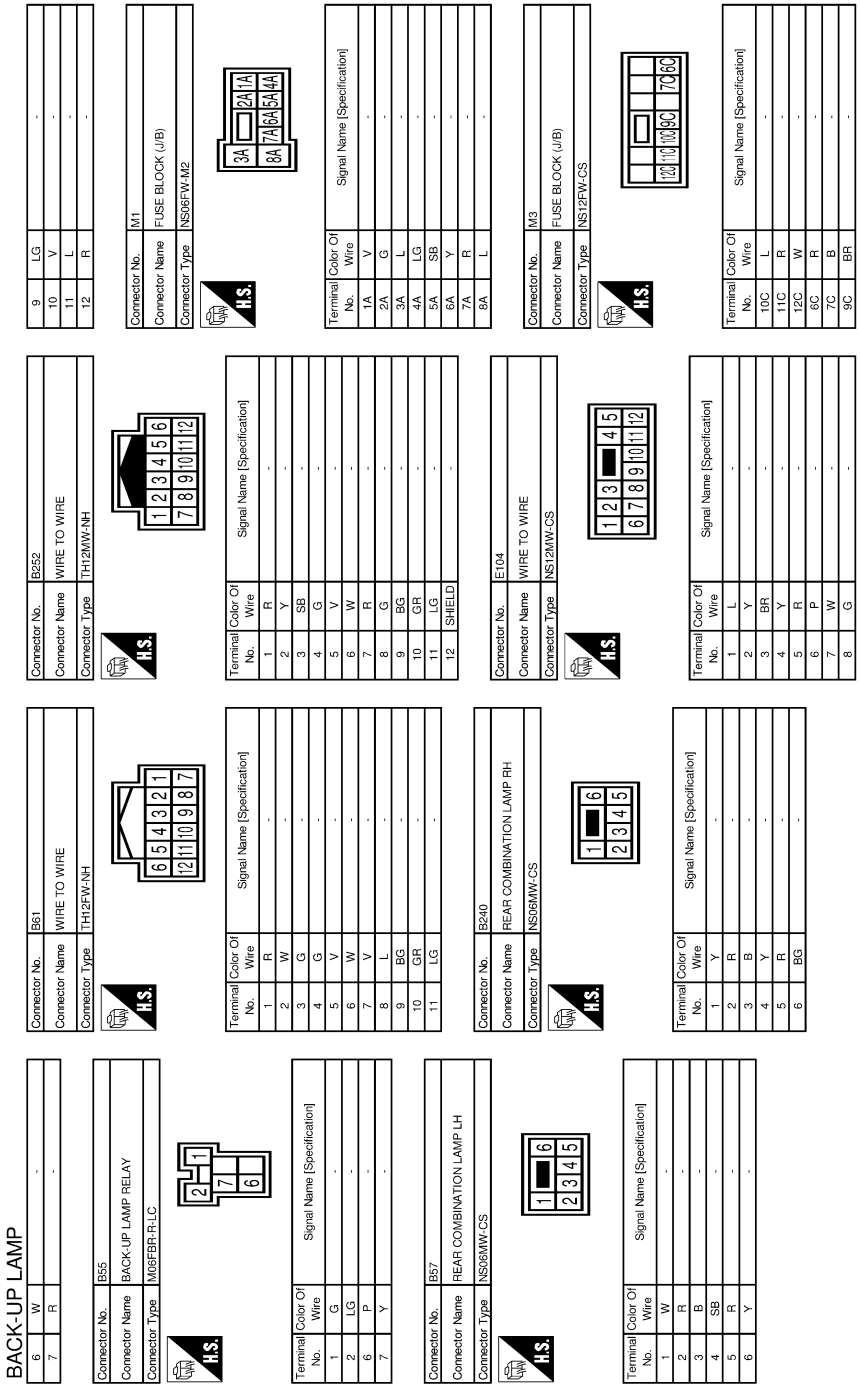
BACK-UP LAMP
6 W -
7 R -
Connector No. B55
Connector Name BACK-UP LAMP RELAY
Connector Type M06FBR-R-LC
H.S.
Terminal No. Color Of Wire Signal Name [Specification]
1 G -
2 LG -
6 P -
7 Y -
Connector No. B57
Connector Name REAR COMBINATION LAMP LH
Connector Type NS06MW-CS
H.S.
Terminal No. Color Of Wire Signal Name [Specification]
1 W -
2 R -
3 B -
4 SB -
5 R -
6 Y -
Connector No. B61
Connector Name WIRE TO WIRE
Connector Type TH12FW-NH
H.S.
Terminal No. Color Of Wire Signal Name [Specification]
1 R -
2 W -
3 G -
4 G -
5 V -
6 W -
7 V -
8 L -
9 BG -
10 GR -
11 LG -
Connector No. B240
Connector Name REAR COMBINATION LAMP RH
Connector Type NS06MW-CS
H.S.
Terminal No. Color Of Wire Signal Name [Specification]
1 Y -
2 R -
3 B -
4 Y -
5 R -
6 BG -
Connector No. B252
Connector Name WIRE TO WIRE
Connector Type TH12MW-NH
H.S.
Terminal No. Color Of Wire Signal Name [Specification]
1 R -
2 Y -
3 SB -
4 G -
5 V -
6 W -
7 R -
8 G -
9 BG -
10 GR -
11 LG -
12 SHIELD -
Connector No. E104
Connector Name WIRE TO WIRE
Connector Type NS12MW-CS
H.S.
Terminal No. Color Of Wire Signal Name [Specification]
1 L -
2 Y -
3 BR -
4 Y -
5 R -
6 P -
7 W -
8 G -
9 LG -
10 V -
11 L -
12 R -
Connector No. M1
Connector Name FUSE BLOCK (J/B)
Connector Type NS06FW-M2
H.S.
Terminal No. Color Of Wire Signal Name [Specification]
1A V -
2A G -
3A L -
4A LG -
5A SB -
6A Y -
7A R -
8A L -
Connector No. M3
Connector Name FUSE BLOCK (J/B)
Connector Type NS12FW-CS
H.S.
Terminal No. Color Of Wire Signal Name [Specification]
10C L -
11C R -
12C W -
6C R -
7C B -
9C BR -
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BACK-UP LAMP

Connector No.	M7
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4

H.S.

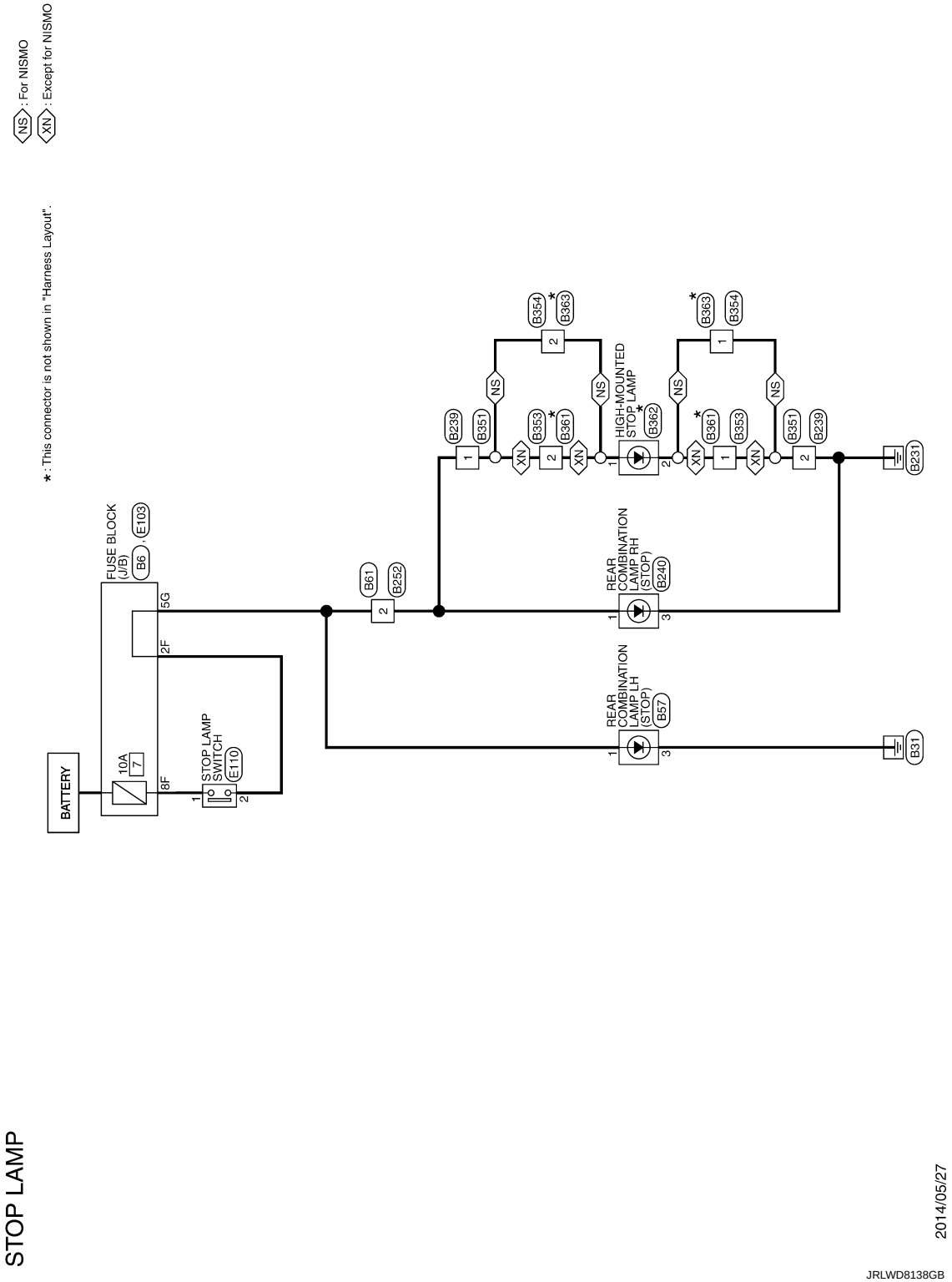
Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	-
3	P	-
6	L	-
7	W	-
8	W	-
9	G	-
10	R	-
11	W	-
12	SB	-
13	G	-
14	W	-
15	BR	-
16	R	-
17	BG	-
18	SB	-
20	GR	-
21	L	-
22	R	-
23	G	-
24	BR	-
25	L	-
26	LG	-
27	W	-
28	R	-
31	GR	-
32	L	-
33	V	-
34	BG	-
39	W	-
40	BG	-
41	R	-
42	V	-
43	W	-
47	G	-
48	R	-
49	W	-
50	SHIELD	-
51	SB	-
52	B	-
53	R	-
54	B	-
56	R	-
57	G	-
58	G	-
59	R	-
60	BR	-
61	Y	-
62	SHIELD	-
63	GR	-
64	R	-
65	G	-
66	BR	-
67	BG	-
69	P	-
70	L	-
71	SHIELD	-
72	SHIELD	- [Without active noise control unit]
72	V	- [With active noise control unit]
73	LG	-
76	R	-
77	SB	-
78	G	-
79	Y	-
80	R	-
81	G	-
82	BR	- [Without active noise control unit]
82	G	- [With active noise control unit]
83	R	- [With active noise control unit]
83	Y	- [Without active noise control unit]
84	SHIELD	-
85	V	-
86	LG	- [Without active noise control unit]
86	W	- [With active noise control unit]
87	L	-
88	P	-
89	SHIELD	-
90	V	-
92	LG	-
93	Y	-
94	G	-
95	R	-
96	Y	-
97	R	-
98	G	-
99	L	-
100	W	-

JRLWE4742GB

STOP LAMP

Wiring Diagram - STOP LAMP -

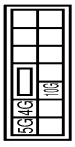
INFOID:0000000011489932



STOP LAMP

STOP LAMP

Connector No.	B6
Connector Name	FUSE BLOCK (J/B)
Connector Type	NS12FBR-CS

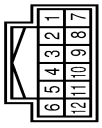


Terminal No.	Color Of Wire	Signal Name [Specification]
10G	BG	-
4G	P	-
5G	W	-

Connector No.	B57
Connector Name	REAR COMBINATION LAMP LH
Connector Type	NS06MW-CS

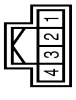
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	B	-
4	SB	-
5	R	-
6	Y	-

Connector No.	B61
Connector Name	WIRE TO WIRE
Connector Type	TH12FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	W	-
3	G	-
4	G	-
5	V	-
6	W	-
7	V	-
8	L	-
9	BG	-
10	GR	-
11	LG	-

Connector No.	B239
Connector Name	WIRE TO WIRE
Connector Type	TH04FW-NH

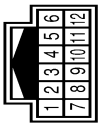


Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	B	-
3	GR	-
4	P	-

Connector No.	B240
Connector Name	REAR COMBINATION LAMP RH
Connector Type	NS06MW-CS

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

Connector No.	B252
Connector Name	WIRE TO WIRE
Connector Type	TH12MW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	R	-
2	Y	-
3	SB	-
4	G	-
5	V	-
6	W	-
7	R	-
8	G	-
9	BG	-
10	GR	-
11	LG	-
12	SHIELD	-

Connector No.	B351
Connector Name	WIRE TO WIRE
Connector Type	TH04MW-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	-
2	B	-
3	GR	-
4	P	-

Connector No.	B353
Connector Name	WIRE TO WIRE
Connector Type	A02FW

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

JRLWE4738GB

STOP LAMP

Connector No.	B354
Connector Name	WIRE TO WIRE
Connector Type	TK02MW

H.S.

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

Connector No.	B361
Connector Name	WIRE TO WIRE
Connector Type	A02MW

H.S.

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

Connector No.	B362
Connector Name	HIGH-MOUNTED STOP LAMP
Connector Type	RK02FGY

H.S.

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

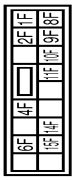
Connector No.	B363
Connector Name	WIRE TO WIRE
Connector Type	TK02FW

H.S.

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

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

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
10F	GR	-
11F	Y	-
14F	LG	-
15F	P	-
1F	W	-
2F	W	-
4F	G	-
6F	BG	-
8F	L	-
9F	R	-

Connector No.	E110
Connector Name	STOP LAMP SWITCH
Connector Type	M04FW-LC

H.S.

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

JRLWE4739GB

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000011807027

VALUES ON THE DIAGNOSIS TOOL

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
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
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	**NOTE:** The item is indicated, but not monitored.	Off

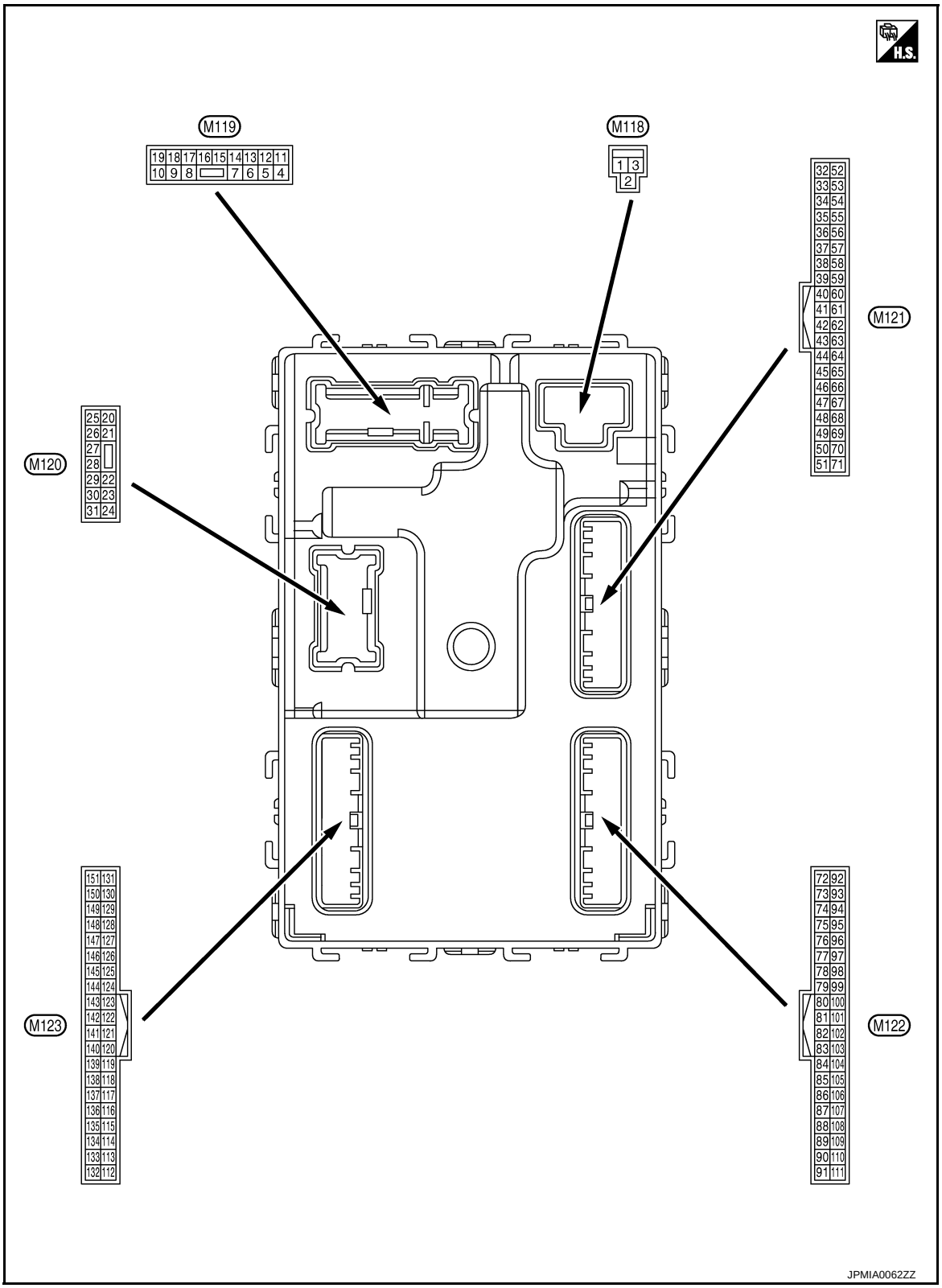
Monitor Item	Condition	Value/Status
DOOR SW-RL	**NOTE:** The item is indicated, but not monitored.	Off
DOOR SW-BK	**NOTE:** The item is indicated, but not monitored.	Off
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	**NOTE:** The item is indicated, but not monitored.	Off
KEY CYL UN-SW	**NOTE:** The item is indicated, but not monitored.	Off
KEY CYL SW-TR	**NOTE:** The item is indicated, but not monitored.	Off
HAZARD SW	Hazard switch is not pressed	Off
	Hazard switch is pressed	On
REAR DEF SW	**NOTE:** The item is indicated, but not monitored.	Off
H/L WSR SW	**NOTE:** The item is indicated, but not monitored.	Off
TR CANCEL SW	Trunk lid opener cancel switch OFF	Off
	Trunk lid opener cancel switch ON	On
TR/BD OPEN SW	Trunk lid opener switch OFF	Off
	While the trunk lid opener switch is turned ON	On
TRNK/HAT MNTR	Trunk lid closed	Off
	Trunk lid opened	On
REVERSE SW	**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	TRUNK OPEN button of Intelligent Key is not pressed	Off
	TRUNK 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
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

Monitor Item	Condition	Value/Status
REQ SW-RL	**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	Trunk lid opener request switch is not pressed	Off
	Trunk lid opener 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	**NOTE:** The item is indicated, but not monitored.	Off
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
	The brake pedal is depressed	On
DETE/CANCL SW	Shift lever in P position	Off
	Shift lever in any position other than P	On
SFT PN/N SW	Shift lever in any position other than P and N	Off
	Shift lever in P or N position	On
S/L -LOCK	Steering is unlocked	Off
	Steering is locked	On
S/L -UNLOCK	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-F/B	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
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Shift lever in any position other than P	Off
	Shift lever in P position	On
SFT PN -IPDM	Shift lever in any position other than P and N	Off
	Shift lever in P or N position	On
SFT P -MET	Shift lever in any position other than P	Off
	Shift lever in P position	On
SFT N -MET	Shift lever in any position other than N	Off
	Shift lever in N position	On

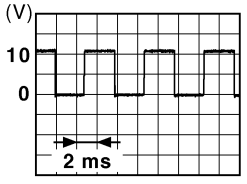
Monitor Item	Condition	Value/Status
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	Steering is unlocked	Off
	Steering is locked	On
S/L UNLK-IPDM	Steering is locked	Off
	Steering is unlocked	On
S/L RELAY-REQ	Steering lock system 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 speed-ometer reading
VEH SPEED 2	While driving	Equivalent to speed-ometer 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	Steering is locked	Reset
	Steering is unlocked	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.	—
CONFRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done

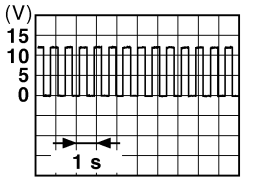
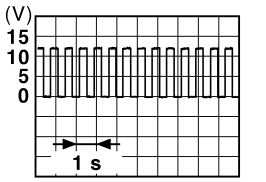
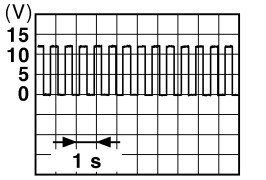
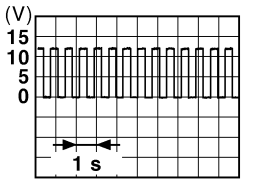
Monitor Item	Condition	Value/Status
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the first 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

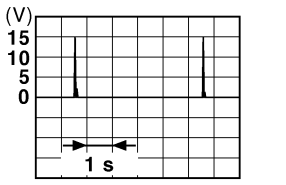
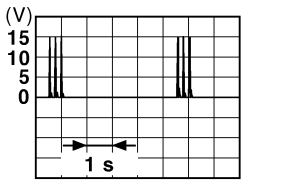
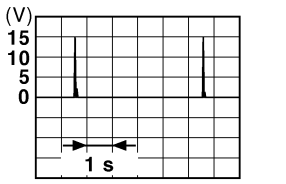
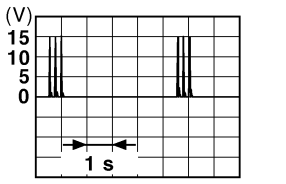
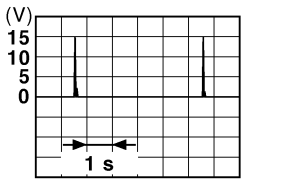
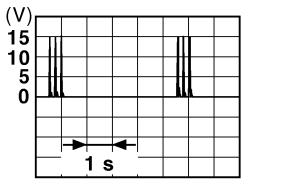
TERMINAL LAYOUT

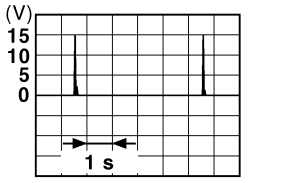
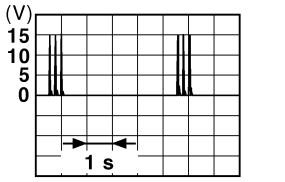
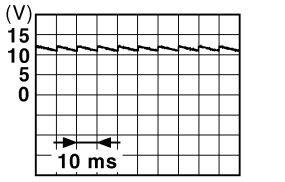
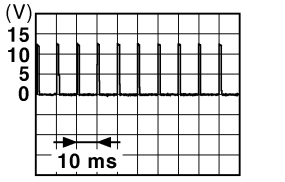


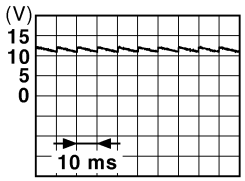
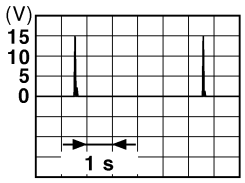
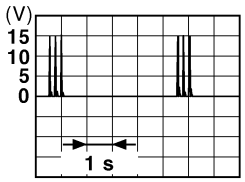
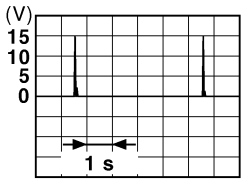
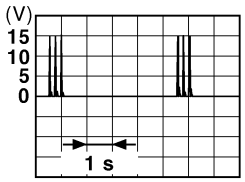
PHYSICAL VALUES

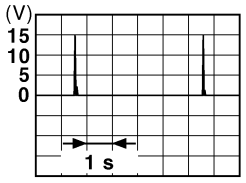
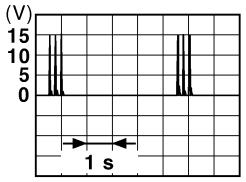
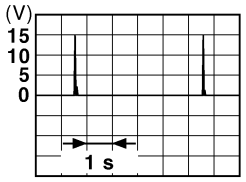
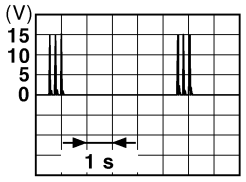
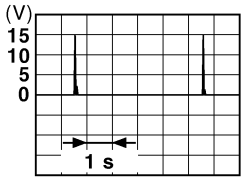
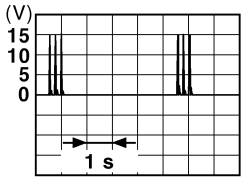
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
3 (W)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
4 (R)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0 V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
5 (G)	Ground	Passenger door UNLOCK	Output	Passenger door	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
7 (Y)	Ground	Step lamp control signal	Output	Step lamp	ON	0 V
					OFF	Battery voltage
8 (V)	Ground	All doors, fuel lid LOCK	Output	All doors, fuel lid	LOCK (Actuator is activated)	Battery voltage
					Other than LOCK (Actuator is not activated)	0 V
9 (G)	Ground	Driver door, fuel lid UNLOCK	Output	Driver door, fuel lid	UNLOCK (Actuator is activated)	Battery voltage
					Other than UNLOCK (Actuator is not activated)	0 V
11 (R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0 V
14 (P)	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 (Y)	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ACC or ON	0 V

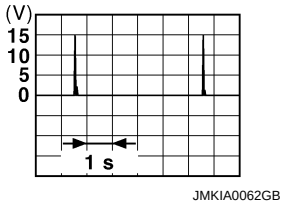
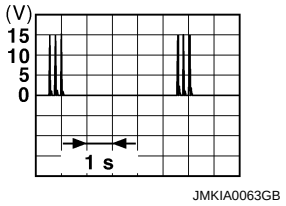
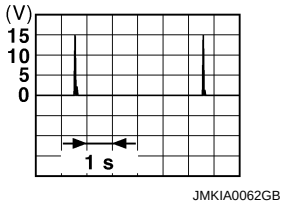
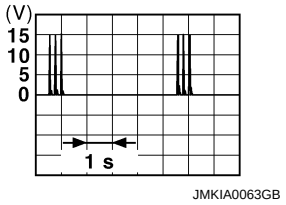
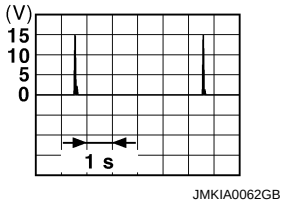
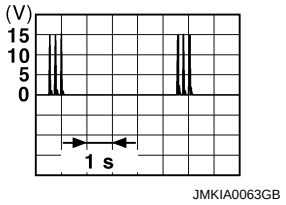
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
18 (BG)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
19 (V)	Ground	Interior room lamp control signal	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
20 (SB)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 PKID0926E 6.5 V
23 (G)	Ground	Trunk lid open	Output	Trunk lid	Open (Trunk lid opener actuator is activated)	Battery voltage
					Close (Trunk lid opener actuator is not activated)	0 V
25 (V)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 PKID0926E 6.5 V
30 (BG)	Ground	Trunk room lamp control signal	Output	Trunk room lamp	ON	0 V
					OFF	Battery voltage

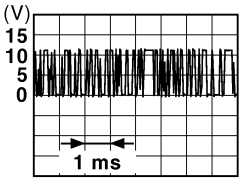
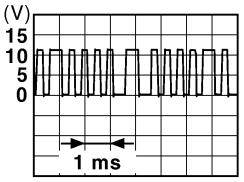
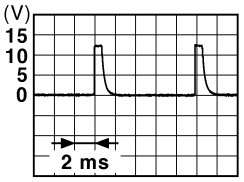
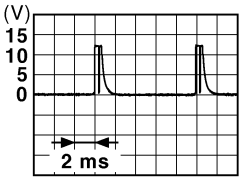
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
34 (P)	Ground	Trunk room antenna (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
35 (L)	Ground	Trunk 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 (R)	Ground	Rear bumper antenna (-)	Output	When the trunk lid opener 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

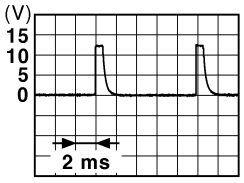
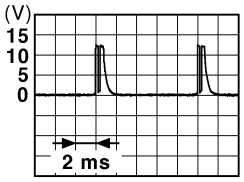
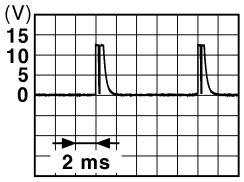
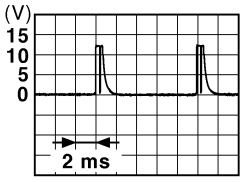
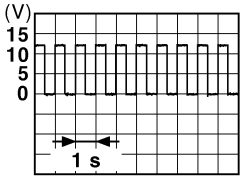
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
39 (BR)	Ground	Rear bumper antenna (+)	Output	When the trunk lid opener request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
47 (Y)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V
50 (R)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk is closed)	 JPMIA0011GB 11.8 V
					ON (Trunk is open)	0 V
52 (SB)	Ground	Starter relay control	Output	Ignition switch ON	When shift lever is in P or N position	Battery voltage
					When shift lever is not in P or N position	0 V
61 (W)	Ground	Trunk lid opener request switch	Input	Trunk lid opener request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
64 (BG)	Ground	Intelligent Key warning buzzer (Engine room)	Output	Intelligent Key warning buzzer (Engine room)	Sounding	0 V
					Not sounding	Battery voltage

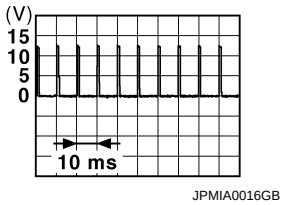
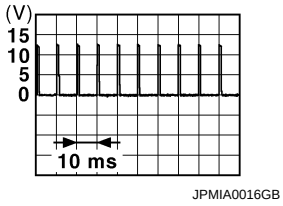
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
67 (G)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed	0 V
					Not pressed	 JPMIA0011GB 11.8 V
72 (R)	Ground	Room antenna 2 (-) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
73 (G)	Ground	Room antenna 2 (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

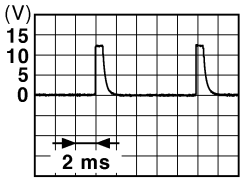
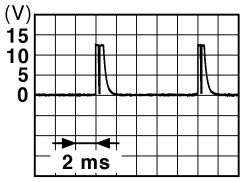
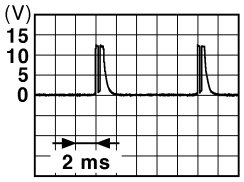
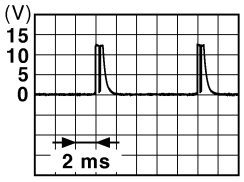
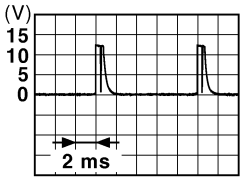
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
74 (SB)	Ground	Passenger door antenna (-)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
75 (BR)	Ground	Passenger door antenna (+)	Output	When the passenger 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
76 (V)	Ground	Driver door antenna (-)	Output	When the driver 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

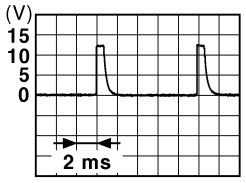
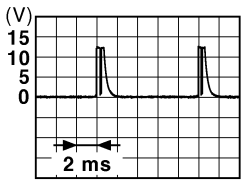
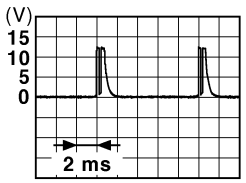
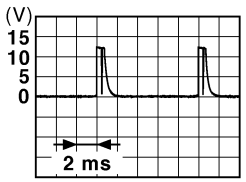
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
77 (LG)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
					When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
78 (Y)	Ground	Room antenna 1 (-) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
79 (BR)	Ground	Room antenna 1 (+) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

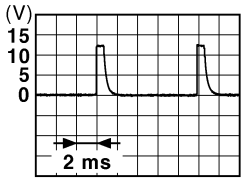
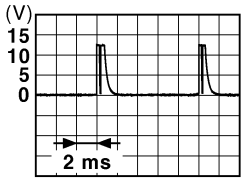
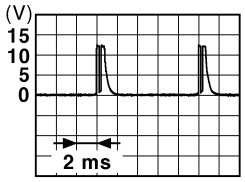
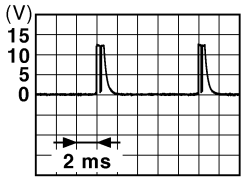
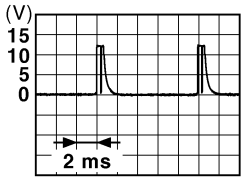
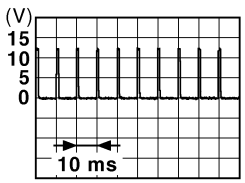
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
80 (GR)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (L)	Ground	NATS antenna amp.	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
83 (Y)	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on Intelligent Key		 JMKIA0065GB
87 (BR)	Ground	Combination switch INPUT 5	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 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

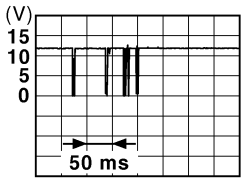
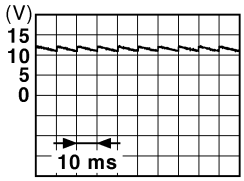
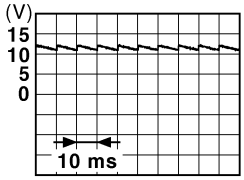
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
88 (V)	Ground	Combination switch INPUT 3	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch HI (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3 V
					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 ignition switch (push switch)	Pressed	0 V
					Not pressed	Battery voltage
90 (P)	Ground	CAN - L	Input/ Output	—		—
91 (L)	Ground	CAN - H	Input/ Output	—		—
92 (LG)	Ground	Key slot illumination	Output	Key slot illumination	OFF	Battery voltage
					Blinking	 JPMIA0015GB 6.5 V
					ON	0 V

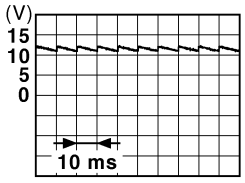
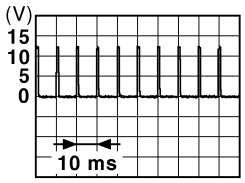
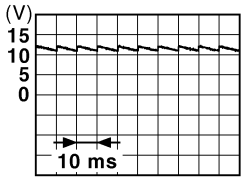
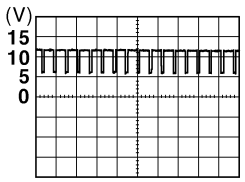
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
					ON or ACC	0 V
95 (BG)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	Battery voltage
96 (SB)	Ground	A/T shift selector (detention switch) power supply	Output	—		Battery voltage
97 (L)	Ground	Steering lock condition No. 1	Input	Steering lock	LOCK status	0 V
					UNLOCK status	Battery voltage
98 (R)	Ground	Steering lock condition No. 2	Input	Steering lock	LOCK status	Battery voltage
					UNLOCK status	0 V
99 (G)	Ground	Shift lever P position switch	Input	Shift lever	P position	0 V
					Any position other than P	Battery voltage
100 (W)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
101 (V)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	 JPMIA0016GB 1.0 V
102 (BG)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
103 (LG)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage
106 (P)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0 V

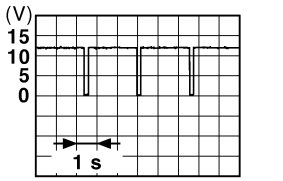
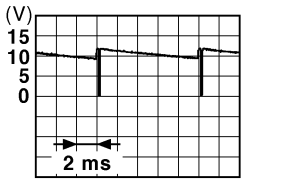
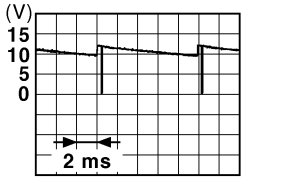
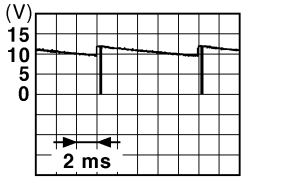
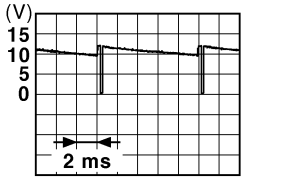
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Turn signal switch LH	 JPMIA0037GB 1.3 V
					Turn signal switch RH	 JPMIA0036GB 1.3 V
					Front wiper switch LO	 JPMIA0038GB 1.3 V
					Front washer switch ON	 JPMIA0039GB 1.3 V

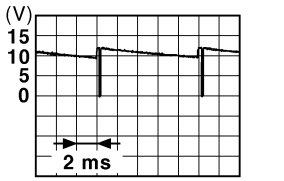
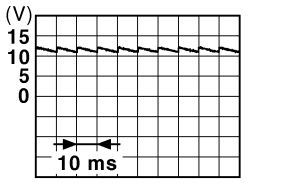
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
108 (R)	Ground	Combination switch INPUT 4	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	 JPMIA0038GB 1.3 V
					Lighting switch 1ST (Wiper intermittent dial 4)	 JPMIA0036GB 1.3 V
					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

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
109 (Y)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermittent dial 4)	All switches OFF	 JPMIA0041GB 1.4 V
					Lighting switch PASS	 JPMIA0037GB 1.3 V
					Lighting switch 2ND	 JPMIA0036GB 1.3 V
					Front wiper switch INT	 JPMIA0038GB 1.3 V
					Front wiper switch HI	 JPMIA0040GB 1.3 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	Pressed	0 V
					Not pressed	 JPMIA0012GB 1.1 V

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
111 (Y)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK status	Battery voltage
					LOCK or UNLOCK	 JMKIA0066GB
					For 15 seconds after UNLOCK	Battery voltage
					15 seconds or later after UNLOCK	0 V
113 (P)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
116 (SB)	Ground	Stop lamp switch 1	Input	—		Battery voltage
118 (P)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is depressed)	Battery voltage
119 (SB)	Ground	Driver side door lock actuator (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 JPMIA0011GB 11.8 V
					UNLOCK status (Unlock sensor switch ON)	0 V
121 (R)	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 (BR)	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
					ON	Battery voltage
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	 JPMIA0011GB 11.8 V
					ON (When passenger door opens)	0 V

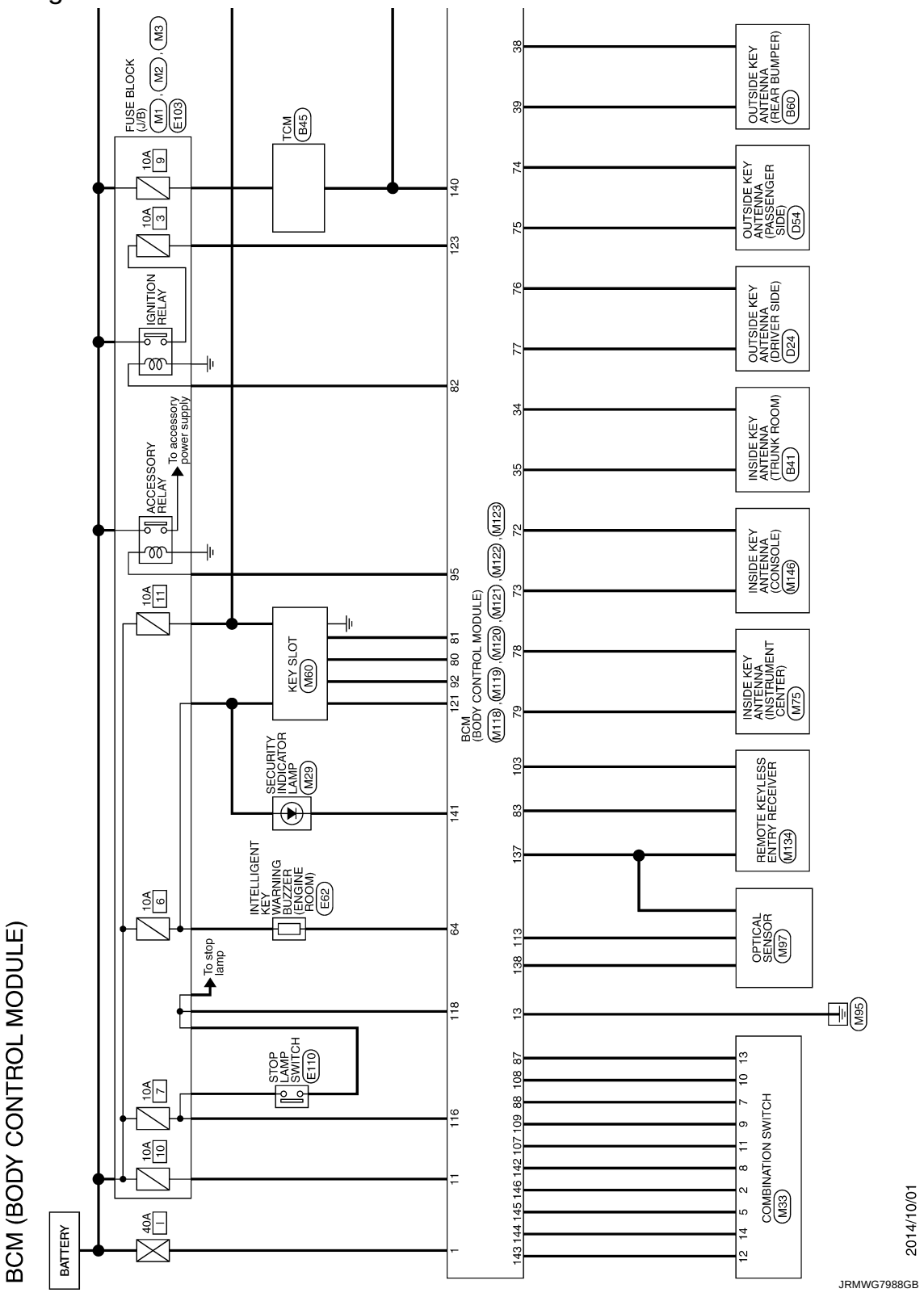
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
128 (P)	Ground	Door lock and unlock switch LOCK	Input	Door lock and unlock switch (power window main switch or power window sub-switch)	NEUTRAL position	 JPMIA0011GB 11.8 V
					LOCK position	0 V
129 (BG)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	 JPMIA0012GB 1.1 V
					ON	0 V
131 (BR)	Ground	Door lock and unlock switch UNLOCK	Input	Door lock and unlock switch (power window main switch or power window sub-switch)	NEUTRAL position	 JPMIA0011GB 11.8 V
					LOCK position	0 V
133 (W)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON (When tail lamps OFF)	5.5 V
					ON (When tail lamps ON)	**NOTE:** The pulse width of this wave is varied by the illumination brightening/dimming level.  JPMIA0159GB
					OFF	0 V
134 (GR)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON	0 V
					OFF	Battery voltage
137 (L)	Ground	Receiver and sensor ground	Input	Ignition switch ON		0 V
138 (Y)	Ground	Sensor power supply	Output	Ignition switch	OFF	0 V
					ACC or ON	5.0 V
140 (BR)	Ground	Shift lever P/N position	Input	Shift lever	P or N position	12 V
					Except P and N positions	0 V

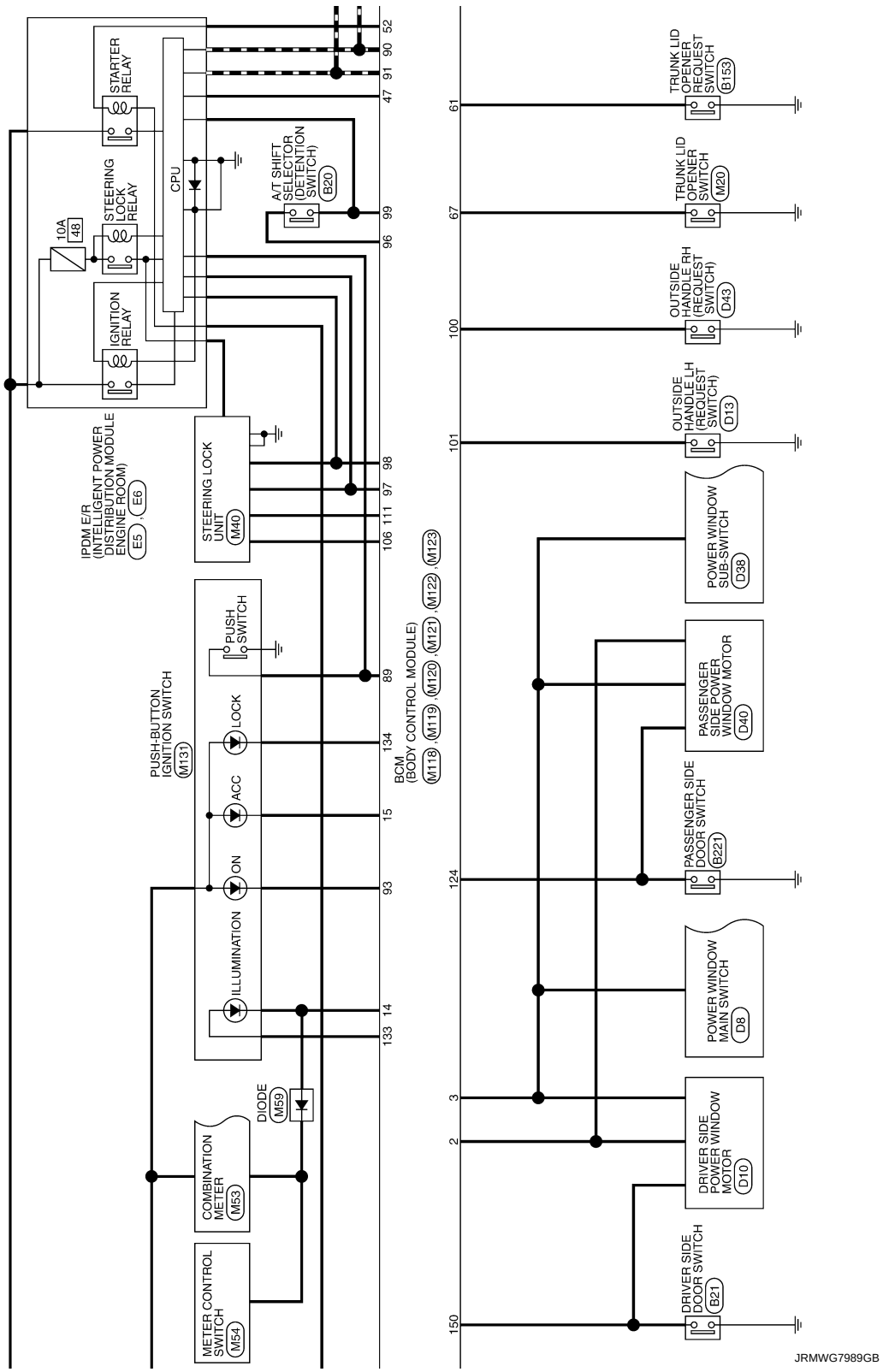
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
141 (G)	Ground	Security indicator	Output	Security indicator	ON	0 V
					Blinking	 JPMIA0014GB 11.3 V
					OFF	Battery voltage
142 (BG)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper 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 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	 JPMIA0032GB 10.7 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7	
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	 JPMIA0033GB 10.7 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	
145 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Front wiper switch INT	 JPMIA0034GB 10.7 V
					Front wiper switch LO	
					Lighting switch AUTO	

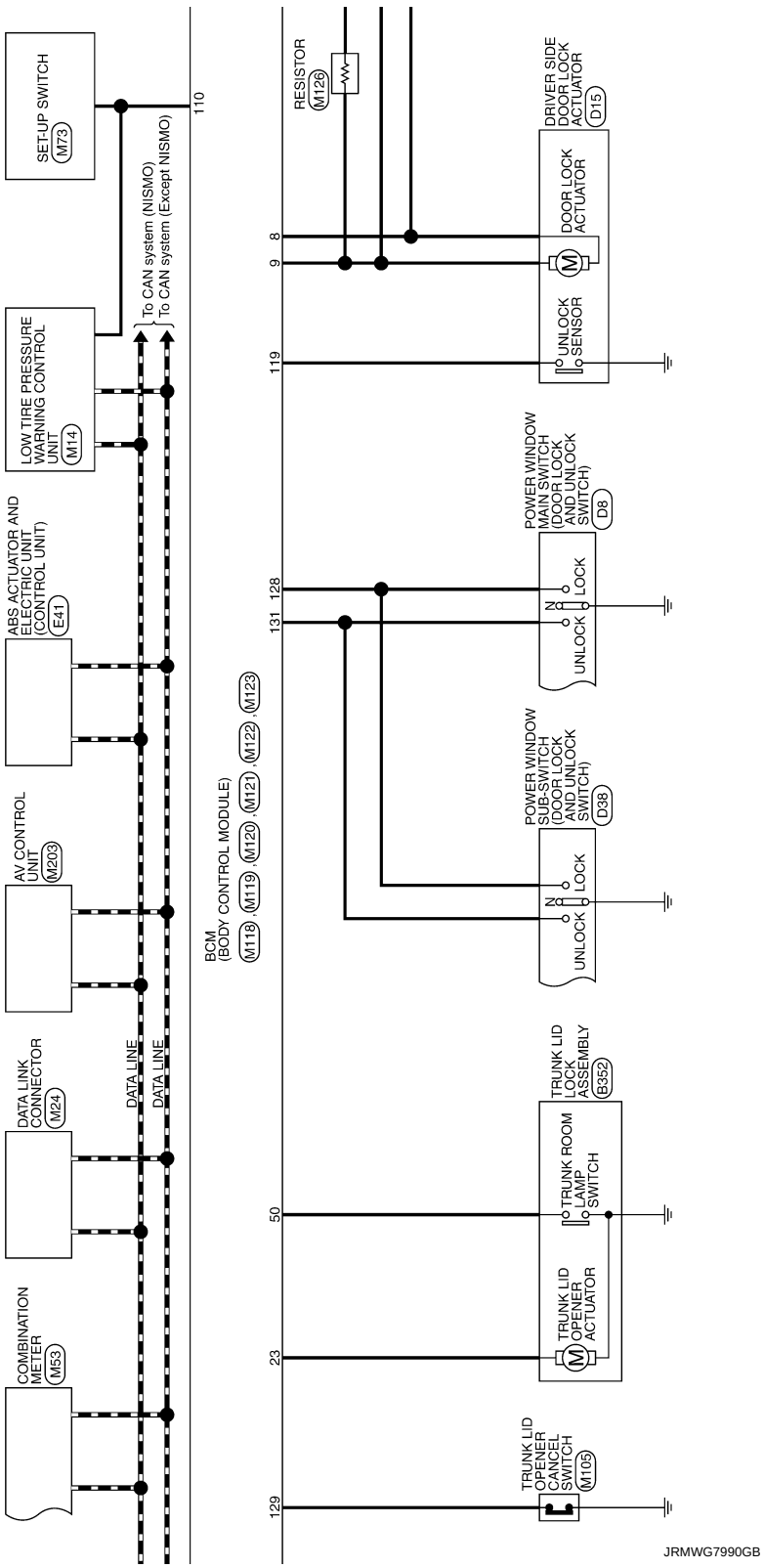
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
146 (SB)	Ground	Combination switch OUTPUT 4	Output	Combination switch (Wiper intermittent dial 4)	All switches OFF	0 V
					Lighting switch 2ND	 JPMIA0035GB 10.7 V
					Lighting switch PASS	
					Turn signal switch LH	
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	 JPMIA0011GB 11.8 V
					ON (When driver door opens)	0 V
151 (G)	Ground	Rear window defogger relay control	Output	Rear window defogger	Active	0 V
					Not activated	Battery voltage

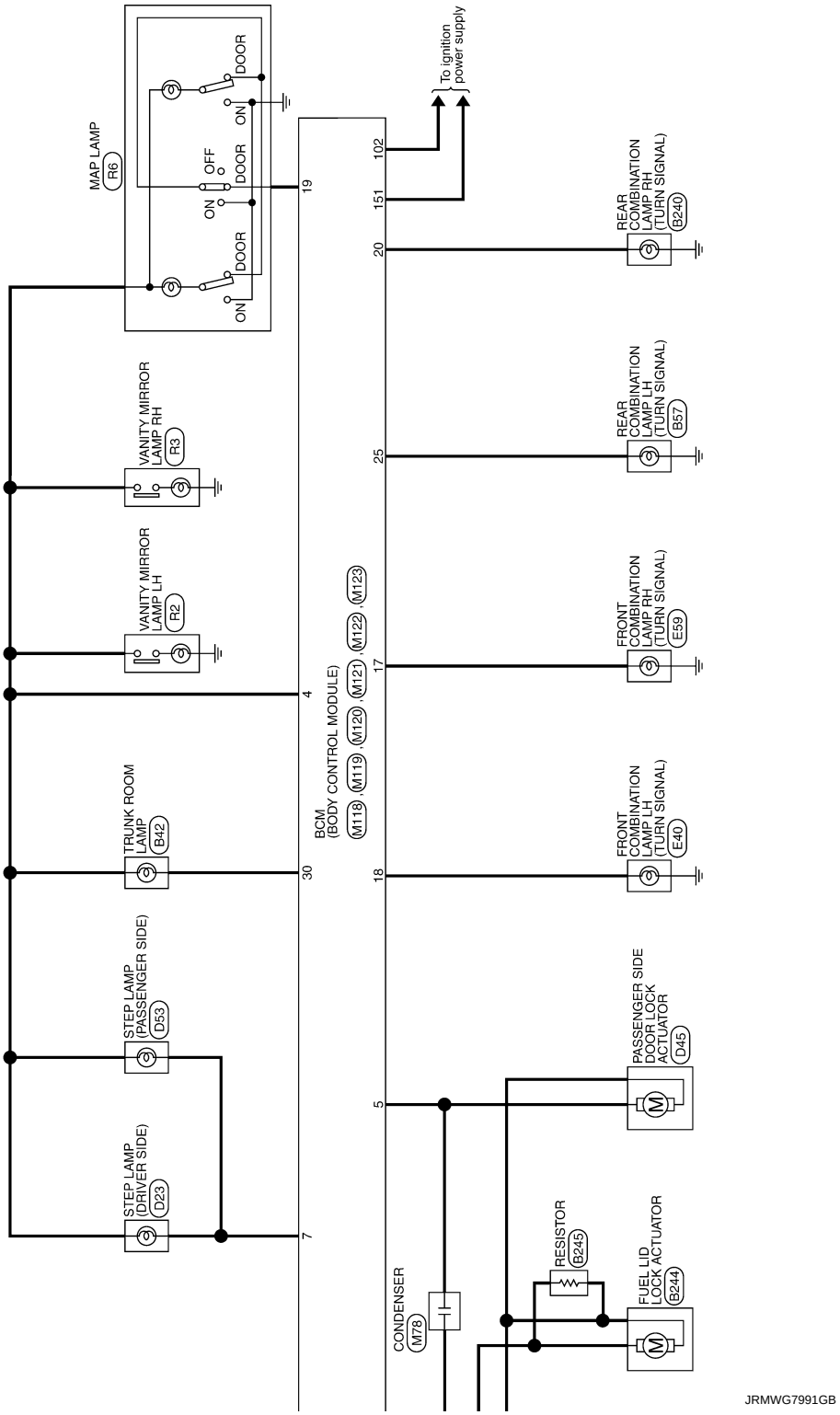
Wiring Diagram - BCM -

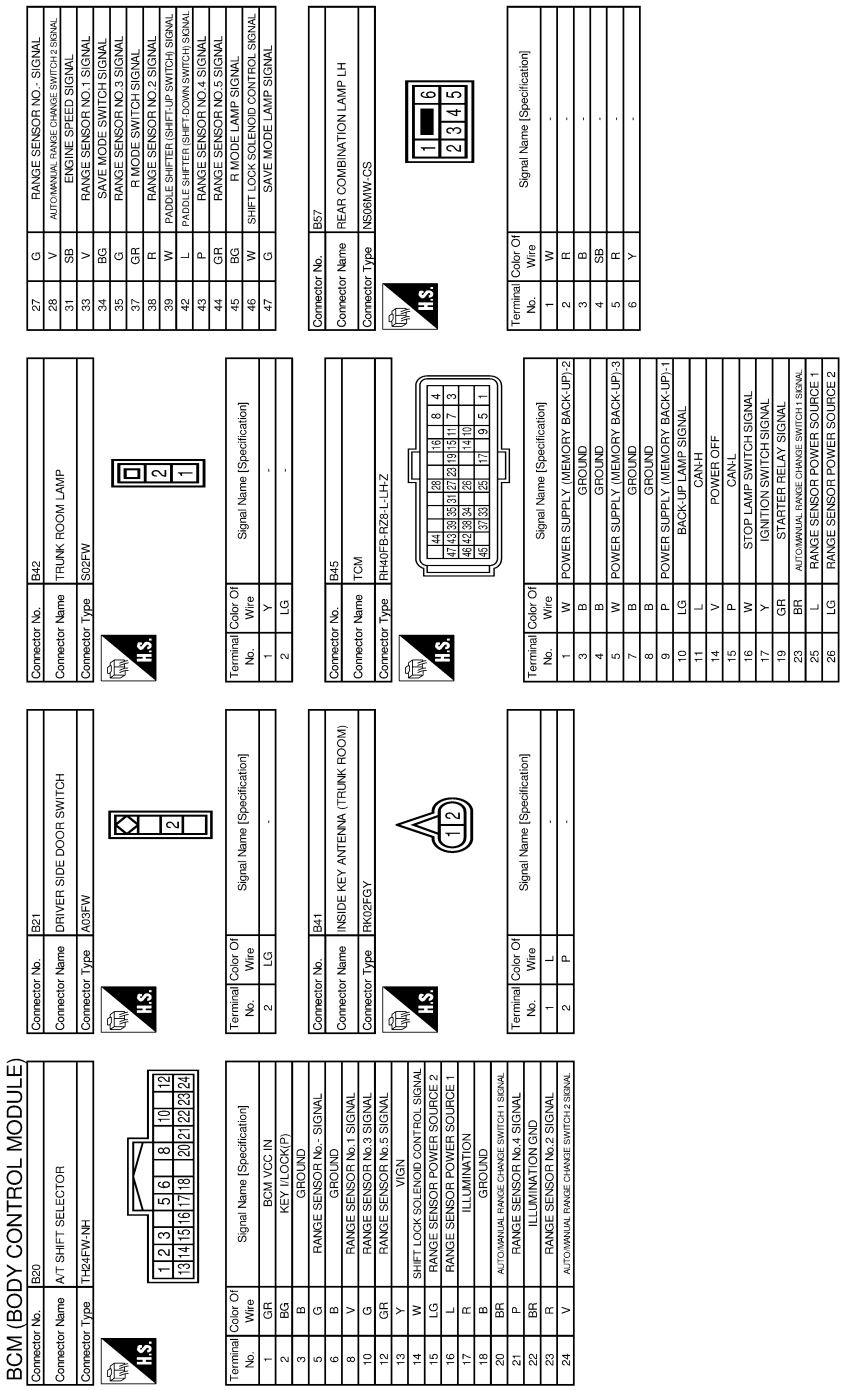
INFOID:0000000011807028




STARTER RELAY
STEERING LOCK RELAY
IGNITION RELAY
10A 48
CPU
A/T SHIFT SELECTOR (DETENTION SWITCH) B20
IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM) E5, E6
STEERING LOCK UNIT M40
PUSH-BUTTON IGNITION SWITCH M131
PUSH SWITCH
LOCK
ACC
ON
ILLUMINATION
DIODE M59
COMBINATION METER M53
METER CONTROL SWITCH M54
BCM (BODY CONTROL MODULE) M118, M119, M120, M121, M122, M123
TRUNK LID OPENER REQUEST SWITCH B153
TRUNK LID OPENER SWITCH M20
OUTSIDE HANDLE RH (REQUEST SWITCH) D43
OUTSIDE HANDLE LH (REQUEST SWITCH) D13
POWER WINDOW SUB-SWITCH D38
PASSENGER SIDE POWER WINDOW MOTOR D40
PASSENGER SIDE DOOR SWITCH B221
POWER WINDOW MAIN SWITCH D8
DRIVER SIDE POWER WINDOW MOTOR D10
DRIVER SIDE DOOR SWITCH B21
JRMWG7989GB


SET-UP SWITCH (M73)
110
To CAN system (NISMO)
To CAN system (Except NISMO)
LOW TIRE PRESSURE WARNING CONTROL UNIT (M14)
ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) (E41)
AV CONTROL UNIT (M203)
DATA LINK CONNECTOR (M24)
DATA LINE
DATA LINE
COMBINATION METER (M53)
BCM (BODY CONTROL MODULE)
(M118) (M119) (M120) (M121) (M122) (M123)
RESISTOR (M126)
DRIVER SIDE DOOR LOCK ACTUATOR (D15)
DOOR LOCK ACTUATOR
UNLOCK SENSOR
POWER WINDOW MAIN SWITCH (DOOR LOCK AND UNLOCK SWITCH) (D8)
POWER WINDOW SUB SWITCH (DOOR LOCK AND UNLOCK SWITCH) (D38)
N
LOCK
UNLOCK
TRUNK LID LOCK ASSEMBLY (B352)
TRUNK ROOM LAMP SWITCH
TRUNK LID OPENER ACTUATOR
TRUNK LID OPENER CANCEL SWITCH (M105)
8
9
119
128
131
50
23
129
JRMWG7990GB


MAP LAMP
R6
DOOR
ON
OFF
DOOR
ON
DOOR
ON
To ignition power supply
102
151
19
20
REAR COMBINATION LAMP RH (TURN SIGNAL)
B240
VANITY MIRROR LAMP RH
R3
REAR COMBINATION LAMP LH (TURN SIGNAL)
B57
25
VANITY MIRROR LAMP LH
R2
FRONT COMBINATION LAMP RH (TURN SIGNAL)
E59
17
4
BCM (BODY CONTROL MODULE)
M118 M119 M120 M121 M122 M123
TRUNK ROOM LAMP
B42
FRONT COMBINATION LAMP LH (TURN SIGNAL)
E40
18
30
STEP LAMP (PASSENGER SIDE)
D53
PASSENGER SIDE DOOR LOCK ACTUATOR
D45
5
STEP LAMP (DRIVER SIDE)
D23
RESISTOR
B245
FUEL LID LOCK ACTUATOR
B244
CONDENSER
M78
7
JRMWG7991GB



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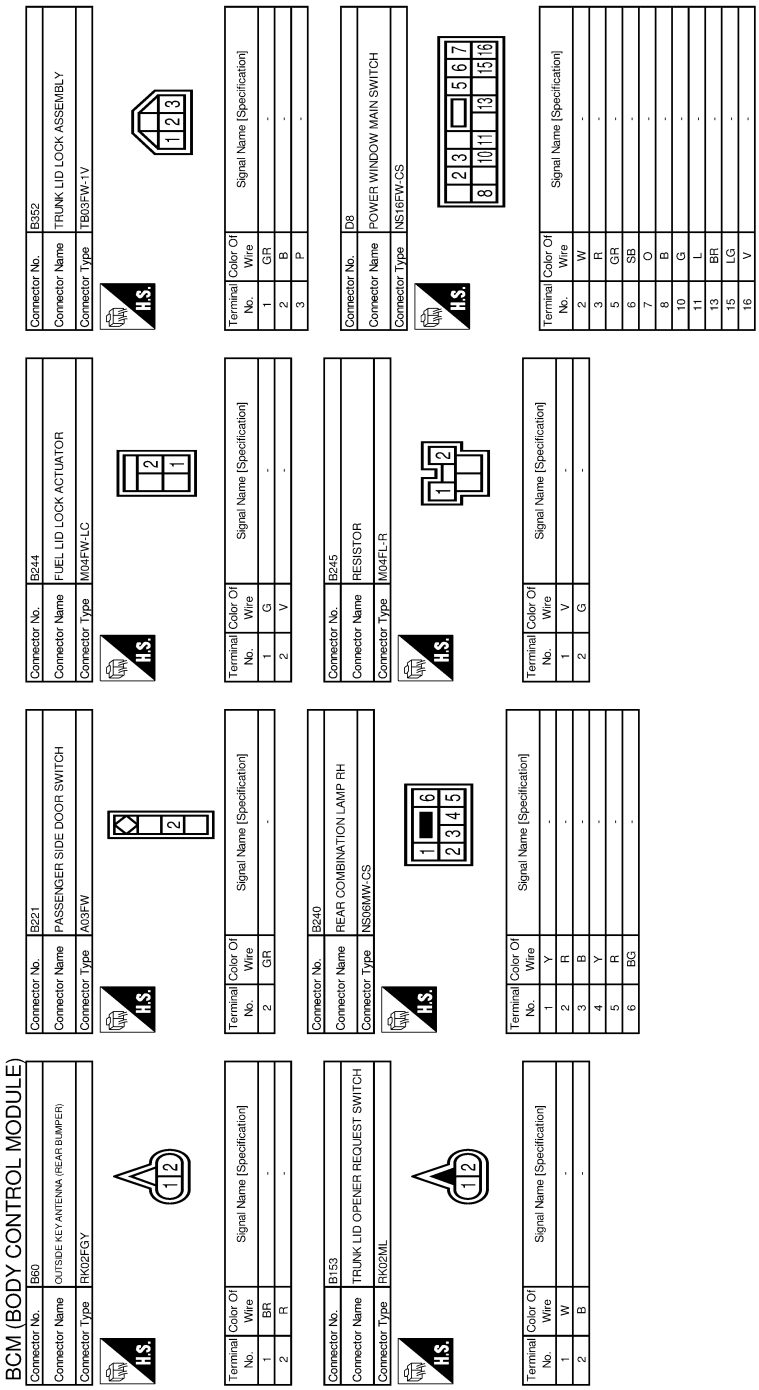

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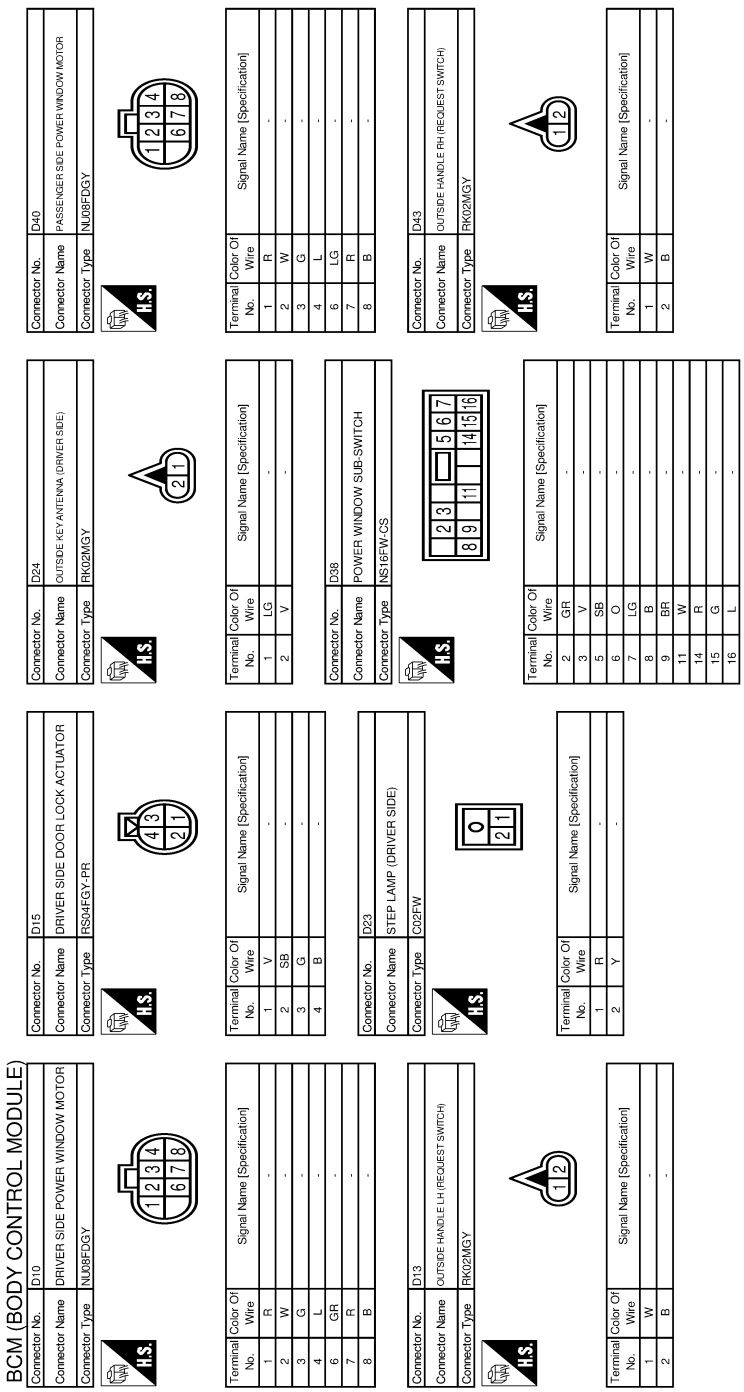

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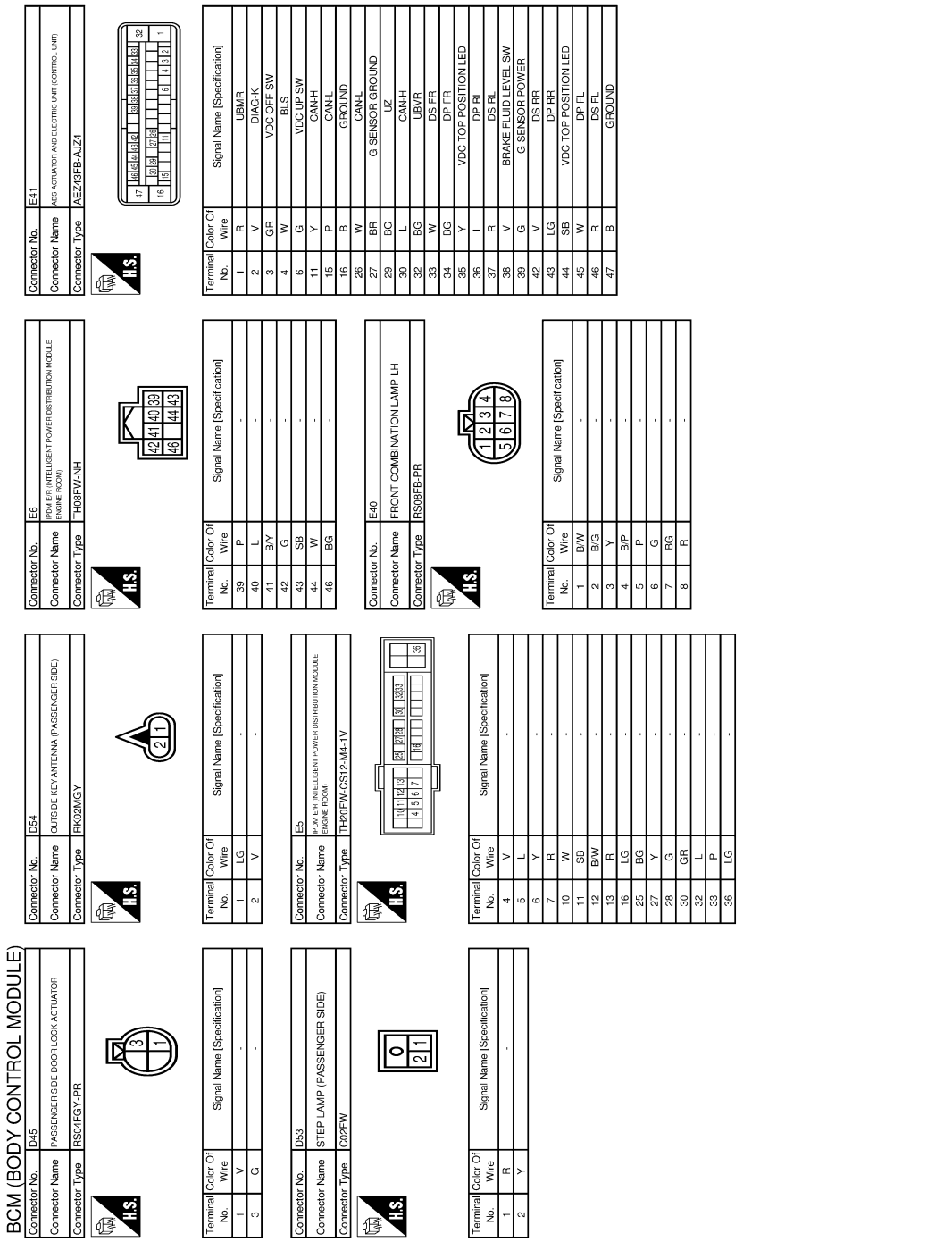

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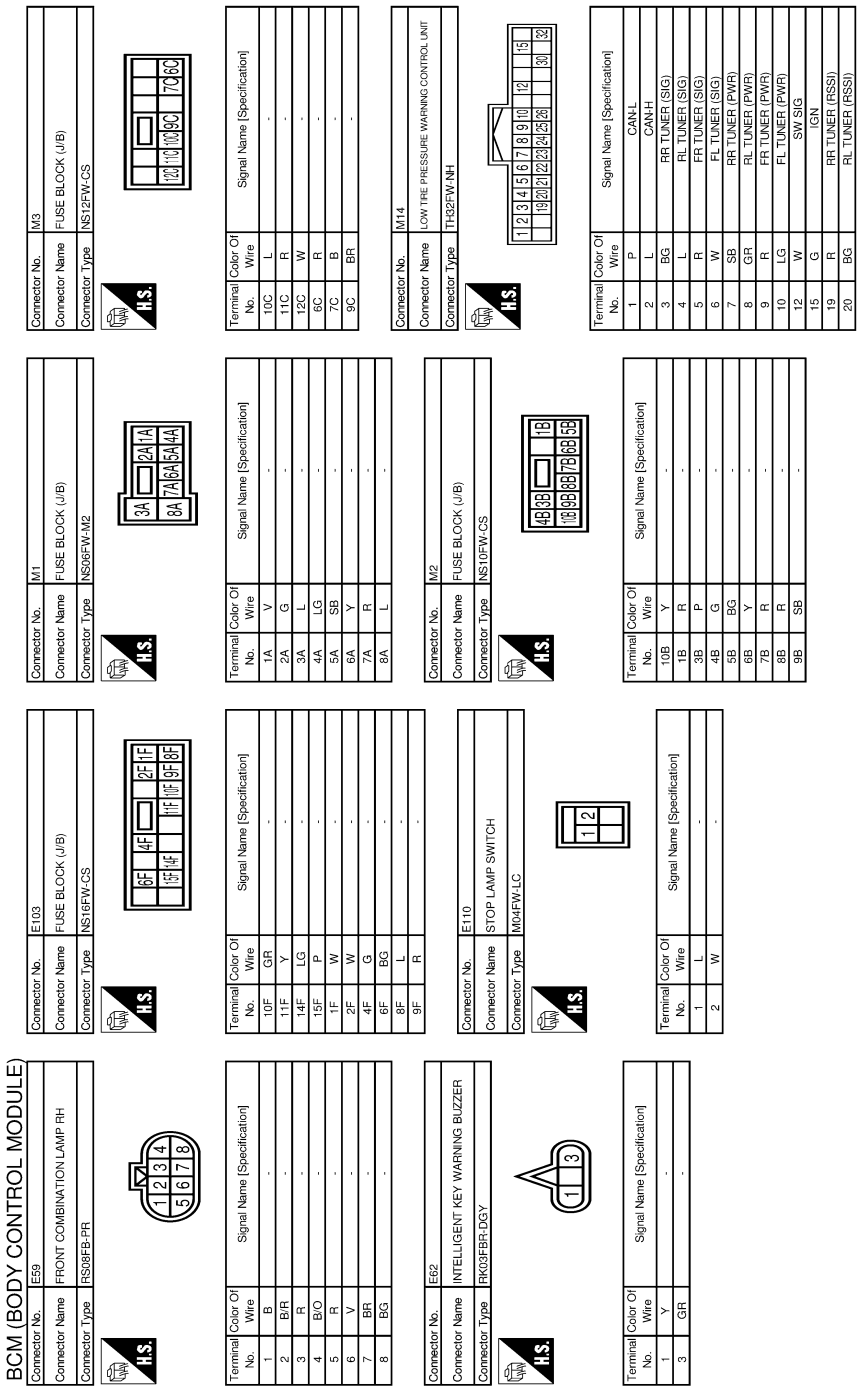

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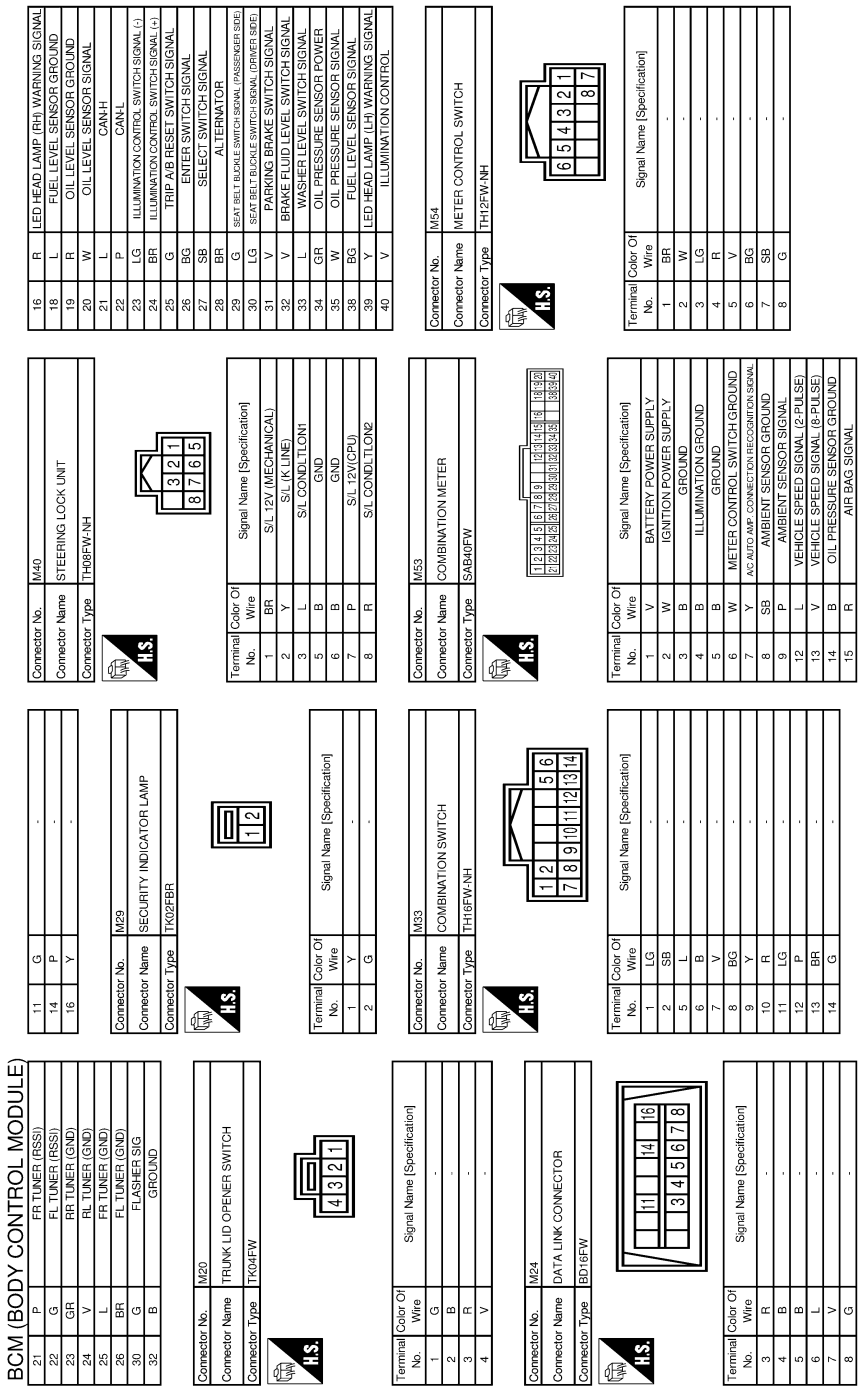

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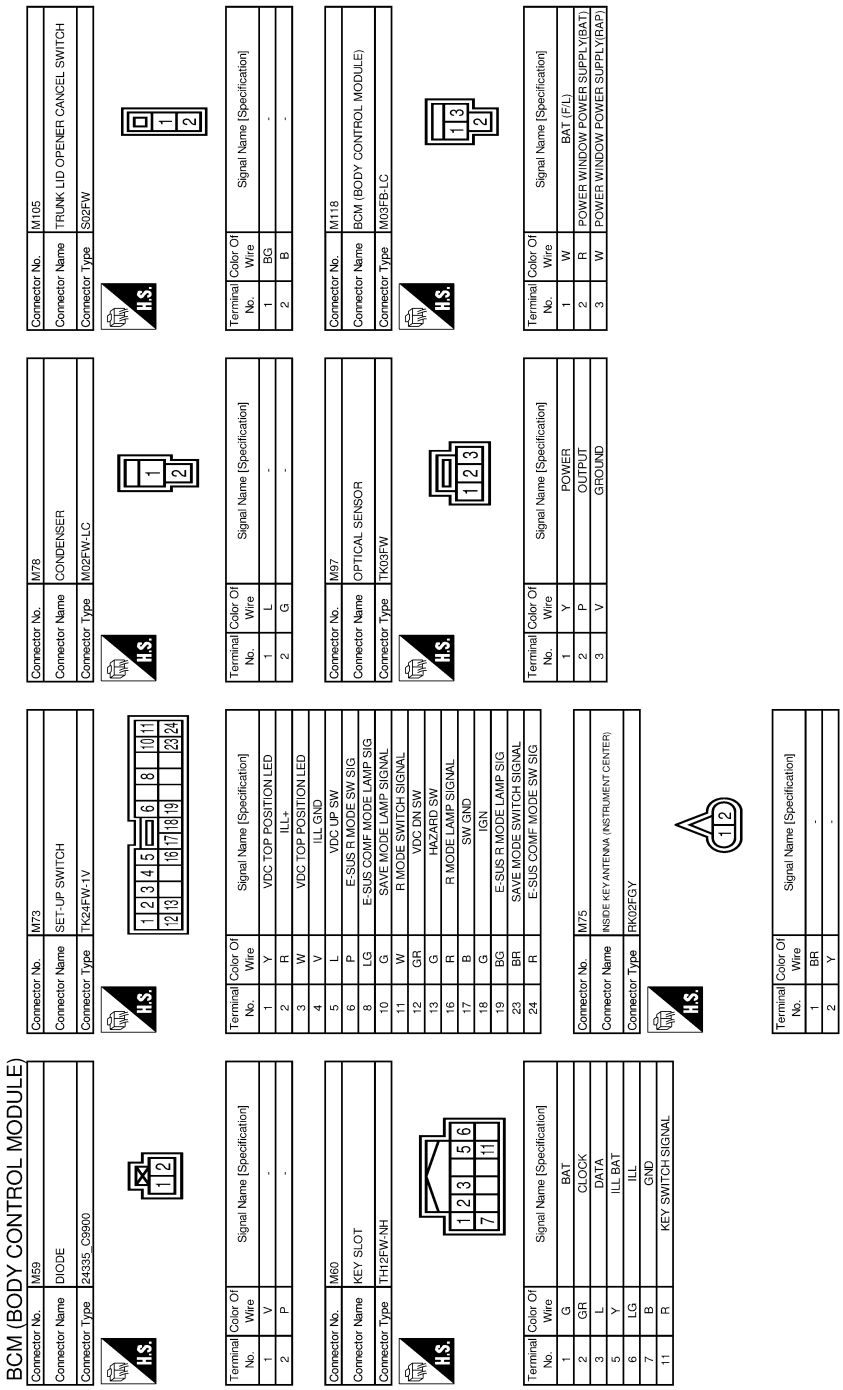
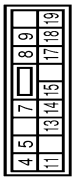


JRMWG7998GB

BCM (BODY CONTROL MODULE)

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

H.S.



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

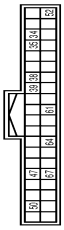
Connector No.	M120
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	NS12FW-CS

H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
20	SB	TURN SIGNAL RH (REAR) OUTPUT
23	G	TRUNK LID OPEN OUTPUT
25	V	TURN SIGNAL LH (REAR) OUTPUT
30	BG	TRUNK ROOM LAMP OUTPUT

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

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
34	P	TRUNK ROOM ANT-
35	L	TRUNK ROOM ANT+
38	R	REAR BUMPER ANT-
39	BR	REAR BUMPER ANT+
47	Y	IGN RELAY (IPDM E/R) CONT
50	R	TRUNK ROOM LAMP SW
52	SB	STARTER RELAY CONT
61	W	TRUNK LID REQUEST SW
64	BG	I-KEY WARN BUZZER (ENG ROOM)
67	G	TRUNK LID OPENER SW

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

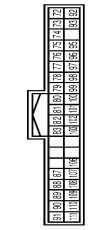
H.S.

Terminal No.	Color Of Wire	Signal Name [Specification]
72	R	ROOM ANT2-
73	G	ROOM ANT2+
74	SB	PASSENGER DOOR ANT-
75	BR	PASSENGER DOOR ANT+
76	V	DRIVER DOOR ANT-
77	LG	DRIVER DOOR ANT+
78	Y	ROOM ANT1-
79	BR	ROOM ANT1+
80	GR	IMMOBI ANTENNA CONTROL
81	L	IMMOBI ANTENNA SIGNAL

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

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

H.S.



Terminal No.	Color Of Wire	Signal Name [Specification]
113	P	OPTICAL SENSOR
116	SB	STOP LAMP SW 1
118	P	STOP LAMP SW 2
119	SB	DR DOOR UNLOCK SENSOR
121	R	KEY SLOT SW
123	BR	IGN F/B
124	LG	PASSENGER DOOR SW
128	P	DOOR LOCK/UNLOCK SW LOCK
129	BG	TRUNK CANCEL SW
131	BR	DOOR LOCK/UNLOCK SW UNLOCK

133	W	PUSH-BUTTON IGNITION SW ILL POWER
134	GR	LOCK IND
137	L	RECEIVER GND
138	Y	RECEIVER/SENSOR POWER SUPPLY
140	BR	SHIFT N/P
141	G	SECURITY INDICATOR
142	BG	COMBI SW OUTPUT 5
143	P	COMBI SW OUTPUT 1
144	G	COMBI SW OUTPUT 2
145	L	COMBI SW OUTPUT 3
146	SB	COMBI SW OUTPUT 4
150	GR	DRIVER DOOR SW
151	G	REAR WINDOW DEFOGGER RELAY CONT

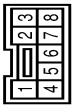
Connector No.	M126
Connector Name	RESISTOR
Connector Type	M04FL-R

H.S.

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

Connector No.	M131
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FBR

H.S.



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

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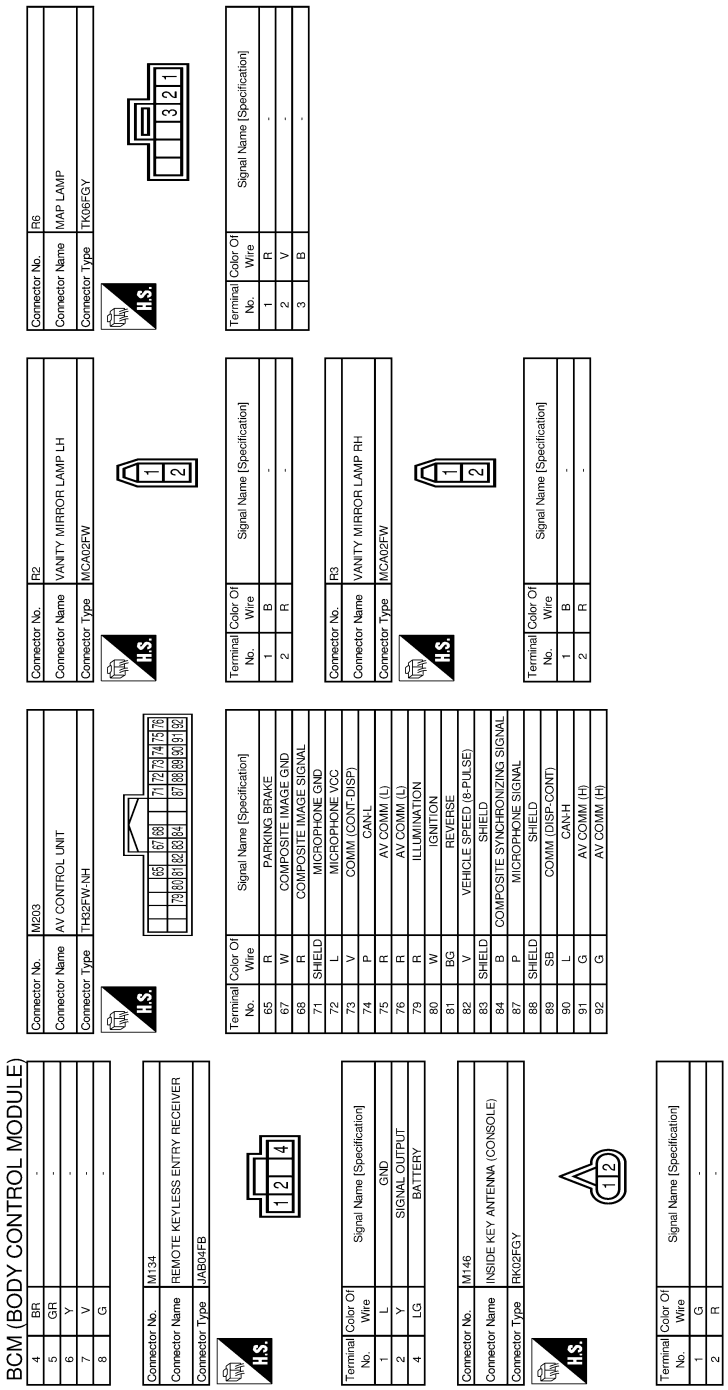

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Fail-safe

INFOID:0000000011807029

FAIL-SAFE CONTROL BY DTC

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

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 • Shift 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 • Shift 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 • Shift lever P position switch signal: Except P position (Battery voltage) • Shift lever P/N position signal: Except P and N positions (0 V)
B2604: PNP/CLUTCH 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 - Shift 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 - Shift lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF
B2605: PNP/CLUTCH 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 - Shift 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 - Shift 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)
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)

Display contents of CONSULT	Fail-safe	Cancellation
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: BCM	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 (0 V) • Steering condition No. 2 signal: LOCK (Battery voltage)

DTC Inspection Priority Chart

INFOID:0000000011807030

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

Priority	DTC
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/CLUTCH SW • B2605: PNP/CLUTCH 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: BCM • B2615: BCM • B2616: BCM • B2617: BCM • B2618: BCM • B2619: BCM • B261A: PUSH-BTN IGN SW • B261E: VEHICLE TYPE • B26E9: S/L STATUS • B26EA: KEY REGISTRATION • U0415: VEHICLE SPEED
5	• B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA • B2623: INSIDE ANTENNA
6	B26E7: TPMS CAN COMM

DTC Index

INFOID:0000000011807031

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 BCS-17, "COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Reference page
No DTC is detected. Further testing may be required.	—	—	—	—
U1000: CAN COMM	—	—	—	BCS-36
U1010: CONTROL UNIT (CAN)	—	—	—	BCS-37
U0415: VEHICLE SPEED	—	—	—	BCS-38
B2013: ID DISCORD BCM-S/L	×	×	—	SEC-48
B2014: CHAIN OF S/L-BCM	×	×	—	SEC-49
B2190: NATS ANTENNA AMP	×	—	—	SEC-40

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Reference page
B2191: DIFFERENCE OF KEY	×	—	—	SEC-43
B2192: ID DISCORD BCM-ECM	×	—	—	SEC-44
B2193: CHAIN OF BCM-ECM	×	—	—	SEC-46
B2195: ANTI-SCANNING	×	—	—	SEC-47
B2553: IGNITION RELAY	—	×	—	PCS-50
B2555: STOP LAMP	—	×	—	SEC-52
B2556: PUSH-BTN IGN SW	—	×	×	SEC-54
B2557: VEHICLE SPEED	×	×	×	SEC-56
B2560: STARTER CONT RELAY	×	×	×	SEC-57
B2562: LOW VOLTAGE	—	×	—	BCS-39
B2601: SHIFT POSITION	×	×	×	SEC-58
B2602: SHIFT POSITION	×	×	×	SEC-61
B2603: SHIFT POSI STATUS	×	×	×	SEC-63
B2604: PNP/CLUTCH SW	×	×	×	SEC-65
B2605: PNP/CLUTCH SW	×	×	×	SEC-67
B2606: S/L RELAY	×	×	×	SEC-69
B2607: S/L RELAY	×	×	×	SEC-70
B2608: STARTER RELAY	×	×	×	SEC-72
B2609: S/L STATUS	×	×	×	SEC-74
B260A: IGNITION RELAY	×	×	×	PCS-52
B260B: STEERING LOCK UNIT	—	×	×	SEC-78
B260C: STEERING LOCK UNIT	—	×	×	SEC-79
B260D: STEERING LOCK UNIT	—	×	×	SEC-80
B260F: ENG STATE SIG LOST	×	×	×	SEC-81
B2612: S/L STATUS	×	×	×	SEC-84
B2614: BCM	—	×	×	PCS-54
B2615: BCM	—	×	×	PCS-56
B2616: BCM	—	×	×	PCS-58
B2617: BCM	×	×	×	SEC-88
B2618: BCM	×	×	×	PCS-60
B2619: BCM	×	×	×	SEC-90
B261A: PUSH-BTN IGN SW	—	×	×	SEC-91
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	SEC-93
B2621: INSIDE ANTENNA	—	×	—	DLK-56
B2622: INSIDE ANTENNA	—	×	—	DLK-58
B2623: INSIDE ANTENNA	—	×	—	DLK-60
B26E7: TPMS CAN COMM	—	—	—	BCS-40
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	SEC-82
B26EA: KEY REGISTRATION	—	×	× (Turn ON for 15 seconds)	SEC-83

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

Reference Value

INFOID:0000000011807032

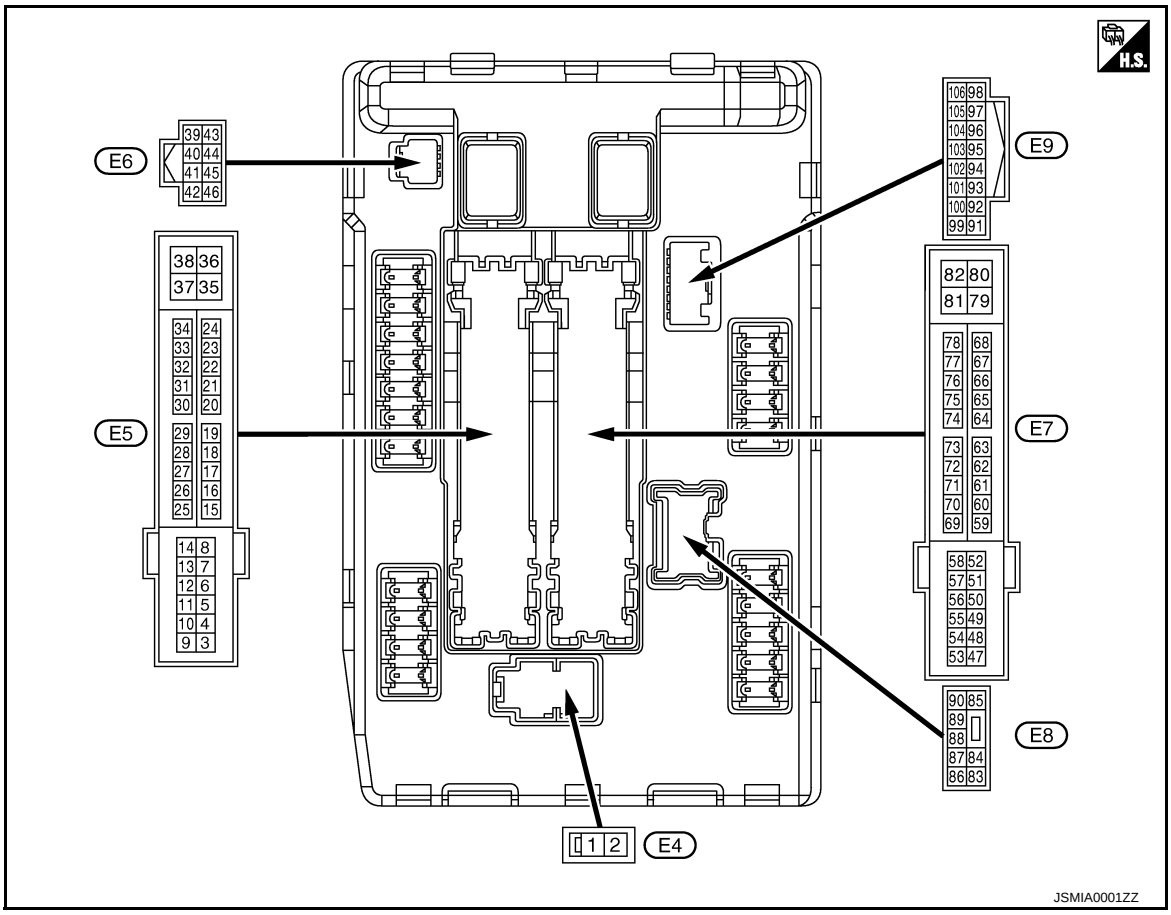
VALUES ON THE DIAGNOSIS TOOL

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

Monitor Item	Condition		Value/Status
RAD FAN REQ	Engine idle speed	Changes depending on engine coolant temperature, air conditioner operation status, vehicle speed, etc.	0 - 100 %
AC COMP REQ	Engine running	A/C switch OFF	Off
		A/C switch ON (Compressor is operating)	On
TAIL&CLR REQ	Lighting switch OFF		Off
	Lighting switch 1ST, 2ND or HI		On
HL LO REQ	Lighting switch OFF		Off
	Lighting switch 2ND or HI		On
HL HI REQ	Lighting switch OFF		Off
	Lighting switch HI		On
FR FOG REQ	Daytime running light system is not operated		Off
	Daytime running light system is operated		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	Shift lever in any position other than P or N	Off
	Ignition switch ON	Shift 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

Monitor Item	Condition		Value/Status
ST/INHI RLY	Ignition switch ON		Off
	At engine cranking		INHI → 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 knob button with shift lever in P position • Shift lever in any position other than P	Off
	Release the knob button with shift lever in P position		On
S/L RLY -REQ	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	Steering lock is activated		LOCK
	Steering lock is deactivated		UNLOCK
	[DTC: B210A] is detected		UNKWN
DTRL REQ	Lighting switch OFF		Off
	Lighting switch 1ST, 2ND, HI or AUTO (Light is illuminated)		On
OIL P SW	**NOTE:** The item is indicated, but not monitored.		Open
HOOD SW	Close the hood		Off
	Open the hood		On
HL WASHER REQ	**NOTE:** The item is indicated, but not monitored.		Off
THFT HRN REQ	Not 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) • Door locking with key fob (horn chirp mode)		On
CRNRNG LMP REQ	**NOTE:** The item is indicated, but not monitored.		Off

TERMINAL LAYOUT

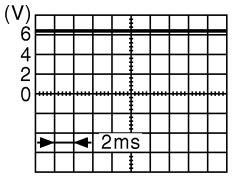
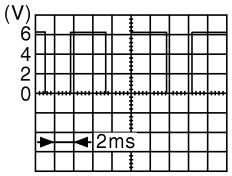
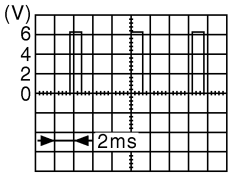


PHYSICAL VALUES

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (Y)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
4 (V)	Ground	Front wiper LO	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch LO	Battery voltage
5 (L)	Ground	Front wiper HI	Output	Ignition switch ON	Front wiper switch OFF	0 V
					Front wiper switch HI	Battery voltage
6 (Y)	Ground	Daytime running light relay power supply	Input	Ignition switch ON	Lighting switch OFF	Battery voltage
					Lighting switch 1ST	0 V
7 (R)	Ground	Illuminations	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 1ST	Battery voltage
10 (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 ignition switch OFF)		Battery voltage

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
11 (SB)	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/W)	Ground	Ground	—	Ignition switch ON		0 V
13 (R)	Ground	Fuel pump power supply	Output	Ignition switch OFF		0 V
				• Ignition switch ON • Engine running		Battery voltage
16 (LG)	Ground	Front wiper stop position	Input	Ignition switch ON	Front wiper stop position	0 V
					Any position other than front wiper stop position	Battery voltage
25 (O)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
27 (Y)	Ground	Ignition relay monitor	Input	Ignition switch OFF or ACC		Battery voltage
				Ignition switch ON		0 V
28 (G)	Ground	Push-button ignition switch	Input	Press the push-button ignition switch		0 V
				Release the push-button ignition switch		Battery voltage
30 (GR)	Ground	Starter relay control	Input	Shift lever in any position other than P or N (Ignition switch ON)		0.4 V
				Shift lever P or N (Ignition switch ON)		Battery voltage
32 (L)	Ground	Steering lock unit condition-1	Input	Steering lock is activated		0 V
				Steering lock is deactivated		Battery voltage
33 (P)	Ground	Steering lock unit condition-2	Input	Steering lock is activated		Battery voltage
				Steering lock is deactivated		0 V
36 (LG)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
39 (P)	—	CAN-L	Input/ Output	—		—
40 (L)	—	CAN-H	Input/ Output	—		—
41 (B/Y)	Ground	Ground	—	Ignition switch ON		0 V
42 (G)	Ground	Cooling fan relay control	Input	Ignition switch OFF or ACC		Battery voltage
				Ignition switch ON		0.7 V
43 (SB)	Ground	A/T shift selector (Detention switch)	Input	Ignition switch ON	• Press the knob button (Shift lever P) • Shift lever in any position other than P	Battery voltage
					Release the knob button (Shift lever P)	0 V
44 (W)	Ground	Horn relay control	Input	The horn is deactivated		Battery voltage
				The horn is activated		0 V
46 (O)	Ground	Starter relay control	Input	Shift lever in any position other than P or N (Ignition switch ON)		0 V
				Shift lever P or N (Ignition switch ON)		Battery voltage

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
48 (L)	Ground	A/C relay power supply	Output	Engine running	A/C switch OFF	0 V
					A/C switch ON (A/C compressor is operating)	Battery voltage
49 (P)	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
51 (LG)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
53 (SB)	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
54 (W)	Ground	Throttle control motor 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
55 (O)	Ground	ECM power supply	Output	Ignition switch OFF		Battery voltage
56 (R)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
57 (G)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
58 (Y)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
69 (O)	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 ignition switch OFF)		0 - 1.5 V
70 (G)	Ground	Throttle control motor relay control	Output	Ignition switch ON → OFF		0 -1.0 V ↓ Battery voltage ↓ 0 V
				Ignition switch ON		0 - 1.0 V
71 (SB)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
74 (LG)	Ground	Ignition relay power supply	Output	Ignition switch OFF		0 V
				Ignition switch ON		Battery voltage
76 (P)	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 (B/W)	Ground	Fuel pump relay control	Output	• Ignition switch ON • Engine running		0 V
80 (W)	Ground	Starter motor	Output	At engine cranking		Battery voltage
83 (R)	Ground	Headlamp LO (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 2ND	Battery voltage
84 (P)	Ground	Headlamp LO (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					Lighting switch 2ND	Battery voltage
86* (W)	Ground	Daytime running light (RH)	Output	Daytime running light system	Not operated	0 V
					Operated	Battery voltage
87* (L)	Ground	Daytime running light (LH)	Output	Daytime running light system	Not operated	0 V
					Operated	Battery voltage
88 (G)	Ground	Washer pump power supply	Output	Ignition switch ON		Battery voltage
89 (BR)	Ground	Headlamp HI (RH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					• Lighting switch HI • Lighting switch PASS	Battery voltage
90 (O)	Ground	Headlamp HI (LH)	Output	Ignition switch ON	Lighting switch OFF	0 V
					• Lighting switch HI • Lighting switch PASS	Battery voltage

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	–					
97 (Y)	Ground	Cooling fan control	Output	Engine idling		0 - 5 V
104 (LG)	Ground	Hood switch	Input	Close the hood		Battery voltage
				Open the hood		0 V
105 (GR)	Ground	Daytime running light relay control	Input	Ignition switch ON	Lighting switch OFF	Battery voltage
					Lighting switch 1ST	0 V

Wiring Diagram - IPDM E/R -

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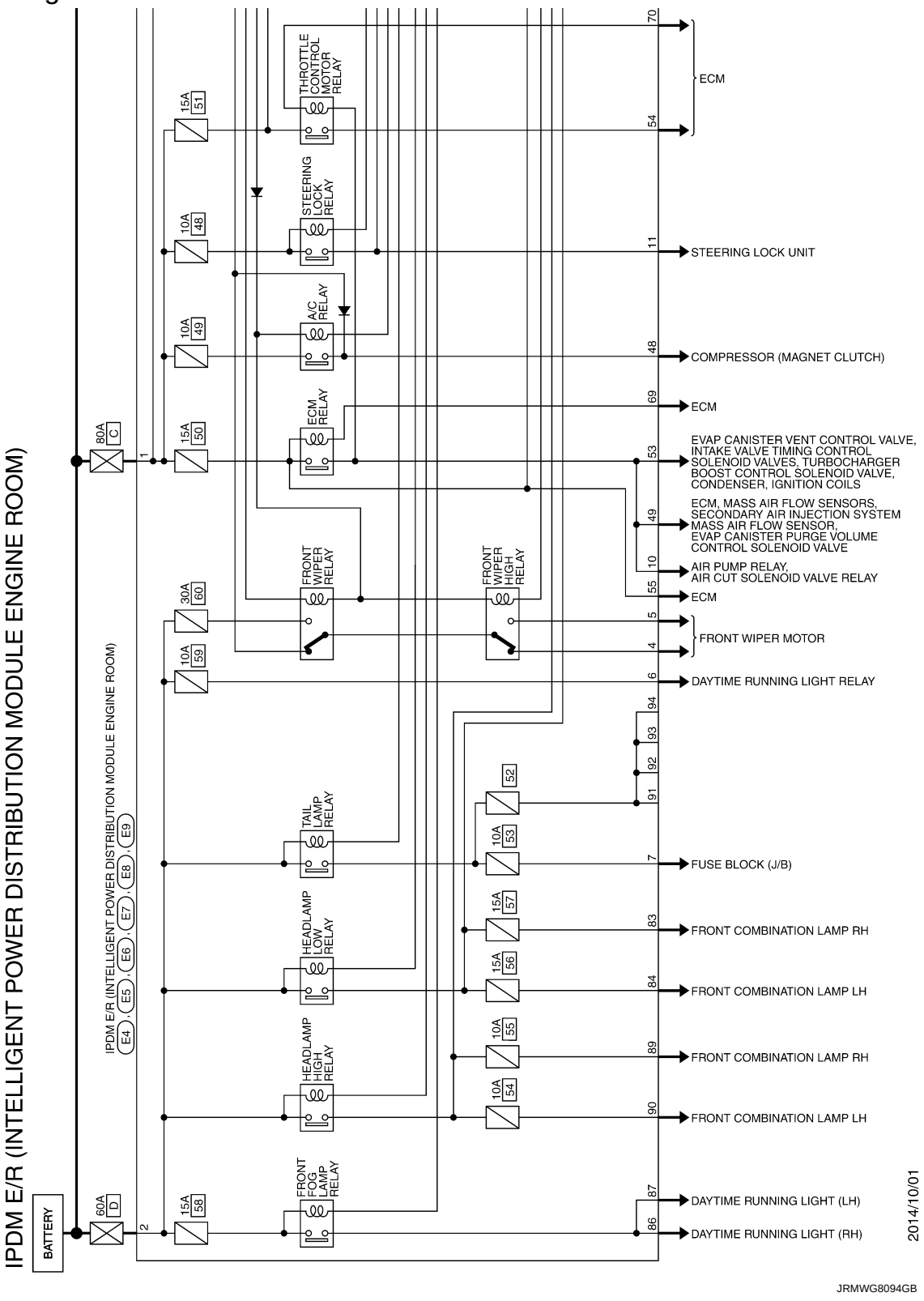
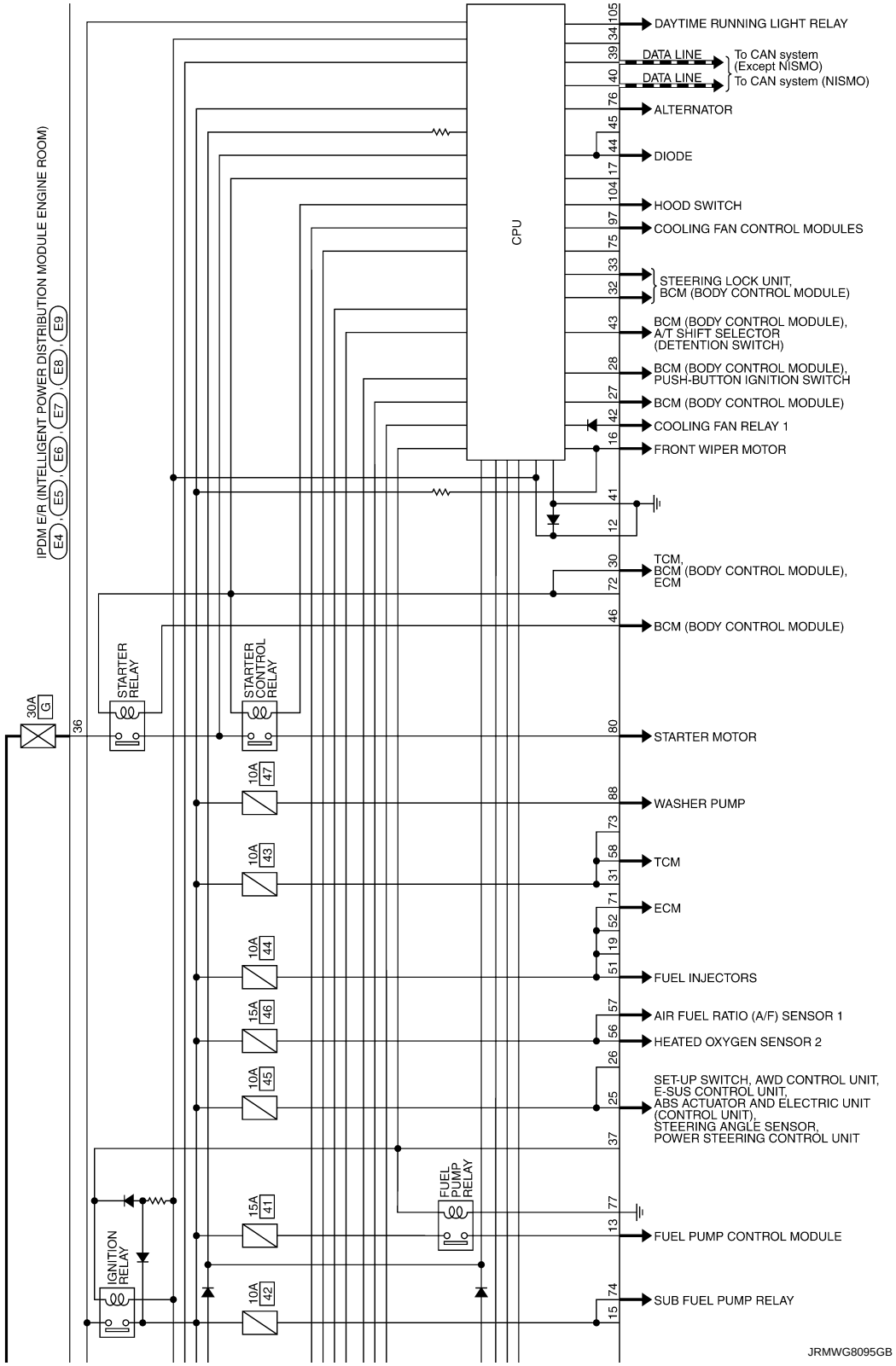
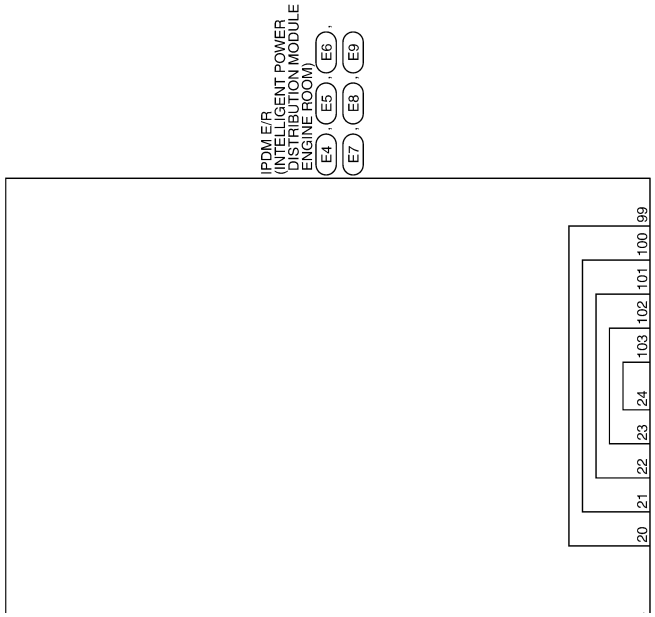



IPDM E/R (INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
E4, E5, E6, E7, E8, E9
CPU
105 DAYTIME RUNNING LIGHT RELAY
34
39 DATA LINE To CAN system (Except NISMO)
40 DATA LINE To CAN system (NISMO)
76 ALTERNATOR
45
44 DIODE
17
104 HOOD SWITCH
97 COOLING FAN CONTROL MODULES
75
33
32 STEERING LOCK UNIT, BCM (BODY CONTROL MODULE)
43 BCM (BODY CONTROL MODULE), A/T SHIFT SELECTOR (DETENTION SWITCH)
28 BCM (BODY CONTROL MODULE), PUSH-BUTTON IGNITION SWITCH
27 BCM (BODY CONTROL MODULE)
42 COOLING FAN RELAY 1
16 FRONT WIPER MOTOR
41
12
30 TCM, BCM (BODY CONTROL MODULE), ECM
72
46 BCM (BODY CONTROL MODULE)
STARTER RELAY
STARTER CONTROL RELAY
30A G
36
80 STARTER MOTOR
10A 47
88 WASHER PUMP
73
10A 43
58 TCM
31
71 ECM
52
19
10A 44
51 FUEL INJECTORS
15A 46
57 AIR FUEL RATIO (A/F) SENSOR 1
56 HEATED OXYGEN SENSOR 2
26
10A 45
25 SET-UP SWITCH, AWD CONTROL UNIT, E-SUS CONTROL UNIT, ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT), STEERING ANGLE SENSOR, POWER STEERING CONTROL UNIT
37
FUEL PUMP RELAY
15A 41
77
13 FUEL PUMP CONTROL MODULE
IGNITION RELAY
10A 42
74 SUB FUEL PUMP RELAY
15
JRMWG8095GB



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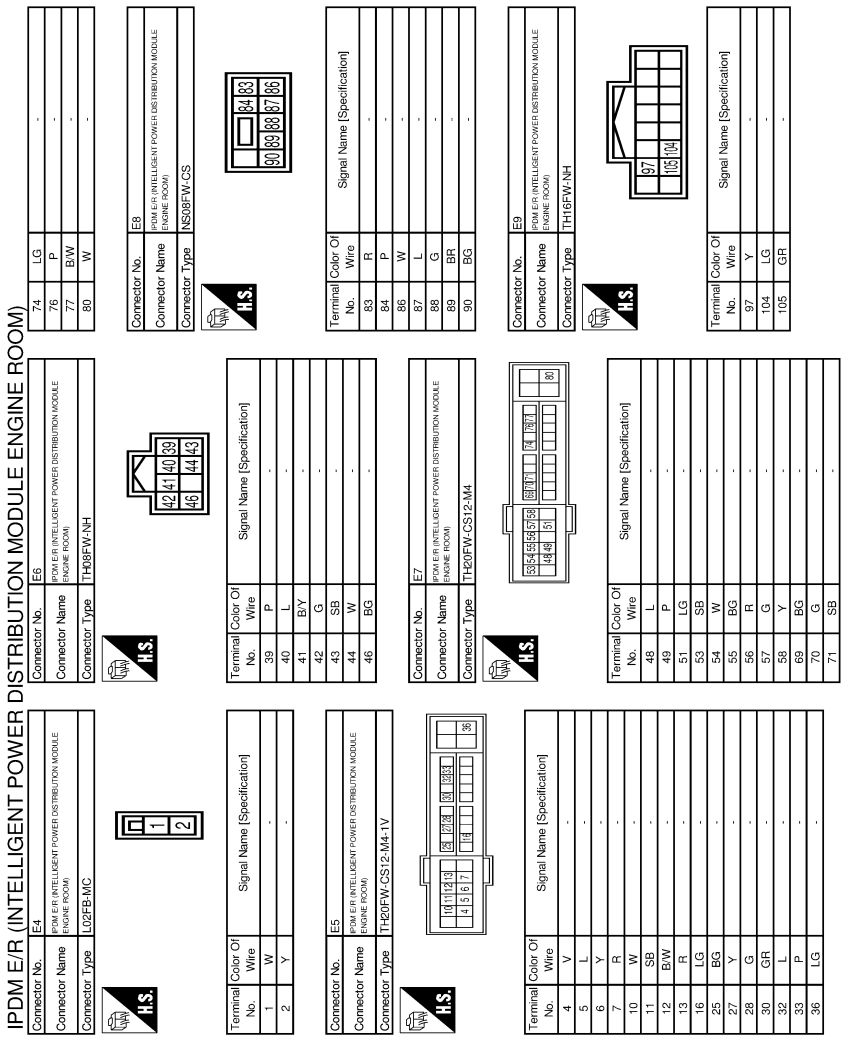


JRMWG8015GB

Fail-safe

INFOID:0000000011807034

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

Control part	Fail-safe operation
Cooling fan	• Outputs the pulse duty signal (PWM signal) 100% when the ignition switch is turned ON • Outputs the pulse duty signal (PWM signal) 0% when the ignition switch is turned OFF
A/C compressor	A/C relay OFF

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
Illuminations	• 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 mode and the front wiper motor is operating.
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
• Parking lamps • License plate lamps • Side marker lamps • Tail lamps	Daytime running light relay OFF
Daytime running light	Front fog lamp relay OFF

IGNITION RELAY MALFUNCTION DETECTION FUNCTION

- IPDM E/R monitors the voltage at the contact circuit and excitation coil circuit of the ignition relay inside it.
- IPDM E/R judges the ignition relay error if the voltage differs between the contact circuit and the excitation coil circuit.
- If the ignition relay cannot turn OFF due to contact seizure, it activates the tail lamp relay and daytime running light 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 CIRC” • Turns ON the tail lamp relay and daytime running light relay* for 10 minutes
OFF	ON	Ignition relay OFF stuck	Detects DTC “B2099: IGN RELAY OFF CIRC”

*: With daytime running light system

FRONT WIPER CONTROL

IPDM E/R detects front wiper stop position by a front wiper stop position signal.
When a front wiper stop position signal is in the conditions listed below, IPDM E/R stops power supply to wiper after repeating a front wiper 10 seconds activation and 20 seconds stop five times.

Ignition switch	Front wiper switch	Front wiper stop position signal
ON	OFF	The front wiper stop position signal (stop position) cannot be input for 10 seconds.
	ON	The front wiper stop position signal does not change for 10 seconds.

NOTE:
This operation status can be confirmed on the IPDM E/R “Data Monitor” that displays “BLOCK” for the item “WIP PROT” while the wiper is stopped.

STARTER MOTOR PROTECTION FUNCTION

IPDM E/R turns OFF the starter control relay to protect the starter motor when the starter control relay remains active for 90 seconds.

DTC Index

INFOID:0000000011807035

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-14
B2098: IGN RELAY ON CIRC	×	PCS-15
B2099: IGN RELAY OFF CIRC	—	PCS-17
B2108: S/L RELAY ON	—	SEC-94
B2109: S/L RELAY OFF	—	SEC-95
B210A: S/L STATE SW	—	SEC-96
B210B: STR CONT RLY ON CIRC	—	SEC-100
B210C: STR CONT RLY OFF CIRC	—	SEC-101
B210D: STARTER RLY ON CIRC	—	SEC-102
B210E: STARTER RLY OFF CIRC	—	SEC-103
B210F: INTRLCK/PNP SW ON	—	SEC-105
B2110: INTRLCK/PNP SW OFF	—	SEC-107

SYMPTOM DIAGNOSIS

EXTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000011489942

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

Symptom		Possible cause	Inspection item
Headlamp (HI) is not turned ON	One side	• Fuse • Headlamp (HI) power supply circuit • Front combination lamp internal circuit - LED (headlamp high) - LED headlamp control module - Harness • IPDM E/R	Headlamp (HI) circuit Refer to EXL-39, "Component Function Check".
	Both sides	**Symptom diagnosis** "BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON" Refer to EXL-163, "Diagnosis Procedure".	
High beam indicator lamp is not turned ON [Headlamp (HI) is turned ON]		Combination meter	• Combination meter Data monitor "HI-BEAM IND" • BCM (HEAD LAMP) Active test "HEAD LAMP"
Headlamp (LO) is not turned ON	One side	• Fuse • Headlamp (LO) power supply circuit • Front combination lamp internal circuit - LED (headlamp low) - LED headlamp control module - Harness • IPDM E/R	Headlamp (LO) circuit Refer to EXL-41, "Component Function Check".
	Both sides	**Symptom diagnosis** "BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON" Refer to EXL-164, "Diagnosis Procedure".	
Headlamp (HI) and (LO) is not turned ON		• LED headlamp ground circuit • Front combination lamp internal circuit - LED headlamp control module - Harness	LED headlamp Refer to EXL-43, "Diagnosis Procedure".
Headlamp warning remains ON [Headlamp (LO) is turned ON]		• LED headlamp warning signal circuit • Front combination lamp internal circuit - LED headlamp control module - Harness • Combination meter	Headlamp warning Refer to EXL-45, "Component Function Check".
Each lamp is not turned ON/OFF with lighting switch AUTO		• Combination switch input/output signal circuit • Combination switch • BCM	Combination switch Refer to BCS-86, "Symptom Table".
		• Optical sensor power supply/ground/signal circuit • Optical sensor • BCM	Optical sensor Refer to EXL-62, "Component Function Check".

Symptom		Possible cause	Inspection item
Parking lamp is not turned ON		• Parking lamp power supply/ground circuit • Front combination lamp internal circuit - LED (parking lamp) - Harness	Parking lamp circuit Refer to EXL-50, "Component Function Check".
Front side marker lamp is not turned ON		• Front side marker lamp power supply/ground circuit • Bulb (front side marker lamp)	Front side marker lamp circuit Refer to EXL-51, "Component Function Check".
Tail lamp is not turned ON		• Tail lamp power supply/ground circuit • Rear combination lamp internal circuit - LED (tail lamp) - Harness	Tail lamp circuit Refer to EXL-52, "Component Function Check".
Rear side marker lamp is not turned ON		• Rear side marker lamp power supply/ground circuit • Rear side marker lamp	Rear side marker lamp circuit Refer to EXL-53, "Component Function Check".
License plate lamp is not turned ON		• License plate lamp power supply/ground circuit • Bulb (license plate lamp) • Bulb socket (license plate lamp)	License plate lamp circuit Refer to EXL-54, "Component Function Check".
Parking, license plate, side marker and tail lamps are not turned ON		**Symptom diagnosis** “PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS ARE NOT TURNED ON” Refer to EXL-165, "Diagnosis Procedure".	
Position lamp indicator is not turned ON (Parking lamp, license plate lamp, side marker lamp and tail lamp are turned ON)		Combination meter	• Combination meter Data monitor “LIGHT IND” • BCM (HEAD LAMP) Active test “TAIL LAMP”
Back-up lamp is not turned ON		• Fuse • Back-up lamp relay • Back-up lamp relay power supply/control signal circuit • TCM relay • TCM relay power supply circuit • Back-up lamp power supply/ground circuit • Bulb (back-up lamp) • Bulb socket/harness (back-up lamp) • TCM	Back-up lamp circuit Refer to EXL-55, "Component Function Check".
Turn signal lamp does not blink	Indicator lamp is normal (Applicable side performs high flasher activation)	• Front turn signal lamp - Front turn signal lamp power supply/ground circuit - Bulb (front turn signal lamp) - Bulb socket (front turn signal lamp) • Rear turn signal lamp - Rear turn signal lamp power supply/ground circuit - Bulb (rear turn signal lamp) - Bulb socket/harness (rear turn signal lamp)	Turn signal lamp circuit Refer to EXL-58, "Component Function Check".
	Indicator lamp is included	• Combination switch input/output signal circuit • Combination switch • BCM	Combination switch Refer to BCS-86, "Symptom Table".

Symptom		Possible cause	Inspection item
Turn signal indicator lamp does not blink (Turn signal 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 ignition switch OFF)	• Combination meter power supply/ground circuit • Combination meter	Combination meter Power supply and ground circuit Refer to MWI-68, "COMBINATION METER : Diagnosis Procedure".
• Hazard warning lamp does not activate (Turn signal is normal) • Hazard warning lamp continues activating		• Hazard switch signal/ground circuit • Set-up switch (hazard switch) • BCM	Hazard switch Refer to EXL-65, "Component Function Check".
Daytime running light is not turned ON		• Fuse • Daytime running light power supply/ground circuit • Daytime running light • IPDM E/R • BCM • ECM • Combination meter	• Daytime running light circuit Refer to EXL-46, "Component Function Check". • BCM (HEAD LAMP) Data monitor “ENGINE STATE” • Combination meter Data monitor “PKB SW”

NORMAL OPERATING CONDITION

Description

INFOID:0000000011489943

LED HEADLAMP

- LED brightness and color may slightly change until the temperature becomes stable. This is not malfunction.
- Illumination time lag may occur between right and left. This is not malfunction.
- Brightness may be reduced due to aged deterioration of LED.

AUTO LIGHT SYSTEM

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

BOTH SIDE HEADLAMPS (HI) ARE NOT TURNED ON

Description

INFOID:0000000011489944

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

Diagnosis Procedure

INFOID:0000000011489945

1.COMBINATION SWITCH INSPECTION

Check combination switch. Refer to BCS-86, "Symptom Table".

Is the inspection result normal?

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

2.CHECK HEADLAMP (HI) REQUEST SIGNAL INPUT

With CONSULT

1. Select “HL HI REQ” in “Data Monitor” mode of “IPDM E/R” using CONSULT.
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 inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-89, "Removal and Installation".

BOTH SIDE HEADLAMPS (LO) ARE NOT TURNED ON

Description

INFOID:0000000011489946

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

Diagnosis Procedure

INFOID:0000000011489947

1.CHECK COMBINATION SWITCH

Check combination switch. Refer to BCS-86, "Symptom Table".

Is the inspection result normal?

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

2.CHECK HEADLAMP (LO) REQUEST SIGNAL INPUT

With CONSULT

1. Select “HL LO REQ” in “Data Monitor” mode of “IPDM E/R” using CONSULT.
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 inspection result normal?

YES >> Replace IPDM E/R. Refer to PCS-35, "Removal and Installation".
NO >> Replace BCM. Refer to BCS-89, "Removal and Installation".

PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMPS ARE NOT TURNED ON

Description

INFOID:0000000011489948

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

Diagnosis Procedure

INFOID:0000000011489949

1.COMBINATION SWITCH INSPECTION

Check combination switch. Refer to BCS-86, "Symptom Table".

Is the combination switch normal?

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

2.CHECK DAYTIME RUNNING LIGHT REQUEST SIGNAL INPUT

With CONSULT

1. Select “DTRL REQ” in “Data Monitor” mode of “IPDM E/R” using CONSULT.
2. With operating the lighting switch, check the monitor status.

Monitor item	Condition		Monitor status
DTRL REQ	Lighting switch	1ST	On
		OFF	Off

Is the inspection result normal?

YES >> Perform the daytime running light relay circuit diagnosis. Refer to EXL-48, "Component Function Check".
NO >> Replace BCM. Refer to BCS-89, "Removal and Installation".

PRECAUTION

PRECAUTIONS

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

INFOID:0000000011489950

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the “SRS AIR BAG” and “SEAT BELT” of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- **To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, 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 “SRS AIR BAG”.**
- **Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.**

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

WARNING:

Always observe the following items for preventing accidental activation.

- **When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.**
- **When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.**

Precaution for Battery Service

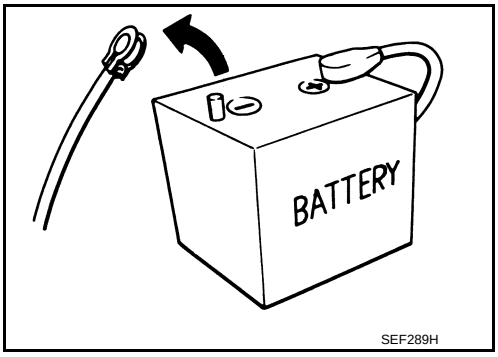
INFOID:0000000011489951

Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

Precautions for Removing Battery Terminal

INFOID:0000000011489952

- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
  NOTE:
  ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.
  NOTE:
  If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.



- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.
  NOTE:
  The removal of 12V battery may cause a DTC detection error.

PERIODIC MAINTENANCE

HEADLAMP AIMING ADJUSTMENT

Description

INFOID:0000000011489953

PREPARATION BEFORE ADJUSTING

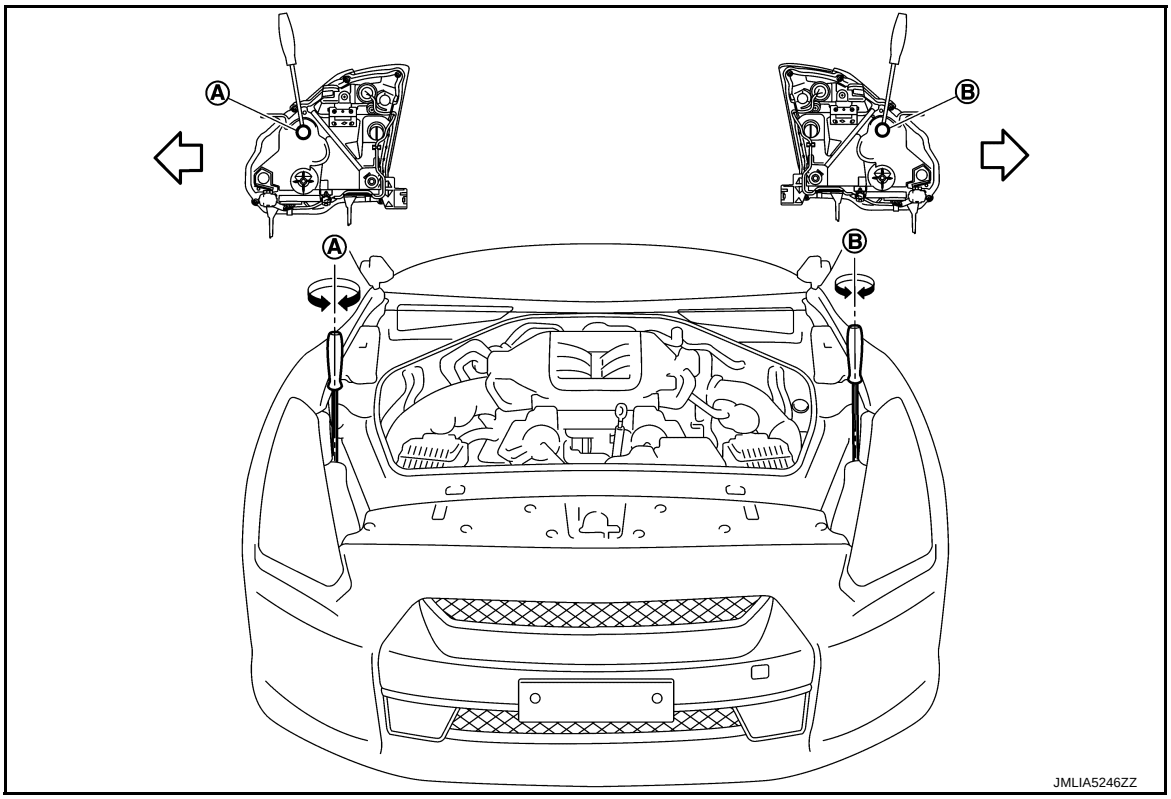
NOTE:

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

Before performing aiming adjustment, check the following.

- Adjust the tire pressure to the specification.
- Fill with fuel, engine coolant and each oil.
- Maintain the unloaded vehicle condition. (Remove luggage from the passenger compartment and the trunk room.)
  NOTE:
  Do not remove the temporary tire, jack and on-vehicle tool.
- Wipe out dirt on the headlamp.
  CAUTION:
  Never use organic solvent (thinner, gasoline etc.)
- Ride alone on the driver seat.

AIMING ADJUSTMENT SCREW



A Headlamp (RH) UP/DOWN adjustment screw

B. Headlamp (LH) UP/DOWN adjustment screw

⇦: Vehicle center

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

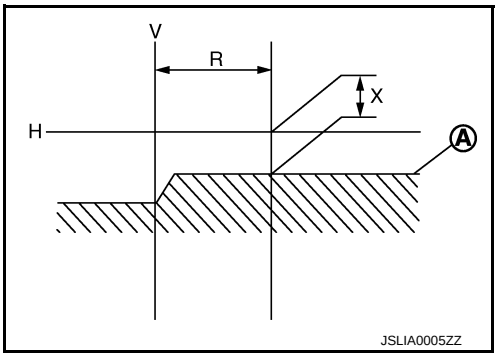
Aiming Adjustment Procedure

INFOID:0000000011489954

1. Place the screen.
   NOTE:
   - Stop the vehicle facing the wall.
   - Place the board on a plain road vertically.
2. Face the vehicle with the screen. Maintain 10 m (32.8 ft) between the headlamp center and the screen.
3. Start the engine. Turn the headlamp (LO) ON.
   NOTE:
   Shut off the headlamp light with the board to prevent from illuminating the adjustment screen.
   CAUTION:
   Never cover the lens surface with a tape etc. The lens is made of resin.
4. 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

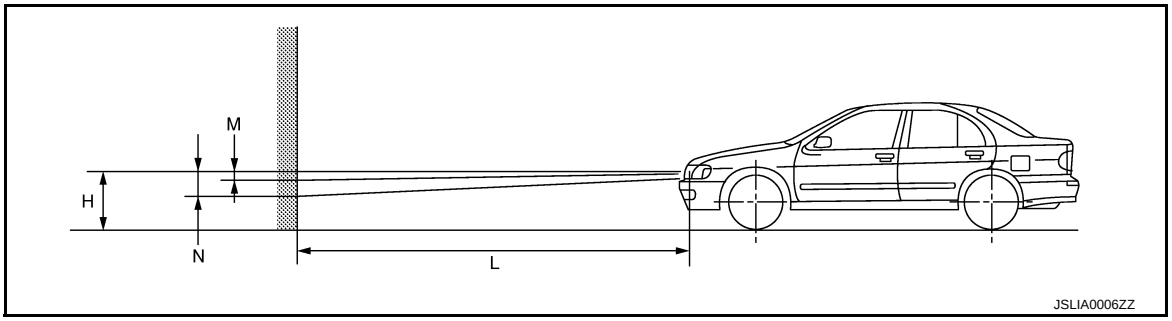


5. Adjust the cutoff line height (X) with the aiming adjustment screw so as to enter in the adjustment range (M–N) according to the horizontal center line of headlamp (H).

unit: mm (in)

Horizontal center line of headlamp (H)	Highest cutoff line height (M)	Lowest cutoff line height (N)
700 (27.56) or less	4 (0.16)	30 (1.18)
701(27.60) – 800 (31.50)	4 (0.16)	30 (1.18)
801 (31.54) or more	17 (0.67)	44 (1.73)

Side view



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

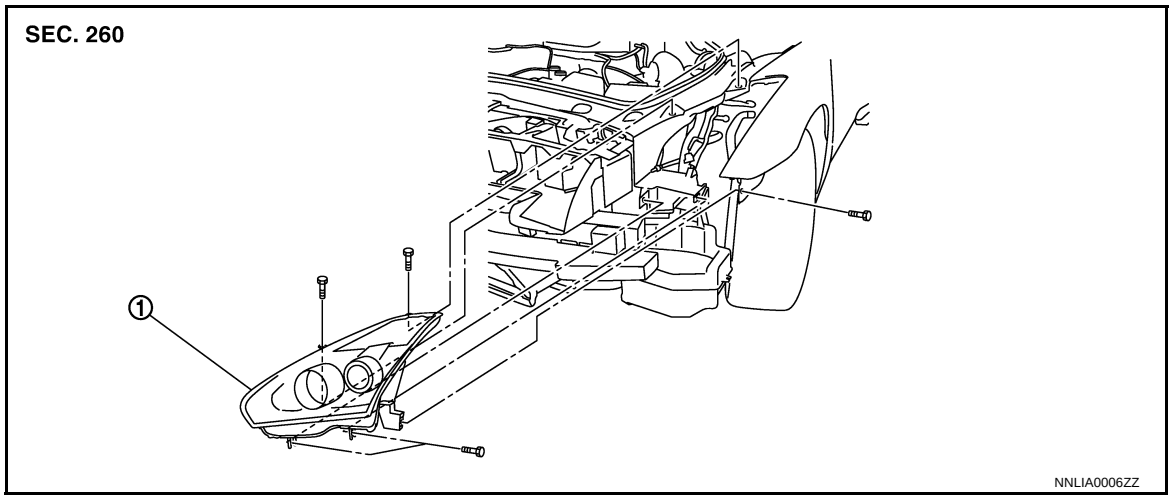
REMOVAL AND INSTALLATION

FRONT COMBINATION LAMP

Exploded View

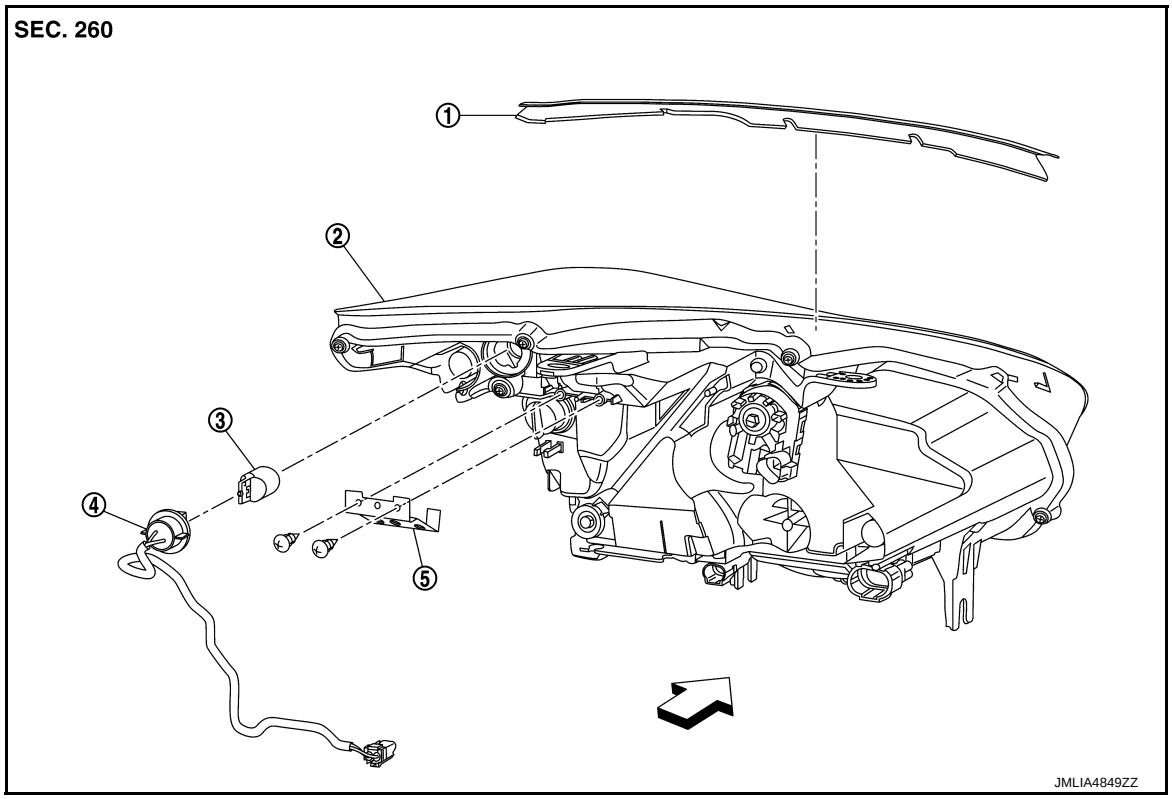
INFOID:0000000011489955

REMOVAL



1. Front combination lamp

DISASSEMBLY



1. Seal rubber
2. Headlamp housing assembly
3. Front turn signal lamp bulb
4. Front turn signal lamp bulb socket
5. Headlamp bracket A

⇦ : Vehicle front

Removal and Installation

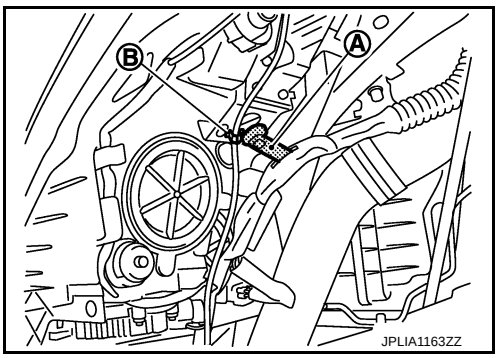
INFOID:0000000011489956

REMOVAL

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

1. Remove front bumper fascia. Refer to EXT-15, "Removal and Installation".
2. Remove the headlamp mounting bolts.
3. Remove the harness clip (A) and the washer tube (B)*.
   *: Left side only
4. Pull out the headlamp assembly forward the vehicle.
5. Disconnect the connector before removing the headlamp housing assembly.



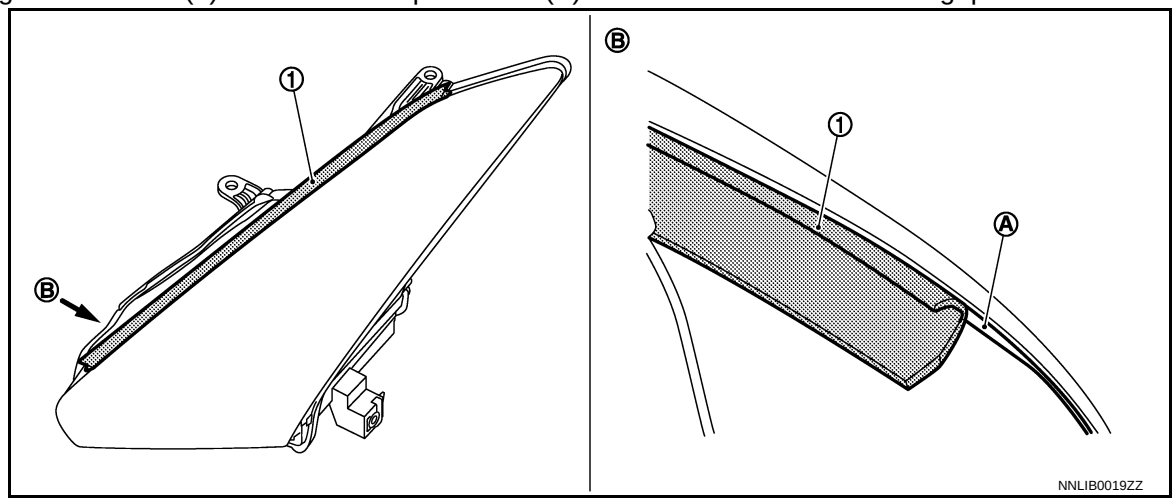
INSTALLATION

Note the following items, Install in the reverse order of removal.

CAUTION:

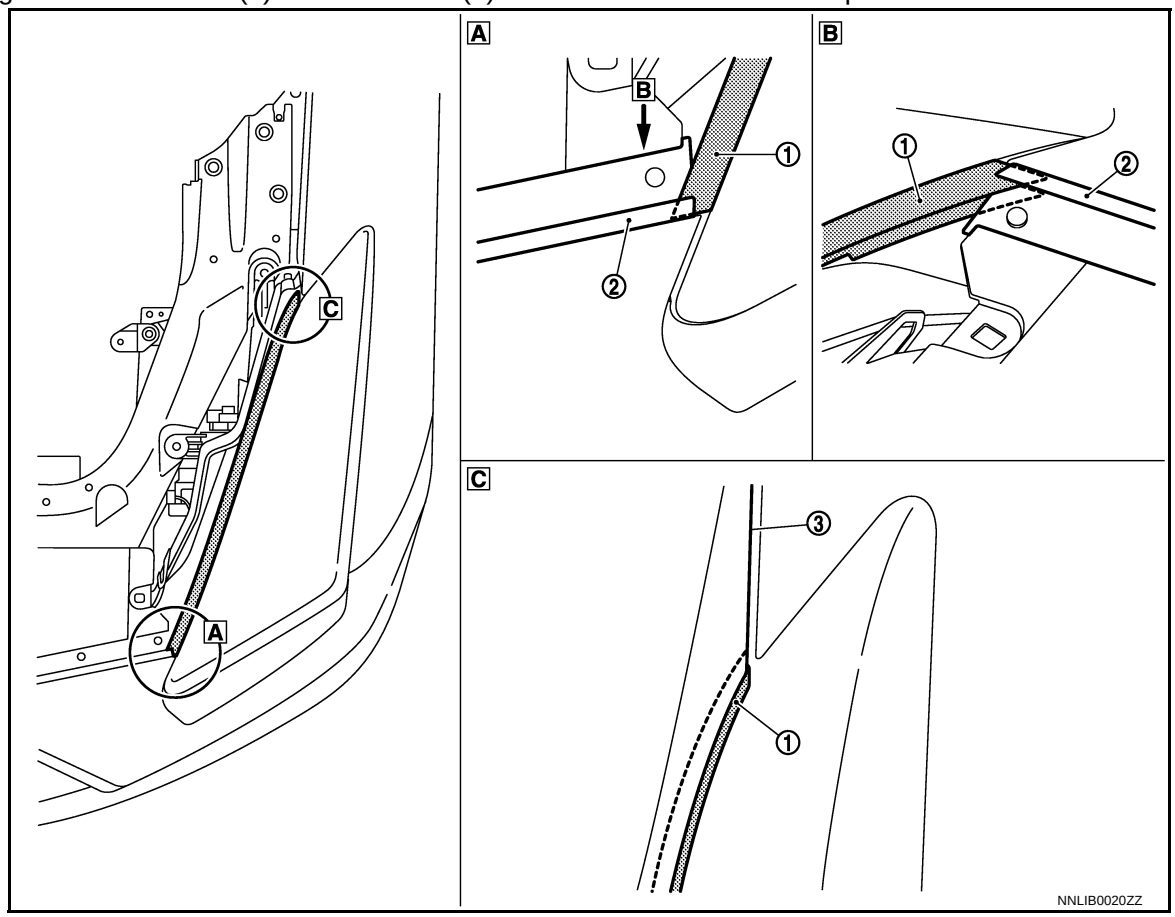
- **After installation, perform aiming adjustment. Refer to EXL-167, "Description".**
- **When the front combination lamp on one side is replaced, and rubber seal is not installed to the front combination lamp on the side that is not replaced, install a rubber seal to the front combination lamp that is not replaced as per the following procedure.**
- **Always clean the front combination lamp surface where rubber seal is affixed.**

1. Align rubber seal (1) with lens inner protrusion (A) and affix so that there is not gap.



2. Align rubber seal edge (1) with hood seal assembly edge (2) and affix under hood seal assembly.

3. Align rubber seal end (1) with hood end (3) and affix so that it does not protrude from hood.



Replacement

INFOID:0000000011489957

CAUTION:
- **Disconnect the battery negative terminal or remove the fuse.**
- **After installing the bulb, install 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)

CAUTION:
Replacement of a single part is not possible due to the adoption of LED bulb. For replacement, replace front combination lamp as a set.

HEADLAMP BULB (HI)

CAUTION:
Replacement of a single part is not possible due to the adoption of LED bulb. For replacement, replace front combination lamp as a set.

PARKING LAMP BULB

CAUTION:
Replacement of a single part is not possible due to the adoption of LED bulb. For replacement, replace front combination lamp as a set.

FRONT TURN SIGNAL LAMP BULB

1. Remove the front tire. Refer to WT-75, "Removal and Installation".
2. Remove the fender protector. Keep a service area. Refer to EXT-32, "FENDER PROTECTOR : Removal and Installation".
3. Rotate the bulb socket counterclockwise and unlock it.

4. Remove the bulb from the bulb socket.

Disassembly and Assembly

INFOID:0000000011489958

DISASSEMBLY

1. Rotate the front turn signal lamp bulb socket counterclockwise and unlock it.
2. Remove the bulb from the front turn signal lamp bulb socket.
3. Remove the headlamp bracket A fixing screws, and then remove headlamp bracket A.

ASSEMBLY

Assemble in the reverse order of disassembly.

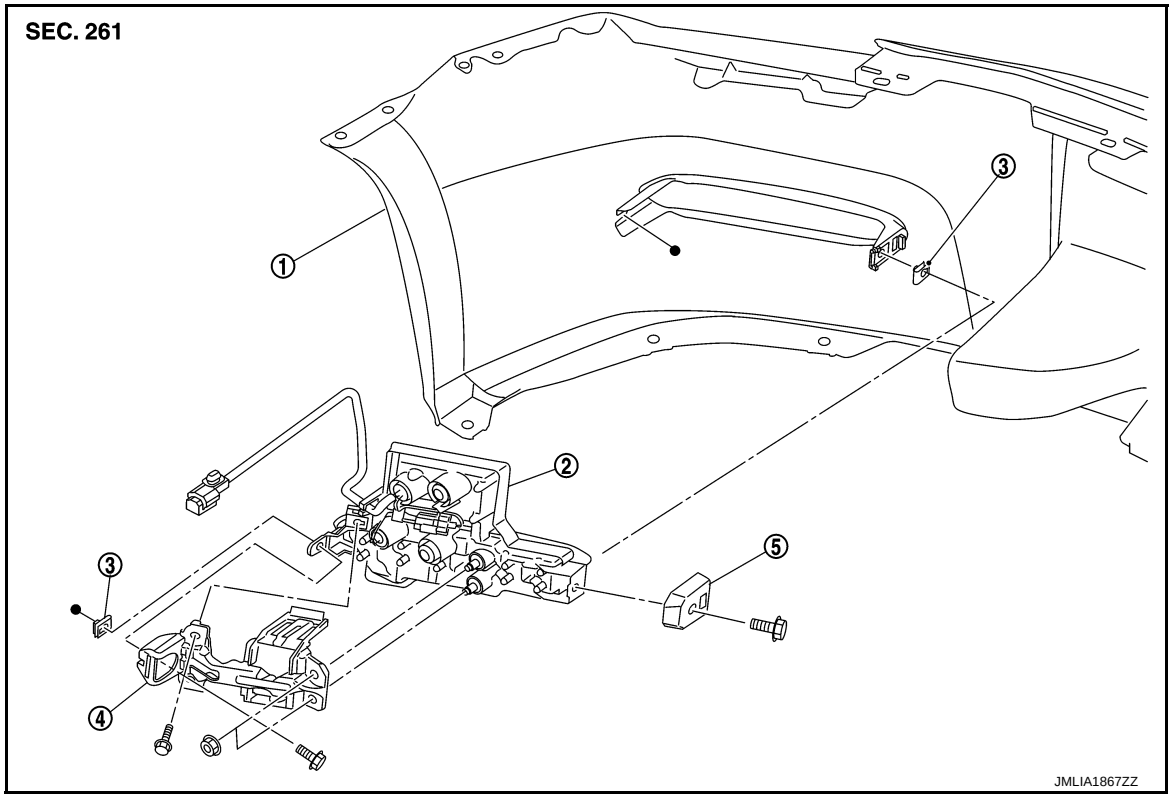
CAUTION:

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

DAYTIME RUNNING LIGHT

Exploded View

INFOID:0000000011489959



1. Bumper fascia
2. Daytime running light
3. U nut
4. Daytime running light bracket A
5. Daytime running light bracket B

Removal and Installation

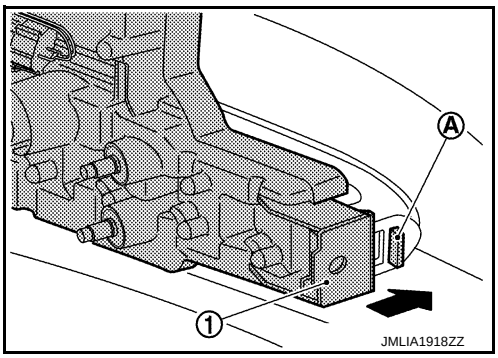
INFOID:0000000011489960

CAUTION:
Disconnect the battery negative terminal or remove the fuse.

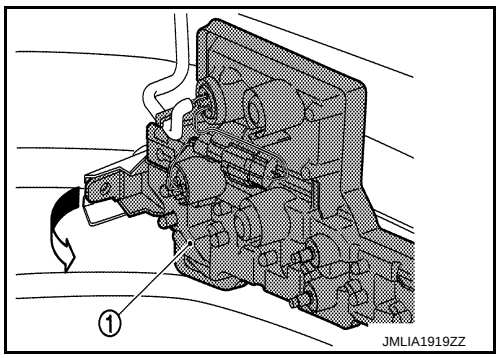
REMOVAL

Left side

1. Remove engine under cover. EXT-39, "ENGINE UNDER COVER : Removal and Installation".
2. Remove washer tank mounting bolt, and then keep a service area.
3. Disconnect daytime running light harness connector.
4. Remove daytime running light mounting bolt and nut, and then remove daytime running light bracket.
5. Move daytime running light (1) until it contacts bumper fascia rib portion (A).

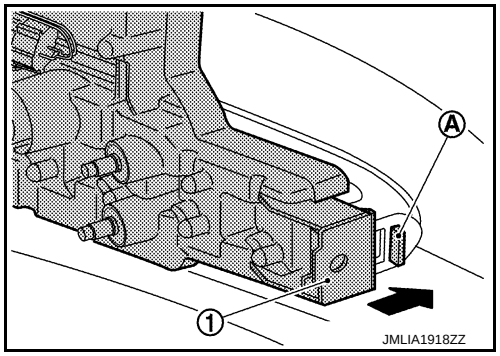


6. Rotate daytime running light around center of rib portion and remove LED hyper day light.

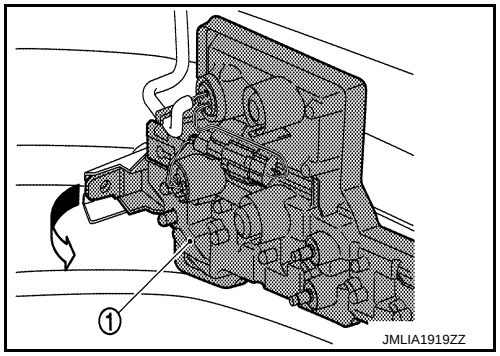


Right side

1. Remove bumper fascia. Refer to EXT-15, "Removal and Installation".
2. Remove daytime running light mounting bolt and nut, and then remove daytime running light bracket.
3. Move daytime running light (1) until it contacts bumper fascia rib portion (A).



4. Rotate daytime running light around center of rib portion and remove LED hyper day light.



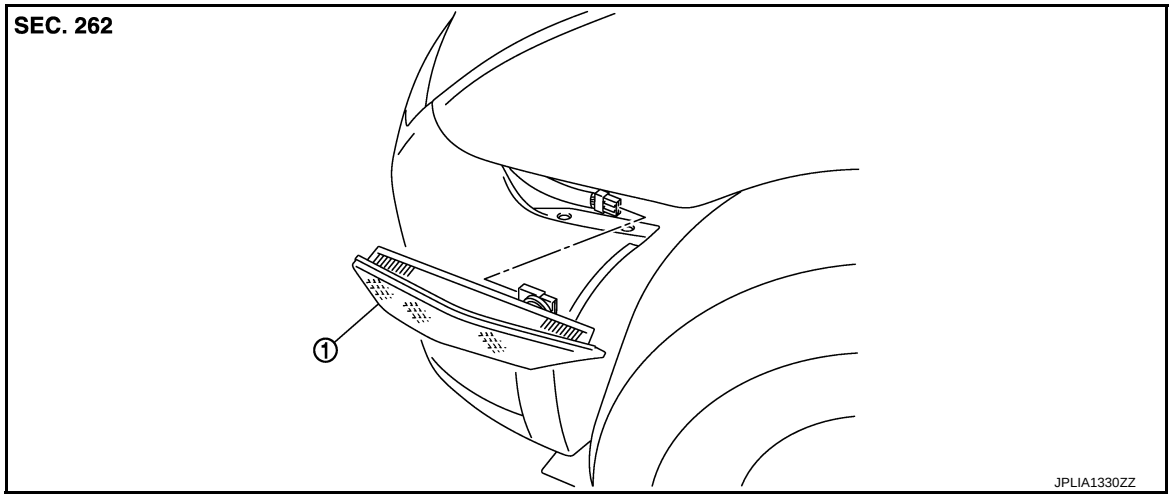
INSTALLATION

Install in the reverse order of removal.

FRONT SIDE MARKER LAMP

Exploded View

INFOID:0000000011489961



1. Front side marker lamp

Removal and Installation

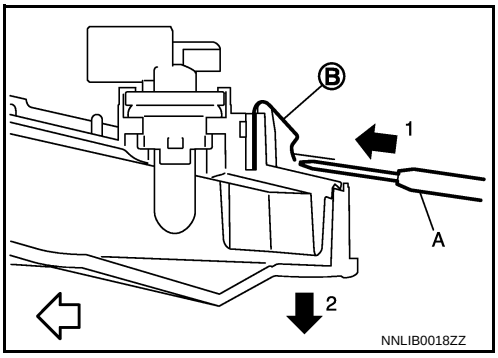
INFOID:0000000011489962

CAUTION:
Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Insert any appropriate tool (A) into the gap between the side turn signal lamp and fender protector.
2. Pull the side turn signal lamp toward vehicle outside while pushing metal clip (B) toward vehicle front, and then remove side turn signal lamp from vehicle.

⇦ : Vehicle front



3. Disconnect the side turn signal lamp connector.Remove the side turn signal lamp.

NOTE:
Support the vehicle-side harness of the side turn signal lamp with tape so that it does not drop inside the front fender.

INSTALLATION

1. Connect the side turn signal lamp connector.
2. Fix the pawl side. And then push the clip side.

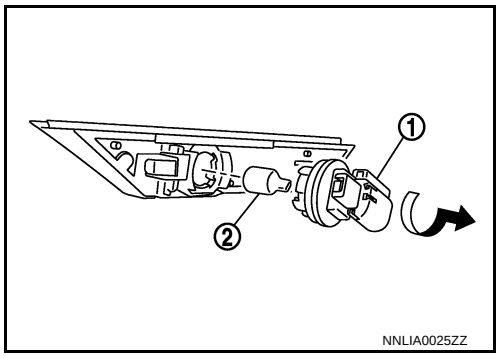
Replacement

INFOID:0000000011489963

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 SIDE MARKER LAMP BULB

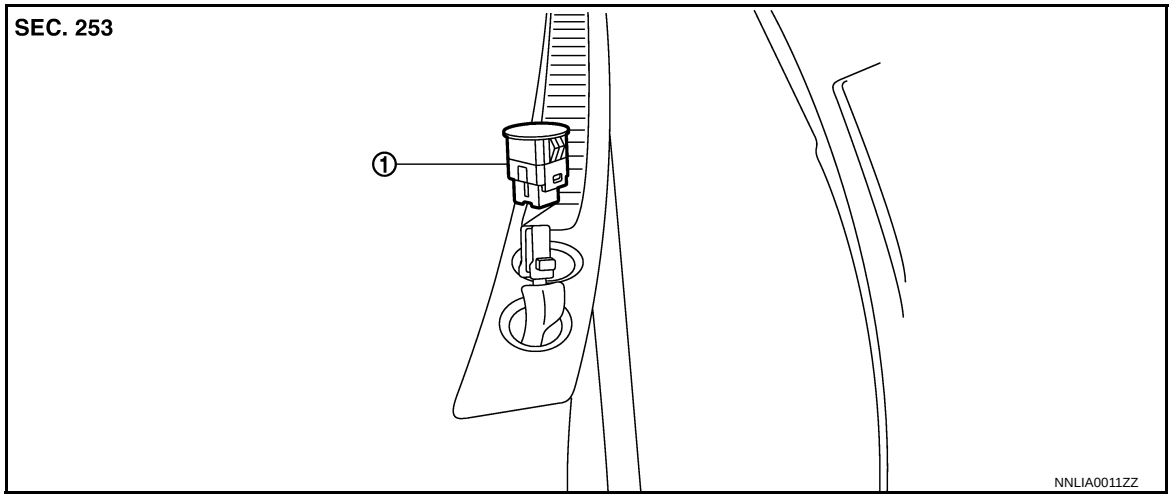
1. Remove the front side marker lamp. Refer to EXL-176, "Exploded View".
2. Turn the bulb socket (1) counterclockwise and unlock it.
3. Remove the bulb (2) from the socket.



OPTICAL SENSOR

Exploded View

INFOID:0000000011489964



1. Optical sensor

Removal and Installation

INFOID:0000000011489965

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

Exploded View

INFOID:0000000011489966

The lighting & turn signal switch is integrated in the combination switch. BCS-90, "Exploded View".

HAZARD SWITCH

Exploded View

INFOID:0000000011489967

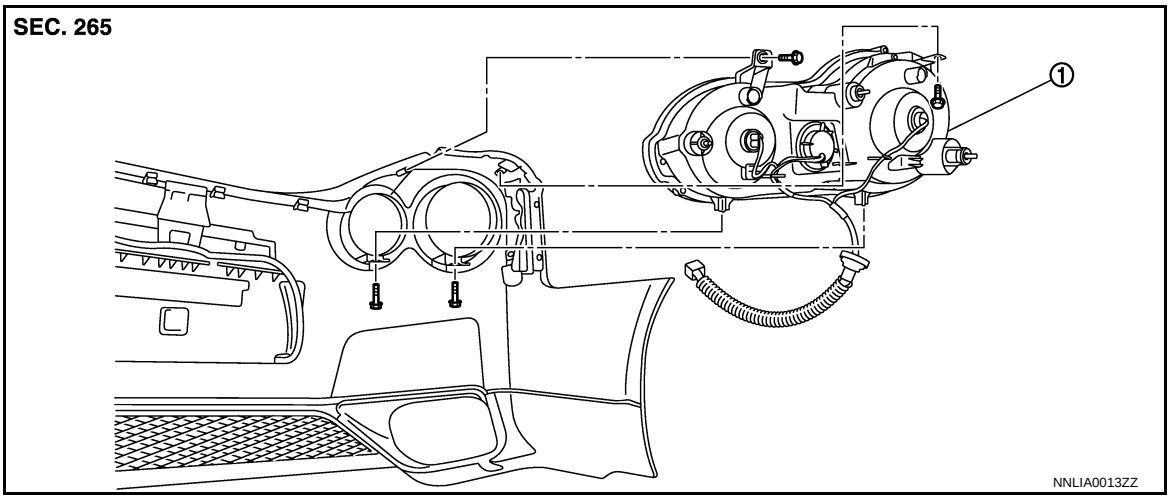
The hazard switch is integrated in the set-up switch. Refer to IP-12, "Exploded View".

REAR COMBINATION LAMP

Exploded View

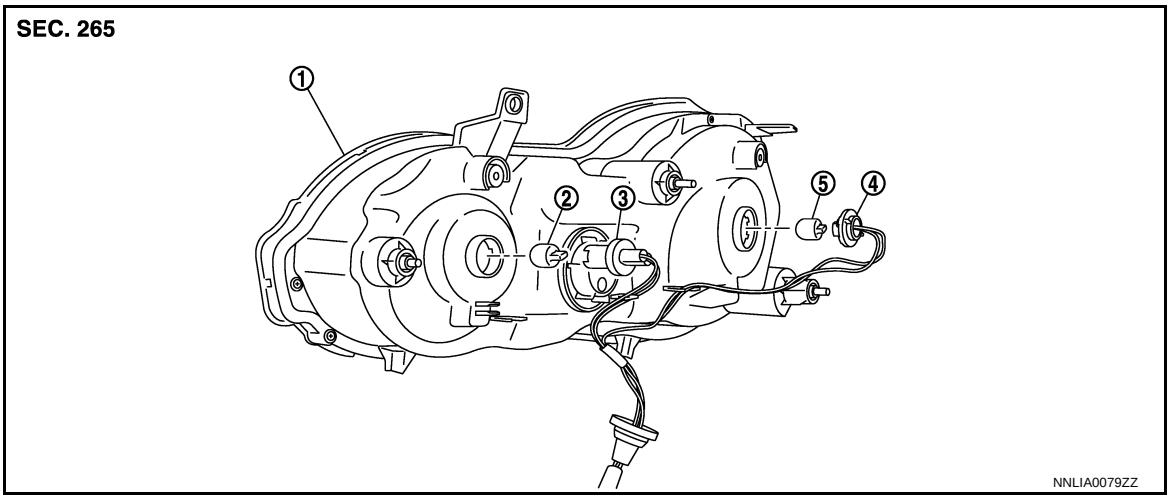
INFOID:0000000011489968

REMOVAL



1. Rear combination lamp assembly

DISASSEMBLY



1. Rear combination lamp
2. Back-up lamp bulb
3. Back-up lamp bulb socket
4. Rear turn signal lamp bulb socket
5. Rear turn signal lamp bulb

Removal and Installation

INFOID:0000000011489969

CAUTION:
Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the rear bumper fascia. Refer to EXT-22, "Removal and Installation".
2. Remove the rear combination lamp mounting bolts.
3. Disconnect the rear side marker lamp connector.
4. Remove the rear combination lamp.

INSTALLATION

Install in the reverse order of removal.

Replacement

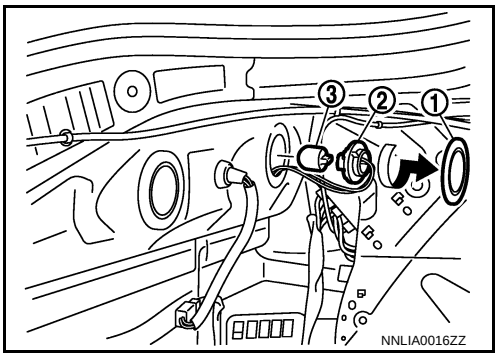
INFOID:0000000011489970

CAUTION:

- **Disconnect the battery negative terminal or remove the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

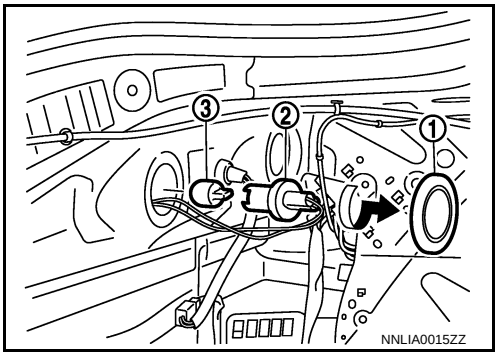
REAR TURN SIGNAL LAMP BULB

1. Remove the trunk lid finisher. Refer to INT-29, "Removal and Installation".
2. Remove the rubber cover (1).
3. Turn the rear turn signal lamp bulb socket (2) counterclockwise and unlock it.
4. Remove the bulb (3) from the rear turn signal lamp bulb socket.



BACK-UP LAMP BULB

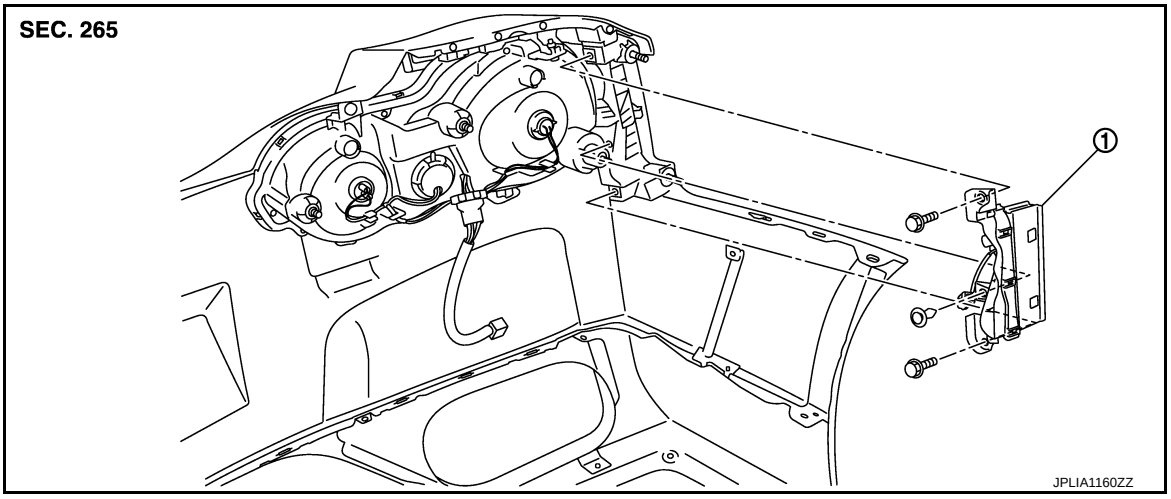
1. Remove the trunk lid finisher. Refer to INT-29, "Removal and Installation".
2. Remove the rubber cover (1).
3. Turn the back-up lamp bulb socket (2) counterclockwise and unlock it.
4. Remove the bulb (3) from the back-up lamp bulb socket.



REAR SIDE MARKER LAMP

Exploded View

INFOID:0000000011489971



1. Rear side marker lamp

Removal and Installation

INFOID:0000000011489972

REMOVAL

CAUTION:

Disconnect the battery negative terminal or remove the fuse.

1. Remove the rear bumper fascia. Refer to EXT-22, "Removal and Installation".
2. Disconnect the rear side marker lamp connector.
3. Remove the rear side marker lamp mounting bolts and clip.
4. Remove the rear side marker lamp.

INSTALLATION

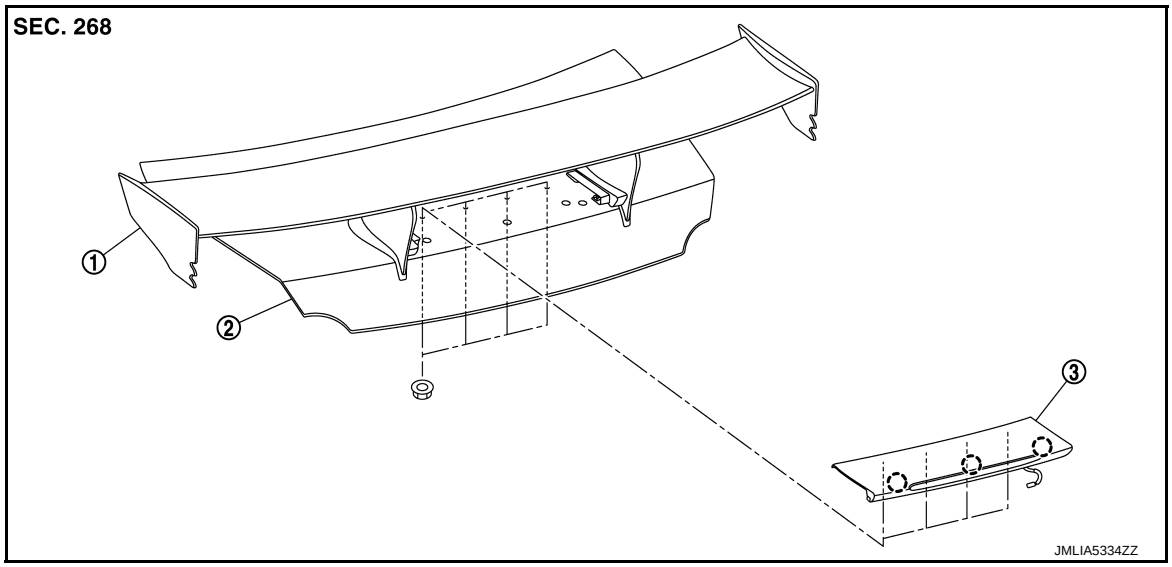
Install in the reverse order of removal.

HIGH-MOUNTED STOP LAMP

Exploded View

INFOID:0000000011489973

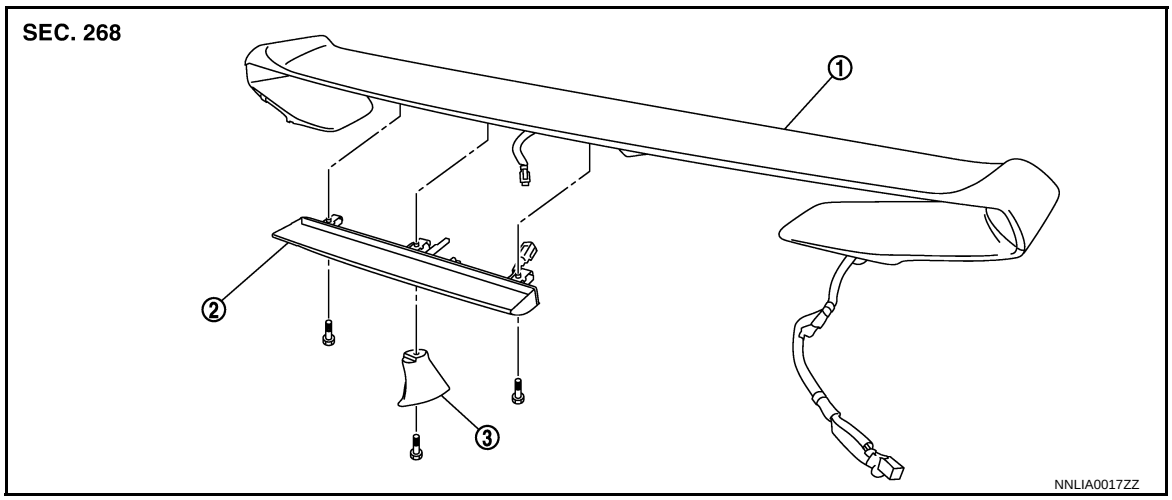
GT-R NISMO



1. Rear wing
2. Trunk lid panel
3. Rear wing cover (with high-mounted stop lamp)

: Clip

EXCEPT FOR GT-R NISMO



1. Rear wing
2. High-mounted stop lamp
3. Center leg bracket

Removal and Installation

INFOID:0000000011489974

REMOVAL

CAUTION:

Disconnect the battery negative terminal or the remove the fuse.

GT-R NISMO

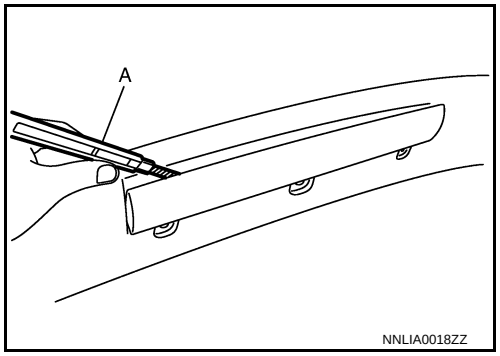
Remove rear wing cover. Refer to EXT-56, "Removal and Installation".

NOTE:

The high-mounted stop lamp is an integral part of the rear wing cover. If the replacement of the high-mounted stop lamp is necessary, replace the rear wing cover.

Except For GT-R NISMO

1. Remove the rear wing. Refer to EXT-56, "Removal and Installation".
2. Remove the center leg bracket.
3. Remove the high-mounted stop lamp mounting screw. And then cut the double-sided tape by the any appropriate tool (A).



4. Disconnect the connector. And then remove the high-mounted stop lamp from the rear wing.

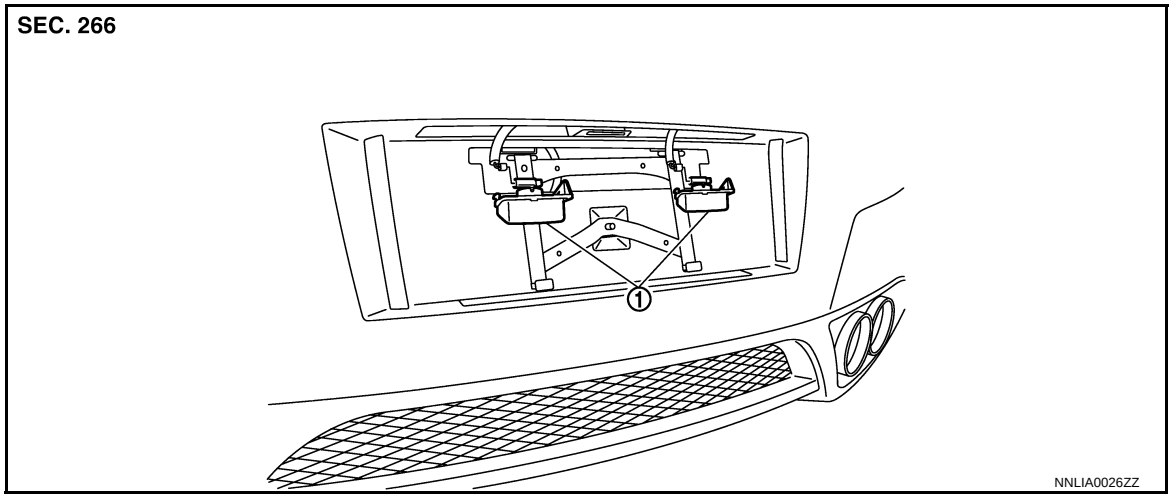
INSTALLATION

Install in the reverse order of removal.

LICENSE PLATE LAMP

Exploded View

INFOID:0000000011489975



1. License plate lamp

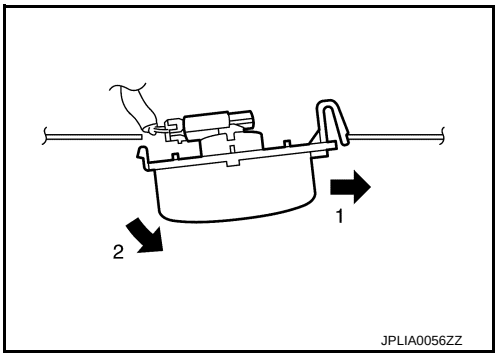
Removal and Installation

INFOID:0000000011489976

CAUTION:
Disconnect the battery negative terminal or remove the fuse.

REMOVAL

1. Remove the license plate lamp in numerical order shown in the figure.
2. Disconnect the connector.
3. Remove license plate lamp.



INSTALLATION

1. Connect the connector.
2. Fix the pawl side. And then push the resin clip side.

Replacement

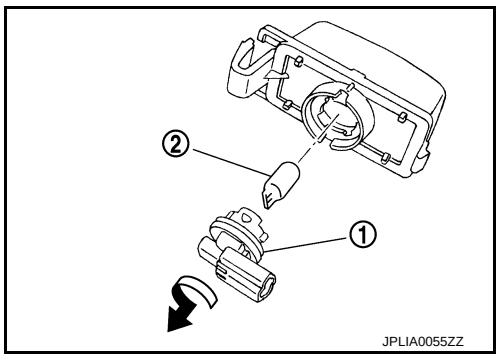
INFOID:0000000011489977

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 license plate lamp. Refer to EXL-186, "Exploded View".

2. Turn the bulb socket (1) counterclockwise and unlock it.
3. Remove the bulb (2) from the socket.



SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000011489978

Item		Type	Wattage (W)
Front combination lamp	Headlamp (LO)	LED	—
	Headlamp (HI)	LED	—
	Parking lamp	LED	—
	Front turn signal lamp	WY21W (Amber)	21
Daytime running light		LED	—
Front side marker lamp		W5W	5
Rear combination lamp	Stop lamp	LED	—
	Tail lamp	LED	—
	Rear turn signal lamp	WY21W (Amber)	21
	Back-up lamp	W16W	16
Rear side marker lamp		LED	—
License plate lamp		W5W	5
High-mounted stop lamp		LED	—