SECTION INL
INTERIOR LIGHTING SYSTEM

CONTENTS

COUPE

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

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

INFOID:0000000008196448

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.**

FOR USA AND CANADA : Precaution for Battery Service

INFOID:0000000008196449

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.

FOR MEXICO

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

INFOID:0000000008196450

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

WARNING:

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.**

FOR MEXICO : Precaution for Battery Service

INFOID:0000000008196451

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.

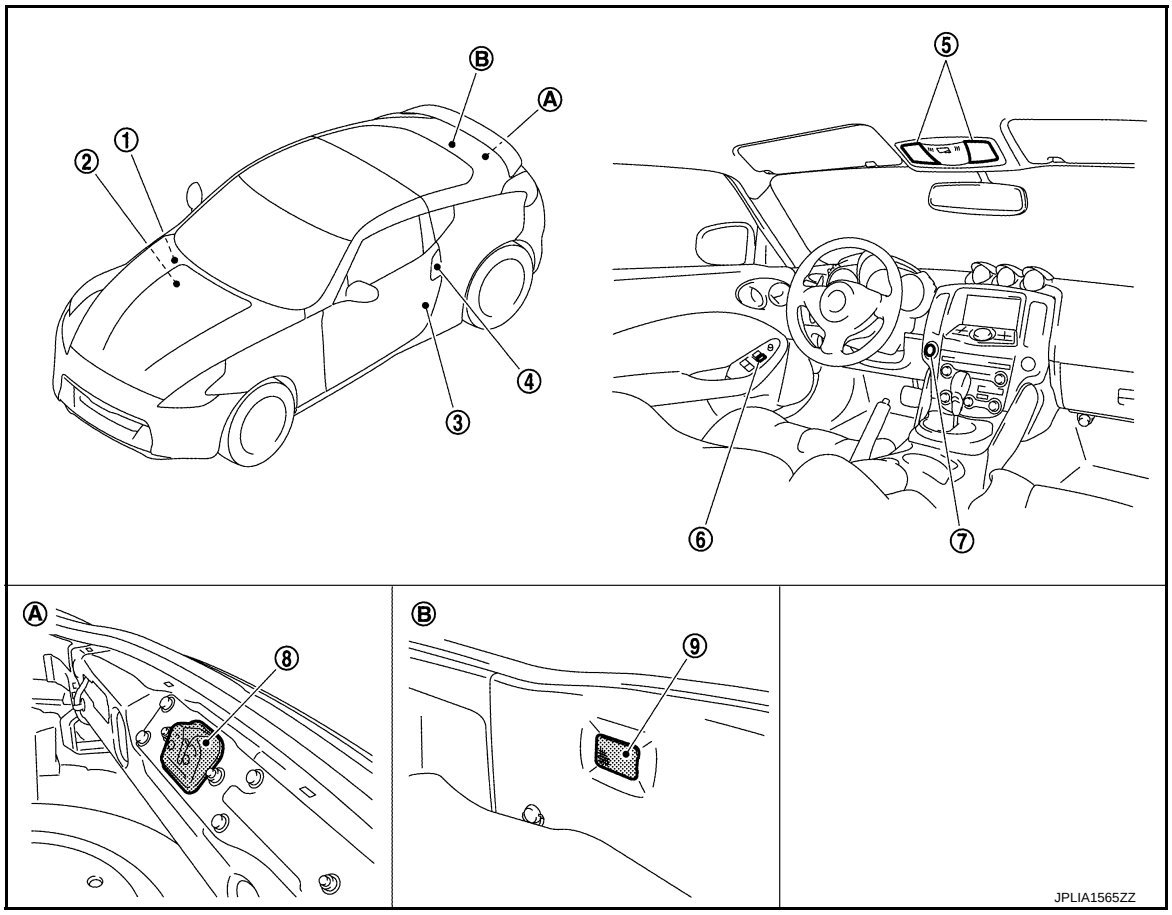
SYSTEM DESCRIPTION

COMPONENT PARTS

INTERIOR ROOM LAMP CONTROL SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM : Component Parts Location

INFOID:0000000008196452



1. Remote keyless entry receiver
   Refer to SEC-12, "Component Parts Location".
2. BCM
   Refer to BCS-10, "Component Parts Location".
3. Door switch
4. • Key cylinder switch
   • Request switch
5. Map lamp
6. Door lock and unlock switch
7. Push-button ignition switch (Push-button ignition switch illumination)
8. Back door switch
9. Luggage room lamp

A. Back door lock assembly
B. Luggage room

INTERIOR ROOM LAMP CONTROL SYSTEM : Component Description

INFOID:0000000008196453

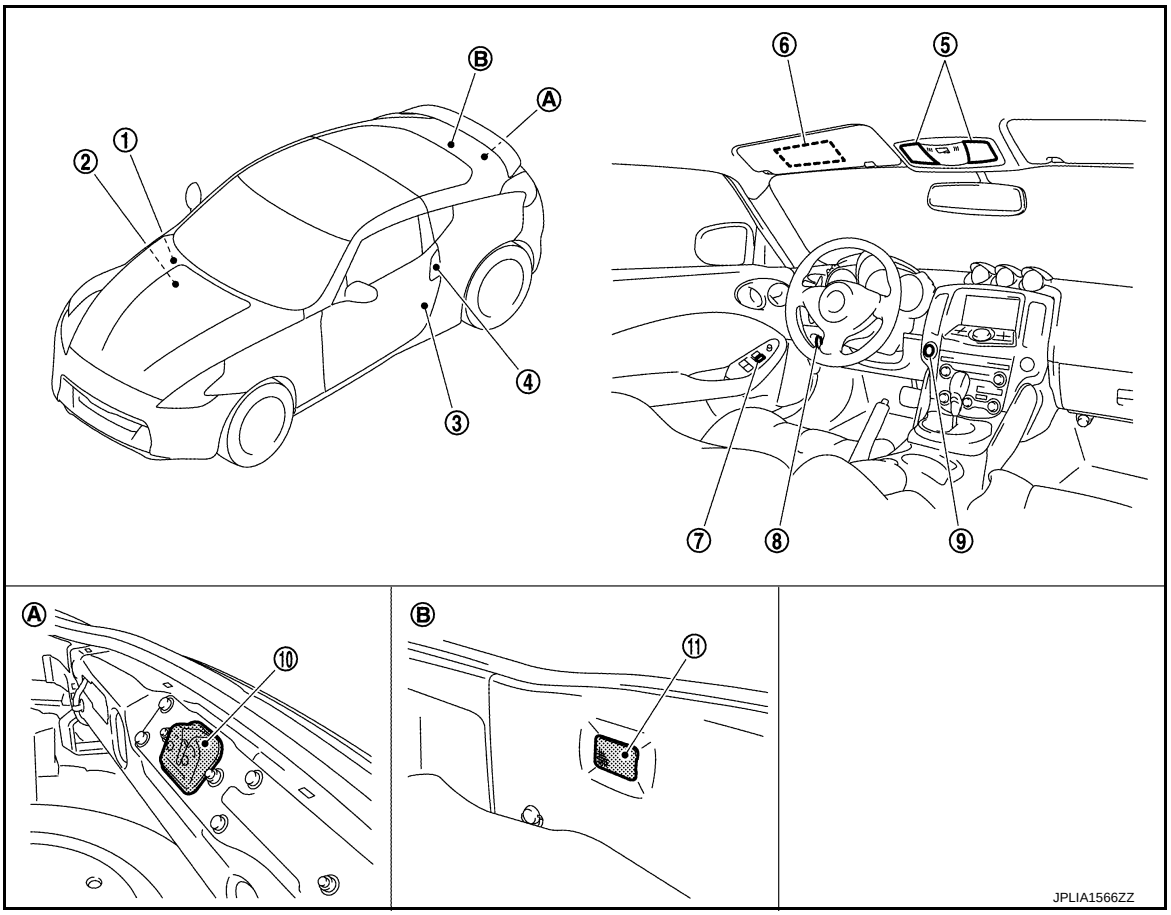
Part	Description
BCM	• Activates the interior room lamp timer depending on the vehicle condition to turn the interior room lamp ON/OFF. • Turns the luggage room lamp ON /OFF according to the luggage room lamp switch status.
Remote keyless entry receiver	Transmits the lock/unlock signal to BCM.

Part	Description
• Door lock and unlock switch • Key cylinder switch	Transmits a switch signal by power window switch serial link.
• Request switch • Door switch	Inputs a switch signal to BCM.

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : Component Parts Location

INFOID:0000000008196454



1. Remote keyless entry receiver
   Refer to DLK-15, "POWER DOOR LOCK SYSTEM : Component Parts Location".
2. BCM
   Refer to BCS-10, "Component Parts Location".
3. Door switch
4. • Key cylinder switch
   • Request switch
5. Map lamp
6. Vanity mirror lamp
7. Door lock and unlock switch
8. Key slot
9. Push-button ignition switch
10. Back door switch
11. Luggage room lamp

A. Back door lock assembly
B. Luggage room

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : Component Description

INFOID:0000000008196455

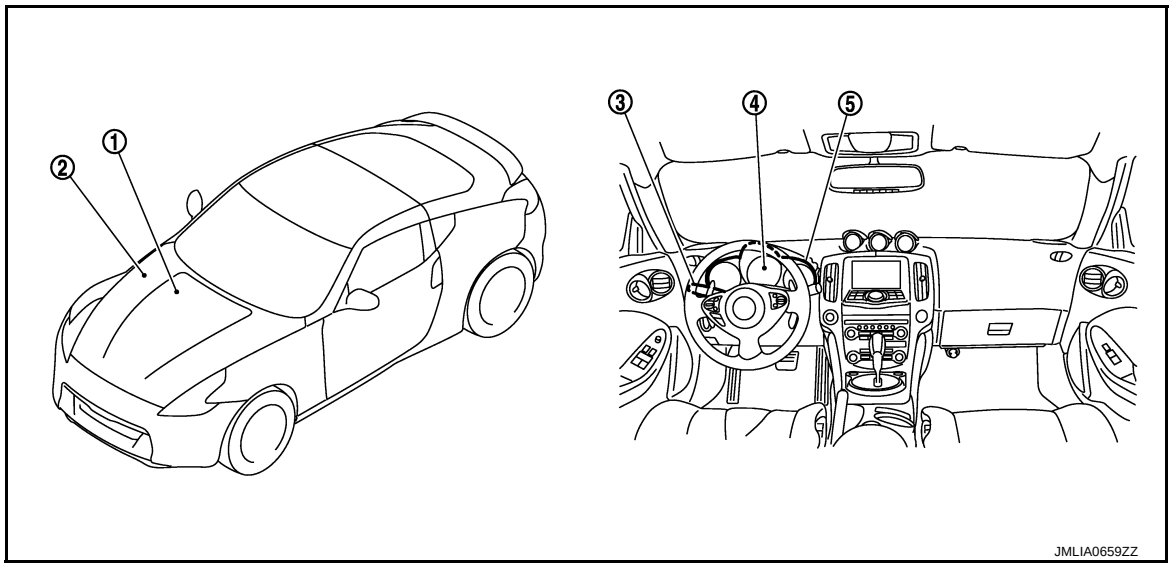
Part	Description
BCM	Operates the interior room lamp battery saver depending on the vehicle condition to cut the interior room lamp power supply.
Remote keyless entry receiver	Transmits the lock/unlock signal to BCM.

Part	Description
• Door lock and unlock switch • Key cylinder switch	Transmits a switch signal by power window switch serial link.
• Request switch • Door switch	Inputs a switch signal to BCM.
Key slot	Inputs the key switch status to BCM.

ILLUMINATION CONTROL SYSTEM

ILLUMINATION CONTROL SYSTEM : Component Parts Location

INFOID:0000000008196456



1. BCM
   Refer to BCS-10, "Component Parts Location".
2. IPDM E/R
   Refer to PCS-5, "Component Parts Location".
3. Combination switch
4. Combination meter
5. Illumination control switch

ILLUMINATION CONTROL SYSTEM : Component Description

INFOID:0000000008196457

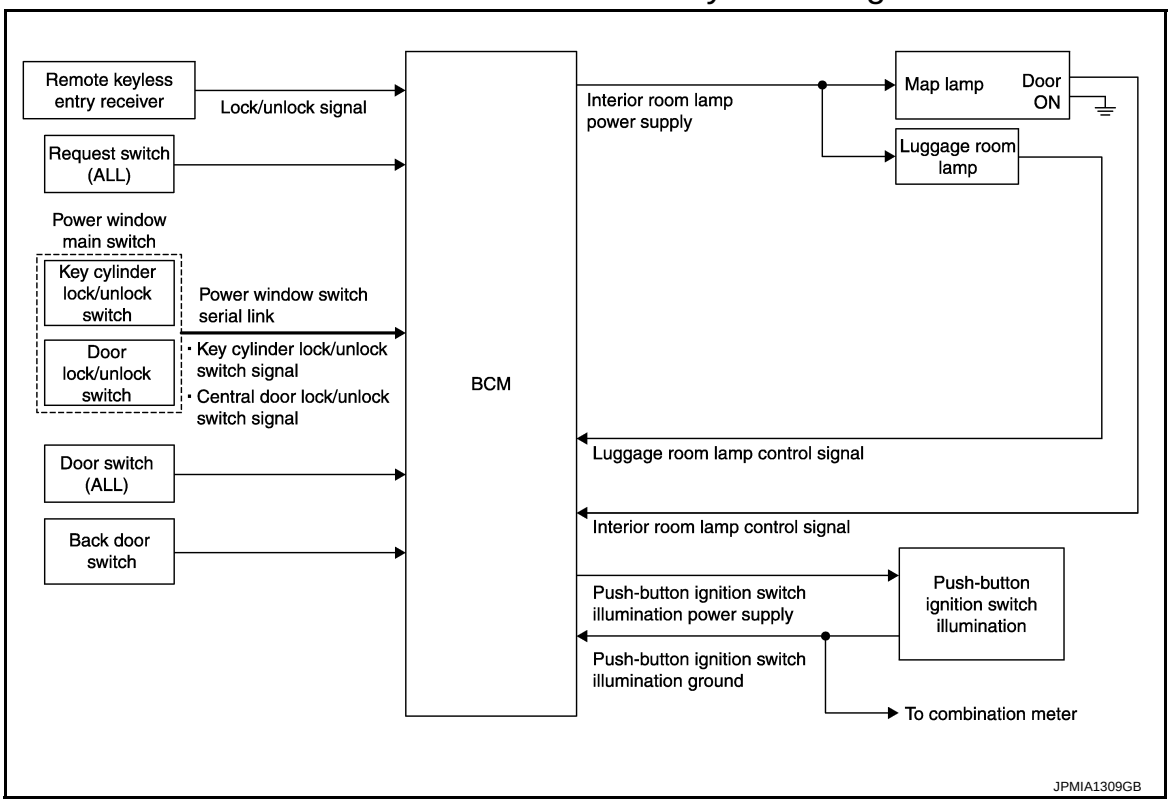
Part	Description
BCM	• Detects each switch condition by the combination switch reading function. • Judges the illumination lamp ON/OFF status depending on the vehicle condition. And then it transmits position light request signal to IPDM E/R and combination meter (with CAN communication).
IPDM E/R	Controls the integrated relay according to the request from BCM (with CAN communication).
Combination meter	• Enters in nighttime mode according to the request from BCM (with CAN communication). • Controls the each illumination in the nighttime mode. Refer to MWI-6, "METER SYSTEM : System Description".
Combination switch (Lighting & turn signal switch)	Refer to BCS-11, "System Diagram".

SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM : System Diagram

INFOID:0000000008196458



INTERIOR ROOM LAMP CONTROL SYSTEM : System Description

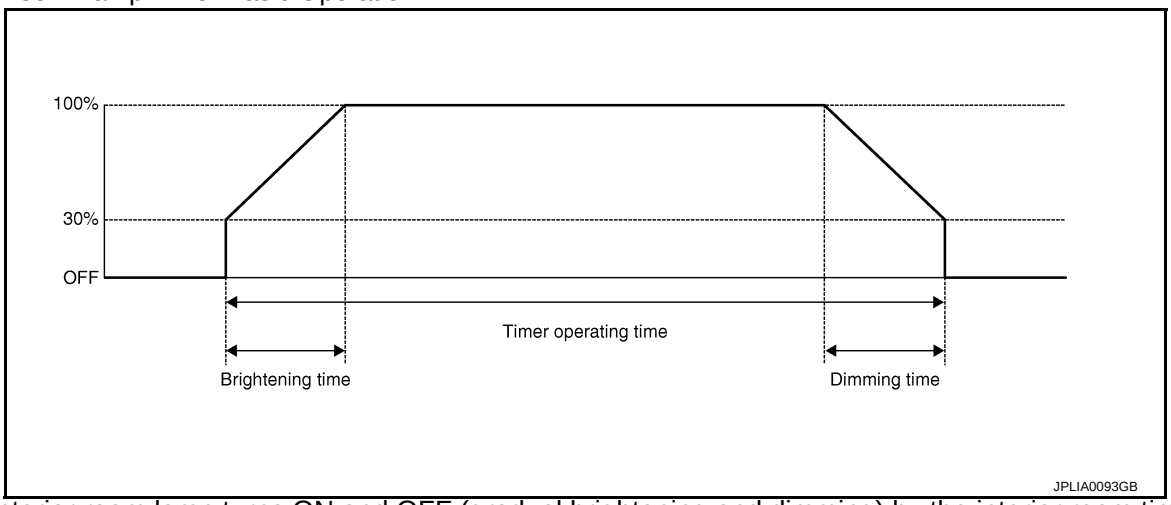
INFOID:0000000008196459

OUTLINE

- Interior room lamps* are controlled by interior room lamp timer control function of BCM.
  *: Map lamp (when map lamp switch is in DOOR position).
- Luggage room lamp is controlled by luggage room lamp control function of BCM.
- Push-button ignition switch illumination is controlled by the push-button ignition switch illumination control function of BCM.

INTERIOR ROOM LAMP TIMER CONTROL

Interior Room Lamp Timer Basic Operation



- The interior room lamp turns ON and OFF (gradual brightening and dimming) by the interior room timer.
- BCM judges the vehicle condition with the following items. It activates the interior room timer.

- Ignition switch status
- Door switch signal (ALL)
- Door lock/unlock signal (Remote keyless entry receiver, each request switch, key cylinder lock/unlock switch, central door lock/unlock switch)

NOTE:
Each function of interior room lamp timer can be set by CONSULT. Refer to INL-15, "INT LAMP : CONSULT Function (BCM - INT LAMP) (Coupe Models)".

Interior Room Lamp ON Operation
- BCM always turns the interior room lamp ON when any door opens.
- BCM activates the interior room timer in any of the following conditions to turn the interior room lamp ON for a period of time.

- Any door opens before all doors close.
- Ignition switch is turned ON → OFF.
- Any door unlock signal is detected when all doors close with ignition switch OFF.

NOTE:
Restart the timer if new condition is input during the timer operating time.

Interior Room Lamp OFF Operation
BCM stops the timer in any of the following conditions to turns the interior room lamp OFF.
- The timer operating time is expired.
- Ignition switch position is other than OFF with all doors close.
- Any door lock operation is detected with all doors close.

LUGGAGE ROOM LAMP CONTROL
BCM controls the luggage room lamp (ground-side) to turn ON with the luggage room lamp switch ON.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CONTROL

Push-button Ignition Switch Illumination Basic Operation
- BCM provides the power supply and the ground to turn the push-button ignition switch illumination ON.
- BCM cuts the ground supply while the each illumination (tail lamp) ON. BCM switches to the ground control with the meter illumination control function.

Push-button Ignition Switch Illumination ON Operation
BCM turns the push-button ignition switch illumination ON in the following conditions.
- Ignition switch ON
- Each illumination (tail lamp) ON
- Any of the following conditions with ignition switch OFF

- Engine start permission is entered.
- Intelligent Key inserted into the key slot.
- Driver door is LOCK → UNLOCK.
- Driver door is open.

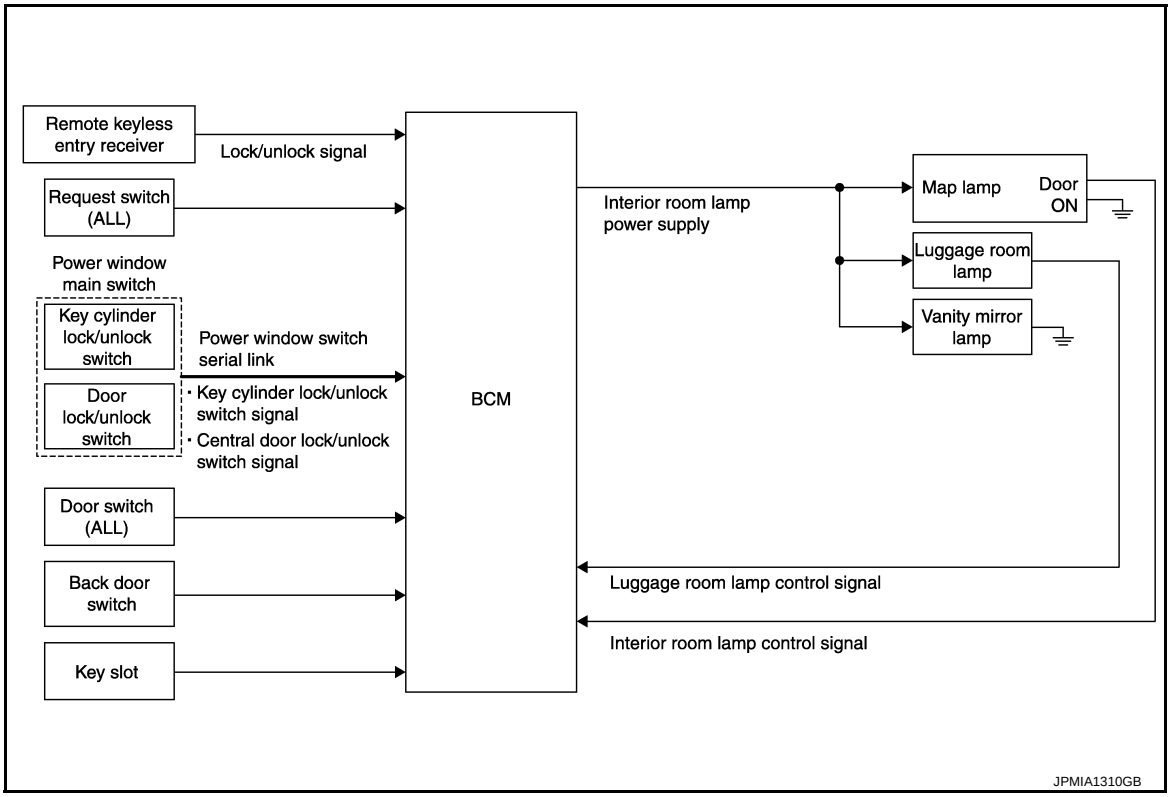
Push-button Ignition Switch Illumination OFF Operation
BCM turns the push-button ignition switch illumination OFF in any of the following conditions.
- The push-button ignition switch illumination ON conditions do not satisfy.
- All of the following conditions with ignition switch OFF

- Each illumination (tail lamp) OFF
- The push-button ignition switch illumination ON conditions do not change (15 seconds after the ignition switch OFF) or the driver door is UNLOCK → LOCK.

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : System Diagram

INFOID:0000000008196460



INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : System Description

INFOID:0000000008196461

OUTLINE

- Interior room lamp battery saver is controlled by BCM.
- BCM turns applicable lamps OFF depending on the vehicle condition. This function prevents the battery from over-discharging if the driver neglect turning OFF the any lamps.

Applicable lamps

- Map lamp
- Luggage room lamp
- Vanity mirror lamp

INTERIOR ROOM LAMP BATTERY SAVER FUNCTION

- When the ignition switch is turned OFF, BCM operates the timer for a period of time to cut the interior room lamp power supply.
- BCM restart the timer when any of the following signals changes while operating the timer.
- Ignition switch status
- Door switch signal (ALL)
- Door lock/unlock signal (Remote keyless entry receiver, each request switch, key cylinder lock/unlock switch, central door lock/unlock switch)
- Back door switch signal
- Key switch signal (Key slot)
- BCM provides the interior room lamp power supply continuously when the ignition switch position is other than OFF.

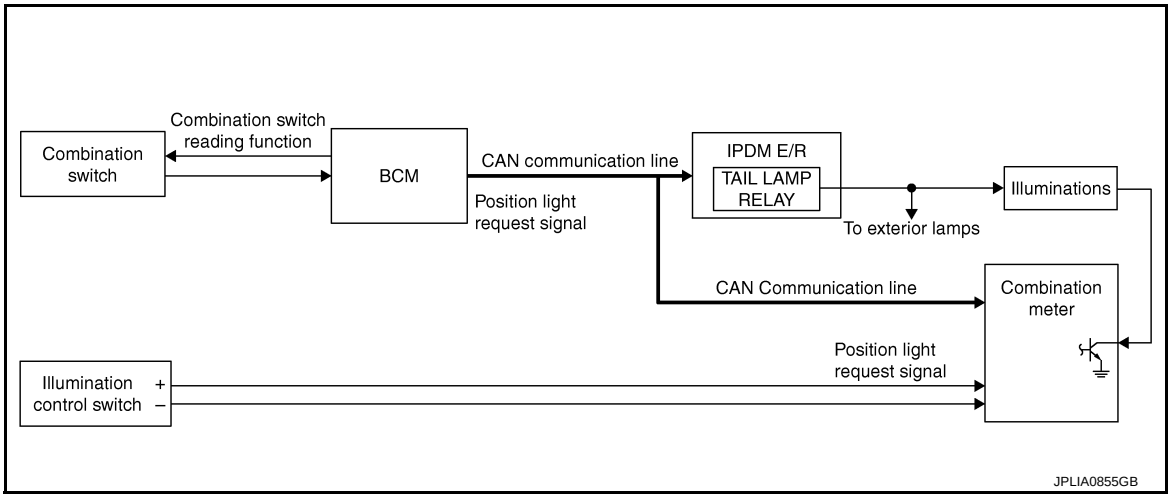
NOTE:

Each function of interior room lamp battery saver can be set by CONSULT. Refer to INL-15, "INT LAMP : CONSULT Function (BCM - INT LAMP) (Coupe Models)".

ILLUMINATION CONTROL SYSTEM

ILLUMINATION CONTROL SYSTEM : System Diagram

INFOID:0000000008196462



ILLUMINATION CONTROL SYSTEM : System Description

INFOID:0000000008196463

OUTLINE

Each illumination lamp is controlled by each function of BCM, IPDM E/R and combination meter.

Control by BCM
- Combination switch reading function
- Headlamp control function

Control by IPDM E/R
- Relay control function

Control by combination meter
- Meter illumination control function (Refer to MWI-24, "METER ILLUMINATION CONTROL : System Description".)

ILLUMINATION CONTROL

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

Tail lamp ON condition
- Lighting switch 1ST
- Lighting switch 2ND
- Lighting switch AUTO, and the auto light function ON judgment

- IPDM E/R turns the integrated tail lamp relay ON according to position light request signal. It provides the power supply to each illumination lamp.
- Combination meter enters in the nighttime mode according to position light request signal. Under the nighttime mode the combination meter controls the illuminance by controlling the each illumination lamp (ground side).

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

INFOID:0000000008838296

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 • Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door/Trunk lid open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

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

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

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power supply position status of the moment a particular DTC is detected	While turning BCM status from low power consumption mode to normal mode (Power supply position is “LOCK”*)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is “OFF”.)
	LOCK>ACC		While turning power supply position from “LOCK”* to “ACC”
	ACC>ON		While turning power supply position from “ACC” to “IGN”
	RUN>ACC		While turning power supply position from “RUN” to “ACC” (Except emergency stop operation)
	CRANK>RUN		While turning power supply position from “CRANKING” to “RUN” (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from “RUN“ to “ACC” (Emergency stop operation)
	ACC>OFF		While turning power supply position from “ACC” to “OFF”
	OFF>LOCK		While turning power supply position from “OFF” to “LOCK”*
	OFF>ACC		While turning power supply position from “OFF” to “ACC”
	ON>CRANK		While turning power supply position from “IGN” to “CRANKING”
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is “OFF”.) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is “LOCK”*.) to low power consumption mode
	LOCK		Power supply position is “LOCK”*
	OFF		Power supply position is “OFF” (Ignition switch OFF)
	ACC		Power supply position is “ACC” (Ignition switch ACC)
	ON		Power supply position is “IGN” (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is “RUN” (Ignition switch ON with engine running)
	CRANKING		Power supply position is “CRANKING” (At engine cranking)
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.	

NOTE:

*: Power supply position shifts to “LOCK” from “OFF”, when ignition switch is in the OFF position, selector lever is in the P position (A/T models), and any of the following conditions are met.

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

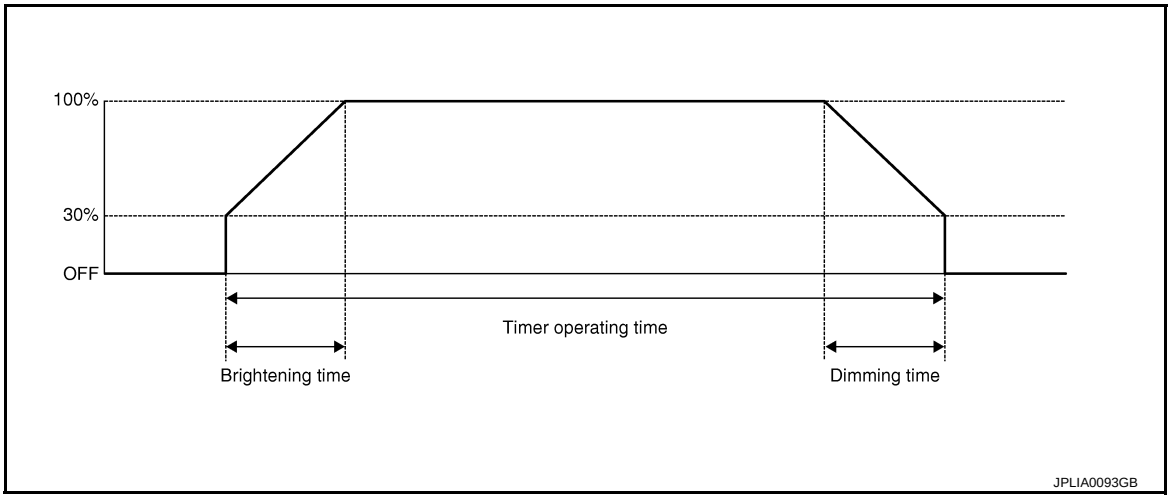
The power supply position shifts to “ACC” when the push-button ignition switch (push switch) is pushed at “LOCK”.

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP) (Coupe Models)

INFOID:0000000008196465

WORK SUPPORT



Service item	Setting item	Setting	
SET I/L D-UNLCK INTCON	ON*	With the interior room lamp timer function	
	OFF	Without the interior room lamp timer function	
ROOM LAMP TIMER SET	MODE 2	7.5 sec.	Sets the interior room lamp ON time. (Timer operating time)
	MODE 3*	15 sec.	
	MODE 4	30 sec.	
ROOM LAMP ON TIME SET	MODE 1	0.5 sec.	Sets the interior room lamp gradual brightening time.
	MODE 2*	1 sec.	
	MODE 3	2 sec.	
	MODE 4	3 sec.	
	MODE 5	0 sec.	
ROOM LAMP OFF TIME SET	MODE 1	0.5 sec.	Sets the interior room lamp gradual dimming time.
	MODE 2	1 sec.	
	MODE 3	2 sec.	
	MODE 4*	3 sec.	
	MODE 5	0 sec.	
R LAMP TIMER LOGIC SET	MODE 1*	Interior room lamp timer activates with synchronizing all doors.	
	MODE 2	Interior room lamp timer activates with synchronizing the driver door only.	

*: 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]	The switch status input from request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from front request switch (passenger side)

Monitor item [Unit]	Description
REQ SW-RR [On/Off]	**NOTE:** The item is indicated, but not monitored.
REQ SW-RL [On/Off]	
PUSH SW [On/Off]	The switch status input from push-button ignition switch
ACC RLY-F/B [On/Off]	**NOTE:** The item is indicated, but not monitored.
UNLK SEN-DR [On/Off]	Driver door unlock status input from unlock sensor
KEY SW-SLOT [On/Off]	Key switch status input from key slot
DOOR SW-DR [On/Off]	The switch status input from driver side door switch
DOOR SW-AS [On/Off]	The switch status input from passenger side door switch
DOOR SW-RR [On/Off]	**NOTE:** The item is indicated, but not monitored.
DOOR SW-RL [On/Off]	
DOOR SW-BK [On/Off]	The switch status input from back door switch
CDL LOCK SW [On/Off]	Lock switch status received from the door lock and unlock switch
CDL UNLOCK SW [On/Off]	Unlock switch status received from the door lock and unlock switch
KEY CYL LK-SW [On/Off]	Lock switch status received from key cylinder switch
KEY CYL UN-SW [On/Off]	Unlock switch status received from key cylinder switch
TRNK/HAT MNTR [On/Off]	**NOTE:** The item is indicated, but not monitored.
RKE-LOCK [On/Off]	Lock signal status received from remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from remote keyless entry receiver

ACTIVE TEST

Test item	Operation	Description
INT LAMP	On	Outputs the interior room lamp control signal to turn map lamp ON (Map lamp switch is in DOOR position).
	Off	Stops the interior room lamp control signal to turn map lamp OFF.
STEP LAMP TEST	On	**NOTE:** The item is displayed, but cannot be tested.
	Off	
LUGGAGE LAMP TEST	On	Outputs the luggage room lamp control signal to turn the luggage room lamp ON.
	Off	Stops the luggage room lamp control signal to turn the luggage room lamp OFF.

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER) (Coupe Models)

INFOID:0000000008196466

WORK SUPPORT

Service item	Setting item	Setting	
BATTERY SAVER SET	On*	With the exterior lamp battery saver function	
	Off	Without the exterior lamp battery saver function	
ROOM LAMP BAT SAV SET	On*	With the interior room lamp battery saver function	
	Off	Without the interior room lamp battery saver function	
ROOM LAMP TIMER SET	MODE 1	30 min.	Sets the interior room lamp battery saver timer operating time.
	MODE 2	60 min.	
	MODE 3*	15 min.	

*: 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]	The switch status input from request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from front request switch (passenger side)
REQ SW-RR [On/Off]	**NOTE:** The item is indicated, but not monitored.
REQ SW-RL [On/Off]	
PUSH SW [On/Off]	The switch status input from push-button ignition switch
ACC RLY-F/B [On/Off]	**NOTE:** The item is indicated, but not monitored.
KEY SW-SLOT [On/Off]	Key switch status input from key slot
UNLK SEN-DR [On/Off]	Driver door unlock status input from unlock sensor
DOOR SW-DR [On/Off]	The switch status input driver side front door switch
DOOR SW-AS [On/Off]	The switch status input from passenger side door switch
DOOR SW-RR [On/Off]	**NOTE:** The item is indicated, but not monitored.
DOOR SW-RL [On/Off]	
DOOR SW-BK [On/Off]	The switch status input from back door switch
CDL LOCK SW [On/Off]	Lock switch status received from the door lock and unlock switch
CDL UNLOCK SW [On/Off]	Unlock switch status received from the door lock and unlock switch
KEY CYL LK-SW [On/Off]	Lock switch status received from key cylinder switch

Monitor item [Unit]	Description
KEY CYL UN-SW [On/Off]	Unlock switch status received from key cylinder switch
TRNK/HAT MNTR [On/Off]	**NOTE:** The item is indicated, but not monitored.
RKE-LOCK [On/Off]	Lock signal status received from remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from remote keyless entry receiver

ACTIVE TEST

Test item	Operation	Description
BATTERY SAVER	Off	Cuts the interior room lamp power supply to turn interior room lamp OFF.
	On	Outputs the interior room lamp power supply to turn interior room lamp ON.*

*: Each lamp switch is in ON position.

ECU DIAGNOSIS INFORMATION

BCM, COMBINATION METER

List of ECU Reference

INFOID:0000000008196467

ECU	Reference
BCM	BCS-58, "Reference Value"
	BCS-86, "Fail-safe"
	BCS-87, "DTC Inspection Priority Chart"
	BCS-88, "DTC Index"
COMBINATION METER	MWI-57, "Reference Value"
	MWI-66, "Fail-Safe"
	MWI-67, "DTC Index"

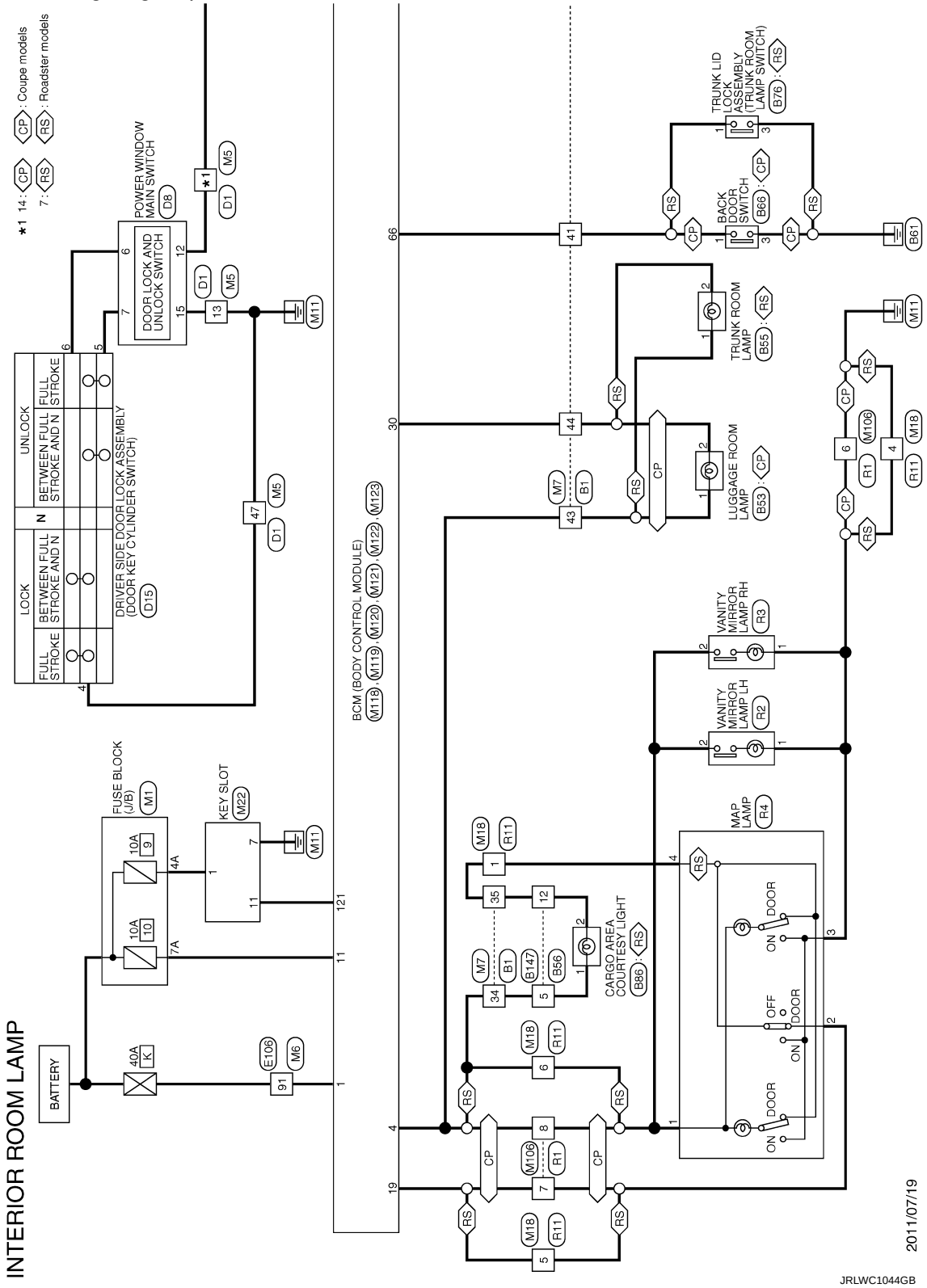
WIRING DIAGRAM

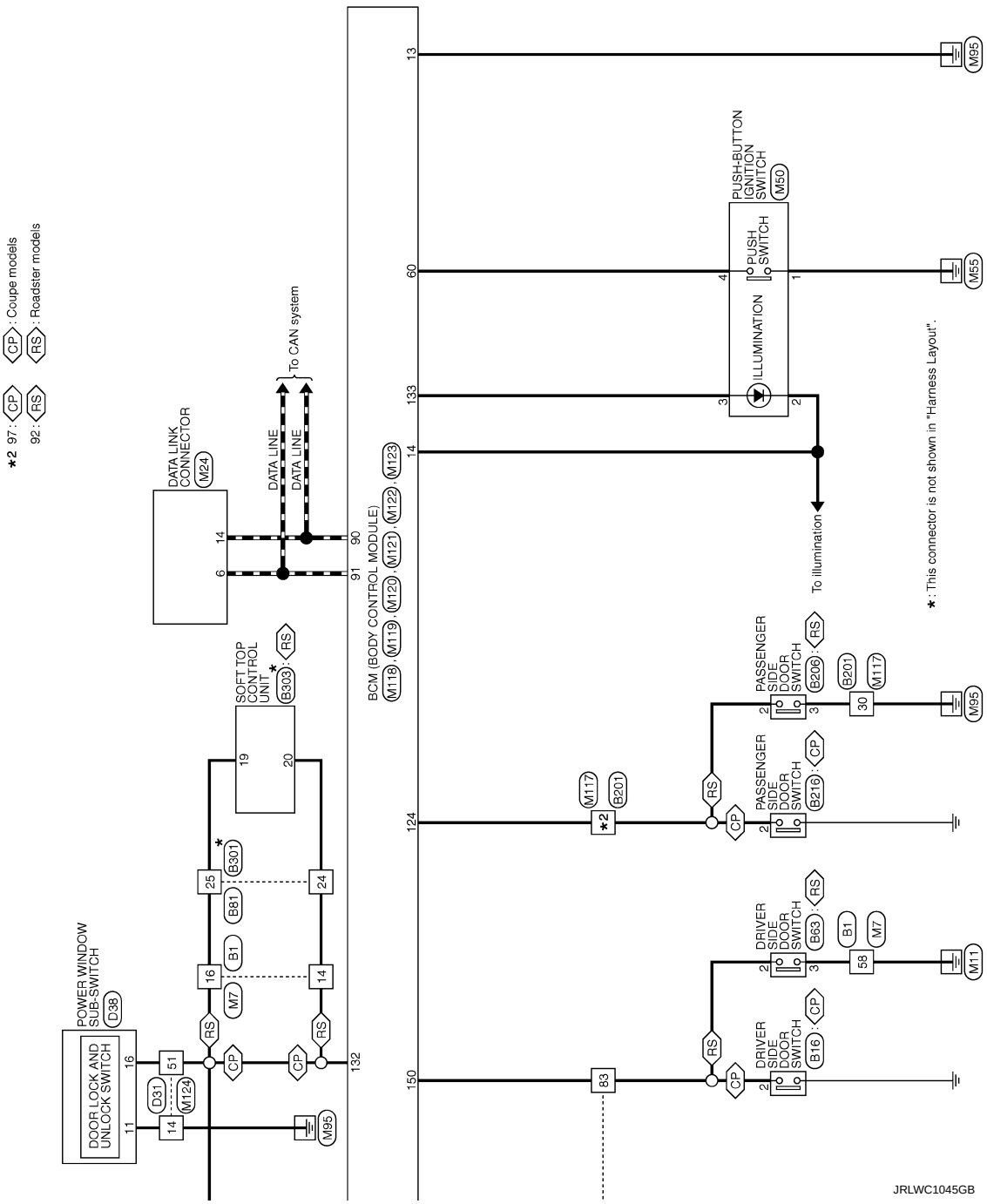
INTERIOR ROOM LAMP CONTROL SYSTEM

Wiring Diagram

INFOID:0000000008196468

For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".



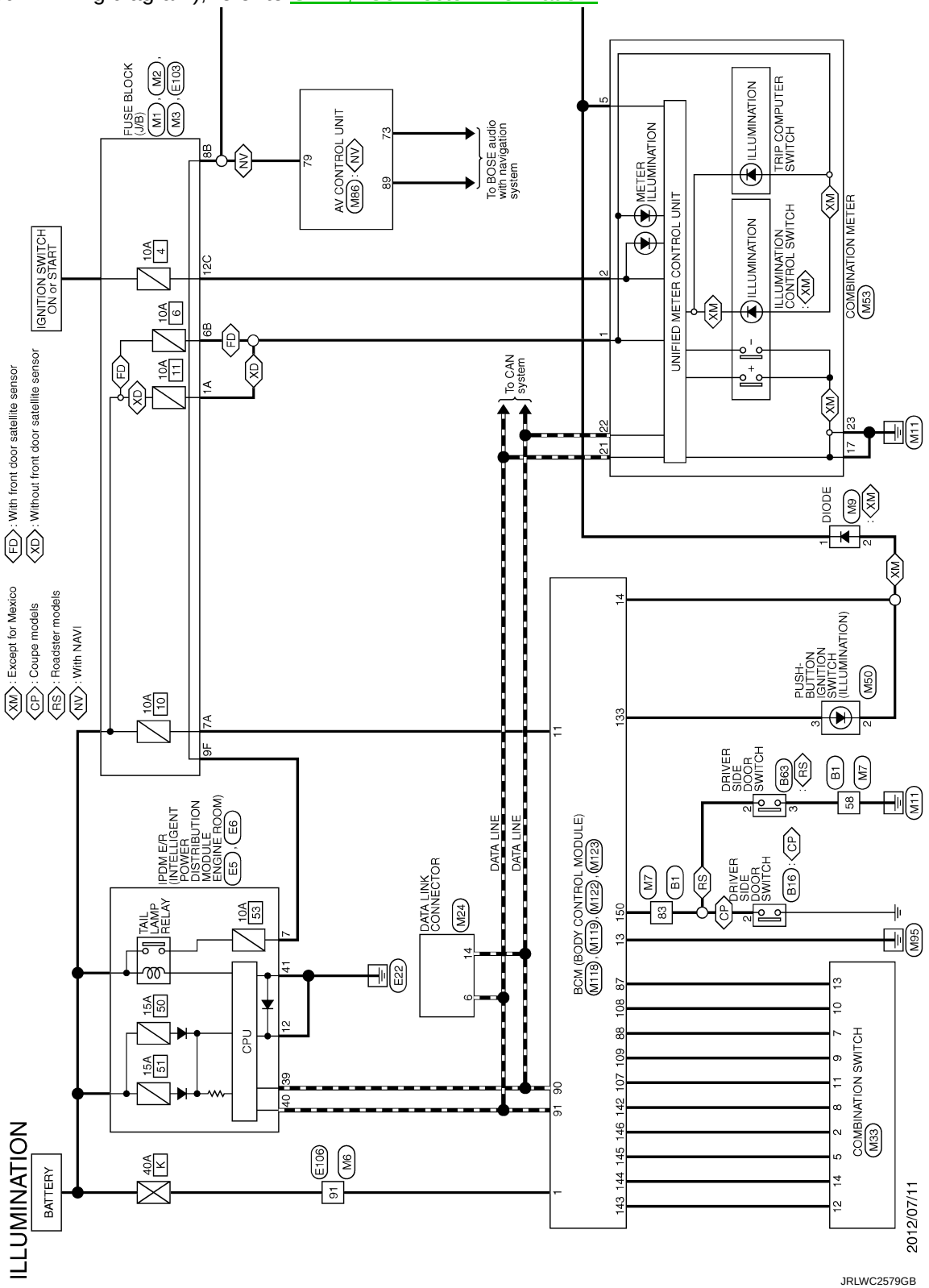

CP : Coupe models
RS : Roadster models
*2 97 : CP
92 : RS
DATA LINK CONNECTOR M24
DATA LINE
DATA LINE
To CAN system
BCM (BODY CONTROL MODULE)
M118 M119 M120 M121 M122 M123
SOFT TOP CONTROL UNIT *
B303
POWER WINDOW SUB-SWITCH D38
DOOR LOCK AND UNLOCK SWITCH
D31 M124
B301 B81 B1 M7
PUSH-BUTTON IGNITION SWITCH M50
PUSH SWITCH
ILLUMINATION
To illumination
* : This connector is not shown in "Harness Layout".
PASSENGER SIDE DOOR SWITCH B206
PASSENGER SIDE DOOR SWITCH B216
DRIVER SIDE DOOR SWITCH B63
DRIVER SIDE DOOR SWITCH B16
M95 M55 M11 M117 B201
JRLWC1045GB

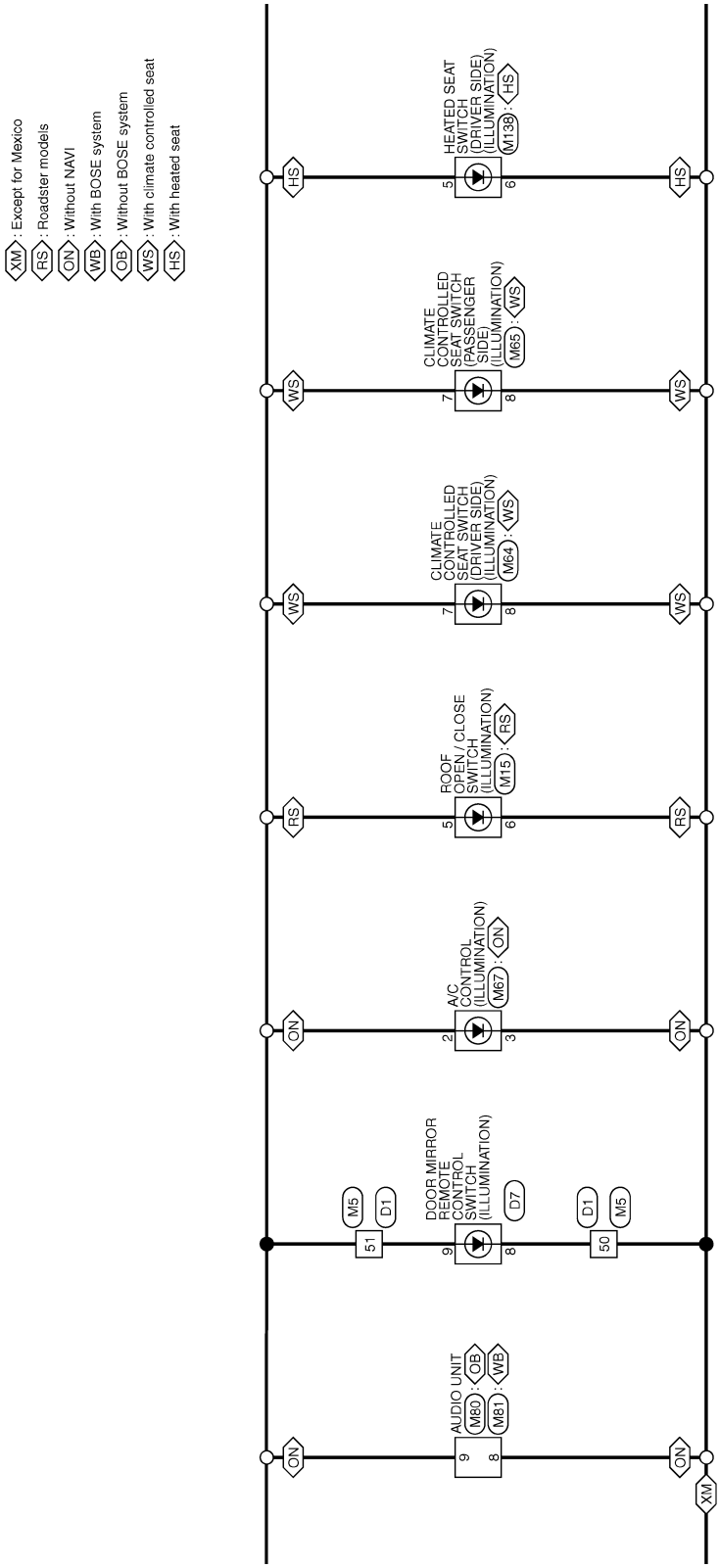
ILLUMINATION

Wiring Diagram

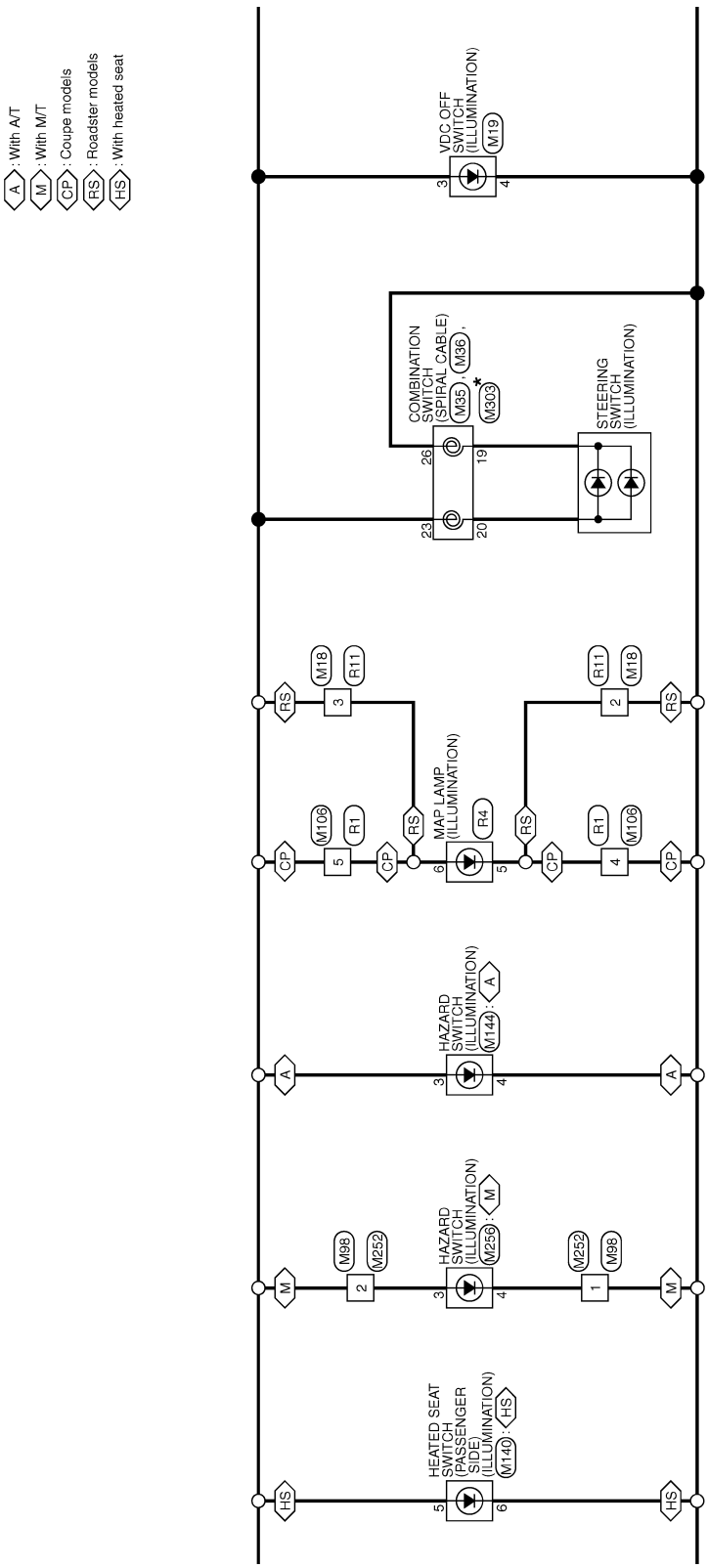
INFOID:0000000008196469

For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".

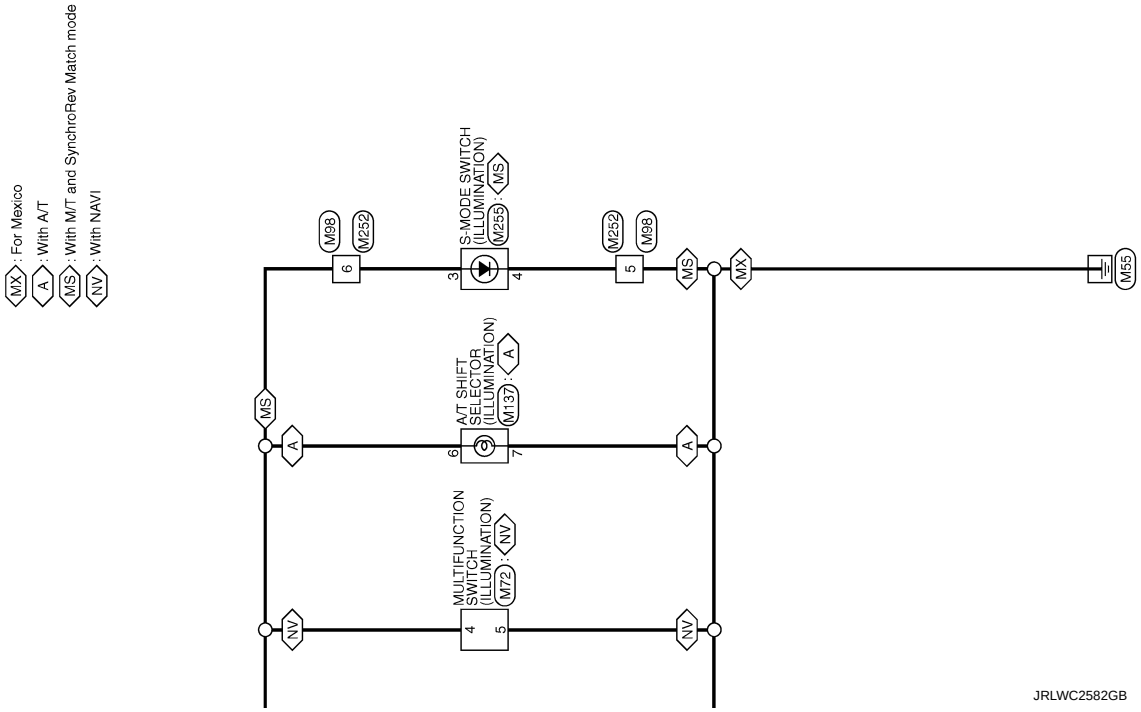




JRLWC2580GB



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


MX : For Mexico
A : With A/T
MS : With M/T and SynchroRev Match mode
NV : With NAVI
S-MODE SWITCH (ILLUMINATION)
A/T SHIFT SELECTOR (ILLUMINATION)
MULTIFUNCTION SWITCH (ILLUMINATION)
M98
M252
M255
M137
M72
M55
JRLWC2582GB

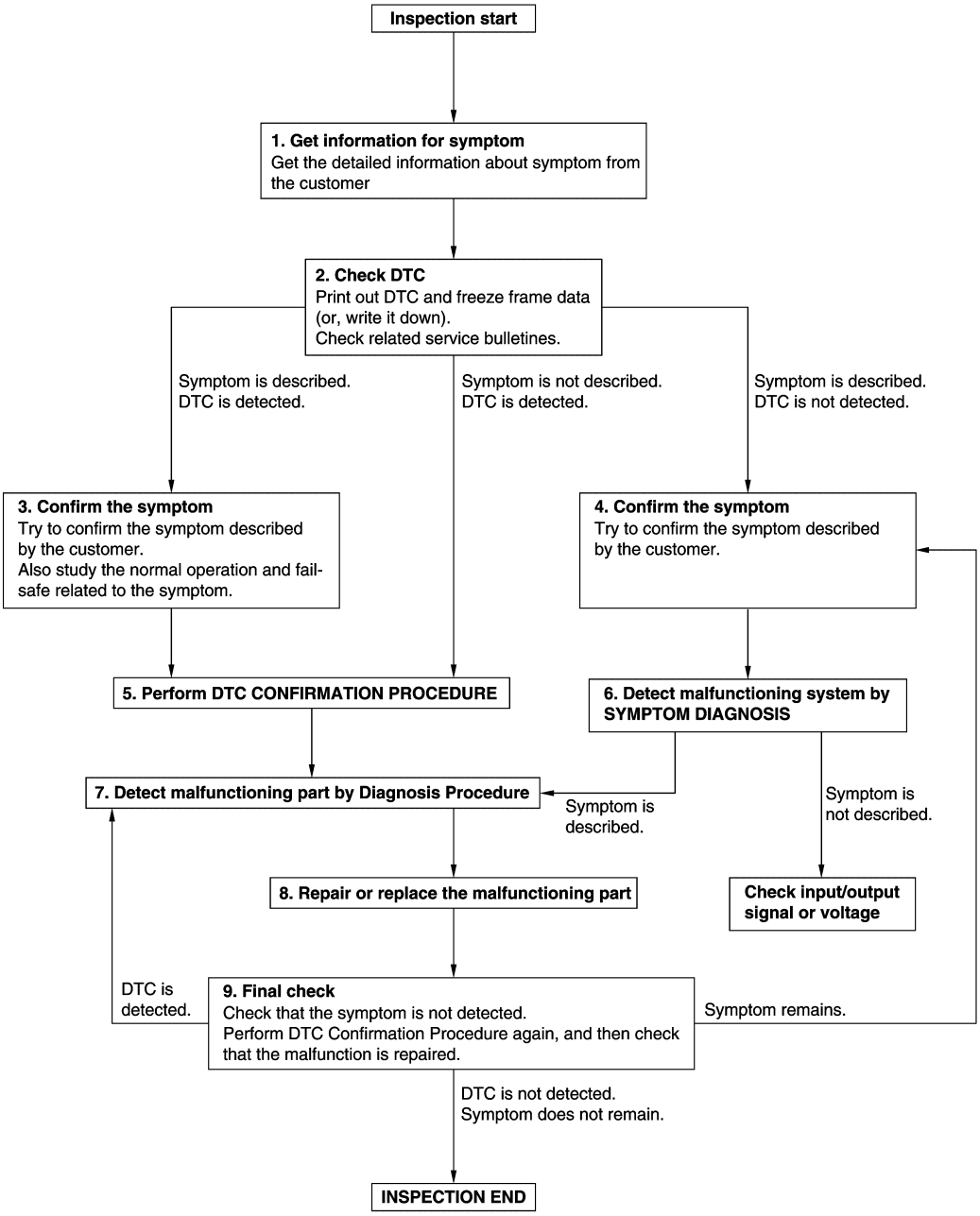
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000008196470

OVERALL SEQUENCE



JMKIA8652GB

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-45, "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 DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.
NO >> Check according to GI-45, "Intermittent Incident".

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

1. Repair or replace the malfunctioning part.
2. Reconnect parts or connectors disconnected during Diagnostic 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.

DTC/CIRCUIT DIAGNOSIS

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

Description

INFOID:0000000008196471

Provides the interior room lamp power supply. Also cuts the power supply when the interior room lamp battery saver activating.

Component Function Check

INFOID:0000000008196472

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY FUNCTION

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Turn each interior room lamp ON.
- Map lamp
- Vanity mirror lamp
- Luggage room lamp
3. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
4. With operating the test items, check that each interior room lamp turns ON/OFF.

Off : Interior room lamp OFF
On : Interior room lamp ON

Does the interior room lamp turn ON/OFF?

YES >> Interior room lamp power supply circuit is normal.
NO >> Refer to INL-29, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008196473

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY OUTPUT

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Select “BATTERY SAVER” of BCM (BATTERY SAVER) active test item.
3. With operating the test item, check voltage between BCM harness connector and the ground.

Terminals			Test item	Voltage (Approx.)
(+)		(–)		
BCM		Ground	BATTERY SAVER	
Connector	Terminal			
M119	4		Off	0 V
			On	Battery voltage

Is the measurement value normal?

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

2.CHECK INTERIOR ROOM LAMP POWER SUPPLY OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect the following connectors.
- Map lamp
- Vanity mirror lamp (LH)
- Vanity mirror lamp (RH)
- Luggage room lamp
3. Check continuity between BCM harness connector and each interior room lamp harness connector.

BCM		Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	
M119	4	Map lamp	R4	1	Existed
		Vanity mirror lamp (LH)	R2	2	
		Vanity mirror lamp (RH)	R3	2	
		Luggage room lamp	B53	1	

Does continuity exist?

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

3.CHECK INTERIOR ROOM LAMP POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM harness connector and the ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	4		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.
NO >> Check that each interior room lamp has no internal short circuit.

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

INFOID:0000000008196474

Controls each interior room lamp (ground side) by PWM signal.
NOTE:
PWM signal control period is approximately 250 Hz (in the gradual brightening/dimming).

Component Function Check

INFOID:0000000008196475

CAUTION:
Before performing the diagnosis, check that the following is normal.
- **Interior room lamp power supply**
- **Map lamp bulb**

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Switch the map lamp switch to DOOR.
3. Select “INT LAMP” of BCM (INT LAMP) active test item.
4. With operating the test items, check that each interior room lamp turns ON/OFF (gradual brightening/dimming).

On : Interior room lamp gradual brightening
Off : Interior room lamp gradual dimming

Does the interior room lamp turns ON/OFF (gradual brightening/dimming)?

YES >> Interior room lamp control circuit is normal.
NO >> Refer to INL-31, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008196476

1.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT ACTIVE TEST
1. Turn the ignition switch OFF.
2. Remove all the bulbs of map lamp.
3. Turn the ignition switch ON.
4. Select “INT LAMP” of BCM (INT LAMP) active test item.
5. With operating the test item, check continuity between BCM harness connector and the ground.

BCM		Ground	Test item	Continuity
Connector	Terminal		INT LAMP	
M119	19		On	Existed
			Off	Not existed

Is the measurement value normal?

YES >> GO TO 2.
Fixed ON>>GO TO 3.
Fixed OFF>>Replace BCM.

2.CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

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

BCM		Map lamp		Continuity
Connector	Terminal	Connector	Terminal	
M119	19	R4	2	Existed

Does continuity exist?

YES >> Replace the map lamp.
NO >> Repair the harnesses or connectors.

3. CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

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

BCM		Ground	Continuity
Connector	Terminal		
M119	19		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.
NO >> Replace BCM.

LUGGAGE ROOM LAMP CIRCUIT

Description

INFOID:0000000008196477

Controls the luggage room lamp (ground side) to turn the luggage room lamp ON and OFF.

Component Function Check

INFOID:0000000008196478

CAUTION:
Before performing the diagnosis, check that the following is normal.
- **Interior room lamp power supply**
- **Luggage room lamp bulb**

1.CHECK LUGGAGE ROOM LAMP OPERATION

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Select “LUGGAGE LAMP TEST” of BCM (INT LAMP) active test item.
3. With operating the test items, check that luggage room lamp turns ON/OFF.

On : Luggage room lamp ON
Off : Luggage room lamp OFF

Does the luggage room lamp turn ON/OFF?

YES >> Luggage room lamp circuit is normal.
NO >> Refer to INL-33, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008196479

1.CHECK LUGGAGE ROOM LAMP OUTPUT

CONSULT ACTIVE TEST
1. Turn the ignition switch OFF.
2. Remove luggage room lamp bulb.
3. Turn the ignition switch ON.
4. Select “LUGGAGE LAMP TEST” of BCM (INT LAMP) active test item.
5. With operating the test item, check continuity between BCM harness connector and the ground.

BCM		Ground	Test item	Continuity
Connector	Terminal		LUGGAGE LAMP TEST	
M120	30		On	Existed
			Off	Not existed

Is the measurement value normal?

YES >> GO TO 2.
Fixed ON>>GO TO 3.
Fixed OFF>>Replace BCM.

2.CHECK LUGGAGE ROOM LAMP OPEN CIRCUIT

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

BCM		Luggage room lamp		Continuity
Connector	Terminal	Connector	Terminal	
M120	30	B53	2	Existed

Does continuity exist?

YES >> Replace the luggage room lamp.

NO >> Repair the harnesses or connectors.

3.CHECK LUGGAGE ROOM LAMP SHORT CIRCUIT

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

BCM		Ground	Continuity
Connector	Terminal		
M120	30		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.
NO >> Replace BCM.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

Description

INFOID:0000000008196480

Provides the power supply and the ground to control the push-button ignition switch illumination.

Component Function Check

INFOID:0000000008196481

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Select “ENGINE SW ILLUMI” of BCM (INTELLIGENT KEY) active test item.
3. With operating the test items, check that the push-button ignition switch illumination turns ON/OFF.

On : Push-button ignition switch illumination ON
Off : Push-button ignition switch illumination OFF

Does the push-button ignition switch illumination turn ON/OFF?

YES >> Push-button ignition switch illumination circuit is normal.
NO >> Refer to INL-35, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008196482

1.CHECK ILLUMINATION CONTROL SWITCHING OPERATION

1. Turn the ignition switch ON.
2. With operating the lighting switch, check that the push-button ignition switch illumination turns ON/OFF.

Condition	Push-button ignition switch illumination
• Ignition switch ON • Lighting switch 1ST	ON
• Ignition switch OFF • Lighting switch OFF • Driver door LOCK	OFF

Does the push-button ignition switch illumination turn ON/OFF?

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

2.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND CIRCUIT

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

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M119	14	M50	2	Existed

Does the continuity exist?

YES >> Replace BCM.
NO >> Repair the harness or the connector.

3.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY OUTPUT

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Select “ENGINE SW ILLUMI” of BCM (INTELLIGENT KEY) active test item.
3. With operating the test item, check voltage between BCM harness connector and the ground.

Terminals			Test item	Voltage (Approx.)
(+)		(–)		
BCM		Ground	ENGINE SW ILLUMI	
Connector	Terminal			
M123	133		ON	5 V
			OFF	0 V

Is the measurement value normal?

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

4. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY OPEN CIRCUIT

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

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M123	133	M50	3	Existed

Does the continuity exist?

YES >> Replace the push-button ignition switch.
NO >> Repair the harness or the connector.

5. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY SHORT CIRCUIT

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

BCM		Ground	Continuity
Connector	Terminal		
M123	133		Not existed

Does the continuity exist?

YES >> Repair the harness or the connector.
NO >> Replace BCM.

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000008196483

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

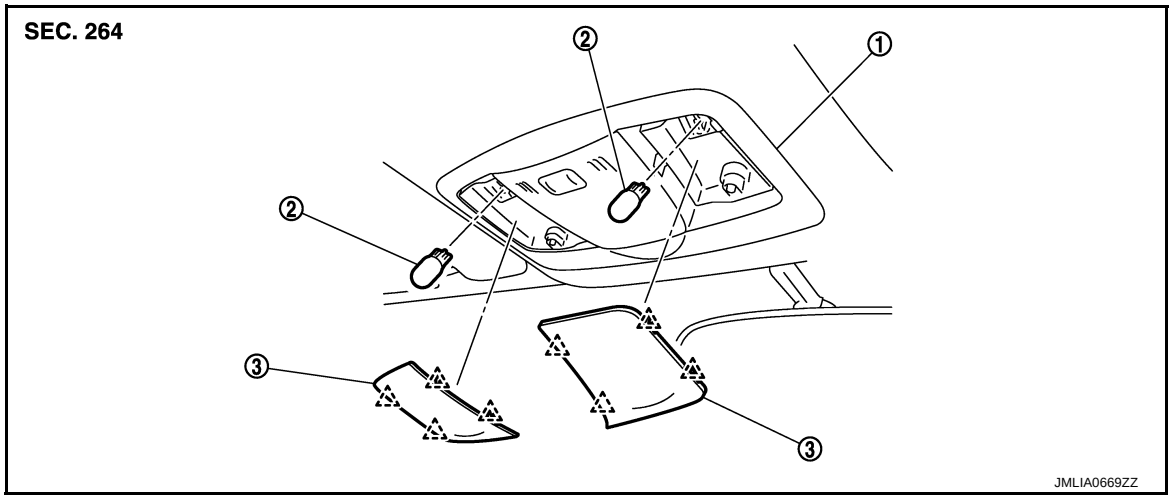
Symptom	Possible cause	Inspection item
All the following lamps do not turn ON. • Map lamp • Luggage room lamp • Vanity mirror lamp	• Harness between BCM and each interior room lamp • BCM	Interior room lamp power supply circuit Refer to INL-29.
• Interior room lamp does not turn ON even though the door is open. (It turns ON when turning the interior room lamp ON.) • Interior room lamp does not turn OFF even though the door is closed.	• Harness between BCM and each door switch • Harness between BCM and each interior room lamp • BCM	Door switch circuit Refer to DLK-63.
		Interior room lamp control circuit Refer to INL-31.
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	—	Check the interior room lamp setting. Refer to INL-15.
• Luggage room lamp does not turn ON. (The bulb is normal.) • Luggage room lamp does not turn OFF.	• Harness between BCM and back door switch • Harness between BCM and luggage room lamp • BCM	Back door switch circuit Refer to DLK-63.
		Luggage room lamp circuit Refer to INL-33.
Push-button ignition switch illumination does not illuminate.	• Harness between BCM and push-button ignition switch • BCM	Push-button ignition switch illumination circuit Refer to INL-35.
Interior room lamp battery saver does not activate.	—	Check the interior room lamp battery saver setting. Refer to INL-17.

REMOVAL AND INSTALLATION

MAP LAMP

Exploded View

INFOID:0000000008196484



1. Map lamp assembly
2. Bulb
3. Lens

: Pawl

Removal and Installation

INFOID:0000000008196485

Refer to INT-28, "Exploded View" for the map lamp assembly installation/removal.

Replacement

INFOID:0000000008196486

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.**

MAP LAMP BULB

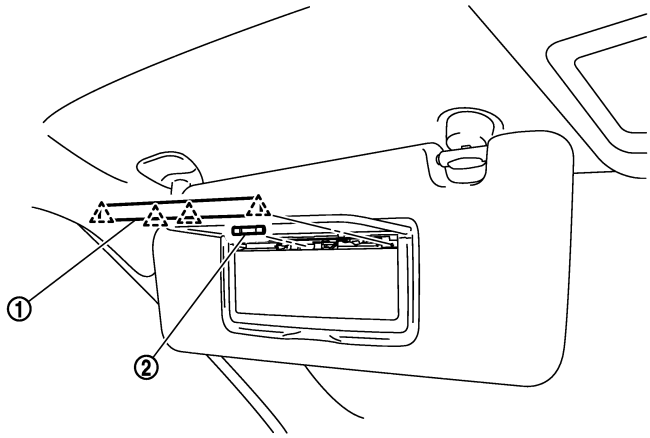
1. Insert any appropriate tool into the gap between the lens. Remove the lens.
2. Remove the bulb.

VANITY MIRROR LAMP

Exploded View

INFOID:0000000008196487

SEC. 964



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1. Lens
2. Bulb

: Pawl

Replacement

INFOID:0000000008196488

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.**

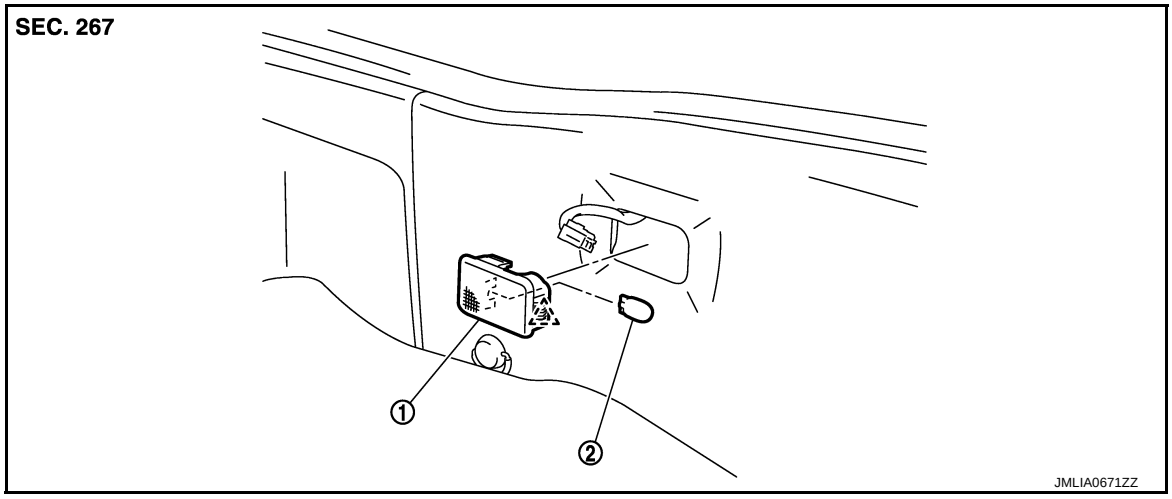
VANITY MIRROR LAMP BULB

1. Insert any appropriate tool into the gap between the lens. Remove the lens.
2. Remove the bulb.

LUGGAGE ROOM LAMP

Exploded View

INFOID:0000000008196489



1. Luggage room lamp assembly
2. Bulb

: Pawl

Removal and Installation

INFOID:0000000008196490

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

REMOVAL

1. Insert any appropriate tool into the gap between the luggage room lamp assembly and luggage finisher lower. Remove the luggage room lamp assembly.
2. Disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000008196491

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.**

LUGGAGE ROOM LAMP BULB

1. Remove the luggage room lamp assembly.
2. Remove the bulb.

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000008196492

Item	Type	Wattage (W)
Push-button ignition switch illumination	LED	—
Map lamp	Wedge	8
Vanity mirror lamp	—	2
Luggage room lamp	Wedge	5

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

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

INFOID:0000000008196493

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.**

FOR USA AND CANADA : Precaution for Battery Service

INFOID:0000000008196494

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.

FOR MEXICO

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

INFOID:0000000008196495

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

WARNING:

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.**

FOR MEXICO : Precaution for Battery Service

INFOID:0000000008196496

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.

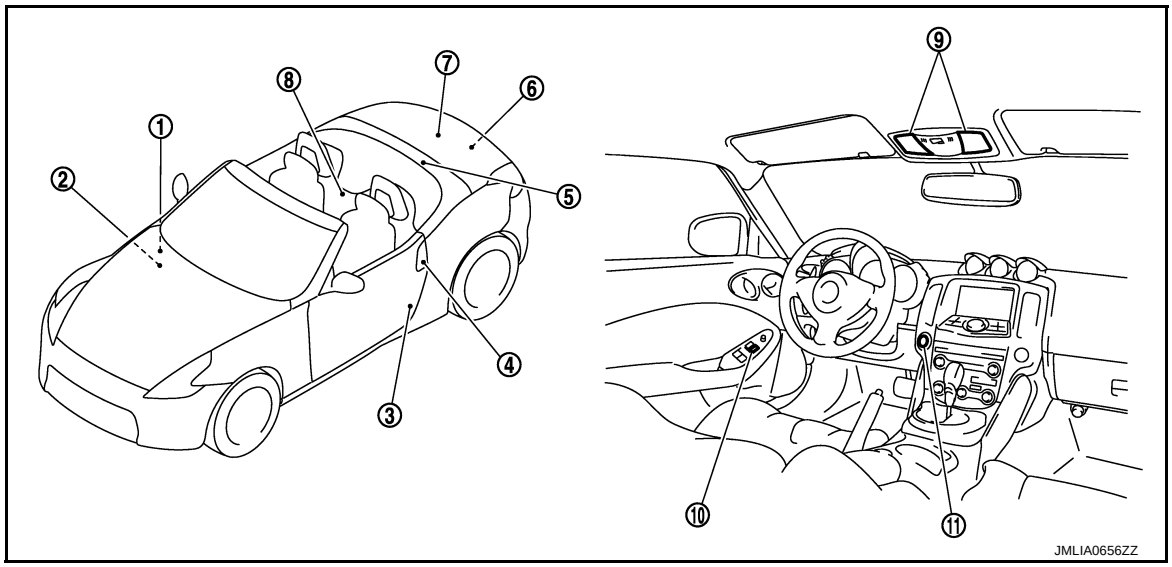
SYSTEM DESCRIPTION

COMPONENT PARTS

INTERIOR ROOM LAMP CONTROL SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM : Component Parts Location

INFOID:0000000008196497



1. Remote keyless entry receiver
   Refer to SEC-12, "Component Parts Location".
2. BCM
   Refer to BCS-10, "Component Parts Location".
3. Door switch
4. • Key cylinder switch
   • Request switch
5. Soft top control unit
   Refer to RF-11, "Component Parts Location"
6. Trunk room lamp switch
7. Trunk room lamp
8. Cargo area coutesy light
9. Map lamp
10. Door lock and unlock switch
11. Push-button ignition switch
    (Push-button ignition switch illumination)

INTERIOR ROOM LAMP CONTROL SYSTEM : Component Description

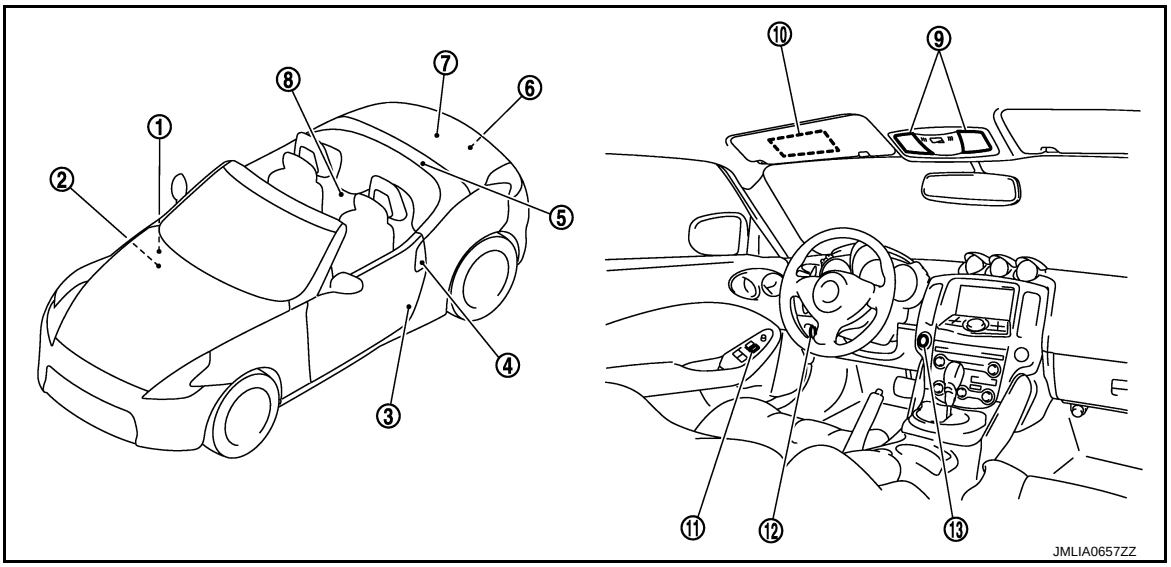
INFOID:0000000008196498

Part	Description
BCM	• Activates the interior room lamp timer depending on the vehicle condition to turn the interior room lamp ON/OFF. • Turns the trunk room lamp ON /OFF according to the trunk room lamp switch status.
Remote keyless entry receiver	Transmits the lock/unlock signal to BCM.
• Door lock and unlock switch • Key cylinder switch	Transmits a switch signal by power window switch serial link.
• Request switch • Door switch • Trunk room lamp switch	Inputs a switch signal to BCM.
Soft top control unit	Refer to RF-16

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : Component Parts Location

INFOID:0000000008196499



1. Remote keyless entry receiver
   Refer to DLK-185, "Remote Keyless Entry Receiver".
2. BCM
   Refer to BCS-10, "Component Parts Location".
3. Door switch
4. • Key cylinder switch
   • Request switch
5. Soft top control unit
   Rfer to RF-11, "Component Parts Location"
6. Trunk room lamp switch
7. Trunk room lamp
8. Cargo area coutesy light
9. Map lamp
10. Vanity mirror lamp
11. Door lock and unlock switch
12. Key slot
13. Push-button ignition switch

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : Component Description

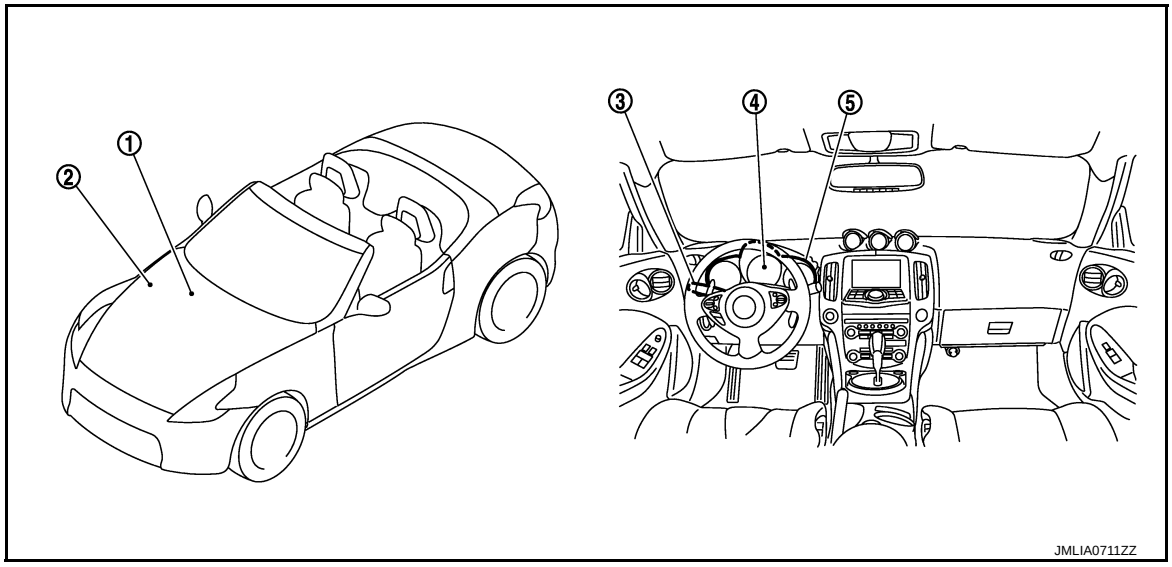
INFOID:0000000008196500

Part	Description
BCM	Operates the interior room lamp battery saver depending on the vehicle condition to cut the interior room lamp power supply.
Remote keyless entry receiver	Transmits the lock/unlock signal to BCM.
• Door lock and unlock switch • Key cylinder switch	Transmits a switch signal by power window switch serial link.
• Request switch • Door switch • Trunk room lamp switch	Inputs a switch signal to BCM.
Key slot	Inputs the key switch status to BCM.
Soft top control unit	Refer to RF-16

ILLUMINATION CONTROL SYSTEM

ILLUMINATION CONTROL SYSTEM : Component Parts Location

INFOID:0000000008196501



1. BCM
   Refer to BCS-10, "Component Parts Location".
2. IPDM E/R
   Refer to PCS-5, "Component Parts Location".
3. Combination switch
4. Combination meter
5. Illumination control switch

ILLUMINATION CONTROL SYSTEM : Component Description

INFOID:0000000008196502

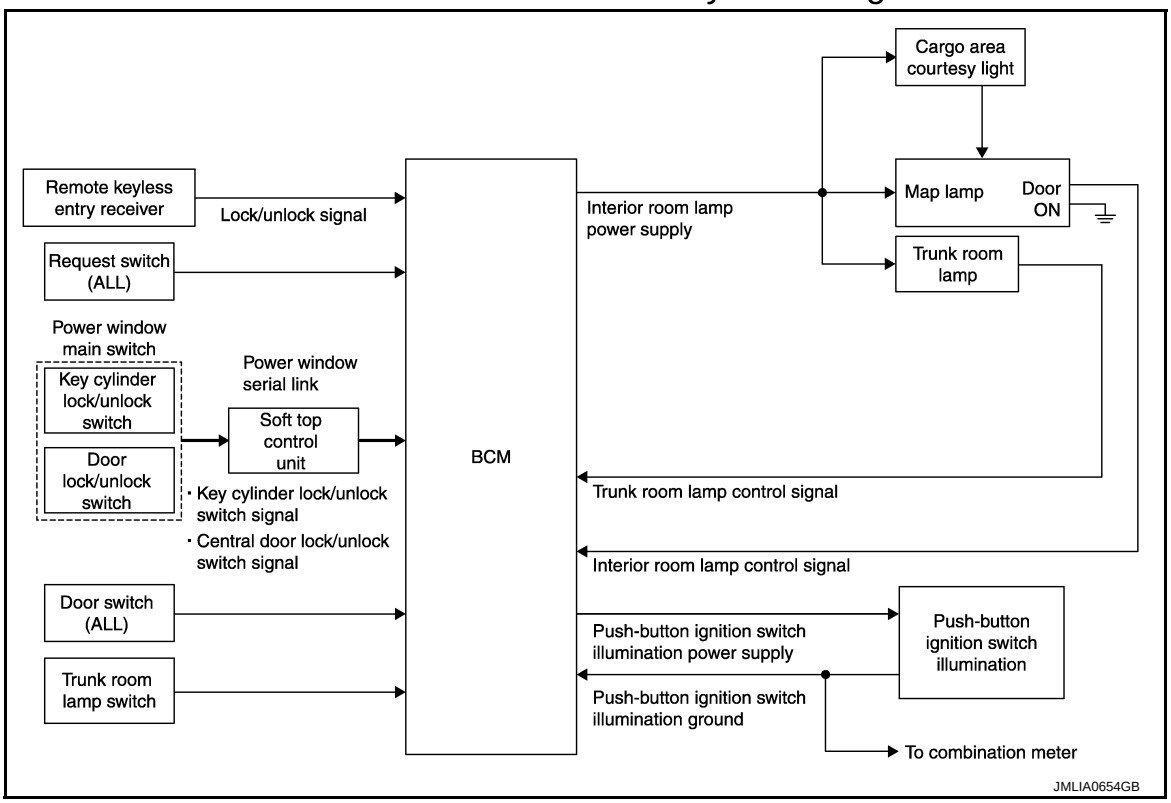
Part	Description
BCM	• Detects each switch condition by the combination switch reading function. • Judges the illumination lamp ON/OFF status depending on the vehicle condition. And then it transmits position light request signal to IPDM E/R and combination meter (with CAN communication).
IPDM E/R	Controls the integrated relay according to the request from BCM (with CAN communication).
Combination meter	• Enters in nighttime mode according to the request from BCM (with CAN communication). • Controls the each illumination in the nighttime mode. Refer to MWI-6, "METER SYSTEM : System Description".
Combination switch (Lighting & turn signal switch)	Refer to BCS-11, "System Diagram".

SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM : System Diagram

INFOID:0000000008196503



INTERIOR ROOM LAMP CONTROL SYSTEM : System Description

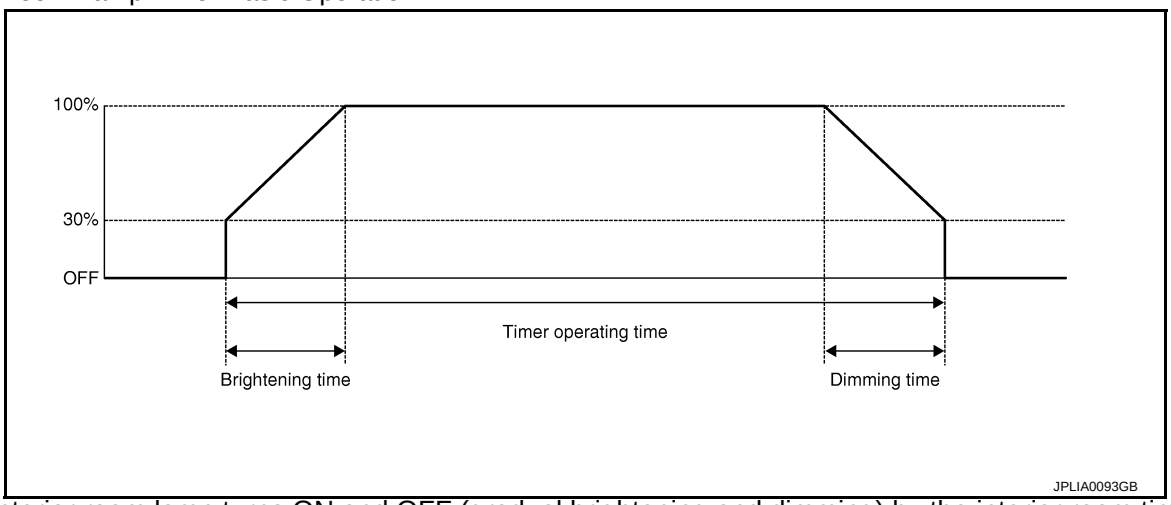
INFOID:0000000008196504

OUTLINE

- Interior room lamps* are controlled by interior room lamp timer control function of BCM.
  *: Map lamp (when map lamp switch is in DOOR position) and cargo area coutesy light (when map lamp switch is in DOOR position).
- Trunk room lamp is controlled by Trunk room lamp control function of BCM.
- Push-button ignition switch illumination is controlled by the push-button ignition switch illumination control function of BCM.

INTERIOR ROOM LAMP TIMER CONTROL

Interior Room Lamp Timer Basic Operation



- The interior room lamp turns ON and OFF (gradual brightening and dimming) by the interior room timer.

- BCM judges the vehicle condition with the following items. It activates the interior room timer.
- Ignition switch status
- Door switch signal (ALL)
- Door lock/unlock signal (Remote keyless entry receiver, each door request switch, key cylinder switch, door lock and unlock switch)

NOTE:
Each function of interior room lamp timer can be set by CONSULT. Refer to INL-53, "INT LAMP : CONSULT Function (BCM - INT LAMP) (Roadster Models)".

Interior Room Lamp ON Operation
- BCM always turns the interior room lamp ON when any door opens.
- BCM activates the interior room timer in any of the following conditions to turn the interior room lamp ON for a period of time.
- Any door opens before all doors close.
- Ignition switch is turned ON → OFF.
- Any door unlock signal is detected when all doors close with ignition switch OFF.

NOTE:
Restart the timer if new condition is input during the timer operating time.

Interior Room Lamp OFF Operation
BCM stops the timer in any of the following conditions to turns the interior room lamp OFF.
- The timer operating time is expired.
- Ignition switch position is other than OFF with all doors close.
- Any door lock operation is detected with all doors close.

TRUNK ROOM LAMP CONTROL
BCM controls the trunk room lamp (ground-side) to turn ON with the trunk room lamp switch ON.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CONTROL

Push-button Ignition Switch Illumination Basic Operation
- BCM provides the power supply and the ground to turn the push-button ignition switch illumination ON.
- BCM cuts the ground supply while the each illumination (tail lamp) ON. BCM switches to the ground control with the meter illumination control function.

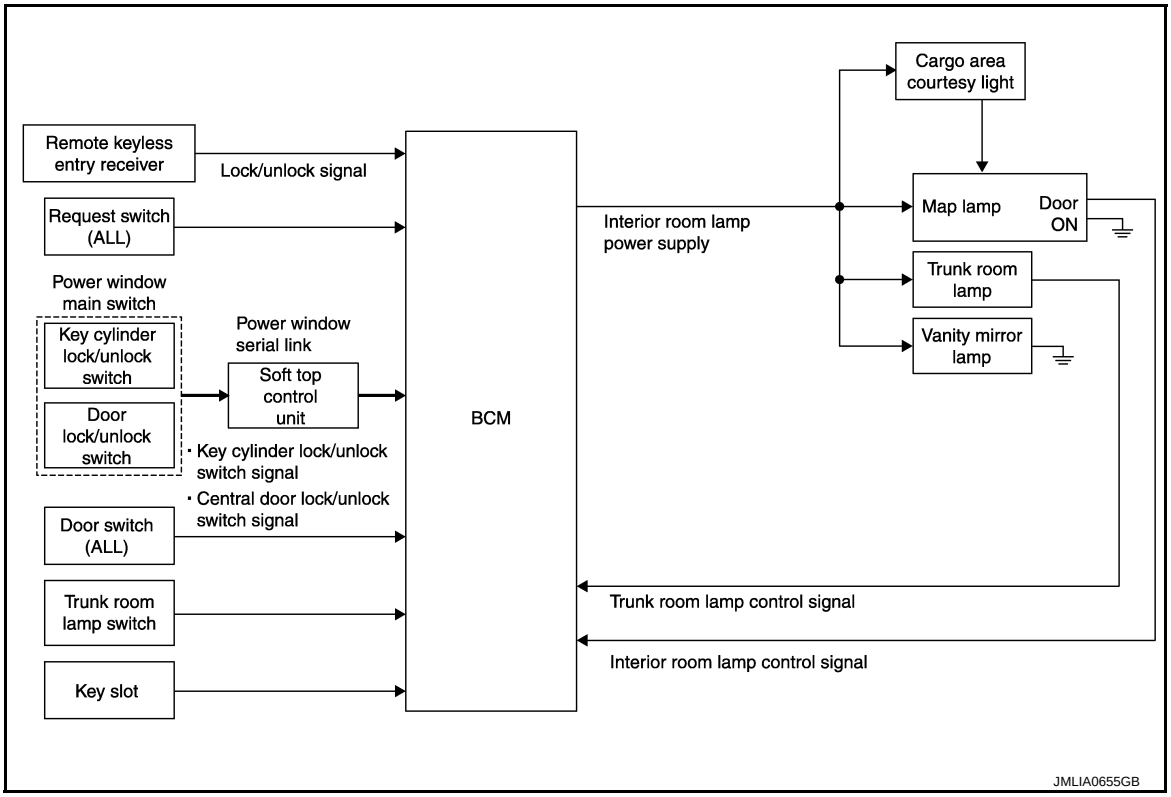
Push-button Ignition Switch Illumination ON Operation
BCM turns the push-button ignition switch illumination ON in the following conditions.
- Ignition switch ON
- Each illumination (tail lamp) ON
- Any of the following conditions with ignition switch OFF
- Engine start permission is entered.
- Intelligent Key inserted into the key slot.
- Driver door is LOCK → UNLOCK.
- Driver door is open.

Push-button Ignition Switch Illumination OFF Operation
BCM turns the push-button ignition switch illumination OFF in any of the following conditions.
- The push-button ignition switch illumination ON conditions do not satisfy.
- All of the following conditions with ignition switch OFF
- Each illumination (tail lamp) OFF
- The push-button ignition switch illumination ON conditions do not change (15 seconds after the ignition switch OFF) or the driver door is UNLOCK → LOCK.

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : System Diagram

INFOID:0000000008196505



INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : System Description

INFOID:0000000008196506

OUTLINE

- Interior room lamp battery saver is controlled by BCM.
- BCM turns applicable lamps OFF depending on the vehicle condition. This function prevents the battery from over-discharging if the driver neglect turning OFF the any lamps.

Applicable lamps

- Map lamp
- Cargo area coutesy light
- Trunk room lamp
- Vanity mirror lamp

INTERIOR ROOM LAMP BATTERY SAVER FUNCTION

- When the ignition switch is turned OFF, BCM operates the timer for a period of time to cut the interior room lamp power supply.
- BCM restart the timer when any of the following signals changes while operating the timer.
  - Ignition switch status
  - Door switch signal (ALL)
  - Door lock/unlock signal (Remote keyless entry receiver, each request switch, key cylinder lock/unlock switch, central door lock/unlock switch)
  - Trunk room lamp switch signal
  - Key switch signal (Key slot)
- BCM provides the interior room lamp power supply continuously when the ignition switch position is other than OFF.

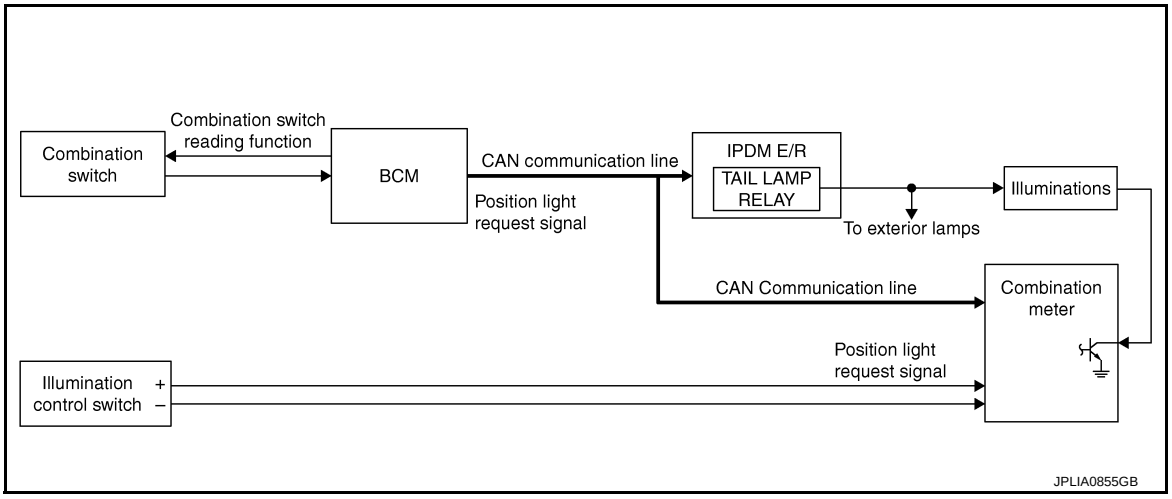
NOTE:

Each function of interior room lamp battery saver can be set by CONSULT. Refer to INL-54, "BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER) (Roadster Models)".

ILLUMINATION CONTROL SYSTEM

ILLUMINATION CONTROL SYSTEM : System Diagram

INFOID:0000000008196507



ILLUMINATION CONTROL SYSTEM : System Description

INFOID:0000000008196508

OUTLINE

Each illumination lamp is controlled by each function of BCM, IPDM E/R and combination meter.

Control by BCM
- Combination switch reading function
- Headlamp control function

Control by IPDM E/R
- Relay control function

Control by combination meter
- Meter illumination control function (Refer to MWI-24, "METER ILLUMINATION CONTROL : System Description".)

ILLUMINATION CONTROL

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

Tail lamp ON condition
- Lighting switch 1ST
- Lighting switch 2ND
- Lighting switch AUTO, and the auto light function ON judgment

- IPDM E/R turns the integrated tail lamp relay ON according to position light request signal. It provides the power supply to each illumination lamp.
- Combination meter enters in the nighttime mode according to position light request signal. Under the nighttime mode the combination meter controls the illuminance by controlling the each illumination lamp (ground side).

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000008838295

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 • Engine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door/Trunk lid open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

NOTE:

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

FREEZE FRAME DATA (FFD)

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

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power supply position status of the moment a particular DTC is detected	While turning BCM status from low power consumption mode to normal mode (Power supply position is “LOCK”*)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is “OFF”.)
	LOCK>ACC		While turning power supply position from “LOCK”* to “ACC”
	ACC>ON		While turning power supply position from “ACC” to “IGN”
	RUN>ACC		While turning power supply position from “RUN” to “ACC” (Except emergency stop operation)
	CRANK>RUN		While turning power supply position from “CRANKING” to “RUN” (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from “RUN“ to “ACC” (Emergency stop operation)
	ACC>OFF		While turning power supply position from “ACC” to “OFF”
	OFF>LOCK		While turning power supply position from “OFF” to “LOCK”*
	OFF>ACC		While turning power supply position from “OFF” to “ACC”
	ON>CRANK		While turning power supply position from “IGN” to “CRANKING”
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is “OFF”.) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is “LOCK”*.) to low power consumption mode
	LOCK		Power supply position is “LOCK”*
	OFF		Power supply position is “OFF” (Ignition switch OFF)
	ACC		Power supply position is “ACC” (Ignition switch ACC)
	ON		Power supply position is “IGN” (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is “RUN” (Ignition switch ON with engine running)
	CRANKING		Power supply position is “CRANKING” (At engine cranking)
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39.	

NOTE:
*: Power supply position shifts to “LOCK” from “OFF”, when ignition switch is in the OFF position, selector lever is in the P position (A/T models), and any of the following conditions are met.
- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

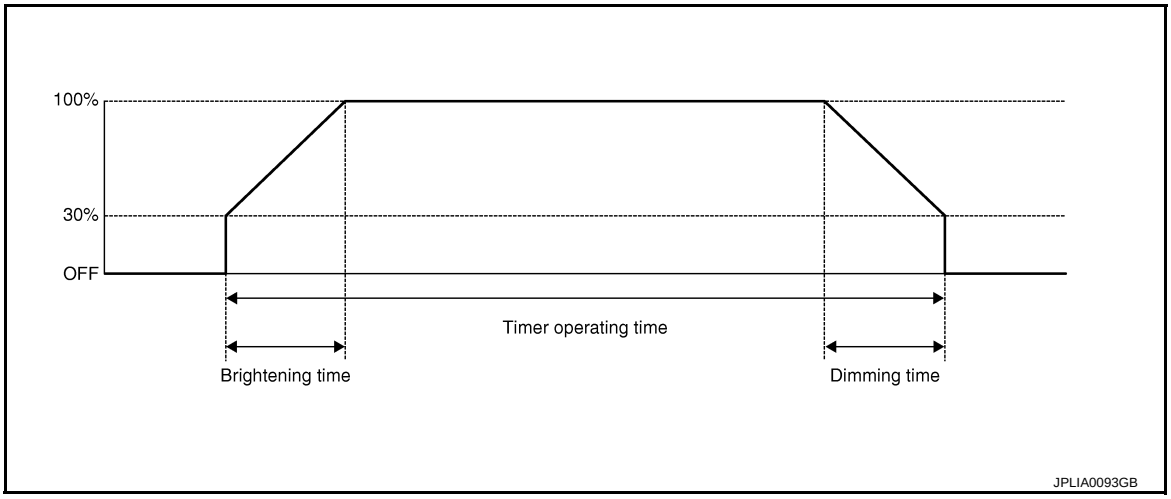
The power supply position shifts to “ACC” when the push-button ignition switch (push switch) is pushed at “LOCK”.

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP) (Roadster Models)

INFOID:0000000008196510

WORK SUPPORT



Service item	Setting item	Setting	
SET I/L D-UNLCK INTCON	ON*	With the interior room lamp timer function	
	OFF	Without the interior room lamp timer function	
ROOM LAMP TIMER SET	MODE 2	7.5 sec.	Sets the interior room lamp ON time. (Timer operating time)
	MODE 3*	15 sec.	
	MODE 4	30 sec.	
ROOM LAMP ON TIME SET	MODE 1	0.5 sec.	Sets the interior room lamp gradual brightening time.
	MODE 2*	1 sec.	
	MODE 3	2 sec.	
	MODE 4	3 sec.	
	MODE 5	0 sec.	
ROOM LAMP OFF TIME SET	MODE 1	0.5 sec.	Sets the interior room lamp gradual dimming time.
	MODE 2	1 sec.	
	MODE 3	2 sec.	
	MODE 4*	3 sec.	
	MODE 5	0 sec.	
R LAMP TIMER LOGIC SET	MODE 1*	Interior room lamp timer activates with synchronizing all doors.	
	MODE 2	Interior room lamp timer activates with synchronizing the driver door only.	

*: 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]	The switch status input from request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from front request switch (passenger side)

Monitor item [Unit]	Description
REQ SW-RR [On/Off]	**NOTE:** The item is indicated, but not monitored.
REQ SW-RL [On/Off]	
PUSH SW [On/Off]	The switch status input from push-button ignition switch
ACC RLY-F/B [On/Off]	**NOTE:** The item is indicated, but not monitored.
UNLK SEN-DR [On/Off]	Driver door unlock status input from unlock sensor
KEY SW-SLOT [On/Off]	Key switch status input from key slot
DOOR SW-DR [On/Off]	The switch status input from driver side door switch
DOOR SW-AS [On/Off]	The switch status input from passenger side door switch
DOOR SW-RR [On/Off]	**NOTE:** The item is indicated, but not monitored.
DOOR SW-RL [On/Off]	
DOOR SW-BK [On/Off]	The switch status input from trunk room lamp switch
CDL LOCK SW [On/Off]	Lock switch status received from the door lock and unlock switch
CDL UNLOCK SW [On/Off]	Unlock switch status received from the door lock and unlock switch
KEY CYL LK-SW [On/Off]	Lock switch status received from key cylinder switch
KEY CYL UN-SW [On/Off]	Unlock switch status received from key cylinder switch
TRNK/HAT MNTR [On/Off]	**NOTE:** The item is indicated, but not monitored.
RKE-LOCK [On/Off]	Lock signal status received from remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from remote keyless entry receiver

ACTIVE TEST

Test item	Operation	Description
INT LAMP	On	Outputs the interior room lamp control signal to turn map lamp and cargo area courtesy light ON (Map lamp switch is in DOOR position).
	Off	Stops the interior room lamp control signal to turn map lamp and cargo area courtesy light OFF.
STEP LAMP TEST	On	**NOTE:** The item is displayed, but cannot be tested.
	Off	
LUGGAGE LAMP TEST	On	Outputs the trunk room lamp control signal to turn the trunk room lamp ON.
	Off	Stops the trunk room lamp control signal to turn the trunk room lamp OFF.

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER) (Roadster Mod-

els)

INFOID:0000000008196511

WORK SUPPORT

Service item	Setting item	Setting	
BATTERY SAVER SET	On*	With the exterior lamp battery saver function	
	Off	Without the exterior lamp battery saver function	
ROOM LAMP BAT SAV SET	On*	With the interior room lamp battery saver function	
	Off	Without the interior room lamp battery saver function	
ROOM LAMP TIMER SET	MODE 1	30 min.	Sets the interior room lamp battery saver timer operating time.
	MODE 2	60 min.	
	MODE 3*	15 min.	

*: 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]	The switch status input from request switch (driver side)
REQ SW-AS [On/Off]	The switch status input from front request switch (passenger side)
REQ SW-RR [On/Off]	**NOTE:** The item is indicated, but not monitored.
REQ SW-RL [On/Off]	
PUSH SW [On/Off]	The switch status input from push-button ignition switch
ACC RLY-F/B [On/Off]	**NOTE:** The item is indicated, but not monitored.
KEY SW-SLOT [On/Off]	Key switch status input from key slot
UNLK SEN-DR [On/Off]	Driver door unlock status input from unlock sensor
DOOR SW-DR [On/Off]	The switch status input driver side front door switch
DOOR SW-AS [On/Off]	The switch status input from passenger side door switch
DOOR SW-RR [On/Off]	**NOTE:** The item is indicated, but not monitored.
DOOR SW-RL [On/Off]	
DOOR SW-BK [On/Off]	The switch status input from trunk room lamp switch
CDL LOCK SW [On/Off]	Lock switch status received from the door lock and unlock switch
CDL UNLOCK SW [On/Off]	Unlock switch status received from the door lock and unlock switch
KEY CYL LK-SW [On/Off]	Lock switch status received from key cylinder switch

Monitor item [Unit]	Description
KEY CYL UN-SW [On/Off]	Unlock switch status received from key cylinder switch
TRNK/HAT MNTR [On/Off]	**NOTE:** The item is indicated, but not monitored.
RKE-LOCK [On/Off]	Lock signal status received from remote keyless entry receiver
RKE-UNLOCK [On/Off]	Unlock signal status received from remote keyless entry receiver

ACTIVE TEST

Test item	Operation	Description
BATTERY SAVER	Off	Cuts the interior room lamp power supply to turn interior room lamp OFF.
	On	Outputs the interior room lamp power supply to turn interior room lamp ON.*

*: Each lamp switch is in ON position.

DIAGNOSIS SYSTEM (SOFT TOP CONTROL UNIT)

CONSULT Function

INFOID:0000000008196512

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with soft top control unit.

Diagnosis mode		Function Description
ECU Identification		The soft top control unit part number is displayed.
Self Diagnostic Result		Displays the diagnosis results judged by soft top control unit.
	Freeze Frame Data	The soft top control unit records the vehicle condition at the time when the DTC is detected, and displays.
Data Monitor		The soft top control unit input/output signals are displayed.
Active Test		The signals used to activate each device are forcibly supplied from soft top control unit.
CAN Diag Support Monitor		Monitors the reception status of CAN communication viewed from soft top control unit. Refer to CONSULT operation manual.

SELF-DIAG RESULT

Refer to RF-40, "DTC Index".

Freeze Frame Data

The soft top control unit records the following vehicle condition at the time when the DTC is detected, and displays on CONSULT.

CONSULT display		Description
Item	Indication	
ROOF SW (OPEN)	ON/OFF	OPEN input state of roof open/close switch is displayed.
ROOF SW (CLOSE)	ON/OFF	CLOSE input state of roof open/close switch is displayed.
ROOF LATCHED LH	ON/OFF	Input state of roof striker sensor LH is displayed.
ROOF LATCHED RH	ON/OFF	Input state of roof striker sensor RH is displayed.
F/CENTER LOCK	ON/OFF	Input state of roof latch lock sensor is displayed.
R/RAIL RAISED LH	ON/OFF	Input state of roof status sensor LH is displayed.
R/RAIL RAISED RH	ON/OFF	Input state of roof status sensor RH is displayed.
R/RAIL LOWERED	ON/OFF	Input state of roof status sensor LH is displayed.
5BOW LOWERED	ON/OFF	Input state of 5th bow status sensor LH is displayed.
5BOW RAISED	ON/OFF	Input state of 5th bow status sensor RH is displayed.
TRUNK STATUS SEN	ON/OFF	Input state of trunk status sensor is displayed.
S/LID OPEN LH	ON/OFF	Input state of storage lid status sensor LH is displayed.
S/LID OPEN RH	ON/OFF	Input state of storage lid status sensor RH is displayed.
S/LID CLOSE RH	ON/OFF	Input state of storage lid status sensor RH is displayed.
5TH BOW LATCH OP	ON/OFF	Input state of 5th bow latch open sensor is displayed.
5TH BOW LATCH CL	ON/OFF	Input state of 5th bow latch close sensor is displayed.
5BOW STRIK LATCH	ON/OFF	Input state of 5th bow striker sensor is displayed.
FLPD LIMIT SW(DWN)	ON/OFF	Input state of flipper door limit switch (DOWN) is displayed.
SWITCH VALVE 1	ON/OFF	Output state to switching valve 1 is displayed.
SWITCH VALVE 2	ON/OFF	Output state to switching valve 2 is displayed.
SWITCH VALVE 3	ON/OFF	Output state to switching valve 3 is displayed.
SWITCH VALVE 4	ON/OFF	Output state to switching valve 4 is displayed.
SWITCH VALVE 5	ON/OFF	Output state to switching valve 5 is displayed.

CONSULT display		Description
Item	Indication	
PUMP OUT (LH)	ON/OFF	Right rotation output state to hydraulic motor is displayed.
PUMP OUT (RH)	ON/OFF	Left rotation output state to hydraulic motor is displayed.

DATA MONITOR

CONSULT display		Description
Item	Indication/Unit	
ROOF LATCHED LH	ON/OFF/NG	Input state of roof striker sensor LH is displayed.
ROOF LATCHED RH	ON/OFF/NG	Input state of roof striker sensor RH is displayed.
F/CENTER LOCK	ON/OFF/NG	Input state of roof latch lock sensor is displayed.
R/RAIL RAISED LH	ON/OFF/NG	Input state of roof status sensor LH is displayed.
R/RAIL RAISED RH	ON/OFF/NG	Input state of roof status sensor RH is displayed.
R/RAIL LOWERED	ON/OFF/NG	Input state of roof status sensor LH is displayed.
5TH BOW LOWERED	ON/OFF/NG	Input state of 5th bow status sensor LH is displayed.
5TH BOW RAISED	ON/OFF/NG	Input state of 5th bow status sensor RH is displayed.
S/LID OPEN LH	ON/OFF/NG	Input state of storage lid status sensor LH is displayed.
S/LID OPEN RH	ON/OFF/NG	Input state of storage lid status sensor RH is displayed.
S/LID CLOSE RH	ON/OFF/NG	Input state of storage lid status sensor RH is displayed.
5TH BOW LATCH OP	ON/OFF/NG	Input state of 5th bow latch open sensor is displayed.
SWITCHING VALVE 1	ON/OFF/NG	Output state to switching valve 1 is displayed.
SWITCHING VALVE 2	ON/OFF/NG	Output state to switching valve 2 is displayed.
SWITCHING VALVE 3	ON/OFF/NG	Output state to switching valve 3 is displayed.
SWITCHING VALVE 4	ON/OFF/NG	Output state to switching valve 4 is displayed.
SWITCHING VALVE 5	ON/OFF/NG	Output state to switching valve 5 is displayed.
PUMP OUT (RH)	ON/OFF/NG	Right rotation output state to hydraulic motor is displayed.
PUMP OUT (LH)	ON/OFF/NG	Left rotation output state to hydraulic motor is displayed.
5TH BOW LATCH CL	ON/OFF/NG	Input state of 5th bow latch close sensor is displayed.
ROOF SW (OPEN)	ON/OFF	OPEN input state of roof open/close switch is displayed.
ROOF SW (CLOSE)	ON/OFF	CLOSE input state of roof open/close switch is displayed.
SHIFT R SIGNAL	ON/OFF	Input state of shift position (R position) is displayed.
TRUNK OPEN OUT	ON/OFF	Output state to trunk open signal is displayed.
THER PROTEC PUMP	OK/NG	Non-operation state of thermo protection (hydraulic pump) is displayed.
THER PROTEC RCU	OK/NG	Non-operation state of thermo protection (soft top control unit) is displayed.
PWR COND RCU	OK/NG	Diagnosis result of power supply (soft top control unit) is displayed.
PWR COND P/W	OK/NG	Diagnosis result of power supply (power window) is displayed.
LOCAL COMM 1	NG/SLEEP/NG	State of serial link 1 is displayed.
LOCAL COMM 2	NG/SLEEP/NG	State of serial link 2 is displayed.
REAR DEF OUT	OK/NG	Output state to rear window defogger is displayed.
5BOW STRIK LATCH	ON/OFF/NG	Input state of 5th bow striker sensor is displayed.
P/W OP REQ SW SIG	ON/OFF	Input state of power window open signal from request switch is displayed.
PROHIBIT P/W UP	ON/OFF	Output state to power window operation prohibition signal is displayed.
IGN ON SIG (BCM)	ON/OFF	Receiving state of ignition ON signal from BCM is displayed.
RF OP REQ SW SIG	ON/OFF	Input state of soft top open signal from request switch is displayed.

ACTIVE TEST

CONSULT display		Description
Item	Indication	
ROOF LATCHED LH/RH	LOCK	Roof lock assembly performs lock operation.
	UNLOCK	Roof lock assembly performs unlock operation.
STORAGE LID	OPEN	Storage lid performs open operation.
	CLOSE	Storage lid performs close operation.
SOFT TOP SYSTEM	UP	Soft top performs close operation.
	DOWN	Soft top performs open operation.
ROOF SYSTEM	OPEN	Soft top system performs open operation.
	CLOSE	Soft top system performs close operation.
5TH BOW SYSTEM	OPEN	1st bow and 5th bow performs fold operation.
	CLOSE	1st bow and 5th bow performs spread operation.
HYDRAULIC PRESSURE RELEASE	ON	Switching valve performs OFF operation.
TRUNK OPENER	ON	Trunk lid opener actuator performs unlock operation.
ROOF STATE OUTPUT (AUDIO)	ON	Full open position signal of roof is transmitted to audio unit.
	OFF	Full close position signal of roof is transmitted to audio unit.
POWER WINDOW (LH/RH)	UP	Power window (LH/RH) performs close operation.
	DOWN	Power window (LH/RH) performs open operation.
REAR WINDOW DEFOGGER	ON	Rear window defogger performs ON operation.
	OFF	Rear window defogger performs OFF operation.

DIAGNOSIS SYSTEM (METER)

Diagnosis Description

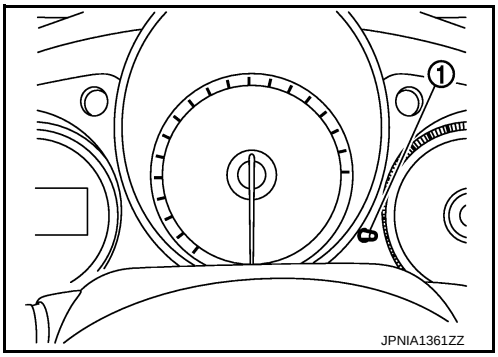
INFOID:0000000008838297

SELF-DIAGNOSIS MODE

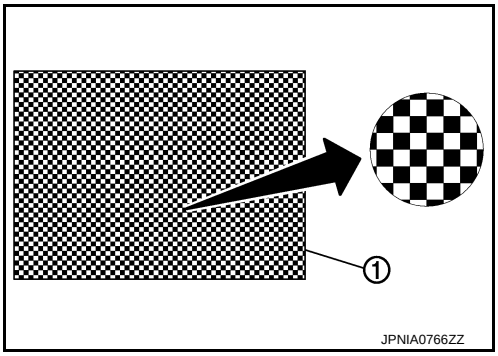
- LCD segment operation can be checked in self-diagnosis mode.
- Meters/gauges can be checked in self-diagnosis mode.

OPERATION PROCEDURE

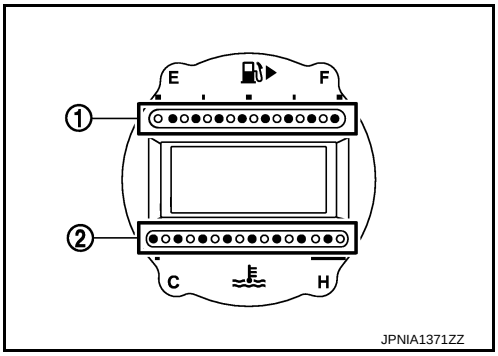
1. Turn ignition switch OFF.
2. While pressing the trip reset switch (1), turn ignition switch ON.
3. Make sure that the trip meter displays “0000.0”.
   NOTE:
   If the diagnosis function is activated with “trip A” displayed, the mileage on “trip A” is reset to “0000.0”. (The same way for “trip B”.)
4. Press the trip reset switch at least 3 times. (Within 7 seconds after the ignition switch is turned ON.)



5. The unified meter control unit is turned to self-diagnosis mode.
   - The segment dots of the information display LCD (1) blink alternately.
   - Speedometer, tachometer, volt meter, and oil temperature gauge return to zero respectively.
   - All the segments of clock, manual mode indicator, S-MODE indicator, odo/trip meter, and shift position indicator illuminate.



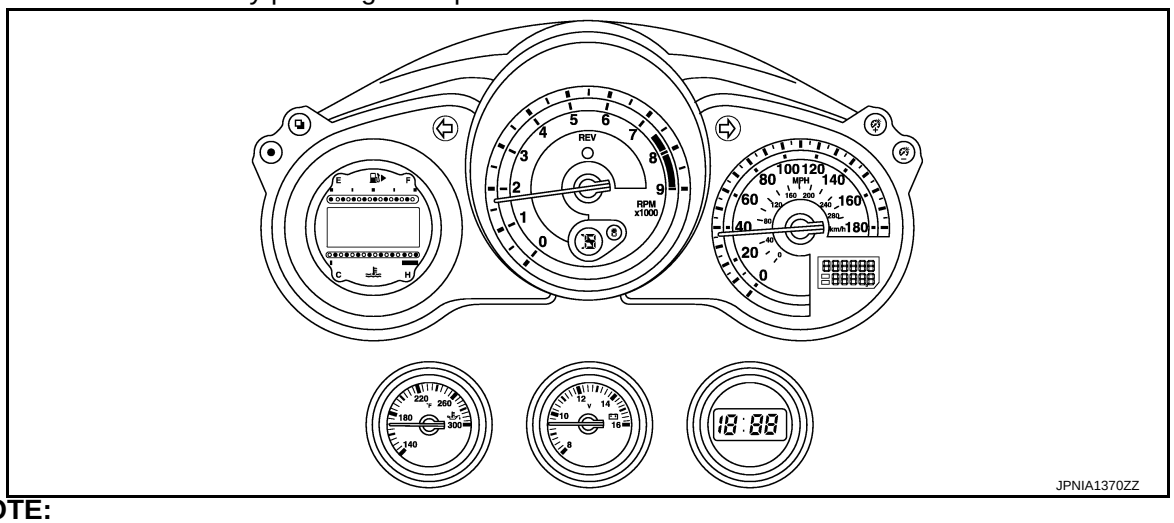
   - The fuel gauge (1) blink alternately.
   - The engine coolant temperature gauge (2) blink alternately.



NOTE:

- Check combination meter power supply and ground circuit when the self-diagnosis mode of the combination meter does not start. Replace combination meter if power supply and ground circuit are normal.
- When turning the ignition switch ON, if the triple meter has a malfunction and the self-diagnosis mode for triple meter does not starts, check the power supply and ground circuit of the triple meter, and the communication line circuit (METER⇔TRIPLE METER). Replace triple meter if power supply and ground circuit and the communication line circuit (METER⇔TRIPLE METER) are normal.
- If any of the segments does not illuminate, replace the combination meter or the triple meter (only when the clock of a segment that does not illuminate).

6. Each meter activates by pressing the trip reset switch.



NOTE:
- If any of the meters or gauges is not activated, replace combination meter or triple meter.
- The figure is reference.

CONSULT Function (METER/M&A)

INFOID:0000000008838298

CONSULT APPLICATION ITEMS

CONSULT can perform the following diagnosis modes via CAN communication and the combination meter.

System	Diagnosis mode	Description
METER/M&A	Self Diagnostic Result	The combination meter checks the conditions and displays memorized errors.
	Data Monitor	Displays the combination meter input/output data in real time.
	Warning History	Lighting history of the warning lamp and indicator lamp can be checked.

SELF DIAG RESULT

Refer to MWI-67, "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.

Display Item List

X: Applicable

Display item [Unit]	MAIN SIGNALS	Description
SPEED METER [km/h]	X	Value of vehicle speed signal received from ABS actuator and electric unit (control unit) via CAN communication. **NOTE:** 655.35 is displayed when the malfunction signal is received.
SPEED OUTPUT [km/h]	X	Vehicle speed signal value transmitted to other units via CAN communication. **NOTE:** 655.35 is displayed when the malfunction signal is received.
ODO OUTPUT [km/h or mph]		Odometer signal value transmitted to other units via CAN communication.
TACHO METER [rpm]	X	Value of the engine speed signal received from ECM via CAN communication. **NOTE:** 8191.875 is displayed when the malfunction signal is received.
FUEL METER [L]	X	Fuel level indicated on combination meter.

Display item [Unit]	MAIN SIGNALS	Description
W TEMP METER [°C]	X	Value of engine coolant temperature signal is received from ECM via CAN communication. **NOTE:** 215 is displayed when the malfunction signal is input.
ABS W/L [On/Off]		Status of ABS warning lamp detected from ABS warning lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.
VDC/TCS IND [On/Off]		Status of VDC OFF indicator lamp detected from VDC OFF indicator lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.
SLIP IND [On/Off]		Status of VDC warning lamp detected from VDC warning lamp signal received from ABS actuator and electric unit (control unit) via CAN communication.
BRAKE W/L [On/Off]		Status of brake warning lamp detected from brake warning lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication. **NOTE:** Displays “Off” if the brake warning lamp is illuminated when the valve check starts, the parking brake switch is turned ON or the brake fluid level switch is turned ON.
DOOR W/L [On/Off]		Status of door warning detected from door switch signal received from BCM via CAN communication.
TRUNK/GLAS-H [Off]		This item is displayed, but cannot be monitored.
HI-BEAM IND [On/Off]		Status of high beam indicator lamp detected from high beam request signal is received from BCM via CAN communication.
TURN IND [On/Off]		Status of turn indicator lamp detected from turn indicator signal is received from BCM via CAN communication.
RR FOG IND [On/Off]		Status of rear fog lamp indicator lamp detected from rear fog lamp status signal is received from BCM via CAN communication.
LIGHT IND [On/Off]		Status of light indicator lamp detected from position light request signal is received from BCM via CAN communication.
OIL W/L [On/Off]		Status of oil pressure warning lamp detected from oil pressure switch signal is received from BCM via CAN communication.
MIL [On/Off]		Status of malfunction indicator lamp detected from malfunctioning indicator lamp signal is received from ECM via CAN communication.
CRUISE IND [On/Off]		Status of CRUISE indicator lamp detected from CRUISE indicator lamp signal is received from ECM via CAN communication.
SET IND [Off]		This item is displayed, but cannot be monitored.
ATC/T-AMT W/L [On/Off]		A/T CHECK indicator lamp status judged by the transmission check warning lamp signal received from TCM via CAN communication.
FUEL W/L [On/Off]		Low-fuel warning lamp status detected by the identified fuel level.
WASHER W/L [On/Off]		Status of washer warning lamp judged from washer level switch input to combination meter.
AIR PRES W/L [On/Off]		Status of low tire pressure warning lamp detected from tire pressure signal is received from BCM via CAN communication.
KEY G/Y W/L [On/Off]		Status of key warning lamp (yellow) detected from key warning signal is received from BCM via CAN communication.
MT SYNC REV IND [On/Off]		Status of S-MODE indicator judged from S-MODE indicator signal received from ECM with CAN communication line.
FUEL CAP W/L [On/Off]		Status of fuel filler cap warning judged from fuel filler cap warning display signal received from ECM with CAN communication line.
LCD [C&P N, C&P I, B&P N, B&P I, ID NG, ROTAT, SFT P, INSRT, BATT, NO KY, OUTKY, LK WN]		Displays status of Intelligent Key system warning detected from meter display signal is received from BCM via CAN communication.

Display item [Unit]	MAIN SIGNALS	Description
SHIFT IND [P, R, N, D, L, M1, M2, M3, M4, M5, M6, M7]		• Status of shift position indicator detected from shift position signal and manual mode indicator signal is received from TCM via CAN communication. (A/T models) • Status of shift position indicator detected from shift position signal is received from ECM via CAN communication. (with SynchroRev Match mode models)
AT S MODE SW [Off]		This item is displayed, but cannot be monitored.
M RANGE SW [On/Off]		Status of manual mode switch.
NM RANGE SW [On/Off]		Status of non-manual mode switch.
AT SFT UP SW [On/Off]		Status of position select switch (up).
AT SFT DWN SW [On/Off]		Status of position select switch (down).
ST SFT UP SW [On/Off]		Status of paddle shifter up switch.
ST SFT DWN SW [On/Off]		Status of paddle shifter down switch.
SYNC MODE [On/Off]		This item is displayed, but cannot be monitored.
PKB SW [On/Off]		Status of parking brake switch.
BUCKLE SW [On/Off]		Status of seat belt buckle switch (driver side).
BRAKE OIL SW [On/Off]		Status of brake fluid level switch.
A/C AMP CONN [On/Off]		Status of A/C auto amp. connection recognition signal.
ENTER SW [On/Off]		Status of ❑ (ENTER) switch.
SELECT SW [On/Off]		Status of ● (SELECT) switch.
MT SYNC REV SW [On/Off]		Status of S-MODE switch.
DISTANCE [km]		Value of possible driving distance calculated by combination meter.
OUTSIDE TEMP [°C or °F]		Ambient air temperature value converted from ambient sensor signal received from ambient sensor. **NOTE:** This may not match with the temperature value indicated on the information display. (Because the information display value is a corrected value from the ambient sensor input value.)
FUEL LOW SIG [On/Off]		Status of fuel level low warning signal to output to AV control unit via CAN communication.
BUZZER [On/Off]	X	Buzzer status (in the combination meter) is detected from the buzzer output signal received from each unit via CAN communication and the warning output condition of the combination meter.

NOTE:

Some items are not available according to vehicle specification.

WARNING HISTORY

- Stores histories when warning/indicator lamp is turned on.
- “Warning History” indicates the “TIME” when the warning/ indicator lamp is turned on.

• The “TIME” above is:
- 0: The condition that the warning/indicator lamp has been turned on 1 or more times after starting the engine and waiting for 30 seconds.
- 1 - 39: The number of times the engine was restarted after the 0 condition.
- NO Warning History: Stores NO (0) turning on history of warning/indicator lamp.

NOTE:
• Warning History is not stored for approximately 30 seconds after the engine starts.
• Brake warning lamp does not store any history when the parking brake is applied or the brake fluid level gets low.

Display Item

Display item	Description
ABS W/L	Lighting history of ABS warning lamp.
VDC/TCS IND	Lighting history of VDC OFF indicator lamp.
SLIP IND	Lighting history of VDC warning lamp.
BRAKE W/L	Lighting history of brake warning lamp.
DOOR W/L	Lighting history of door warning.
OIL W/L	Lighting history of oil pressure warning lamp.
C-ENG W/L	Lighting history of malfunction indicator lamp.
CRUISE IND	Lighting history of CRUISE indicator lamp.
ATC/T-AMT W/L	Lighting history of A/T CHECK indicator lamp.
FUEL W/L	Lighting history of low fuel level warning.
WASHER W/L	Lighting history of low washer fluid warning
AIR PRES W/L	Lighting history of low tire pressure warning lamp.
KEY G/Y W/L	Lighting history of key warning lamp (yellow).

NOTE:
In items displayed on the CONSULT screen, only those listed in the above table are used.

ECU DIAGNOSIS INFORMATION

BCM, COMBINATION METER, SOFT TOP CONTROL UNIT

List of ECU Reference

INFOID:0000000008196515

ECU	Reference
BCM	BCS-58, "Reference Value"
	BCS-86, "Fail-safe"
	BCS-87, "DTC Inspection Priority Chart"
	BCS-88, "DTC Index"
COMBINATION METER	MWI-57, "Reference Value"
	MWI-66, "Fail-Safe"
	MWI-67, "DTC Index"
SOFT TOP CONTROL UNIT	RF-31, "Reference Value"
	RF-38, "Fail-safe"
	RF-39, "DTC Inspection Priority Chart"
	RF-40, "DTC Index"

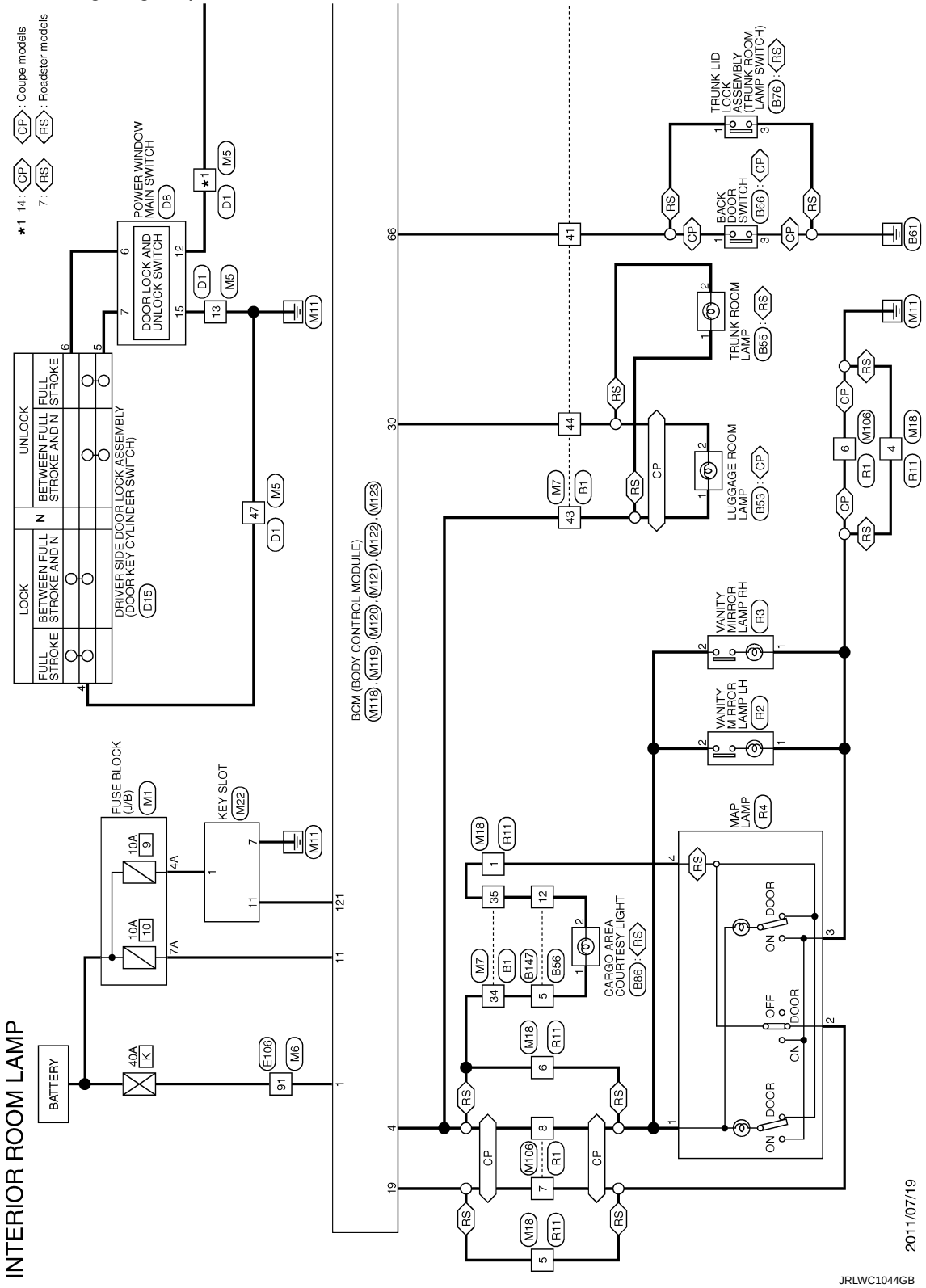
WIRING DIAGRAM

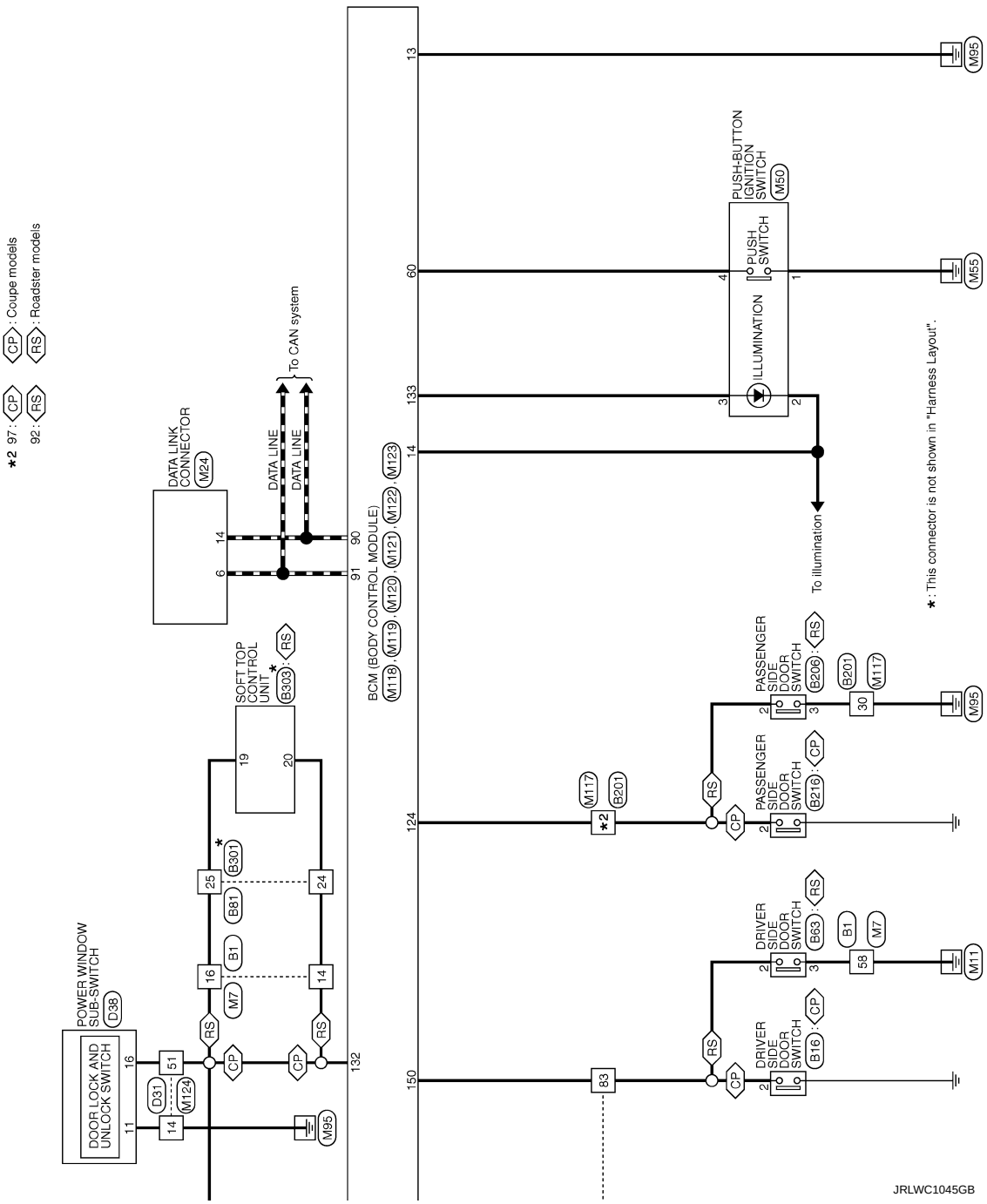
INTERIOR ROOM LAMP CONTROL SYSTEM

Wiring Diagram

INFOID:0000000008196516

For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".



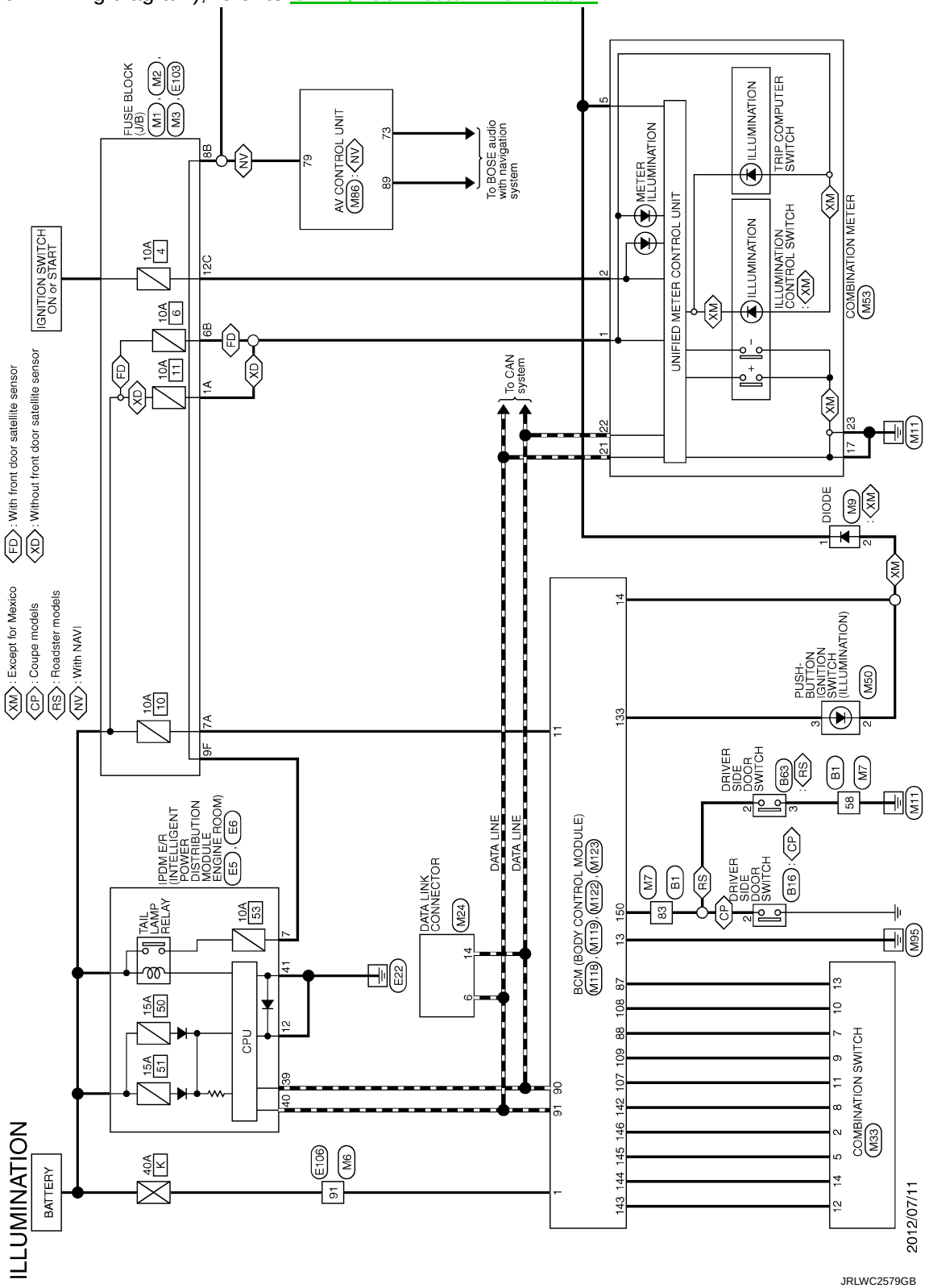

CP : Coupe models
RS : Roadster models
*2 97 : CP
92 : RS
DATA LINK CONNECTOR M24
DATA LINE
DATA LINE
To CAN system
BCM (BODY CONTROL MODULE)
M118 M119 M120 M121 M122 M123
SOFT TOP CONTROL UNIT *
B303
POWER WINDOW SUB-SWITCH D38
DOOR LOCK AND UNLOCK SWITCH
D31 M124
B301 B81 B1 M7
PUSH-BUTTON IGNITION SWITCH M50
PUSH SWITCH
ILLUMINATION
To illumination
* : This connector is not shown in "Harness Layout".
PASSENGER SIDE DOOR SWITCH B206
PASSENGER SIDE DOOR SWITCH B216
DRIVER SIDE DOOR SWITCH B63
DRIVER SIDE DOOR SWITCH B16
B201 M117
M95 M55 M11
JRLWC1045GB

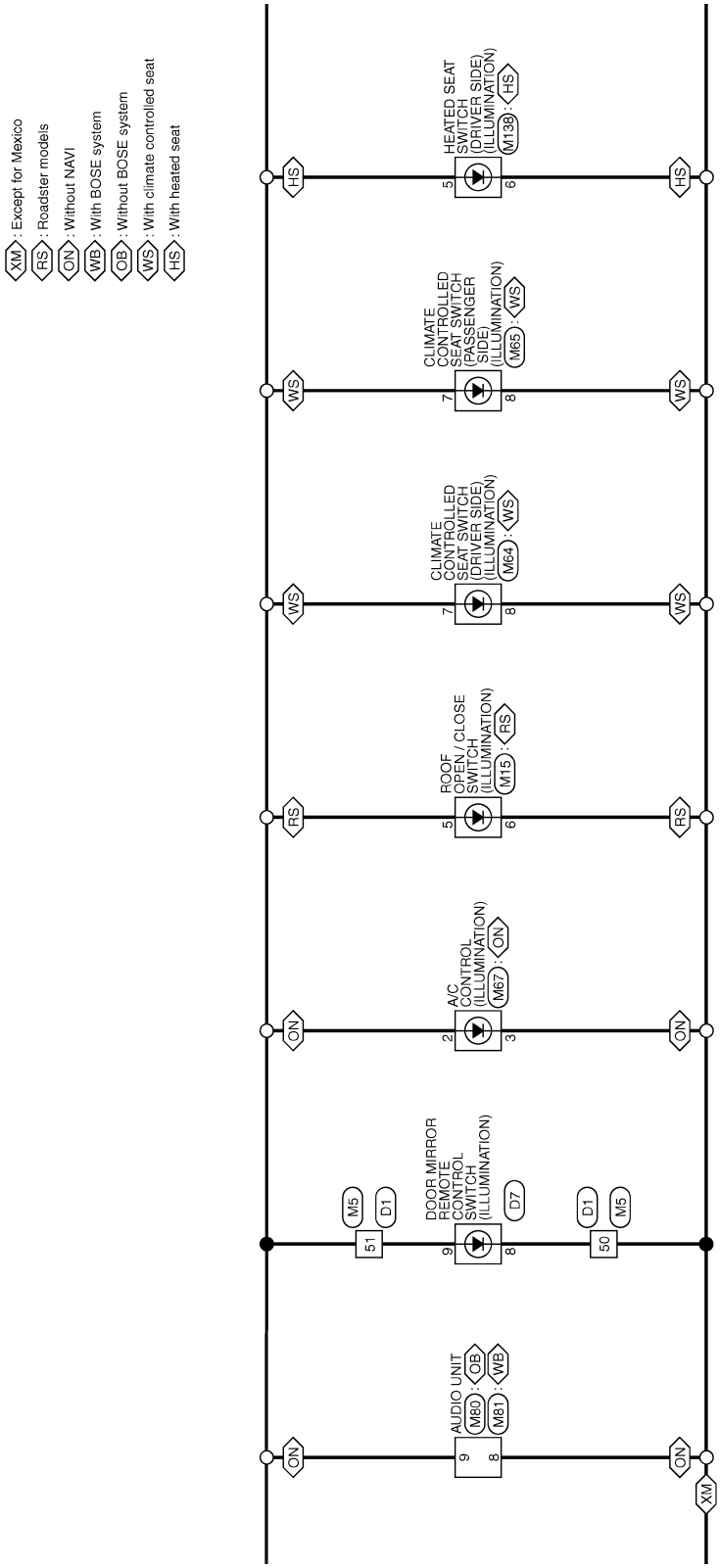
ILLUMINATION

Wiring Diagram

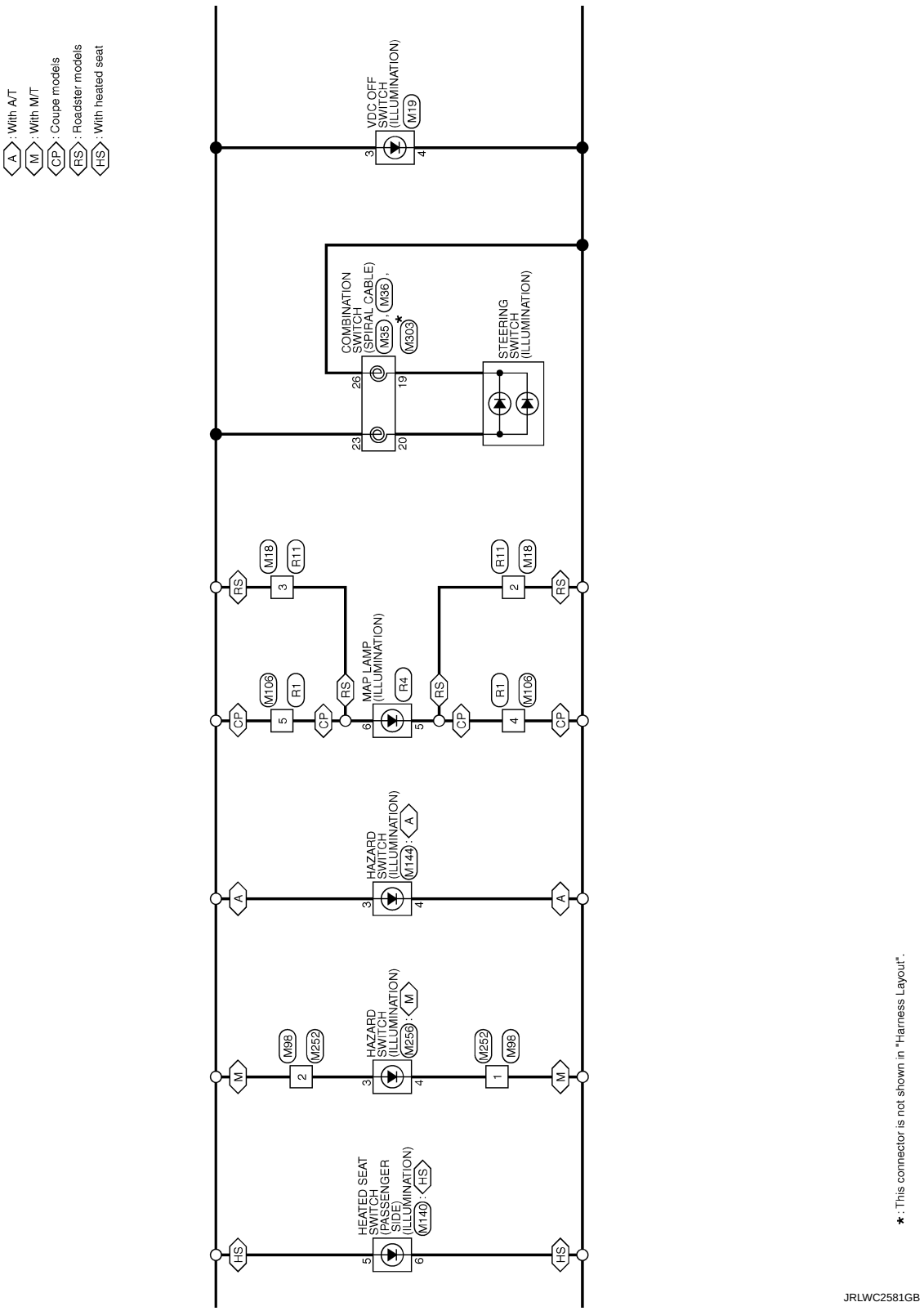
INFOID:0000000008196517

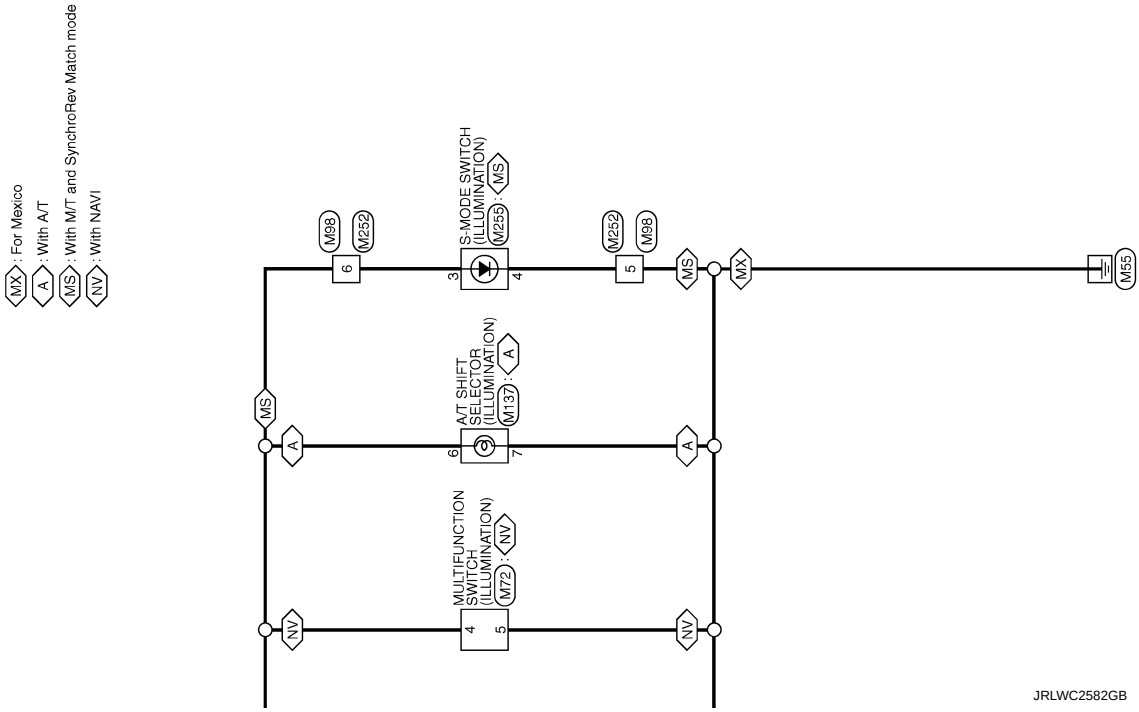
For connector terminal arrangements, harness layouts, and alphabets in a ⬡ (option abbreviation; if not described in wiring diagram), refer to GI-12, "Connector Information".





JRLWC2580GB


A : With A/T
M : With M/T
CP : Coupe models
RS : Roadster models
HS : With heated seat
VDC OFF SWITCH (ILLUMINATION)
M19
COMBINATION SWITCH (SPIRAL CABLE)
M35 , M36 , M303
STEERING SWITCH (ILLUMINATION)
MAP LAMP (ILLUMINATION)
R4
M18
R11
M106
R1
HAZARD SWITCH (ILLUMINATION)
M144
M256
M98
M252
HEATED SEAT SWITCH (PASSENGER SIDE) (ILLUMINATION)
M140
★ : This connector is not shown in "Harness Layout".
JRLWC2581GB


MX : For Mexico
A : With A/T
MS : With M/T and SynchroRev Match mode
NV : With NAVI
S-MODE SWITCH (ILLUMINATION)
A/T SHIFT SELECTOR (ILLUMINATION) : A
(M137)
MULTIFUNCTION SWITCH (ILLUMINATION) : NV
(M72)
M98
M252
M255
M55
JRLWC2582GB

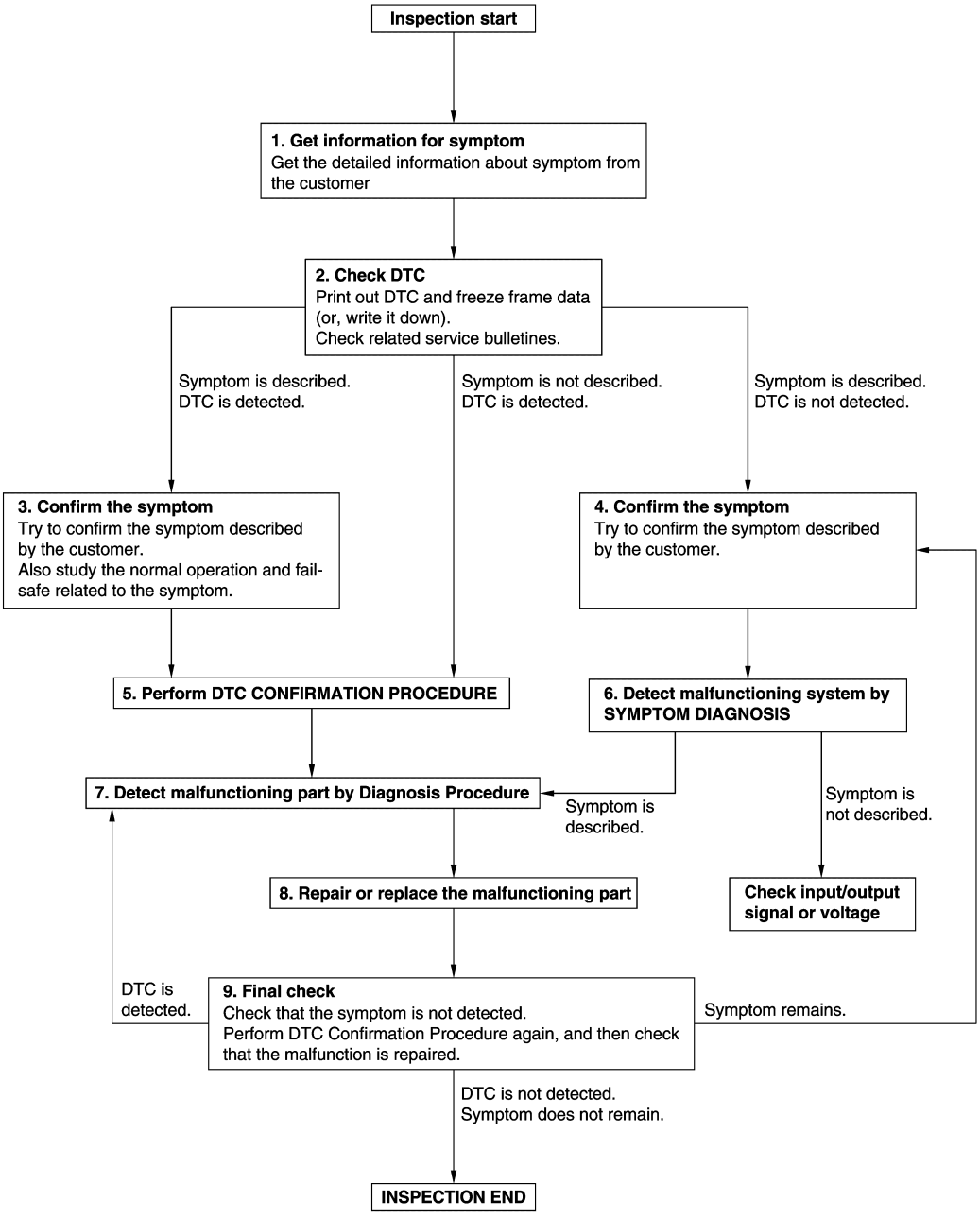
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000008196518

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-45, "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 DIAGNOSTIC PROCEDURE

Inspect according to Diagnostic Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.
NO >> Check according to GI-45, "Intermittent Incident".

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

1. Repair or replace the malfunctioning part.
2. Reconnect parts or connectors disconnected during Diagnostic 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.

DTC/CIRCUIT DIAGNOSIS

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

Description

INFOID:0000000008196519

Provides the interior room lamp power supply. Also cuts the power supply when the interior room lamp battery saver activating.

Component Function Check

INFOID:0000000008196520

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY FUNCTION

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Turn each interior room lamp ON.
- Map lamp
- Vanity mirror lamp
- Trunk room lamp
- Cargo area courtesy light
3. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
4. With operating the test items, check that each interior room lamp turns ON/OFF.

Off : Interior room lamp OFF
On : Interior room lamp ON

Does the interior room lamp turn ON/OFF?

YES >> Interior room lamp power supply circuit is normal.
NO >> Refer to INL-75, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008196521

1.CHECK INTERIOR ROOM LAMP POWER SUPPLY OUTPUT

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Select “BATTERY SAVER” of BCM (BATTERY SAVER) active test item.
3. With operating the test item, check voltage between BCM harness connector and the ground.

Terminals			Test item	Voltage (Approx.)
(+)		(–)		
BCM		Ground	BATTERY SAVER	
Connector	Terminal			
M119	4		Off	0 V
			On	Battery voltage

Is the measurement value normal?

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

2.CHECK INTERIOR ROOM LAMP POWER SUPPLY OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect the following connectors.
- Map lamp
- Vanity mirror lamp (LH)
- Vanity mirror lamp (RH)
- Trunk room lamp
- Cargo area courtesy light
3. Check continuity between BCM harness connector and each interior room lamp harness connector.

BCM		Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	
M119	4	Map lamp	R4	1	Existed
		Vanity mirror lamp (LH)	R2	2	
		Vanity mirror lamp (RH)	R3	2	
		Trunk room lamp	B55	1	
		Cargo area coutesy light	B86	1	

Does continuity exist?

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

3.CHECK INTERIOR ROOM LAMP POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM harness connector and the ground.

BCM		Ground	Continuity
Connector	Terminal		
M119	4		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.
NO >> Check that each interior room lamp has no internal short circuit.

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

INFOID:0000000008196522

Controls each interior room lamp (ground side) by PWM signal.

NOTE:

PWM signal control period is approximately 250 Hz (in the gradual brightening/dimming).

Component Function Check

INFOID:0000000008196523

CAUTION:

Before performing the diagnosis, check that the following is normal.

- **Interior room lamp power supply**
- **Map lamp bulb**

1.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

CONSULT ACTIVE TEST

1. Turn the ignition switch ON.
2. Switch the map lamp switch to DOOR.
3. Select “INT LAMP” of BCM (INT LAMP) active test item.
4. With operating the test items, check that each interior room lamp turns ON/OFF (gradual brightening/dimming).

On : Interior room lamp gradual brightening

Off : Interior room lamp gradual dimming

Does the interior room lamp turns ON/OFF (gradual brightening/dimming)?

YES >> Interior room lamp control circuit is normal.

NO >> Refer to INL-77, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008196524

1.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT ACTIVE TEST

1. Turn the ignition switch OFF.
2. Remove all the bulbs of map lamp.
3. Turn the ignition switch ON.
4. Select “INT LAMP” of BCM (INT LAMP) active test item.
5. With operating the test item, check continuity between BCM harness connector and the ground.

BCM		Ground	Test item	Continuity
Connector	Terminal		INT LAMP	
M119	19		On	Existed
			Off	Not existed

Is the measurement value normal?

YES >> GO TO 2.

Fixed ON>>GO TO 3.

Fixed OFF>>Replace BCM.

2.CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

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

BCM		Map lamp		Continuity
Connector	Terminal	Connector	Terminal	
M119	19	R4	2	Existed

Does continuity exist?

YES >> Replace the map lamp.
NO >> Repair the harnesses or connectors.

3.CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

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

BCM		Ground	Continuity
Connector	Terminal		
M119	19		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.
NO >> Replace BCM.

TRUNK ROOM LAMP CIRCUIT

Description

INFOID:0000000008196525

Controls the trunk room lamp (ground side) to turn the luggage room lamp ON and OFF.

Component Function Check

INFOID:0000000008196526

CAUTION:
Before performing the diagnosis, check that the following is normal.
- **Interior room lamp power supply**
- **Trunk room lamp bulb**

1.CHECK TRUNK ROOM LAMP OPERATION

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Select “LUGGAGE LAMP TEST” of BCM (INT LAMP) active test item.
3. With operating the test items, check that trunk room lamp turns ON/OFF.

On : Trunk room lamp ON
Off : Trunk room lamp OFF

Does the Trunk room lamp turn ON/OFF?

YES >> Trunk room lamp circuit is normal.
NO >> Refer to INL-79, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008196527

1.CHECK TRUNK ROOM LAMP OUTPUT

CONSULT ACTIVE TEST
1. Turn the ignition switch OFF.
2. Remove trunk room lamp bulb.
3. Turn the ignition switch ON.
4. Select “LUGGAGE LAMP TEST” of BCM (INT LAMP) active test item.
5. With operating the test item, check continuity between BCM harness connector and the ground.

BCM		Ground	Test item	Continuity
Connector	Terminal		LUGGAGE LAMP TEST	
M120	30		On	Existed
			Off	Not existed

Is the measurement value normal?

YES >> GO TO 2.
Fixed ON>>GO TO 3.
Fixed OFF>>Replace BCM.

2.CHECK TRUNK ROOM LAMP OPEN CIRCUIT

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

BCM		Trunk room lamp		Continuity
Connector	Terminal	Connector	Terminal	
M120	30	B55	2	Existed

Does continuity exist?

YES >> Replace the trunk room lamp.

NO >> Repair the harnesses or connectors.

3.CHECK TRUNK ROOM LAMP SHORT CIRCUIT

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

BCM		Ground	Continuity
Connector	Terminal		
M120	30		Not existed

Does continuity exist?

YES >> Repair the harnesses or connectors.
NO >> Replace BCM.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

Description

INFOID:0000000008196528

Provides the power supply and the ground to control the push-button ignition switch illumination.

Component Function Check

INFOID:0000000008196529

1.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Select “ENGINE SW ILLUMI” of BCM (INTELLIGENT KEY) active test item.
3. With operating the test items, check that the push-button ignition switch illumination turns ON/OFF.

On : Push-button ignition switch illumination ON
Off : Push-button ignition switch illumination OFF

Does the push-button ignition switch illumination turn ON/OFF?

YES >> Push-button ignition switch illumination circuit is normal.
NO >> Refer to INL-81, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008196530

1.CHECK ILLUMINATION CONTROL SWITCHING OPERATION

1. Turn the ignition switch ON.
2. With operating the lighting switch, check that the push-button ignition switch illumination turns ON/OFF.

Condition	Push-button ignition switch illumination
• Ignition switch ON • Lighting switch 1ST	ON
• Ignition switch OFF • Lighting switch OFF • Driver door LOCK	OFF

Does the push-button ignition switch illumination turn ON/OFF?

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

2.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND CIRCUIT

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

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M119	14	M50	2	Existed

Does the continuity exist?

YES >> Replace BCM. Refer to BCS-95, "Exploded View"
NO >> Repair the harness or the connector.

3.CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY OUTPUT

CONSULT ACTIVE TEST
1. Turn the ignition switch ON.
2. Select “ENGINE SW ILLUMI” of BCM (INTELLIGENT KEY) active test item.
3. With operating the test item, check voltage between BCM harness connector and the ground.

Terminals			Test item	Voltage (Approx.)
(+)		(–)		
BCM		Ground	ENGINE SW ILLUMI	
Connector	Terminal			
M123	133		ON	5 V
			OFF	0 V

Is the measurement value normal?

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

4. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY OPEN CIRCUIT

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

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M123	133	M50	3	Existed

Does the continuity exist?

YES >> Replace the push-button ignition switch.
NO >> Repair the harness or the connector.

5. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY SHORT CIRCUIT

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

BCM		Ground	Continuity
Connector	Terminal		
M123	133		Not existed

Does the continuity exist?

YES >> Repair the harness or the connector.
NO >> Replace BCM. Refer to BCS-95, "Exploded View"

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:0000000008196531

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

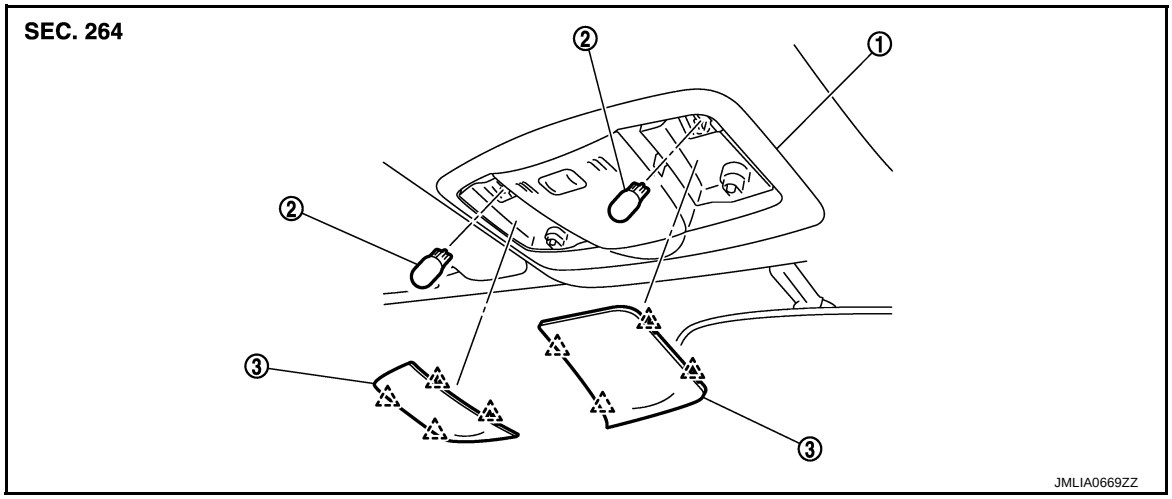
Symptom	Possible cause	Inspection item
All the following lamps do not turn ON. • Map lamp • Cargo area courtesy light • Trunk room lamp • Vanity mirror lamp	• Harness between BCM and each interior room lamp • BCM	Interior room lamp power supply circuit Refer to INL-75.
• Interior room lamp does not turn ON even though the door is open. (It turns ON when turning the interior room lamp ON.) • Interior room lamp does not turn OFF even though the door is closed.	• Harness between BCM and each door switch • Harness between BCM and each interior room lamp • BCM	Door switch circuit Refer to DLK-234.
		Interior room lamp control circuit Refer to INL-77.
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	—	Check the interior room lamp setting. Refer to INL-53.
• Trunk room lamp does not turn ON. (The bulb is normal.) • Trunk room lamp does not turn OFF.	• Harness between BCM and trunk room lamp switch • Harness between BCM and trunk room lamp • BCM	Trunk room lamp switch circuit Refer to DLK-247.
		Trunk room lamp circuit Refer to INL-79.
Push-button ignition switch illumination does not illuminate.	• Harness between BCM and push-button ignition switch • BCM	Push-button ignition switch illumination circuit Refer to INL-81.
Interior room lamp battery saver does not activate.	—	Check the interior room lamp battery saver setting. Refer to INL-54.

REMOVAL AND INSTALLATION

MAP LAMP

Exploded View

INFOID:0000000008196532



1. Map lamp assembly
2. Bulb
3. Lens

: Pawl

Removal and Installation

INFOID:0000000008196533

Refer to INT-28, "Exploded View" for the map lamp assembly installation/removal.

Replacement

INFOID:0000000008196534

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.**

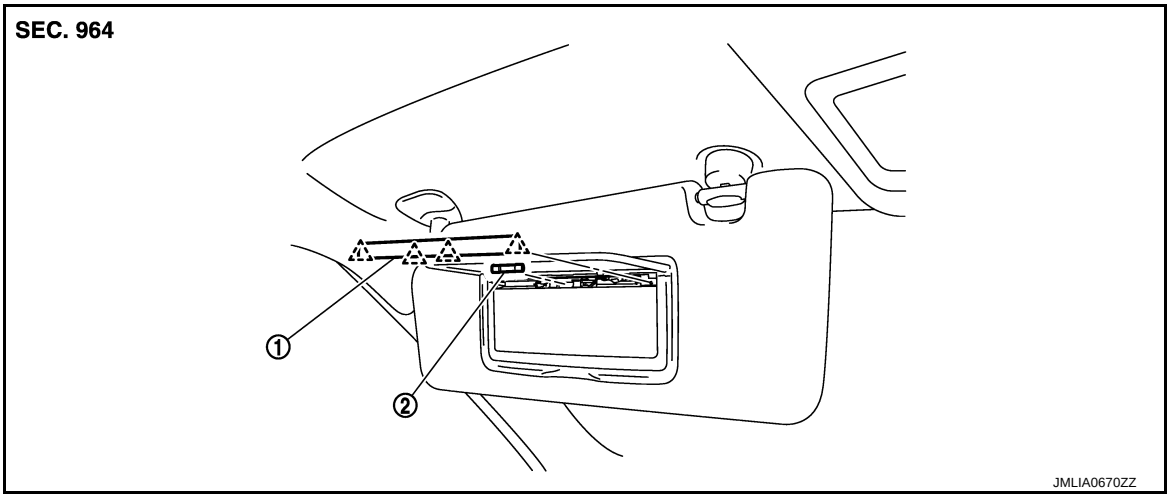
MAP LAMP BULB

1. Insert any appropriate tool into the gap between the lens. Remove the lens.
2. Remove the bulb.

VANITY MIRROR LAMP

Exploded View

INFOID:0000000008196535



1. Lens
2. Bulb

: Pawl

Replacement

INFOID:0000000008196536

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.**

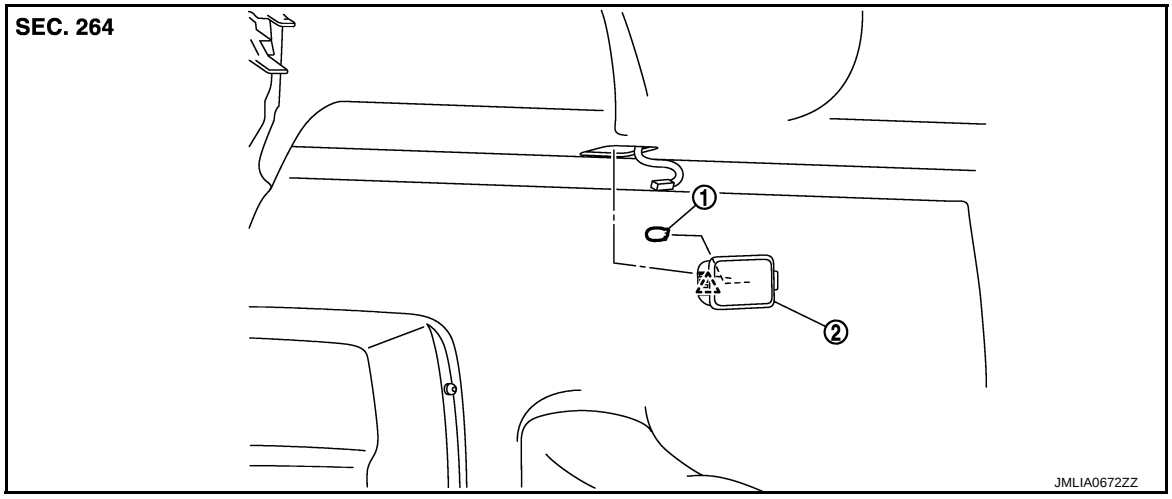
VANITY MIRROR LAMP BULB

1. Insert any appropriate tool into the gap between the lens. Remove the lens.
2. Remove the bulb.

CARGO AREA COURTESY LIGHT

Exploded View

INFOID:0000000008196537



1. Bulb
2. Cargo area courtesy light

: Pawl

Removal and Installation

INFOID:0000000008196538

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

REMOVAL

1. Insert any appropriate tool into the gap between cargo area courtesy light and rear parcel shelf assembly. Remove cargo area courtesy light.
2. Disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000008196539

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.**

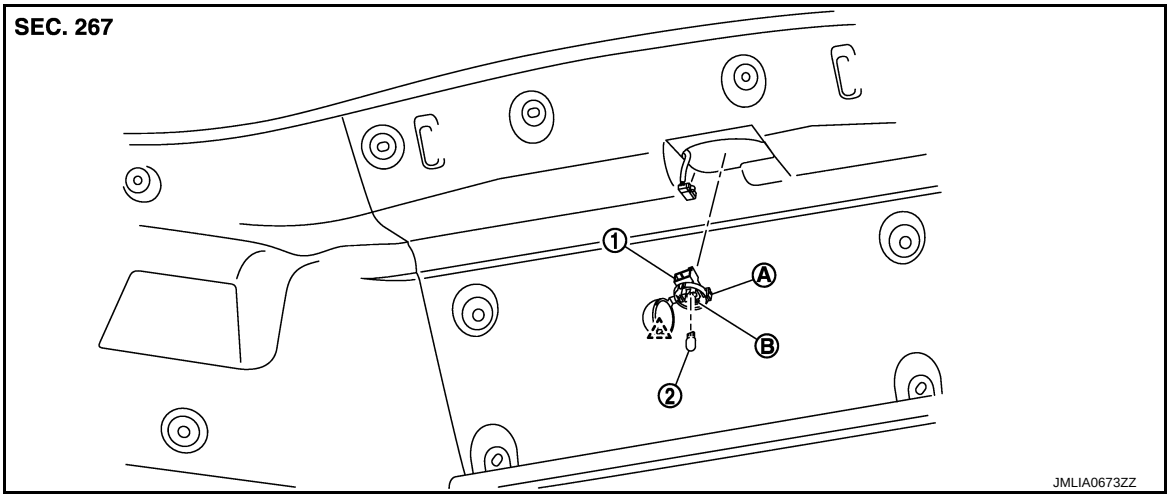
CARGO AREA COURTESY LIGHT BULB

1. Remove cargo area courtesy light. Refer to INL-86, "Removal and Installation".
2. Remove the bulb.

TRUNK ROOM LAMP

Exploded View

INFOID:0000000008196540



1. Trunk room lamp
2. Bulb

A : Lens fixing pawl
B : Trunk room lamp fixing pawl
: Pawl

Removal and Installation

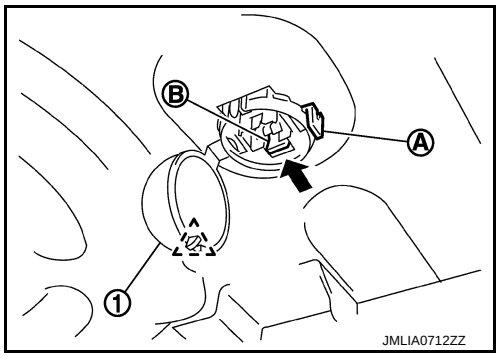
INFOID:0000000008196541

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

REMOVAL

1. Disengage lens (1) fixing pawl (A) and open the lens.
2. Remove the bulb.
3. Press trunk room lamp fixing pawl (B) toward the direction of the arrow and pull trunk room lamp down to remove it from the panel.
4. Disconnect the connector and remove trunk room lamp.

: Pawl



INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:0000000008196542

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.**

TRUNK ROOM LAMP BULB

1. Disengage trunk room lamp lens fixing pawl with a remover tool and open the lens.
2. Remove the bulb.

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:0000000008196543

Item	Type	Wattage (W)
Push-button ignition switch illumination	LED	—
Map lamp	Wedge	8
Vanity mirror lamp	—	2
Trunk room lamp	Wedge	5
Cargo area courtesy light	Wedge	5