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SECTION INL

INTERIOR LIGHTING SYSTEM

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000007566440

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

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

WARNING:

Always observe the following items for preventing accidental activation.

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

Precaution for Battery Service

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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.

Service Procedure Precautions for Models with a Pop-up Roll Bar

INFOID:000000007566442

WARNING:

Always observe the following items for preventing accidental activation.

- Risk of passenger injury or death may increase if the pop-up roll bar does not deploy during a roll over collision. In order to reduce the chance of an incident where the pop-up roll bar is inoperative, all maintenance must be performed by a NISSAN or INFINITI dealer.
- Before removing and installing the pop-up roll bar component parts and harness, always turn the ignition switch OFF, disconnect the battery negative terminal, and wait for 3 minutes or more. (The purpose of this operation is to discharge electricity that is accumulated in the auxiliary power supply circuit in the air bag diagnosis sensor unit.)
- When repairing, removing, and installing a pop-up roll bar, always refer to SRS AIR BAG and SRS AIR BAG CONTROL warnings in the Service Manual.

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COMPONENT PARTS

< SYSTEM DESCRIPTION >

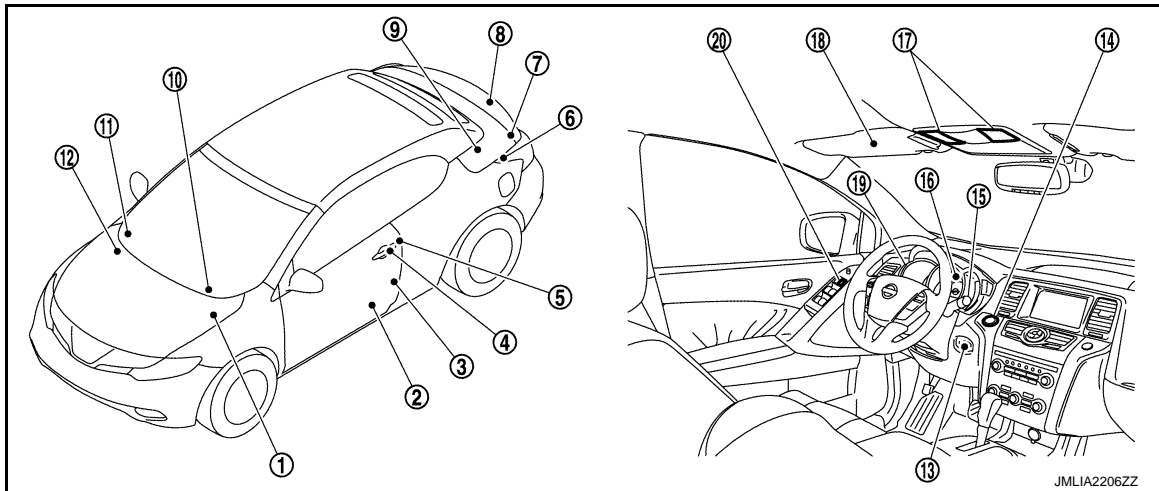
SYSTEM DESCRIPTION

COMPONENT PARTS

INTERIOR LIGHTING SYSTEM

INTERIOR LIGHTING SYSTEM : Component Parts Location

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- | | | |
|---|--|---|
| 1. IPDM E/R Refer to PCS-4, "Component Parts Location" | 2. Step lamp | 3. Door switch |
| 4. Door request switch | 5. Door key cylinder switch | 6. Rear remote keyless entry receiver Refer to DLK-10, "DOOR LOCK SYSTEM : Component Parts Location" |
| 7. Trunk room lamp | 8. Trunk room lamp switch | 9. Soft top control unit Refer to RF-9, "Component Parts Location" |
| 10. BCM Refer to BCS-4, "BODY CONTROL SYSTEM : Component Parts Location" | 11. Optical sensor Refer to EXL-6, "Component Parts Location" | 12. Front remote keyless entry receiver |
| 13. Key slot | 14. Push-button ignition switch | 15. Combination switch |
| 16. Combination meter | 17. Map lamp | 18. Vanity mirror lamp |
| 19. Illumination control switch | 20. Door lock and unlock switch | |

INTERIOR LIGHTING SYSTEM : Component Description

INFOID:000000007566444

| Part | Description |
|--|---|
| BCM | <ul style="list-style-type: none"> Activates the interior room lamp timer depending on the vehicle condition to turn the interior room lamp ON/OFF. Turns the step lamp ON /OFF according to any door switch status. Operates the interior room lamp battery saver depending on the vehicle condition to cut the interior room lamp power supply. 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). |
| Remote keyless entry receiver | Refer to DLK-11, "DOOR LOCK SYSTEM : Component Description" . |
| <ul style="list-style-type: none"> Door request switch Door key cylinder switch Door lock/unlock switch | Refer to DLK-11, "DOOR LOCK SYSTEM : Component Description" . |

COMPONENT PARTS

< SYSTEM DESCRIPTION >

| Part | Description |
|---|--|
| <ul style="list-style-type: none"> • Door switch • Trunk room lamp switch | Refer to DLK-11, "DOOR LOCK SYSTEM : Component Description" . |
| Key slot | Refer to DLK-11, "DOOR LOCK SYSTEM : Component Description" . |
| Optical sensor | Refer to EXL-7, "Component Description" . |
| Combination meter | Refer to MWI-8, "METER SYSTEM : System Description" . |
| Combination switch (Lighting & turn signal switch) | Refer to BCS-6, "COMBINATION SWITCH READING SYSTEM : System Description" . |

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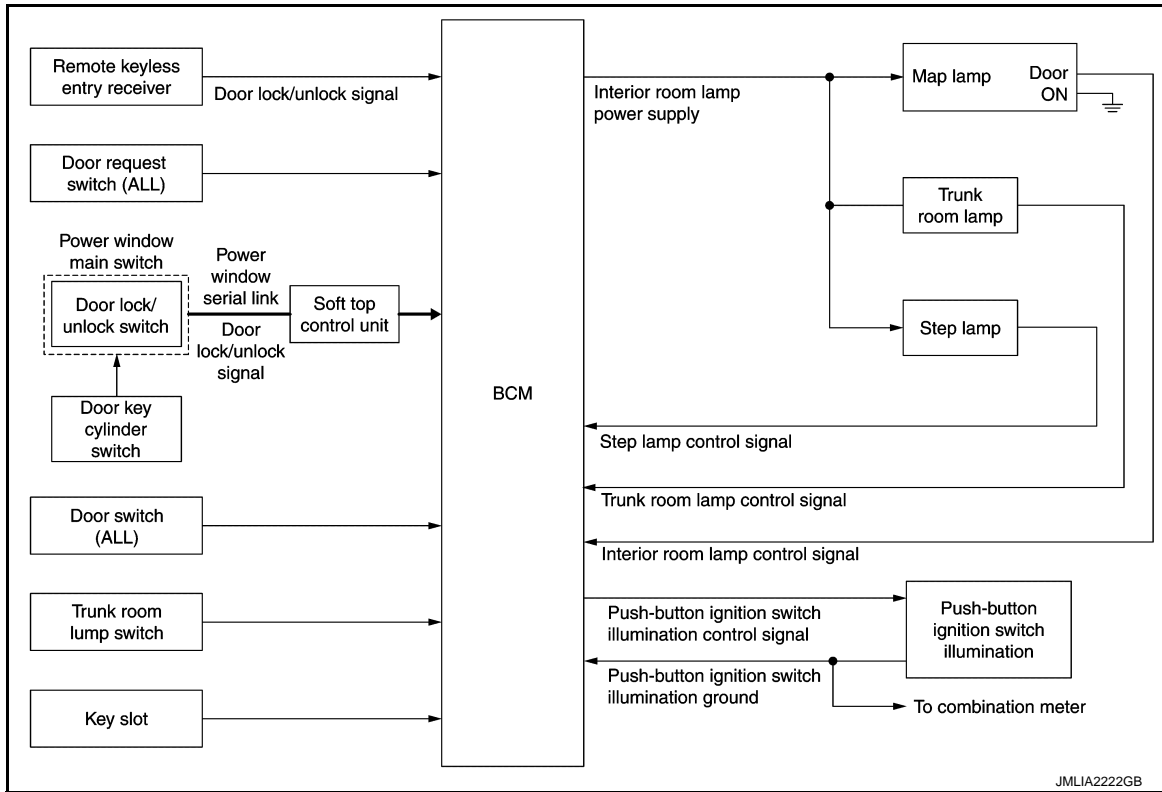
< SYSTEM DESCRIPTION >

SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM

INTERIOR ROOM LAMP CONTROL SYSTEM : System Diagram

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INTERIOR ROOM LAMP CONTROL SYSTEM : System Description

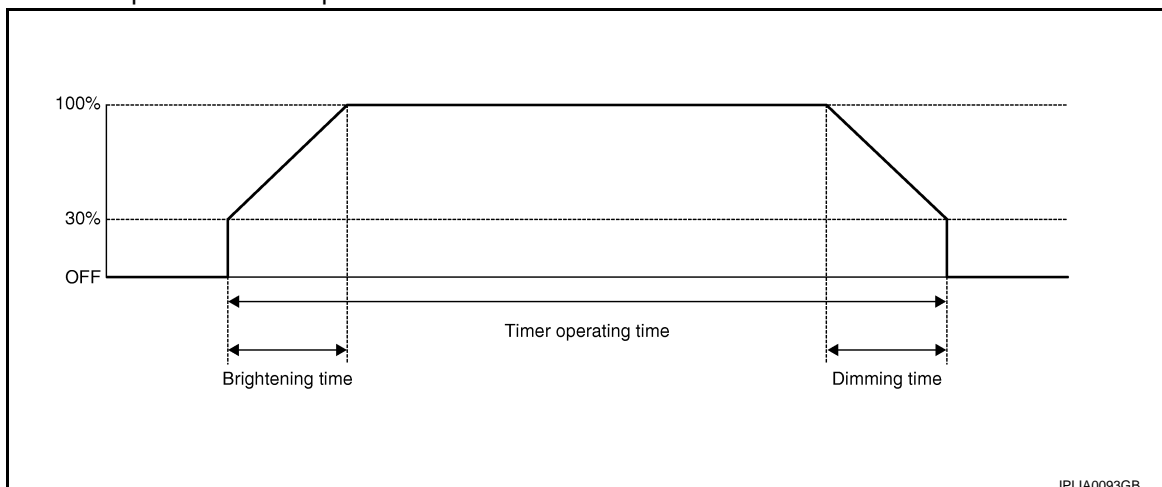
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OUTLINE

- Interior room lamps* are controlled by interior room lamp timer control function of BCM.
*: Map lamp (when map lamp switch is in DOOR position).
- Step lamp is controlled by step lamp control function of BCM.
- 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.

SYSTEM

< SYSTEM DESCRIPTION >

- 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, door key cylinder switch, door lock and unlock switch)

NOTE:

Each function of interior room lamp timer can be set by CONSULT. Refer to [INL-12. "INT LAMP : CONSULT Function \(BCM - INT LAMP\)"](#).

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 turn 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.

STEP LAMP CONTROL

BCM controls the step lamp (ground-side) to turn ON with any door switch ON.

TRUNK ROOM LAMP CONTROL

BCM turns trunk room lamp ON when the following condition is detected.

- Trunk room lamp switch is ON

BCM turns trunk room lamp OFF when the following condition is detected.

- Trunk room lamp switch is OFF

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.

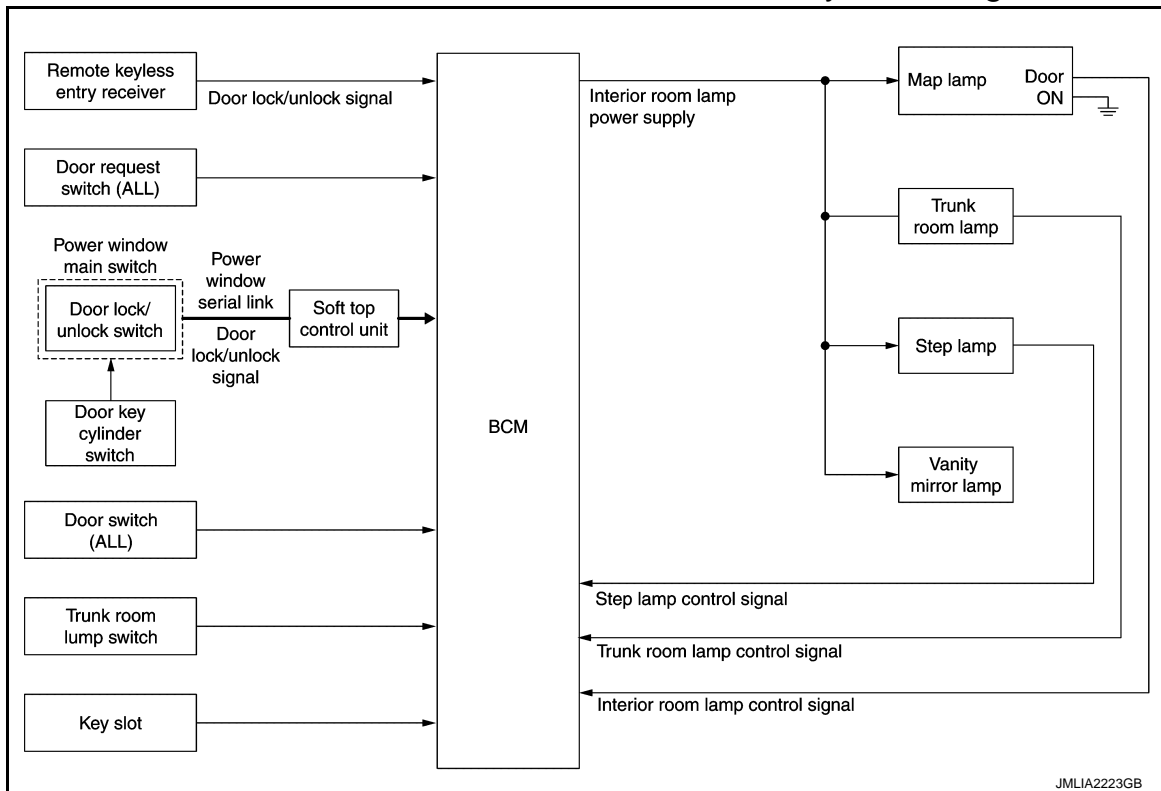
INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

SYSTEM

< SYSTEM DESCRIPTION >

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : System Diagram

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INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : System Description

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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
- Step lamp
- 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 door request switch, door key cylinder switch, door lock and unlock switch)
 - 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-13, "BATTERY SAVER : CONSULT Function \(BCM - BATTERY SAVER\)"](#).

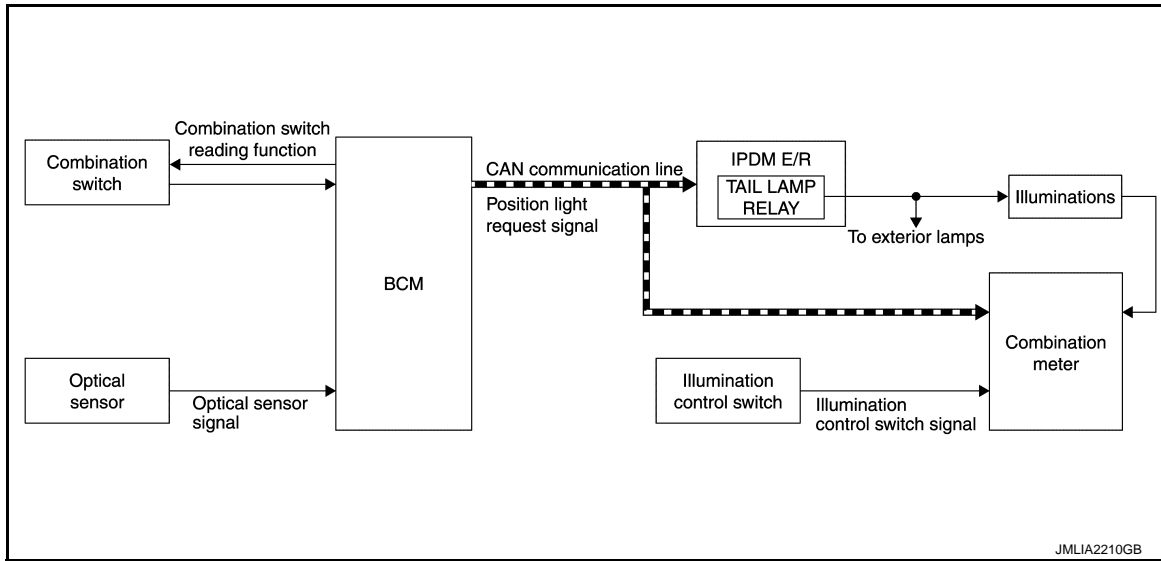
ILLUMINATION CONTROL SYSTEM

SYSTEM

< SYSTEM DESCRIPTION >

ILLUMINATION CONTROL SYSTEM : System Diagram

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ILLUMINATION CONTROL SYSTEM : System Description

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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-14, "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
- Lighting switch AUTO, with the front fog lamp switch ON and the ignition switch ON
- 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 each illumination lamp (ground side).

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

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APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

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

NOTE:

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

FREEZE FRAME DATA (FFD)

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| CONSULT screen item | Indication/Unit | Description | | |
|---------------------|--|--|--|-----|
| Vehicle Speed | km/h | Vehicle speed of the moment a particular DTC is detected | | A |
| Odo/Trip Meter | km | Total mileage (Odometer value) of the moment a particular DTC is detected | | |
| Vehicle Condition | SLEEP>LOCK | Power position status of the moment a particular DTC is detected | While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*) | B |
| | SLEEP>OFF | | While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".) | C |
| | LOCK>ACC | | While turning power supply position from "LOCK" to "ACC" | |
| | ACC>ON | | While turning power supply position from "ACC" to "IGN" | D |
| | RUN>ACC | | While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.) | |
| | CRANK>RUN | | While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it) | E |
| | 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" | F |
| | OFF>LOCK | | While turning power supply position from "OFF" to "LOCK"* | |
| | OFF>ACC | | While turning power supply position from "OFF" to "ACC" | G |
| | 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 | H |
| | 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"* | I |
| | OFF | | Power supply position is "OFF" (Ignition switch OFF) | |
| | ACC | | Power supply position is "ACC" (Ignition switch ACC) | J |
| | 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) | K |
| CRANKING | Power supply position is "CRANKING" (At engine cranking) | | | |
| IGN Counter | 0 - 39 | The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. | | INL |

NOTE:

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

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

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

INT LAMP

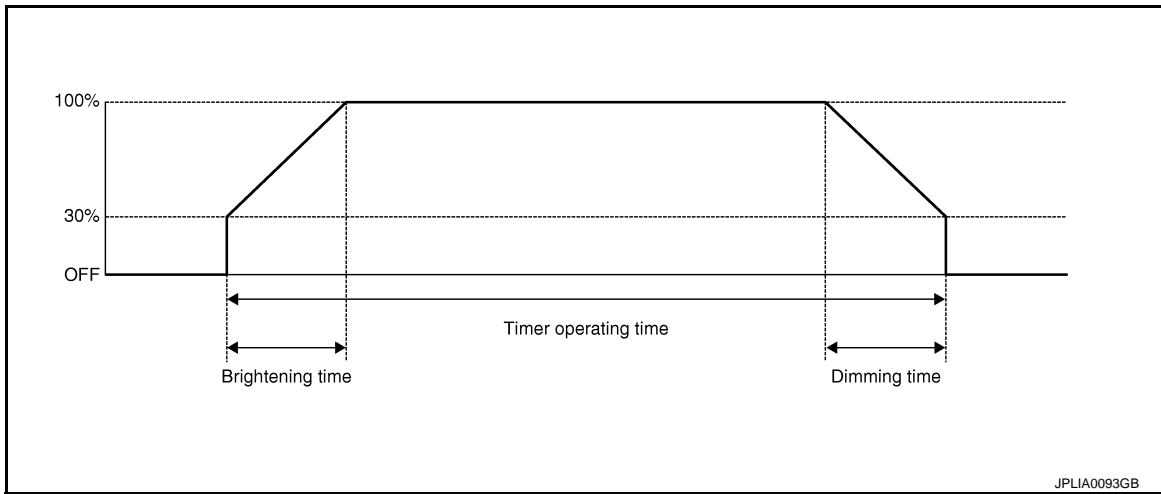
DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:000000007566452

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

| Monitor item [Unit] | Description |
|------------------------|---|
| REQ SW-DR [On/Off] | The switch status input from door request switch (driver side) |
| REQ SW-AS [On/Off] | The switch status input from door request switch (passenger side) |
| REQ SW-RR [On/Off] | NOTE: The item is indicated, but not monitored. |
| REQ SW-RL [On/Off] | |

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Monitor item [Unit] | Description |
|---------------------------|--|
| PUSH SW [On/Off] | The switch status input from push-button ignition switch |
| KEY SW-SLOT [On/Off] | Key switch status input from key slot |
| 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 |
| DOOR SW-DR [On/Off] | The switch status input from front door switch (driver side) |
| DOOR SW-AS [On/Off] | The switch status input from front door switch (passenger side) |
| DOOR SW-RR [On/Off] | NOTE: The item is indicated, but not monitored. |
| DOOR SW-RL [On/Off] | |
| DOOR SW-BK [On/Off] | |
| CDL LOCK SW [On/Off] | Lock switch status received from door lock/unlock switch by power window switch serial link |
| CDL UNLOCK SW [On/Off] | Unlock switch status received from door lock/unlock switch by power window switch serial link |
| KEY CYL LK-SW [On/Off] | Lock switch status received from door key cylinder switch by power window switch serial link |
| KEY CYL UN-SW [On/Off] | Unlock switch status received from door key cylinder switch by power window switch serial link |
| TRNK/HAT MNTR [On/Off] | The switch status input from trunk room lamp switch |
| 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 personal lamp ON (Map lamp switch is in DOOR position). |
| | Off | Stops the interior room lamp control signal to turn map lamp and personal lamp OFF. |
| STEP LAMP TEST | On | Outputs the step lamp control signal to turn step lamp ON. |
| | Off | Stops the step lamp control signal to turn step lamp OFF. |
| LUGGAGE LAMP TEST | On | Outputs the trunk room lamp control signal to turn trunk room lamp ON. |
| | Off | Stops the trunk room lamp control signal to turn trunk room lamp OFF. |

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:000000007566453

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| 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

| Monitor item [Unit] | Description |
|---------------------------|--|
| REQ SW-DR [On/Off] | The switch status input from door request switch (driver side) |
| REQ SW-AS [On/Off] | The switch status input from door 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 from front door switch (driver side) |
| DOOR SW-AS [On/Off] | The switch status input from front door switch (passenger side) |
| DOOR SW-RR [On/Off] | NOTE: The item is indicated, but not monitored. |
| DOOR SW-RL [On/Off] | |
| DOOR SW-BK [On/Off] | |
| CDL LOCK SW [On/Off] | Lock switch status received from door lock/unlock switch by power window switch serial link |
| CDL UNLOCK SW [On/Off] | Unlock switch status received from door lock/unlock switch by power window switch serial link |
| KEY CYL LK-SW [On/Off] | Lock switch status received from door key cylinder switch by power window switch serial link |
| KEY CYL UN-SW [On/Off] | Unlock switch status received from door key cylinder switch by power window switch serial link |
| TRNK/HAT MNTR [On/Off] | The switch status input from trunk room lamp switch |

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Monitor item [Unit] | Description |
|------------------------|--|
| 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.

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BCM

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:000000007566454

| ECU | Reference |
|-----|---|
| BCM | BCS-31. "Reference Value" |
| | BCS-53. "Fail-safe" |
| | BCS-53. "DTC Inspection Priority Chart" |
| | BCS-54. "DTC Index" |

INTERIOR ROOM LAMP CONTROL SYSTEM


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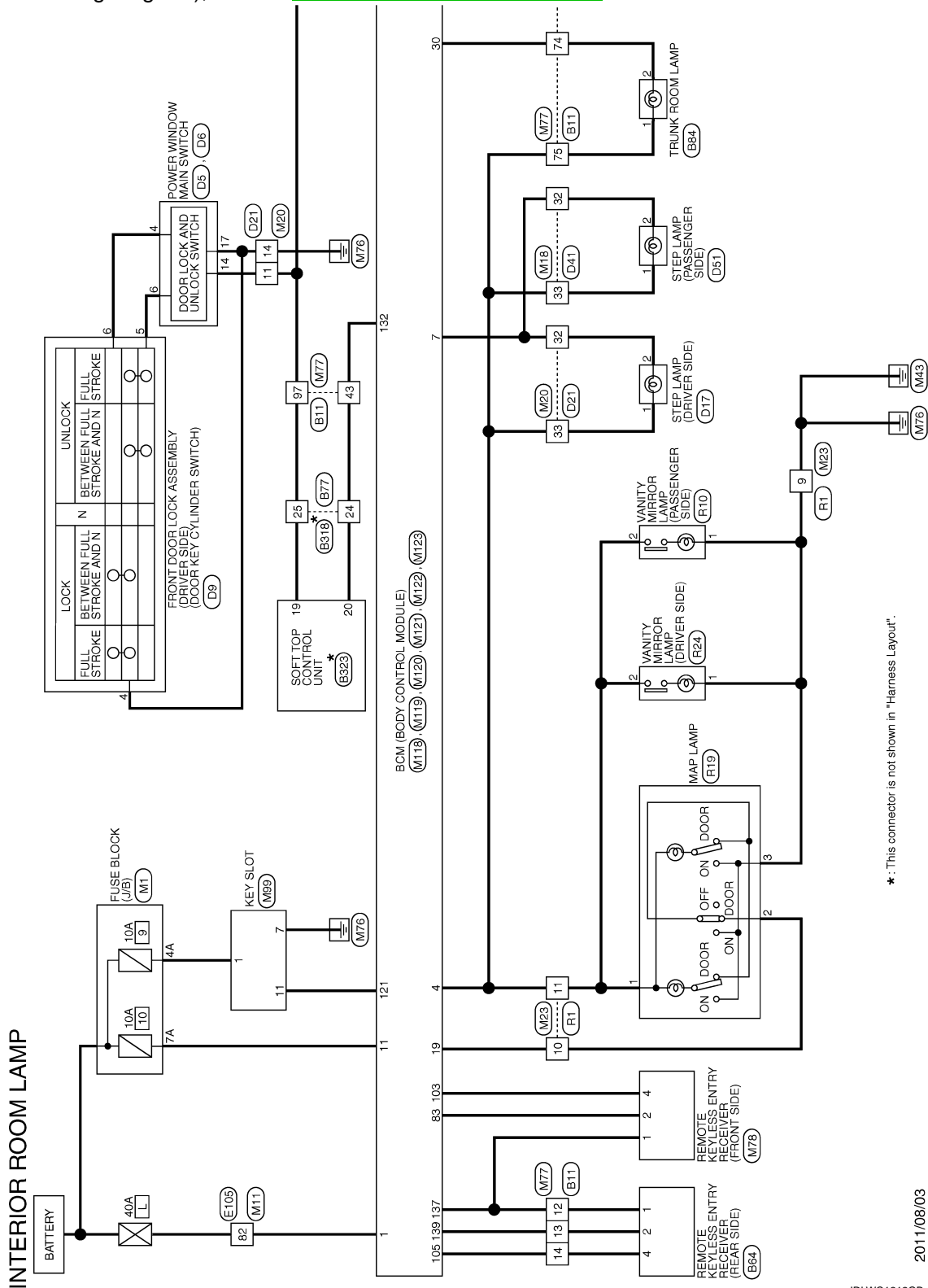
WIRING DIAGRAM

INTERIOR ROOM LAMP CONTROL SYSTEM

Wiring Diagram

INFOID:000000007566455

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



2011/08/03

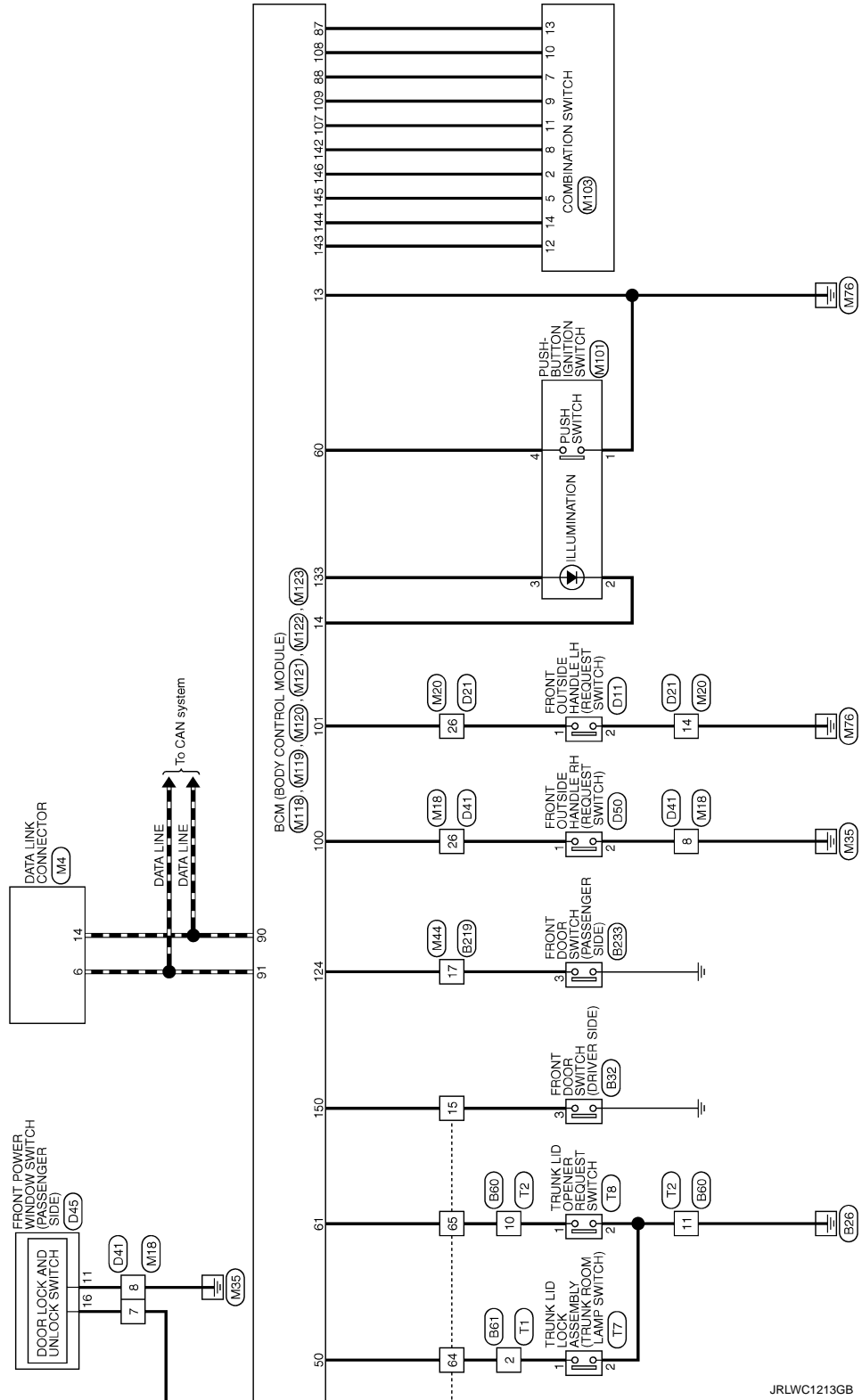
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INTERIOR ROOM LAMP CONTROL SYSTEM

< WIRING DIAGRAM >



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
ILLUMINATION

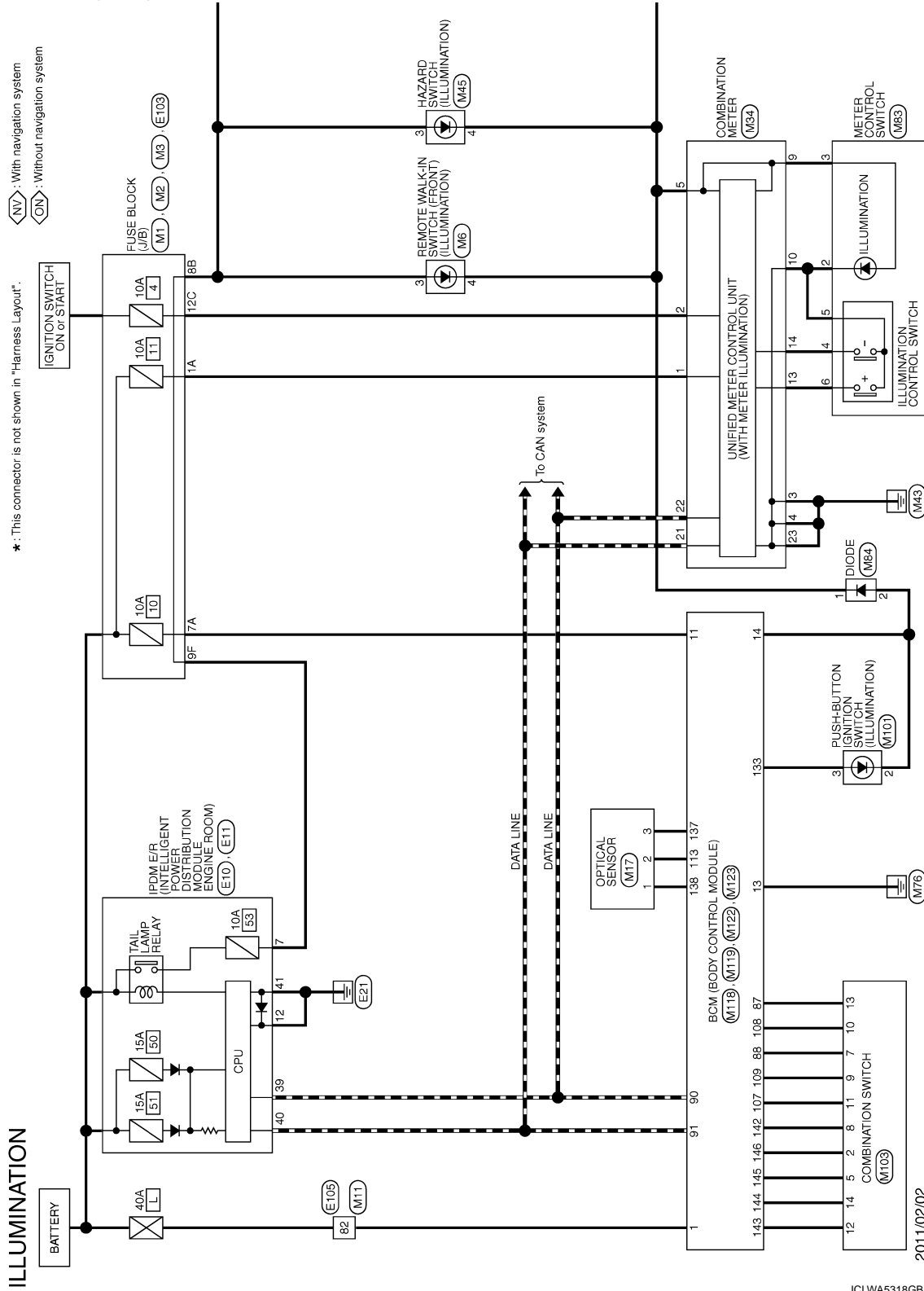
< WIRING DIAGRAM >

ILLUMINATION

Wiring Diagram

INFOID:000000007566456

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

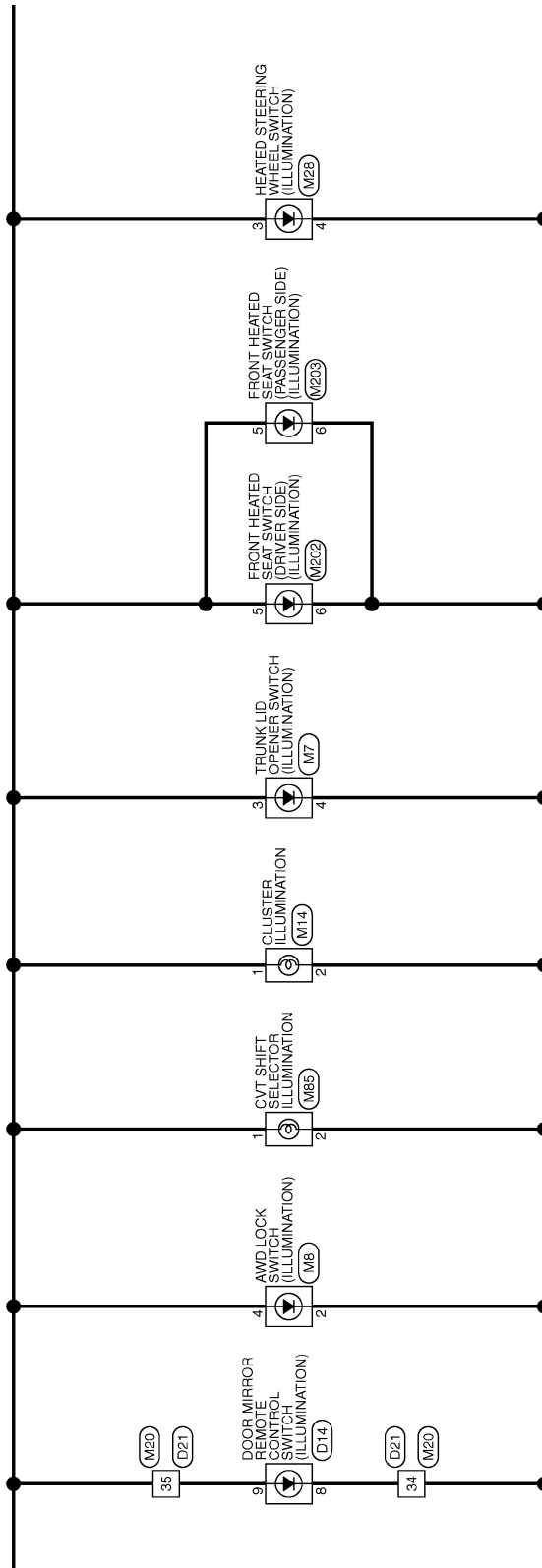


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ILLUMINATION

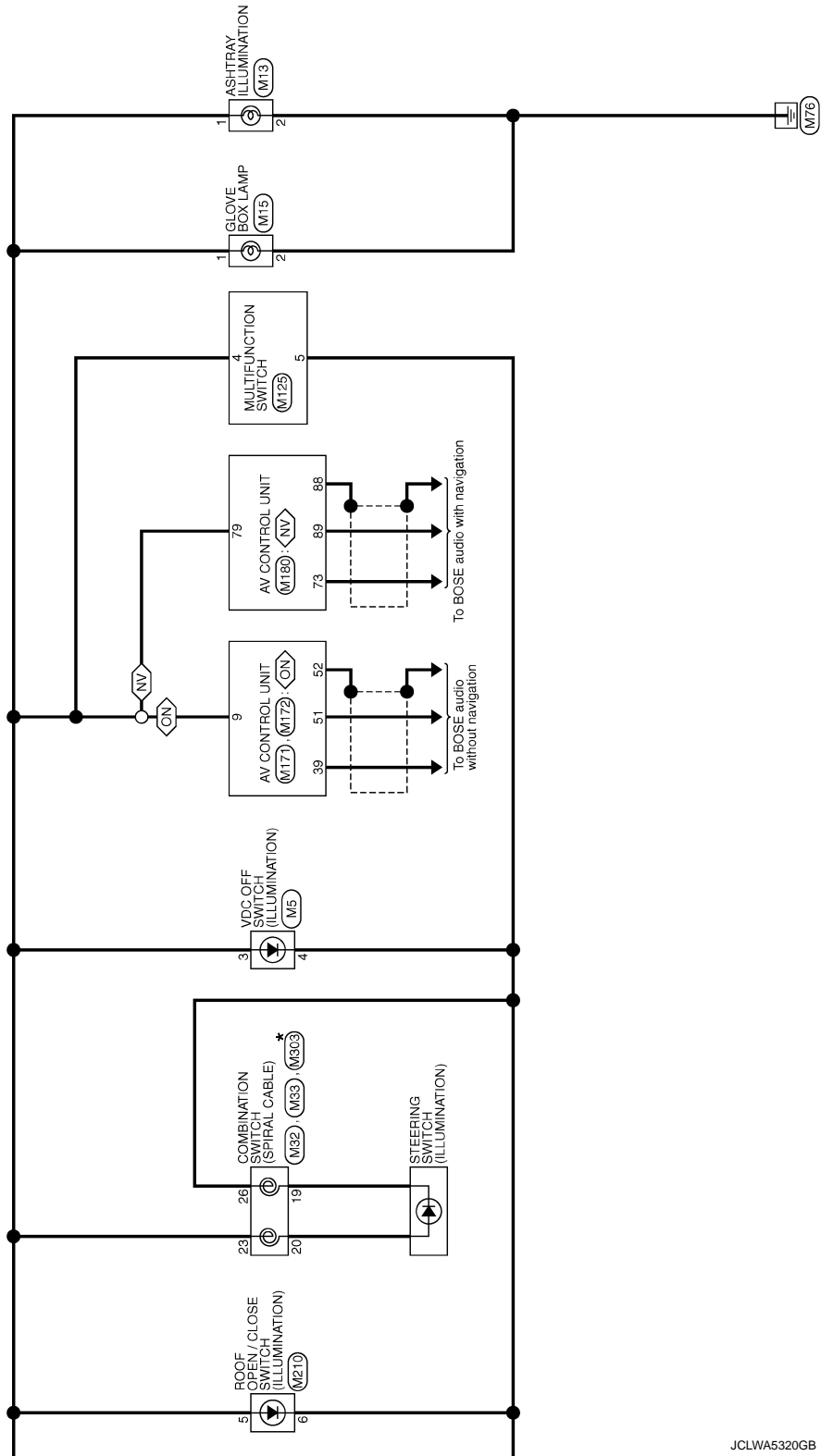
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ILLUMINATION

< WIRING DIAGRAM >



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DIAGNOSIS AND REPAIR WORKFLOW

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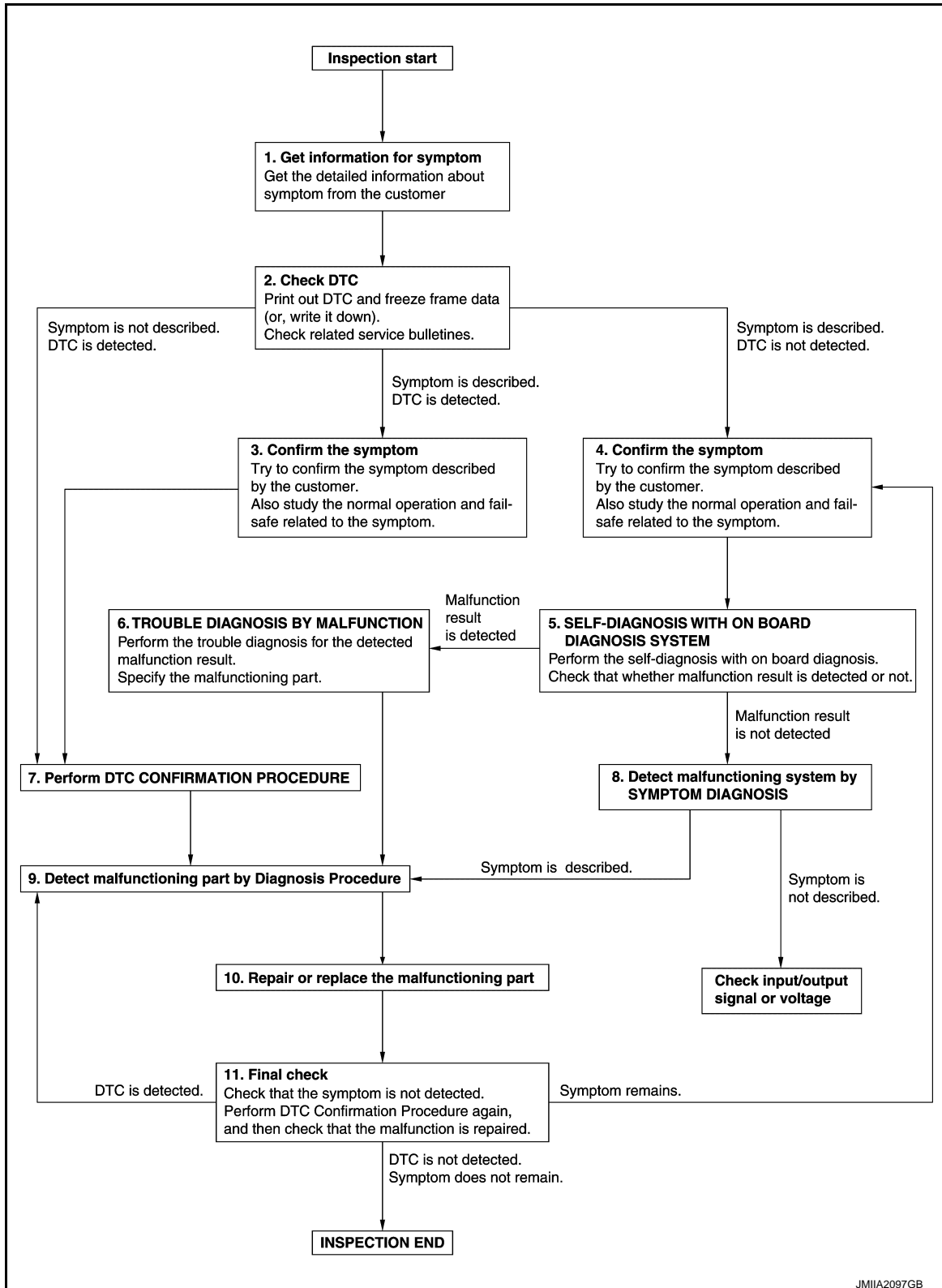
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:00000000797880

OVERALL SEQUENCE



JMIIA2097GB

DETAILED FLOW

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

1.GET INFORMATION FOR SYMPTOM

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

>> GO TO 2.

2.CHECK DTC

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

Are any symptoms described and any DTC detected?

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

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

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

3.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

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

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

>> GO TO 7.

4.CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

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

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

>> GO TO 5.

5.SELF-DIAGNOSIS WITH ON BOARD DIAGNOSIS SYSTEM

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

Is malfunction result detected?

YES >> GO TO 6.

NO >> GO TO 8.

6.TROUBLE DIAGNOSIS BY MALFUNCTION

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

>> GO TO 9.

7.PERFORM DTC CONFIRMATION PROCEDURE

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

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

NOTE:

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

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

Is DTC detected?

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

- YES >> GO TO 9.
NO >> Check according to [GI-40, "Intermittent Incident"](#).

8.DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

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

Is the symptom described?

- YES >> GO TO 9.
NO >> Monitor input data from related sensors or check voltage of related module terminals using CONSULT.

9.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

- YES >> GO TO 10.
NO >> Check according to [GI-40, "Intermittent Incident"](#).

10.REPAIR OR REPLACE THE MALFUNCTIONING PART

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

>> GO TO 11.

11.FINAL CHECK

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

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

Is DTC detected and does symptom remain?

- YES-1 >> DTC is detected: GO TO 9.
YES-2 >> Symptom remains: GO TO 4.
NO >> Before returning the vehicle to the customer, always erase DTC.

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

Component Function Check

INFOID:000000007566458

1. CHECK INTERIOR ROOM LAMP POWER SUPPLY FUNCTION

CONSULT ACTIVE TEST

- Turn the ignition switch ON.
- Turn each interior room lamp ON.
 - Map lamp
 - Step lamp
 - Vanity mirror lamp
 - Trunk room lamp
- Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
- 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-25, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000007566459

1. CHECK INTERIOR ROOM LAMP POWER SUPPLY OUTPUT

CONSULT ACTIVE TEST

- Turn the ignition switch ON.
- Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
- With operating the test item, check voltage between BCM harness connector and the ground.

| Terminals | | Test item | Voltage (Approx.) |
|-----------|----------|---------------|-------------------|
| (+) | (-) | | |
| BCM | | BATTERY SAVER | |
| Connector | Terminal | | |
| M119 | 4 | | |
| | | Ground | |
| | | 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

- Turn the ignition switch OFF.
- Disconnect the following connectors.
 - Map lamp
 - Vanity mirror lamp (driver side)
 - Vanity mirror lamp (passenger side)
 - Trunk room lamp
 - Step lamp (driver side)
 - Step lamp (passenger side)
- Check continuity between BCM harness connector and each interior room lamp harness connector.

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

| BCM | | Each interior room lamp | | | Continuity |
|-----------|----------|-------------------------------------|-----|----------|------------|
| Connector | Terminal | Connector | | Terminal | |
| M119 | 4 | Map lamp | R19 | 1 | Existed |
| | | Vanity mirror lamp (driver side) | R24 | 2 | |
| | | Vanity mirror lamp (passenger side) | R10 | 2 | |
| | | Trunk room lamp | B84 | 2 | |
| | | Step lamp (driver side) | D17 | 1 | |
| | | Step lamp (passenger side) | D51 | 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 | | |

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

< DTC/CIRCUIT DIAGNOSIS >

INTERIOR ROOM LAMP CONTROL CIRCUIT

Component Function Check

INFOID:000000007566460

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. Switch the map lamp switch to DOOR.
2. Turn the ignition switch ON.
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-27, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000007566461

1. CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT ACTIVE TEST

1. Turn ignition switch OFF.
2. Remove all the bulbs of map lamp.
3. Select "INT LAMP" of BCM (INT LAMP) active test item.
4. With operating the test item, check continuity between BCM harness connector and 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 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 | R19 | 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 ignition switch OFF.
2. Disconnect BCM connector and map lamp connector.

INTERIOR ROOM LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

3. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M119 | 19 | | Not existed |

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM. Refer to [BCS-76. "Removal and Installation"](#).

TRUNK ROOM LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

TRUNK ROOM LAMP CIRCUIT

Diagnosis Procedure

INFOID:000000007566462

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 OUTPUT

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

| BCM | | Ground | Condition | | Continuity |
|-----------|----------|--------|-----------|--------|-------------|
| Connector | Terminal | | Trunk lid | Open | Existed |
| M120 | 30 | | | Closed | Not existed |
| | | | | | |

Is the inspection result normal?

YES >> GO TO 2.

Fixed ON>>GO TO 3.

Fixed OFF>>Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

2. CHECK TRUNK ROOM LAMP OPEN CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and trunk room lamp harness connector.

| BCM | | Trunk room lamp | | Continuity |
|-----------|----------|-----------------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M120 | 30 | B84 | 2 | Existed |

Is the inspection result normal?

YES >> Replace trunk room lamp.

NO >> Repair or replace harnesses.

3. CHECK TRUNK ROOM LAMP SHORT CIRCUIT

1. Disconnect BCM connector.
2. Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | Not existed |
| M120 | 30 | | |

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

NO >> Repair or replace harnesses.

STEP LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

STEP LAMP CIRCUIT

Component Function Check

INFOID:000000007566463

CAUTION:

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

- Interior room lamp power supply
- Step lamp bulb

1.CHECK STEP LAMP OPERATION

CONSULT ACTIVE TEST

1. Turn the ignition switch ON.
2. Select "STEP LAMP TEST" of BCM (INT LAMP) active test item.
3. With operating the test items, check that step lamp turns ON/OFF.

On : Step lamp ON

Off : Step lamp OFF

Does the step lamp turn ON/OFF?

YES >> Step lamp circuit is normal.

NO >> Refer to [INL-30, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000007566464

1.CHECK STEP LAMP OUTPUT

CONSULT ACTIVE TEST

1. Turn the ignition switch OFF.
2. Remove the step lamp bulbs (driver side and passenger side).
3. Turn the ignition switch ON.
4. Select "STEP 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 | | STEP LAMP TEST | |
| M119 | 7 | | On | Existed |
| | | | Off | Not existed |

Is the measurement value normal?

YES >> GO TO 2.

Fixed ON>>GO TO 3.

Fixed OFF>>Replace BCM.Refer to [BCS-76, "Removal and Installation"](#).

2.CHECK STEP LAMP OPEN CIRCUIT

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

| BCM | | Step lamp | | | Continuity |
|-----------|----------|----------------|-----|----------|------------|
| Connector | Terminal | Connector | | Terminal | |
| M119 | 7 | Driver side | D17 | 2 | Existed |
| | | Passenger side | D51 | 2 | |

Does continuity exist?

YES >> Replace step lamp.

NO >> Repair harnesses or connectors.

3.CHECK STEP LAMP SHORT CIRCUIT

1. Turn the ignition switch OFF.

STEP LAMP CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M119 | 7 | | Not existed |

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM. Refer to [BCS-76. "Removal and Installation"](#).

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PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

Component Function Check

INFOID:000000007566465

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-32, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000007566466

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

1. Turn ignition switch OFF.
2. Lighting switch OFF.
3. Disconnect push-button ignition switch connector.
4. Check voltage between push-button ignition switch harness connector and ground.

| (+) | | (-) | Condition | Voltage (Approx.) | |
|-----------|----------|--------|--|-------------------|------|
| Connector | Terminal | | | | |
| M101 | 3 | Ground | Push-button ignition switch illumination | ON Condition | 12 V |
| | | | OFF Condition | 0 V | |

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 2.

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

1. Turn the ignition switch OFF.
2. Disconnect BCM 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 | M101 | 3 | Existed |

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harnesses.

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

Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|-------------|
| Connector | Terminal | | |
| M123 | 133 | | Not existed |

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace harnesses.

4. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND CIRCUIT-1

1. Connect push-button ignition switch connector.
2. Check voltage between BCM harness connector and ground.

| (+) | | (-) | Condition | | Voltage (Approx.) |
|-----------|----------|--------|--|--------------|-------------------|
| BCM | | | | | |
| Connector | Terminal | | | | |
| M119 | 14 | Ground | Push-button ignition switch illumination | ON Condition | 0 V |

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace BCM. Refer to [BCS-76, "Removal and Installation"](#).

5. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND CIRCUIT-2

1. Check continuity between push-button ignition switch harness connector and BCM harness connector.

| Push-button ignition switch | | BCM | | Continuity |
|-----------------------------|----------|-----------|----------|------------|
| Connector | Terminal | Connector | Terminal | |
| M101 | 2 | M119 | 14 | Existed |

2. Check continuity between push-button ignition switch harness connector and ground.

| Push-button ignition switch | | Ground | Continuity |
|-----------------------------|----------|--------|-------------|
| Connector | Terminal | | |
| M101 | 2 | | Not existed |

Is the inspection result normal?

YES >> Replace push-button ignition switch.

NO >> Repair or replace harnesses.

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INTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:000000007566467

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 are not turned ON. <ul style="list-style-type: none"> • Map lamp • Trunk room lamp • Step lamp • Vanity mirror lamp | <ul style="list-style-type: none"> • Harness between BCM and each interior room lamp • BCM | Interior room lamp power supply circuit Refer to INL-25 . |
| <ul style="list-style-type: none"> • Interior room lamp is not turned ON even though the door is open. (It turns ON when turning the interior room lamp switch ON.) • Interior room lamp does not turn OFF even though the door is closed. | <ul style="list-style-type: none"> • Harness between BCM and each door switch • Harness between BCM and each interior room lamp • BCM | Door switch circuit Refer to DLK-55 . |
| | | Interior room lamp control circuit Refer to INL-27 . |
| 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-12 . |
| <ul style="list-style-type: none"> • Trunk room lamp does not turn ON even though the trunk lid is open. (It turns ON when turning the trunk room lamp switch ON.) • Trunk room lamp does not turn OFF even though the trunk lid is closed. | <ul style="list-style-type: none"> • Harness between BCM and trunk room lamp switch • Harness between BCM and trunk room lamp • BCM | Trunk room lamp switch circuit Refer to DLK-69 . |
| | | Trunk room lamp circuit Refer to INL-29 . |
| <ul style="list-style-type: none"> • Step lamps (ALL) do not turn ON. • Step lamps (ALL) do not turn OFF. | <ul style="list-style-type: none"> • Harness between BCM and each step lamp • BCM | Door switch circuit Refer to DLK-55 . |
| | | Step lamp circuit Refer to INL-30 . |
| Push-button ignition switch illumination does not illuminate. | <ul style="list-style-type: none"> • Harness between BCM and push-button ignition switch • BCM | Push-button ignition switch illumination circuit Refer to INL-32 . |
| Interior room lamp battery saver does not activate. | — | Check the interior room lamp battery saver setting. Refer to INL-13 . |

MAP LAMP

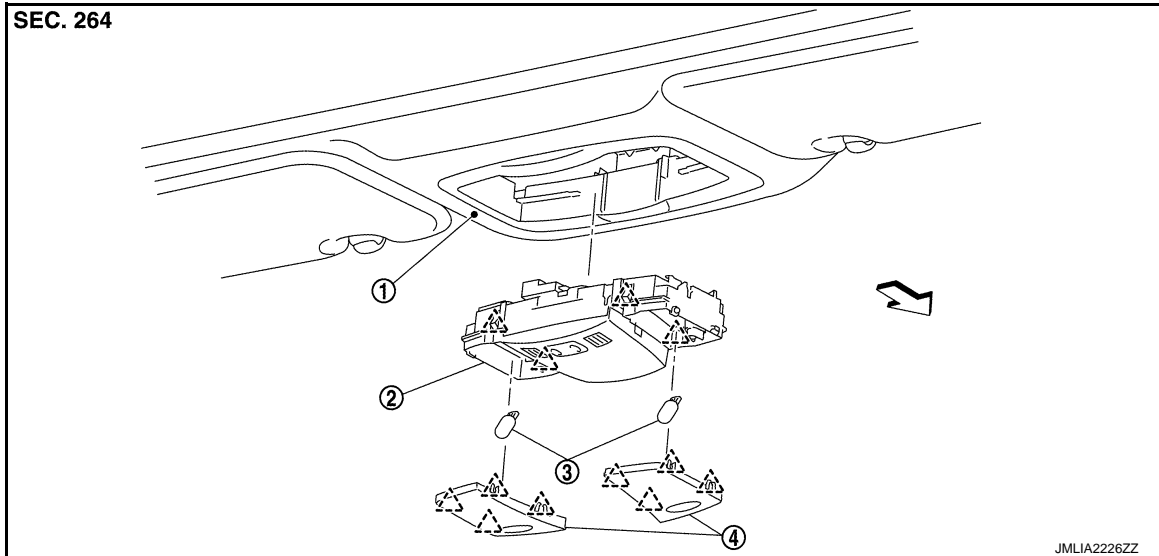
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION


MAP LAMP

Exploded View

INFOID:000000007566468



1. Headlining
2. Map lamp assembly
3. Bulb
4. Lens

 : Pawl

 : Vehicle front

Removal and Installation

INFOID:000000007566469

CAUTION:


- Disconnect the battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage.
- Never touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.
- Never touch the glass surface of the bulb with bare hands because the surface is very hot just after the lamp is turned OFF to prevent a burns.
- Leaving the bulb removed from housing for a long period of time can deteriorate performance of the lens and reflector (causing dirty or clouding). Always prepare a new bulb and have it on hand when replacing the bulb.
- When using a small flat-bladed screwdriver, apply protective tape on tip of a small flat-bladed screwdriver to protect parts from damage.

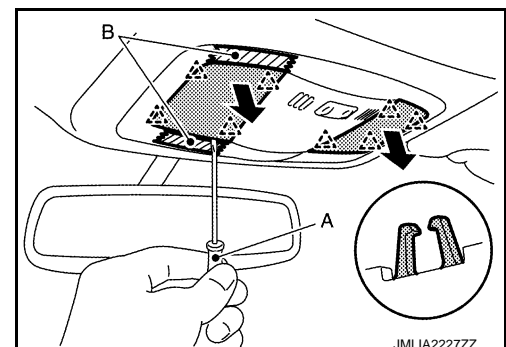
REMOVAL

1. Remove lens.
Disengage lens fixing pawls using a remover tool (A).

CAUTION:

Apply protective tape (B) on the parts to protect it from damage.


 : Pawl

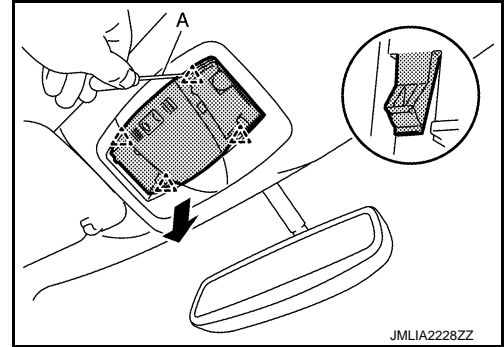


MAP LAMP

< REMOVAL AND INSTALLATION >

2. Remove map lamp assembly.
 - a. Disengage map lamp assembly fixing pawls using a remover tool (A).

 : Pawl



- b. Disconnect harness connector, and then remove map lamp assembly.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:000000007566470

CAUTION:

- Disconnect the battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage.
- Never touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.
- Never touch the glass surface of the bulb with bare hands because the surface is very hot just after the lamp is turned OFF to prevent a burns.
- Leaving the bulb removed from housing for a long period of time can deteriorate performance of the lens and reflector (causing dirty or clouding). Always prepare a new bulb and have it on hand when replacing the bulb.

MAP LAMP BULB

1. Remove lens. Refer to [INL-35, "Removal and Installation"](#).
2. Remove bulb.

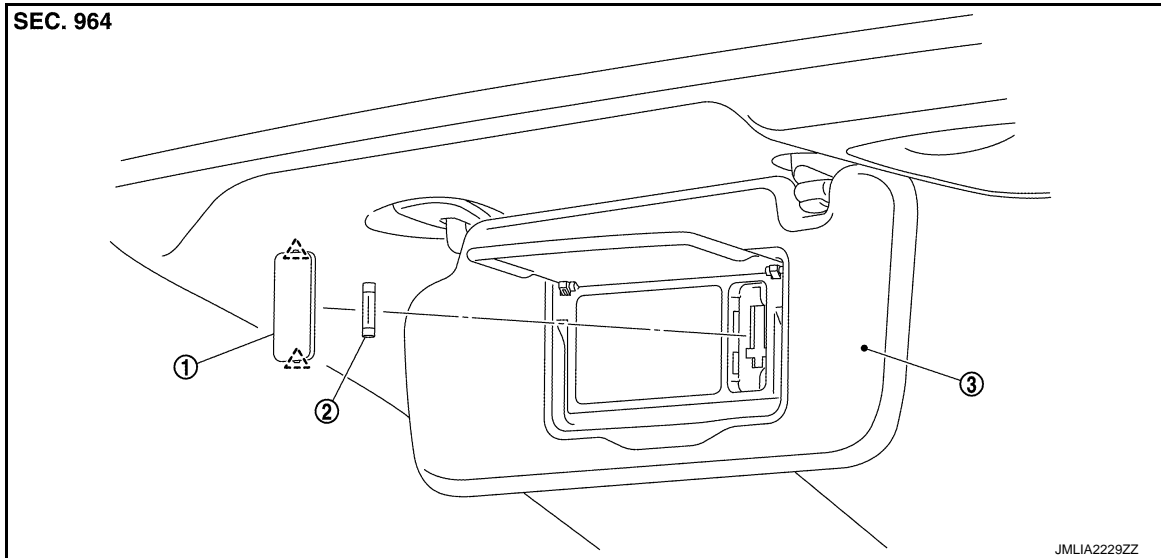
VANITY MIRROR LAMP

< REMOVAL AND INSTALLATION >

VANITY MIRROR LAMP

Exploded View


INFOID:000000007566471



1. Lens

2. Bulb

3. Sun visor

 : Pawl

Replacement

INFOID:000000007566472

CAUTION:


- Disconnect the battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage.
- Never touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.
- Never touch the glass surface of the bulb with bare hands because the surface is very hot just after the lamp is turned OFF to prevent a burns.
- Leaving the bulb removed from housing for a long period of time can deteriorate performance of the lens and reflector (causing dirty or clouding). Always prepare a new bulb and have it on hand when replacing the bulb.
- When using a small flat-bladed screwdriver, apply protective tape on tip of a small flat-bladed screwdriver to protect parts from damage.

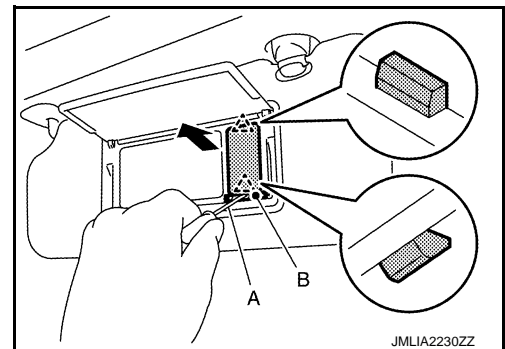
VANITY MIRROR LAMP BULB

1. Disengage lens fixing pawls using a remover tool (A).

CAUTION:

Apply protective tape (B) on the parts to protect it from damage.

 : Pawl



2. Remove bulb.

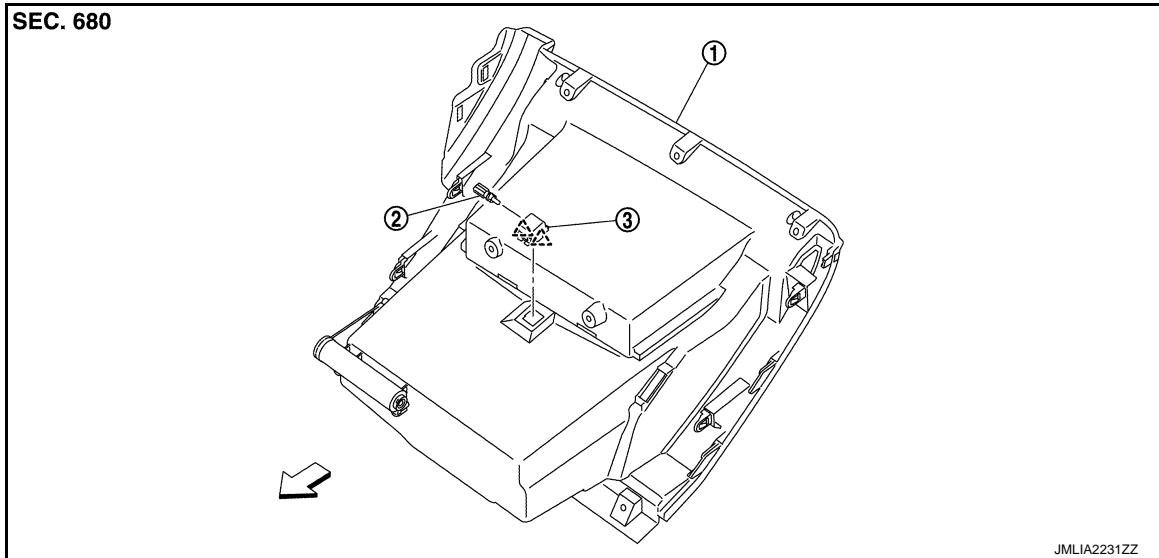
GLOVE BOX LAMP

< REMOVAL AND INSTALLATION >


GLOVE BOX LAMP

Exploded View

INFOID:000000007566473



1. Instrument lower panel RH 2. Bulb & socket assembly 3. Lamp housing

 : Pawl

 : Vehicle front

Replacement

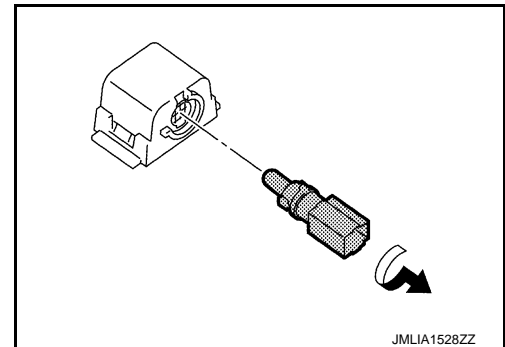
INFOID:000000007566474

CAUTION:

- Disconnect the battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage.
- Never touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.
- Never touch the glass surface of the bulb with bare hands because the surface is very hot just after the lamp is turned OFF to prevent a burns.
- Leaving the bulb removed from housing for a long period of time can deteriorate performance of the lens and reflector (causing dirty or clouding). Always prepare a new bulb and have it on hand when replacing the bulb.

GLOVE BOX LAMP BULB

1. Remove instrument lower panel RH. Refer to [IP-13. "Removal and Installation"](#).
2. Rotate the bulb & socket assembly counterclockwise and unlock it and then remove bulb & socket assembly.



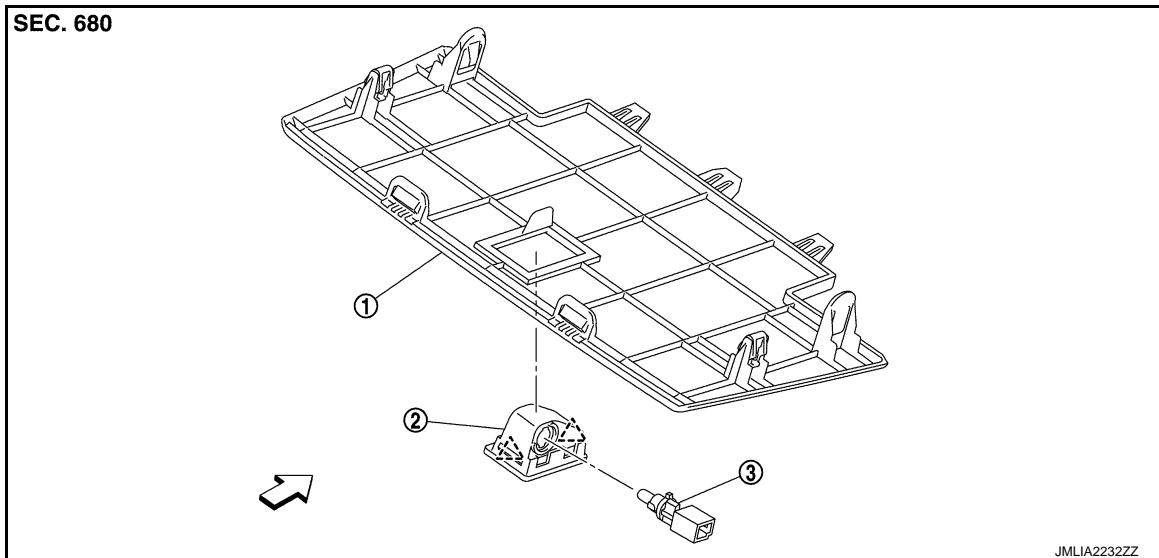
CONSOLE POCKET LAMP

< REMOVAL AND INSTALLATION >

CONSOLE POCKET LAMP

Exploded View


INFOID:000000007566475



1. Cluster lid C (lower)

2. Lamp housing

3. Bulb & socket assembly

 : Pawl

 : Vehicle front

Replacement

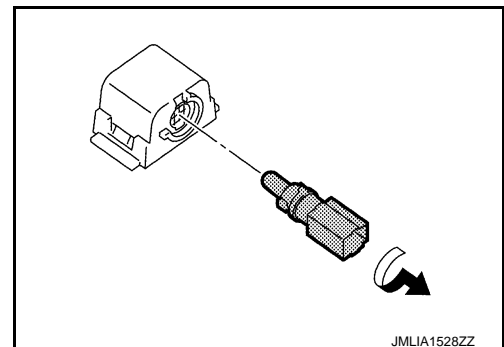
INFOID:000000007566476

CAUTION:

- Disconnect the battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage.
- Never touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.
- Never touch the glass surface of the bulb with bare hands because the surface is very hot just after the lamp is turned OFF to prevent a burns.
- Leaving the bulb removed from housing for a long period of time can deteriorate performance of the lens and reflector (causing dirty or clouding). Always prepare a new bulb and have it on hand when replacing the bulb.

CONSOLE POCKET LAMP BULB

1. Remove cluster lid C (lower). Refer to [IP-13. "Removal and Installation"](#).
2. Rotate the bulb & socket assembly counterclockwise and unlock it and then remove bulb & socket assembly.



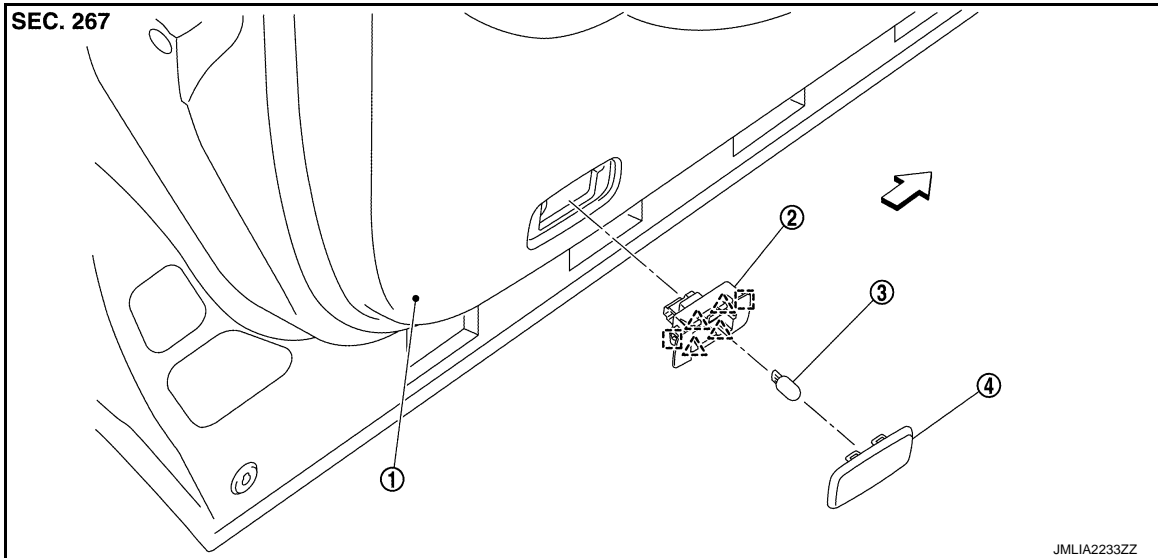
STEP LAMP

< REMOVAL AND INSTALLATION >


STEP LAMP

Exploded View

INFOID:000000007566477



- 1. Front door finisher
- 2. Lamp housing
- 3. Bulb
- 4. Lens

 : Pawl

 : Metal clip

 : Vehicle front

Removal and Installation

INFOID:000000007566478

CAUTION:

- Disconnect the battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage.
- When removing, always use a remover tool that is made of plastic to prevent damage to the parts.

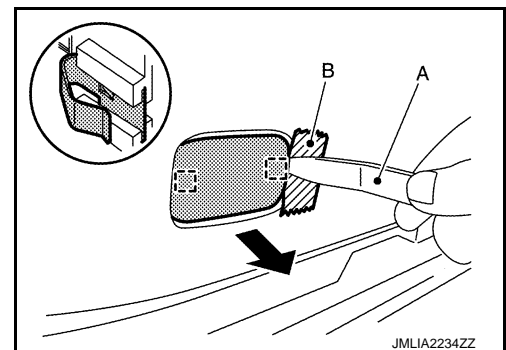
REMOVAL

1. Disengage step lamp fixing metal clips using a remover tool (A).

CAUTION:

Apply protective tape (B) on the parts to protect it from damage.

 : Metal clip



2. Disconnect harness connector, and then remove step lamp.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:000000007566479

CAUTION:

- Disconnect the battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage.


STEP LAMP

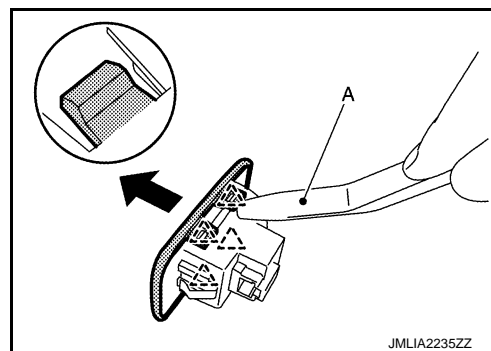
< REMOVAL AND INSTALLATION >

- Never touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.
- Never touch the glass surface of the bulb with bare hands because the surface is very hot just after the lamp is turned OFF to prevent a burns.
- Leaving the bulb removed from housing for a long period of time can deteriorate performance of the lens and reflector (causing dirty or clouding). Always prepare a new bulb and have it on hand when replacing the bulb.

STEP LAMP BULB

1. Remove step lamp. Refer to [INL-40, "Removal and Installation"](#).
2. Remove lens.
Disengage lens fixing pawls using a remover tool (A), and then remove lens.

 : Pawl



3. Remove bulb.

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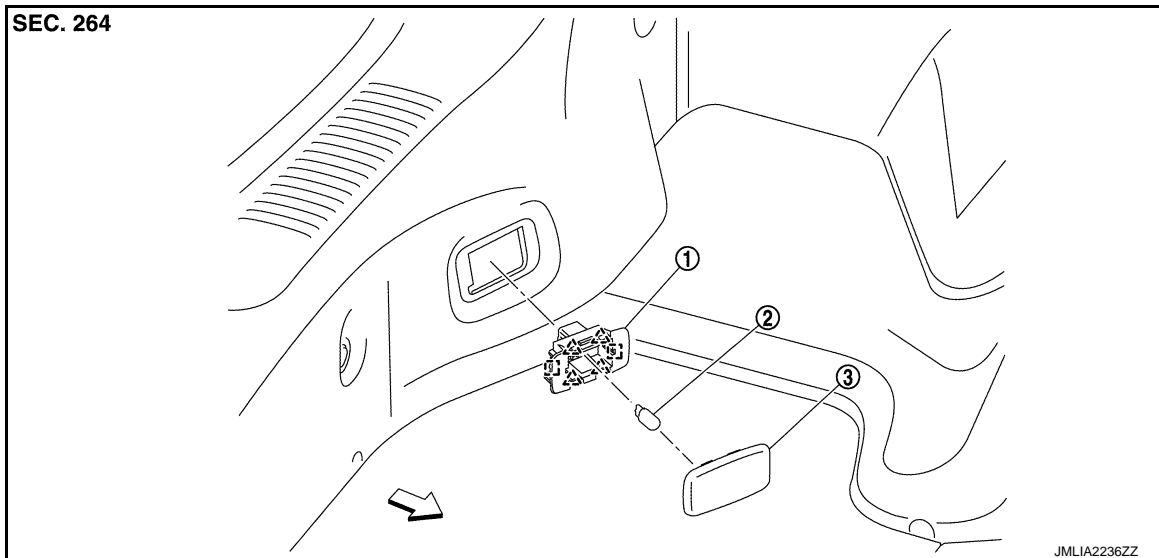
TRUNK ROOM LAMP

< REMOVAL AND INSTALLATION >

TRUNK ROOM LAMP

Exploded View


INFOID:000000007566480



1. Lamp housing

2. Bulb

3. Lens

 : Pawl

 : Metal clip

 : Vehicle front

Removal and Installation

INFOID:000000007566481

CAUTION:

- Disconnect the battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage.
- When removing, always use a remover tool that is made of plastic to prevent damage to the parts.

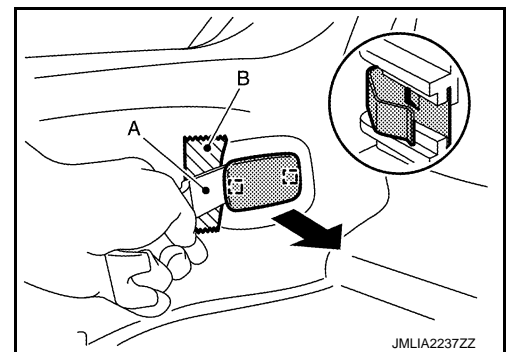
REMOVAL

1. Disengage trunk room lamp fixing metal clips using a remover tool (A).

CAUTION:

Apply protective tape (B) on the parts to protect it from damage.

 : Metal clip



2. Disconnect harness connector, and then remove trunk room lamp.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:000000007566482

CAUTION:

- Disconnect the battery negative terminal or remove power circuit fuse while performing the operation to prevent electric leakage.


TRUNK ROOM LAMP

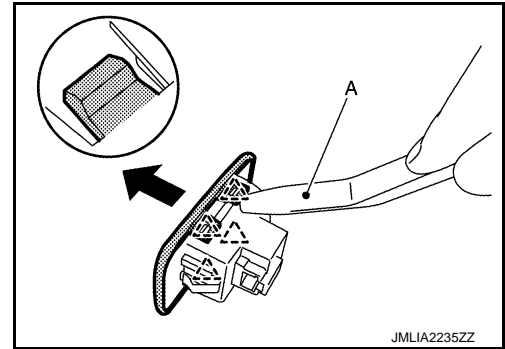
< REMOVAL AND INSTALLATION >

- Never touch the glass surface of the bulb with bare hands or allow oil or grease to get on it to prevent damage to the bulb.
- Never touch the glass surface of the bulb with bare hands because the surface is very hot just after the lamp is turned OFF to prevent a burns.
- Leaving the bulb removed from housing for a long period of time can deteriorate performance of the lens and reflector (causing dirty or clouding). Always prepare a new bulb and have it on hand when replacing the bulb.

TRUNK ROOM LAMP BULB

1. Remove trunk room lamp. Refer to [INL-42, "Removal and Installation"](#).
2. Remove lens.
Disengage lens fixing pawls using a remover tool (A), and then remove lens.

 : Pawl



3. Remove bulb.

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SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:000000007566483

| Item | Type | Wattage (W) |
|--|-------|-------------|
| Push-button ignition switch illumination | LED | — |
| Map lamp | Wedge | 8 |
| Vanity mirror lamp | — | 2 |
| Console pocket lamp | Wedge | 1.4 |
| Glove box lamp | Wedge | 2.0 |
| Step lamp | Wedge | 2.7 |
| Trunk room lamp | Wedge | 5 |