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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow INFOID:000000004992102 B

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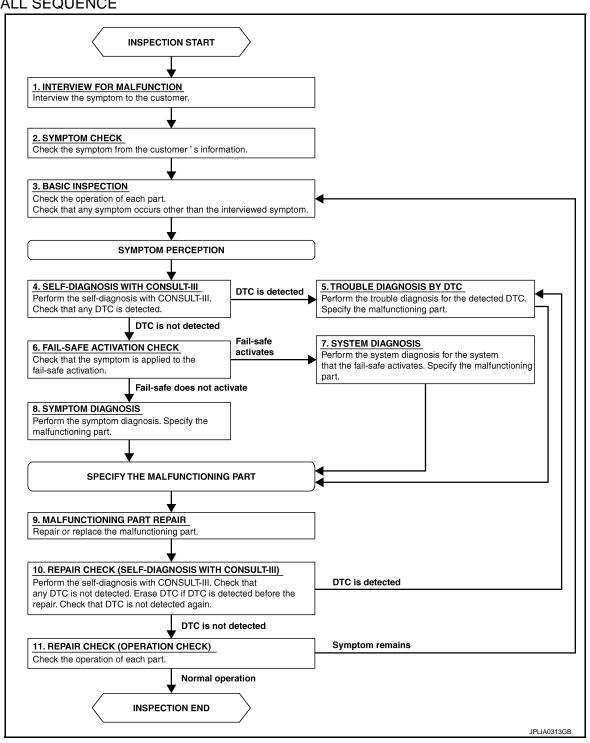
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OVERALL SEQUENCE



DETAILED FLOW

1.INTERVIEW FOR MALFUNCTION

Interview the symptom to the customer.

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

>> GO TO 2.

2.SYMPTOM CHECK

Check the symptom from the customer's information.

>> GO TO 3.

3.BASIC INSPECTION

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

>> GO TO 4.

4. SELF-DIAGNOSIS WITH CONSULT-III

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

Is any DTC detected?

YES >> GO TO 5.

NO >> GO TO 6.

5. TROUBLE DIAGNOSIS BY DTC

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

>> GO TO 9.

6. FAIL-SAFE ACTIVATION CHECK

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

Does the fail-safe activate?

YES >> GO TO 7.

NO >> GO TO 8.

7. SYSTEM DIAGNOSIS

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

>> GO TO 9.

8.SYMPTOM DIAGNOSIS

Perform the symptom diagnosis. Specify the malfunctioning part.

>> GO TO 9.

9. MALFUNCTION PART REPAIR

Repair or replace the malfunctioning part.

>> GO TO 10.

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

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

Is any DTC detected?

YES >> GO TO 5.

NO >> GO TO 11.

11. REPAIR CHECK (OPERATION CHECK)

Check the operation of each part.

Does it operate normally?

YES >> INSPECTION END

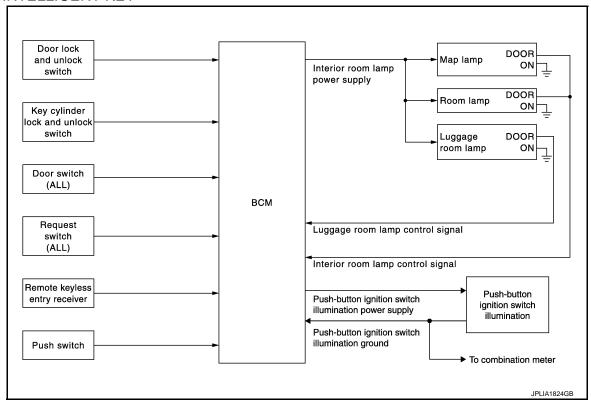
NO >> GO TO 3.

SYSTEM DESCRIPTION

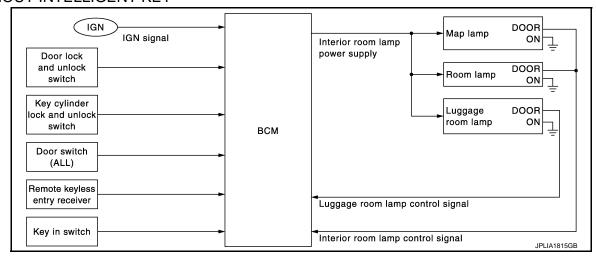
INTERIOR ROOM LAMP CONTROL SYSTEM

System Diagram

WITH INTELLIGENT KEY



WITHOUT INTELLIGENT KEY



System Description

OUTLINE

- Interior room lamps* are controlled by interior room lamp timer control function of BCM.
- *: Map lamp and room lamp (when applicable 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.

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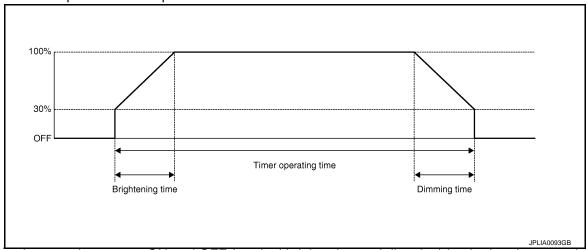
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< SYSTEM DESCRIPTION >

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 lamp timer.
- Ignition switch status
- Door switch signal (ALL)
- Door lock/unlock signal (Remote keyless entry receiver, each request switch*1, door lock and unlock switch, key cylinder lock and unlock switch)
- Key switch signal*2
- Push switch signal*1

NOTE:

Each function of interior room lamp timer can be set by CONSULT-III. Refer to <u>INL-14, "INT LAMP : CONSULT-III Function (BCM - INT LAMP)"</u>.

Interior Room Lamp ON Operation

- BCM always turns the interior room lamp ON when any door opens (back door include).
- 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.
- Key switch is turned ON → OFF*2.
- Any door unlock signal is detected when all doors close with ignition switch OFF.
- Push switch is turned ON → OFF^{*1}.

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 ON with all doors close.
- All door lock operation is detected with all doors close.
- *1:With Intelligent Key
- *2:Without Intelligent Key

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 (WITH INTELLIGENT KEY)

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

< SYSTEM DESCRIPTION >

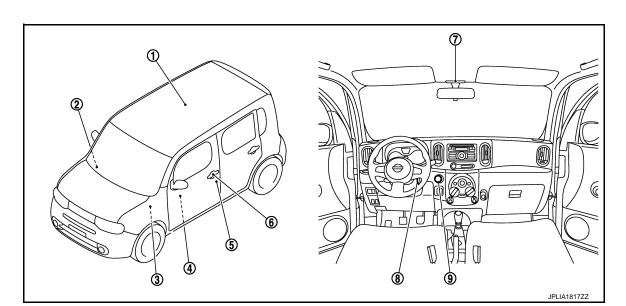
- Each illumination (tail lamp) ON
- · Any of the following conditions with ignition switch OFF
- Engine start permission is entered.
- Driver door is LOCK → UNLOCK.
- Driver door is open.

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 \rightarrow LOCK

Component Parts Location



1. Room lamp

- 2. Remote keyless entry receiver
 Refer to <u>DLK-28</u>, "REMOTE KEY<u>LESS ENTRY FUNCTION</u>:
 <u>Component Parts Location</u>".
- 4. Door lock and unlock switch
- 7. Map lamp

- Door switch
- 8. Key switch (Without Intelligent Key)
- BCM
 Refer to BCS-9, "Component Parts
 Location".
- 6. Request switch
- Push switch (With Intelligent Key)

Component Description

INFOID:0000000004992106

| Part | Description | |
|--|---|--|
| ВСМ | Activates the interior room lamp timer depending on the vehicle condition to turn the interior room lamps ON/OFF. | |
| Remote keyless entry receiver | Receives the lock/unlock signal from Keyfob. | |
| Door lock and unlock switch Key cylinder lock and unlock switch Request switch*1 | Inputs the lock/unlock signal to BCM. | |
| Door switch | Inputs the door switch signal to BCM. | |
| Key in switch*2 Push switch*1 | Inputs the key switch signal to BCM. | |

^{*1:}With Intelligent Key

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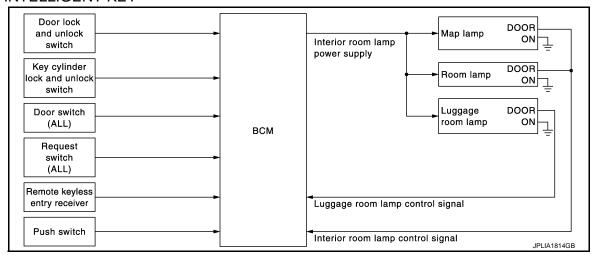
^{*2:}Without Intelligent Key

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

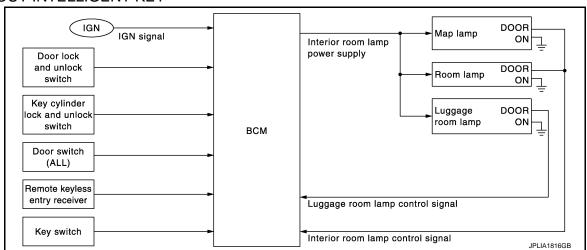
System Diagram

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WITH INTELLIGENT KEY



WITHOUT INTELLIGENT KEY



System Description

INFOID:0000000004992108

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
- Room lamp
- Luggage room 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*1, door lock and unlock switch, key cylinder lock and unlock switch)
- Key switch signal*2

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

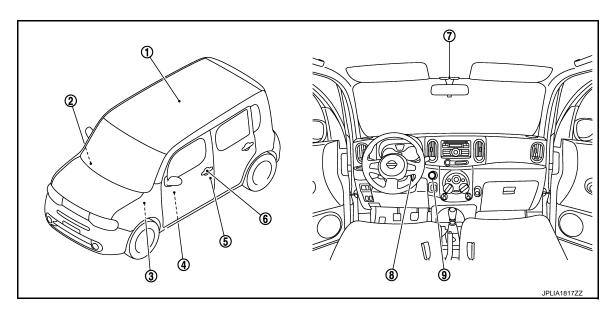
< SYSTEM DESCRIPTION >

- Push switch signal*1
- BCM provides the interior room lamp power supply continuously when the ignition switch position is ON.
- *1:With Intelligent Key
- *2:Without Intelligent Key

NOTE:

Each function of interior room lamp battery saver can be set by CONSULT-III. Refer to INL-15, "BATTERY SAVER: CONSULT-III Function (BCM - BATTERY SAVER)".

Component Parts Location



Room lamp

- 2. Remote keyless entry receiver **LESS ENTRY FUNCTION:**
- Door lock and unlock switch
- Map lamp

- Refer to DLK-28, "REMOTE KEY-Component Parts Location".
- 5. Door switch
- Key switch (Without Intelligent Key)
- всм Refer to BCS-9, "Component Parts Location".
- 6. Request switch
- Push switch (With Intelligent Key) 9.

Component Description

INFOID:0000000004992110

| Part | Description | | |
|--|--|--|--|
| ВСМ | Operates the interior room lamp battery saver depending on the vehicle condition to cut the interior room lamp power supply. | | |
| Remote keyless entry receiver | Receives the lock/unlock signal from keyfob. | | |
| Door lock and unlock switch Key cylinder lock and unlock switch Request switch*1 | Inputs the lock/unlock signal to BCM. | | |
| Door switch | Inputs the door switch signal to BCM. | | |
| Push switch*1 Key switch*2 | Inputs the key switch signal to BCM. | | |

^{*1:}With Intelligent Key

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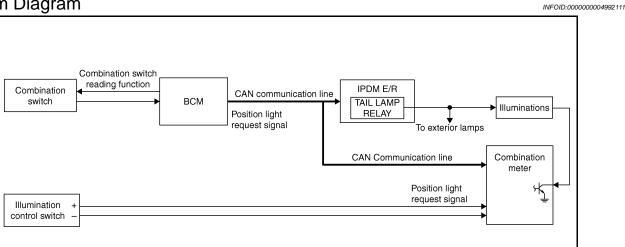
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^{*2:}Without Intelligent Key

ILLUMINATION CONTROL SYSTEM

System Diagram



System Description

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OUTLINE

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

Control by BCM

- Combination switch reading function
- · Headlamp control function

Control by IPDM E/R

Relay control function

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 (With auto light system)
- 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 illuminates the meter illumination according to position light request signal.

ILLUMINATION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

Component Parts Location

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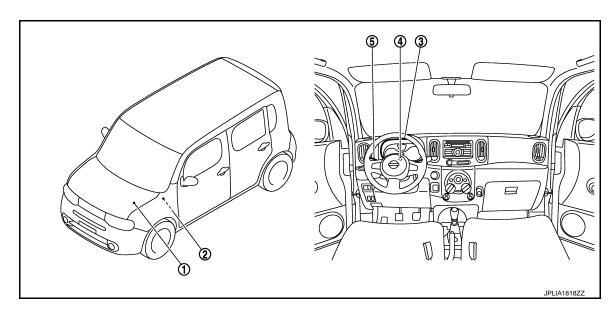
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- IPDM E/R
 Refer to PCS-6, "Component Parts
 Location".
- 4. Illumination control switch
- 2. BCM
 Refer to BCS-9, "Component Parts
 Location".
- 5. Combination switch

3. Combination meter

Component Description

INFOID:0000000004992114

| Part | Description | | |
|--|---|--|--|
| ВСМ | 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 signal from BCM (with CAN communication). | | |
| Combination meter | Illuminates the meter illumination according to the request signal from BCM (with CAN communication). | | |
| Combination switch (Lighting & turn signal switch) | Refer to BCS-10, "System Diagram". | | |

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< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM) COMMON ITEM

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

INFOID:0000000005185959

APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

x: Applicable item

| System | Sub system selection item | Diagnosis mode | | |
|--|-----------------------------|----------------|--------------|-------------|
| System | Sub system selection item | 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 | × | × | × |
| Automatic air conditioner | 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 | | × | |
| Vehicle security system | THEFT ALM | × | × | × |
| RAP system | RETAINED PWR | | × | |
| Signal buffer system | SIGNAL BUFFER | | × | × |
| TPMS | TPMS (AIR PRESSURE MONITOR) | × | × | × |

FREEZE FRAME DATA (FFD)

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

< SYSTEM DESCRIPTION >

| CONSULT screen item | Indication/Unit | Description | | |
|---------------------|-----------------|---|--|---|
| Vehicle Speed | km/h | Vehicle speed of the moment a particular DTC is detected | | |
| Odo/Trip Meter | km | Total mileage (Odometer value) of the moment a particular DTC is detected | | |
| | SLEEP>LOCK | | While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK") | |
| | SLEEP>OFF | | While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".) | |
| | LOCK>ACC | | While turning power supply position from "LOCK" to "ACC" | |
| | ACC>ON | | While turning power supply position from "ACC" to "IGN" | |
| | RUN>ACC | | While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.) | |
| | CRANK>RUN | Power position status of the moment a particular DTC is detected | 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" | |
| Vehicle Condition | OFF>ACC | | While turning power supply position from "OFF" to "ACC" | |
| | ON>CRANK | | While turning power supply position from "IGN" to "CRANKING" | |
| | OFF>SLEEP | | | While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode |
| | LOCK>SLEEP | | While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode | |
| | LOCK | | Power supply position is "LOCK" (Ignition switch OFF with steering is locked.) | |
| | OFF | | Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.) | |
| | ACC | | Power supply position is "ACC" (Ignition switch ACC) | |
| | ON | | | Power supply position is "IGN" (Ignition switch ON with engine stopped) |
| | ENGINE RUN | | Power supply position is "RUN" (Ignition switch ON with engine running) | |
| | CRANKING | | Power supply position is "CRANKING" (At engine cranking) | |
| IGN Counter | 0 - 39 | The number of times that ignition switch is turned ON after DTC is detected The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON. | | |

INT LAMP

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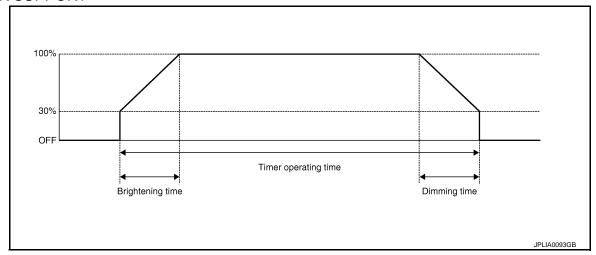
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< SYSTEM DESCRIPTION >

INT LAMP : CONSULT-III Function (BCM - INT LAMP)

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WORK SUPPORT



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

^{*:} Factory setting

DATA MONITOR

| 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 request switch (passenger side) |
| REQ SW-RR [On/Off] | NOTE: |
| REQ SW-RL [On/Off] | The item is indicated, but not monitored. |

< SYSTEM DESCRIPTION >

| Monitor item [Unit] | Description |
|---------------------------|--|
| PUSH SW [On/Off] | Push switch status received from Intelligent Key unit by CAN communication |
| 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] | The switch status input from rear door switch RH |
| DOOR SW- RL [On/Off] | The switch status input from rear door switch LH |
| DOOR SW- BK [On/Off] | The switch status input from back door switch |
| CDL LOCK SW [On/Off] | Lock switch status input from door lock and unlock switch |
| CDL UNLOCK SW [On/Off] | Unlock switch status input from door lock and unlock switch |
| KEY CYL LK-SW [On/Off] | Lock switch status received from key cylinder lock/unlock switch |
| KEY CYL UN-SW [On/Off] | Unlock switch status received from key cylinder lock/unlock 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 the interior room lamps ON. [Map lamp, personal lamp, room lamp, luggage room lamp (when applicable lamps switch is in DOOR position.)] |
| | Off | Stops the interior room lamp control signal to turn the interior room lamps. |

BATTERY SAVER

BATTERY SAVER : CONSULT-III Function (BCM - BATTERY SAVER)

INFOID:0000000005127854

WORK SUPPORT

| Service item | Setting item | Setting | | |
|-----------------------|--------------|---|---|--|
| ROOM LAMP TIMER SET | MODE 1* | 30 min. | Sets the interior room lamp battery saver timer operating | |
| ROOM EAWN THMER SET | MODE 2 | 60 min. | time. | |
| BATTERY SAVER SET | On* | With the exterior lamp battery saver function | | |
| BATTERT SAVER SET | Off | Without the exterior lamp battery saver function | | |
| ROOM LAMP BAT SAV SET | On* | With the interior room lamp battery saver function | | |
| NOOM EAN BAT SAV SET | Off | Without the interior room lamp battery saver function | | |

^{*:}Factory setting

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DATA MONITOR

| 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: |
| REQ SW-RL [On/Off] | The item is indicated, but not monitored. |
| PUSH SW [On/Off] | Push switch status received from Intelligent Key unit by CAN communication |
| 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] | The switch status input from rear door switch RH |
| DOOR SW- RL [On/Off] | The switch status input from rear door switch LH |
| DOOR SW- BK [On/Off] | The switch status input from back door switch |
| CDL LOCK SW [On/Off] | Lock switch status input from door lock and unlock switch |
| CDL UNLOCK SW [On/Off] | Unlock switch status input from door lock and unlock switch |
| KEY CYL LK-SW [On/Off] | Lock switch status received from key cylinder lock/unlock switch |
| KEY CYL UN-SW [On/Off] | Unlock switch status received from key cylinder lock/unlock 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 lamps OFF. |
| DATTERT SAVER | | Outputs the interior room lamp power supply to turn interior room lamps ON.* |

^{*:} Each lamp switch is in ON position.

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM) COMMON ITEM

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

INFOID:0000000005185960

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APPLICATION ITEM

CONSULT-III performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

| System | Sub avatam calcation item | Diagnosis mode | | | |
|--|-----------------------------|----------------|--------------|-------------|--|
| System | Sub system selection item | Work Support | Data Monitor | Active Test | |
| Door lock | DOOR LOCK | × | × | × | |
| Rear window defogger | REAR DEFOGGER | | × | × | |
| Warning chime | BUZZER | | × | × | |
| Interior room lamp control | INT LAMP | × | × | × | |
| Remote keyless entry system | MULTI REMOTE ENT | × | × | × | |
| Exterior lamp | HEAD LAMP | × | × | × | |
| Wiper and washer | WIPER | × | × | × | |
| Turn signal and hazard warning lamps | FLASHER | | × | × | |
| Automatic air conditionerManual air conditioner | AIR CONDITONER | | × | × | |
| Combination switch | COMB SW | | × | | |
| Body control system | BCM | × | | | |
| NVIS - NATS | IMMU | × | × | × | |
| Interior room lamp battery saver | BATTERY SAVER | × | × | × | |
| Back door | TRUNK | | × | | |
| Vehicle security system | THEFT ALM | × | × | × | |
| RAP system | RETAINED PWR | | × | × | |
| Signal buffer system | SIGNAL BUFFER | | × | × | |
| TPMS | TPMS (AIR PRESSURE MONITOR) | × | × | × | |
| Panic alarm system | PANIC ALARM | | | × | |

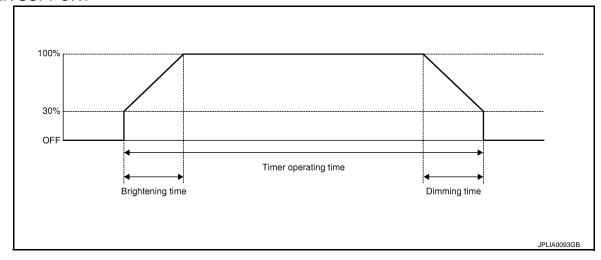
INT LAMP

< SYSTEM DESCRIPTION >

INT LAMP : CONSULT-III Function (BCM - INT LAMP)

INFOID:0000000005128557

WORK SUPPORT



| Service item | Setting item | em Setting | | |
|------------------------|--------------|--|---|--|
| | MODE 1* | 0 sec. | | |
| ROOM LAMP TIMER SET | MODE 2 | 7.5 sec. | Sets the interior room lamp ON time. (Timer operating time) | |
| ROOM LAWF TIMER SET | MODE 3 | 15 sec. | Sets the interior room ramp ON time. (Timer operating time) | |
| | MODE 4 | 30 sec. | | |
| SET I/L D-UNLCK INTCON | On* | With the in | nterior room lamp timer function | |
| SET I/L D-ONLOR INTOON | Off | Without th | ne interior room lamp timer function | |
| | MODE 1 | 0.5 sec. | | |
| | MODE 2* | 1 sec. | | |
| | MODE 3 | 2 sec. | | |
| ROOM LAMP ON TIME SET | MODE 4 | 3 sec. | Sets the interior room lamp gradual brightening time. | |
| | MODE 5 | 4 sec. | | |
| | MODE 6 | 5 sec. | | |
| | MODE 7 | 0 sec. | | |
| | MODE 1 | 0.5 sec. | | |
| | MODE 2* | 1 sec. | | |
| | MODE 3 | 2 sec. | | |
| ROOM LAMP OFF TIME SET | MODE 4 | 3 sec. | Sets the interior room lamp gradual dimming time. | |
| | MODE 5 | 4 sec. | | |
| | MODE 6 | 5 sec. | | |
| | MODE 7 | 0 sec. | | |
| | MODE 1* | Interior room lamp timer activates with synchronizing all doors. | | |
| R LAMP TIMER LOGIC SET | MODE 2 | Interior ro only. | om lamp timer activates with synchronizing the driver door | |

^{*:} Factory setting

DATA MONITOR

< SYSTEM DESCRIPTION >

| Monitor item [Unit] | Description | | |
|----------------------------|--|--|--|
| IGN ON SW [On/Off] | The switch status input from request switch (driver side) | | |
| ACC SW [On/Off] | Ignition switch (ACC) status judges from ACC signal (ACC power supply) | | |
| KEY ON SW [On/Off] | The switch status input from request switch (passenger side) | | |
| 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] | The switch status input from rear door switch RH | | |
| DOOR SW- RL [On/Off] | The switch status input from rear door switch LH | | |
| BACK DOOR SW [On/Off] | The switch status input from back door switch | | |
| LOCK STATUS [On/Off] | The switch status input from door lock status switch (driver side) | | |
| CDL LOCK SW [On/Off] | Lock switch status input from door lock and unlock switch | | |
| CDL UNLOCK SW [On/Off] | Unlock switch status input from door lock and unlock switch | | |
| KEYLESS LOCK [On/Off] | Lock signal status received from remote keyless entry receiver | | |
| KEYLESS UNLOCK [On/Off] | Unlock signal status received from remote keyless entry receiver | | |
| KEY CYL LK-SW [On/Off] | Lock switch status received from key cylinder lock/unlock switch | | |
| KEY CYL UN-SW [On/Off] | Unlock switch status received from key cylinder lock/unlock switch | | |
| TRNK/HAT MNTR [On/Off] | NOTE: The item is indicated, but not monitored. | | |

ACTIVE TEST

| Test item Operation | | Description | |
|---------------------|-----|---|--|
| INT LAMP Off | On | Outputs the interior room lamp control signal to turn the interior room lamps ON. [Map lamp, personal lamp, room lamp, luggage room lamp (when applicable lamps switch is in DOOR position.)] | |
| | Off | Stops the interior room lamp control signal to turn the interior room lamps. | |

BATTERY SAVER

BATTERY SAVER : CONSULT-III Function (BCM - BATTERY SAVER)

WORK SUPPORT

| Service item | Setting item | Setting | | |
|---------------------|--------------|---------|---|--|
| ROOM LAMP TIMER SET | MODE 1* | 30 min. | Sets the interior room lamp battery saver timer operating | |
| | MODE 2 | 60 min. | time. | |

^{*:}Factory setting

DATA MONITOR

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< SYSTEM DESCRIPTION >

| Monitor item [Unit] | Description |
|----------------------------|--|
| IGN ON SW [On/Off] | The switch status input from request switch (driver side) |
| ACC SW [On/Off] | Ignition switch (ACC) status judges from ACC signal (ACC power supply) |
| KEY ON SW [On/Off] | The switch status input from front request switch (passenger side) |
| 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] | The switch status input from rear door switch RH |
| DOOR SW- RL [On/Off] | The switch status input from rear door switch LH |
| BACK DOOR SW [On/Off] | The switch status input from back door switch |
| LOCK STATUS [On/Off] | The switch status input from door lock status switch (driver side) |
| CDL LOCK SW [On/Off] | Lock switch status input from door lock and unlock switch |
| CDL UNLOCK SW [On/Off] | Unlock switch status input from door lock and unlock switch |
| KEY CYL LK-SW [On/Off] | Lock switch status received from key cylinder lock/unlock switch |
| KEY CYL UN-SW [On/Off] | Unlock switch status received from key cylinder lock/unlock switch |
| TRNK/HAT MNTR [On/Off] | NOTE: The item is indicated, but not monitored. |
| KEYLESS LOCK [On/Off] | Lock signal status received from remote keyless entry receiver |
| KEYLESS 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 lamps OFF. |
| DATTERT SAVER | On | Outputs the interior room lamp power supply to turn interior room lamps ON.* |

^{*:} Each lamp switch is in ON position.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT
BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM)

BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

1. CHECK FUSE AND FUSIBLE LINK

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

| Signal name | Fuse and fusible link No. | |
|----------------------|---------------------------|--|
| Battery power supply | G | |
| battery power suppry | 8 | |

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

| (| +) | (-) | Voltage |
|-----------|----------|--------|-----------------|
| В | СМ | | (Approx.) |
| Connector | Terminal | Ground | |
| M70 | 70 | Glound | Battery voltage |
| IVI7 O | 57 | | Dattery Voltage |

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

| В | СМ | | Continuity |
|-----------|--------------------|--|------------|
| Connector | Connector Terminal | | Continuity |
| M70 | 67 | | Existed |

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM)

BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

1. CHECK FUSES AND FUSIBLE LINK

Check that the following fuses and fusible link are not fusing.

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

| Signal name | Fuses and fusible link No. |
|-----------------------|----------------------------|
| Battery power supply | 8 |
| | G |
| ACC power supply | 20 |
| Ignition power supply | 2 |

Is the fuse fusing?

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

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

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

| Terminals | | Ignition switch position | | neition | |
|-----------|----------|--------------------------|-------------------------|--------------------|--------------------|
| (- | +) | | gnition switch position | | osition |
| BCM | | (-) | OFF | ACC (| ON |
| Connector | Terminal | | Orr | ACC | ON |
| M67 | 70 | | Battery | Battery | Battery |
| IVIO7 | 57 | | voltage | voltage | voltage |
| M65 | 11 | Ground | Approx. 0 V | Battery voltage | Battery voltage |
| IVIOS | 38 | | Approx. 0 V | Approx. 0 V | Battery voltage |

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

| ВС | CM | | Continuity |
|-----------|--------------------|--|------------|
| Connector | Connector Terminal | | Continuity |
| M67 | 67 | | Existed |

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

Description INFOID:0000000004992119

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

Component Function Check

${f 1}$.CHECK INTERIOR ROOM LAMP POWER SUPPLY FUNCTION

PCONSULT-III ACTIVE TEST

- Turn ignition switch ON.
- Turn each interior room lamp ON.
- Map lamp
- Room lamp
- Luggage room lamp
- Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
- With operating the test items, check that each interior room lamp is turned ON/OFF.

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

Is the interior room lamp turned ON/OFF?

YES >> Interior room lamp power supply circuit is normal.

>> Refer to INL-23, "Diagnosis Procedure". NO

Diagnosis Procedure

${f 1}$.CHECK INTERIOR ROOM LAMP POWER SUPPLY OUTPUT

(P)CONSULT-III ACTIVE TEST

- Turn ignition switch ON.
- Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item. 2.
- With operating the test item, check voltage between BCM harness connector and ground.

| Terminals | | | Test item | |
|-------------------|----------|--------|-----------|----------------------|
| (+) | | (-) | iest item | Voltage (Ap- |
| В | СМ | | BATTERY | prox.) |
| Connector | Terminal | | SAVER | |
| M70 ^{*1} | | Ground | Off | 0 V |
| M67 ^{*2} | 56 | | On | Battery volt- age |

^{*1:} With Intelligent Key

Is the measurement value normal?

YES >> GO TO 2.

NO >> Replace BCM. Refer to BCS-82, "Exploded View".

2.CHECK INTERIOR ROOM LAMP POWER SUPPLY OPEN CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect the following connectors.
- Map lamp
- Room lamp
- Luggage room lamp
- Check continuity between BCM harness connector and each interior room lamp harness connector.

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^{*2:} Without Intelligent Key

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

| В | СМ | Each interior room lamp | | Continu- | |
|--|----------|-------------------------|-----|----------|---------|
| Connec- tor | Terminal | Connector | | Terminal | ity |
| *1 | | Map lamp | R4 | 4 | |
| M70 ^{*1} M67 ^{*2} | 56 | Room lamp | R6 | 1 | Existed |
| IVIO7 | | Luggage room lamp | B11 | 1 | |

^{*1:} With Intelligent Key

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 ground.

| всм | | | Continuity |
|--|----------|---------|-------------|
| Connector | Terminal | Ground | Continuity |
| M70 ^{*1} M67 ^{*2} | 56 | Giodila | Not existed |

^{*1:} With Intelligent Key

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Check that each interior room lamp has no internal short circuit.

^{*2:} Without Intelligent Key

^{*2:} Without Intelligent Key

INTERIOR ROOM LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description INFOID:0000000004992122

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

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CAUTION:

Before the diagnosis, check that the following items are normal.

- Interior room lamp power supply
- Map lamp bulb
- · Room lamp bulb

${f 1}$.CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

©CONSULT-III ACTIVE TEST

- 1. Switch the map lamp switch to DOOR.
- Turn ignition switch ON.
- 3. Select "INT LAMP" of BCM (INT LAMP) active test item.
- 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 dim-

ming

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

YES >> Interior room lamp control circuit is normal.

NO >> Refer to INL-25, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000004992124

1.CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

CONSULT-III ACTIVE TEST

- 1. Turn ignition switch OFF.
- Remove all the bulbs of following lamps.
- Map lamp
- Room lamp
- 3. Select "INT LAMP" of BCM (INT LAMP) active test item.
- With operating the test item, check continuity between BCM harness connector and ground.

| В | BCM | | Test item | Continuity |
|-------------------|----------|--------|-----------|-------------|
| Connector | Terminal | Ground | INT LAMP | Continuity |
| M70 ^{*1} | 63 | Giouna | On | Existed |
| M67 ^{*2} | 03 | | Off | Not existed |

^{*1:} With Intelligent Key

Is the measurement value normal?

YES >> GO TO 2.

Fixed ON>>GO TO 3.

Fixed OFF>>Replace BCM. Refer to BCS-82, "Exploded View".

2. CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

- Turn ignition switch OFF.
- 2. Disconnect the following connectors.

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^{*2:} Without Intelligent Key

INTERIOR ROOM LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

- Map lamp
- Room lamp
- 3. Check continuity between BCM harness connector, map lamp harness connector, and room lamp harness connector.

| В | СМ | Map lamp/room lamp | | | |
|-------------------|----------|--------------------|----|----------|------------|
| Connec- tor | Terminal | Connector | | Terminal | Continuity |
| M70 ^{*1} | 63 | Map lamp | R4 | 2 | Existed |
| M67*2 | 03 | Room lamp | R6 | 2 | LAISIEU |

^{*1:} With Intelligent Key

Does continuity exist?

YES >> Replace the map lamp or the room lamp.

NO >> Repair the harnesses or connectors.

${f 3.}$ CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

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

| ВС | CM | | Continuity |
|--|----------|--------|-------------|
| Connector | Terminal | Ground | Continuity |
| M70 ^{*1} M67 ^{*2} | 63 | Glound | Not existed |

^{*1:} With Intelligent Key

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM. Refer to BCS-82. "Exploded View".

^{*2:} Without Intelligent Key

^{*2:} Without Intelligent Key

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Description

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

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

Component Function Check

1. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

©CONSULT-III 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-27, "Diagnosis Procedure".

Diagnosis Procedure

1.check illumination control switching operation

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

- 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 | Continuity |
| M71 | 92 | M101 | 6 | 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-III ACTIVE TEST

- 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 ground.

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PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

| Terminals | | Test item | | |
|-----------|----------|-----------|-------------|-----------|
| (| +) | (-) | iesi ileiii | Voltage |
| В | СМ | | ENGINE SW | (Approx.) |
| Connector | Terminal | Ground | ILLUMI | |
| M71 90 | Ground | ON | 12 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.

| ВСМ | | Push-button ignition switch | | Continuity |
|-----------|----------|-----------------------------|----------|------------|
| Connector | Terminal | Connector | Terminal | Continuity |
| M71 | 90 | M101 | 5 | 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

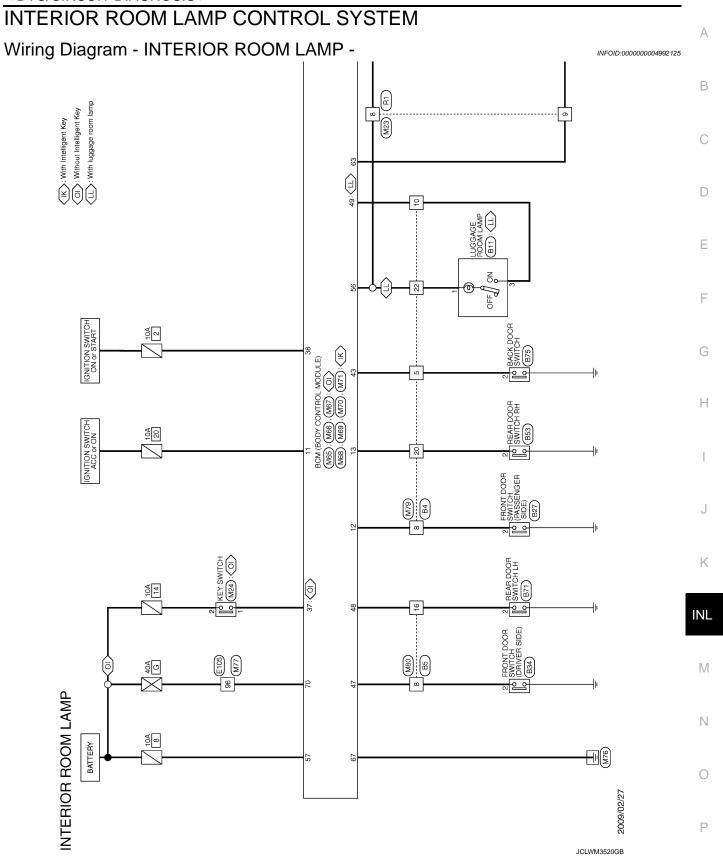
- Turn the ignition switch OFF.
- 2. Disconnect BCM connector and the push-button ignition switch connector.
- 3. Check continuity between BCM harness connector and ground.

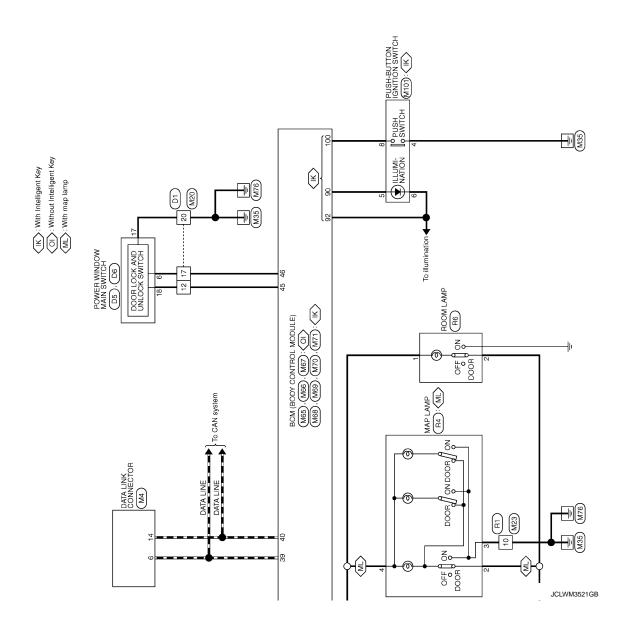
| ВСМ | | | Continuity | |
|-----------|----------|--------|-------------|--|
| Connector | Terminal | Ground | Continuity | |
| M71 | 90 | | Not existed | |

Does the continuity exist?

YES >> Repair the harness or the connector.

NO >> Replace BCM.

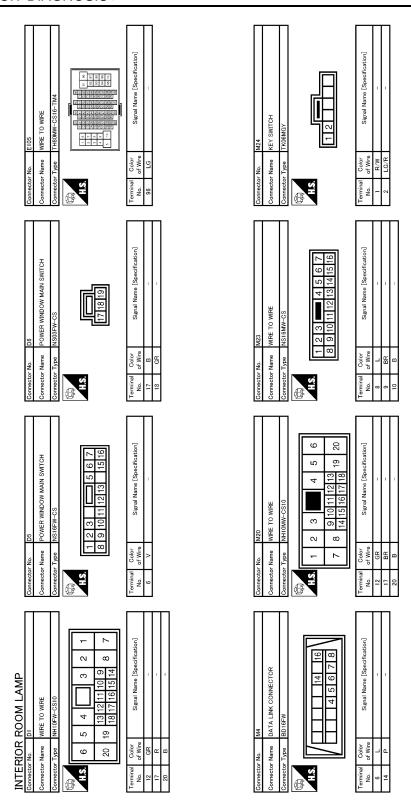




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|--|---|-------------------------------------|-------------|-----|
| BEZ7 SIDE) AGSEW AGSEW Signal Name [Specification] | B75 BACK DOOR SWITCH A33FW | Signal Name [Specification] | | В |
| | 9 9 | Color of Wire | | С |
| Connector No. Connector Type Connector Type Terminal Color No. of Will S. 2 SB | Cornector No. Connector Name Connector Type | Terminal No. 2 | | D |
| oeoffication] | | ocification] | | Е |
| LUGGAGE ROOM LAMP CJO4FW Signal Name [Specification] | B71 A03FW | Signal Name (Specification) | | F |
| ector No. ector Name ector Type intelligence of Octor of Wire v | 3 L Connector No. B71 Connector Name REAl Connector Name REAl | H.S. Terminal Color No. of Wire 2 W | | G |
| Common Co | | Temin No. | | Н |
| WIRE -NH | # Z | Signal Name [Specification] | | I |
| BB5 WIRE TO WIRE THISMW-NH 1 2 3 4 5 9 10 11 12 13 1 | BESS PREAR DOOR SWITCH RHANGEN | Signal Nam | | J |
| ctor No. | Connector No. Connector Name Connector Name | HS. HS. No. Oof Wire 2 LG 2 | | К |
| 242 | DE) | | | INL |
| 9 10 11 22 23 23 pecification | BB4 FRONT DOOR SWITCH (DRIVER SIDE) | Signal Name [Specification] | | M |
| R ROOM WIRE TO TH24MW I S 1 | | | | N |
| INTERIOR Gonnector No. Connector Name Gonnector Type 12 12 13 14 No. Terminal Color No. 5 WW. | 0 5 22 1 22 1 22 1 22 1 22 1 23 24 24 24 24 24 24 24 | Terminal Color No. 2 LG | | 0 |
| | | | JCLWM3522GB | Р |

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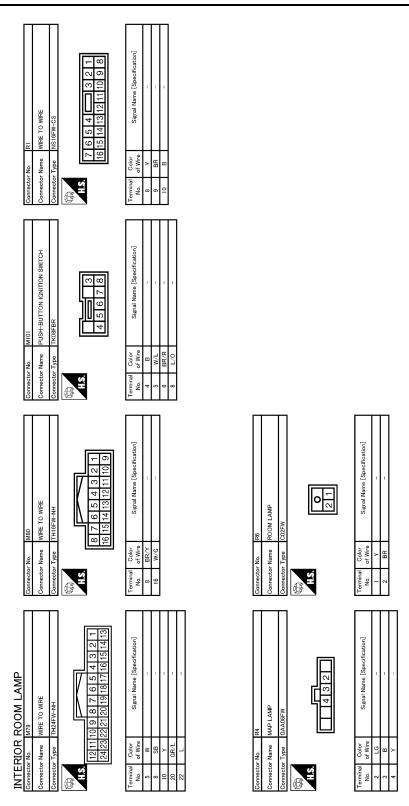


JCLWM3523GB

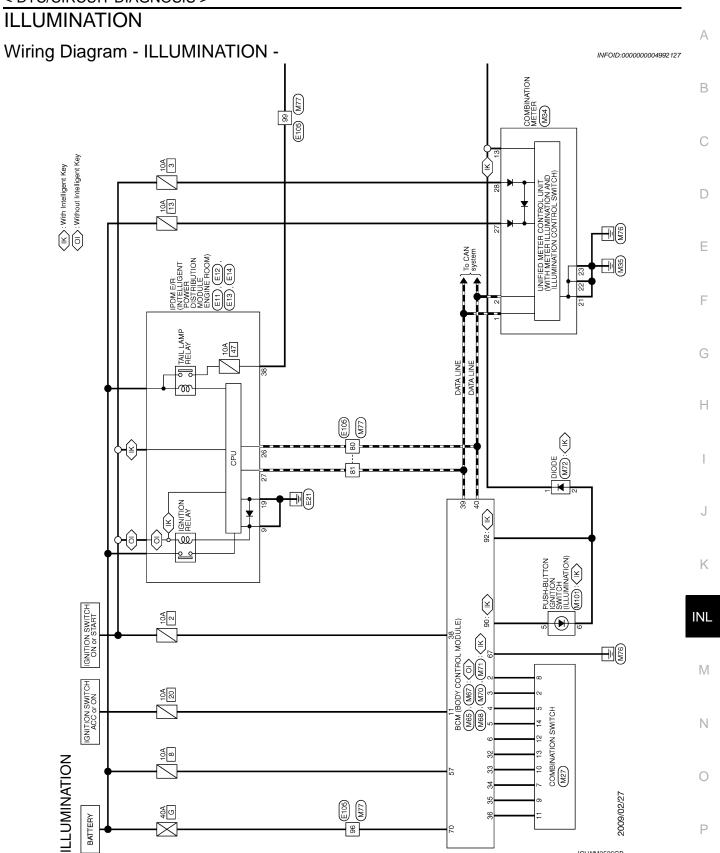
< DTC/CIRCUIT DIAGNOSIS >

| Connector No. M68 Connector No. M68 Connector Name EMZ (BODY CONTROL MODULE) (WITH INTELLIGENT KEY) INTELLIGENT KEY INTELLIGENT KE | A B C |
|---|-------------|
| | D |
| Color Name Color Courte Court | E F G |
| | Н |
| No. Mids BCM BCM | J K |
| Connector No. Connector Name Connector Name AS GR 44 AS GR 45 AS GR 45 | 13.0 |
| ROOM LAMP M65 BCM BODY CONTROL TH40FW-NH TH40FW-NH Signal Name (Specification) EAAP HAG-SA CAN-H CAN-H CAN-H CAN-H TEAGBFW-FHAG-SA Signal Name (Specification) BACK DOOR SW CENTRAL DOOR SW | INL M |
| | N |
| INTERIOR Connector Name Connector | 0 |
| JCLWM3524GE | P |

Revision: 2009 March INL-33 2009 Z12



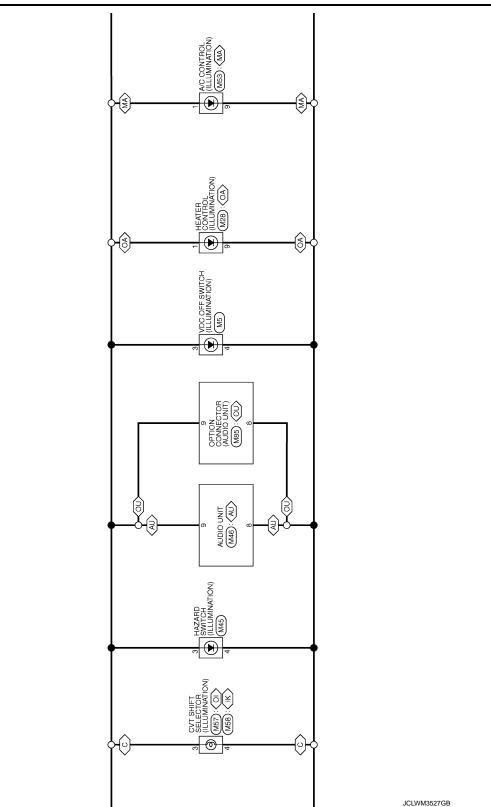
JCLWM3525GB



JCLWM3526GB

⟨OA⟩: Without A/C
⟨AU⟩: With audio
⟨OU⟩: Without audio

⟨C⟩: With CVT ⟨IK⟩: With Intelligent Key ⟨OI⟩: Without Intelligent Key ⟨MA⟩: With manual A/C



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

JCLWM3528GB

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AC AUTO AMP.

(MSD): (AA)

(MSD): (AA)

(MSD): (AA)

(MSD): (AA)

(MSD): (AA)

(MSD): (AB)

(MSD): (MSD): (MSD)

(MSD): (MSD): (MSD): (MSD)

(MSD): (

(AA): With auto A/C
ST⟩: With steering switch

| Connector No. E14 Connector Name DISTRIBUTION MODULE ENGINE ROOM) Connector Type NS12FBR-CS 19 38 | Terminal Color Signal Name [Specification] No. Of Wire Signal Name [Specification] 38 G | Connector No. M28 Connector Name HEATER CONTROL Connector Type TH16FW-NH H.S. 1 4 5 6 8 9 14 15 16 | Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] B P P P P P P P P P |
|--|--|---|--|
| Connector No. E13 Connector Name DISTRIBUTION MODULE ENGINE ROOM) Connector Type THI JETW-NH A.S. E2 Z Z E Z Z E Z Z E Z Z Z Z Z Z Z Z Z | Terminal Color Signal Name Specification Color Signal Name Specification Color Color | Connector No. M27 Connector Name COMBINATION SWITCH Connector Type THISFW-NH H.S. T. R. 9 10 111 12 13 14 | Terminal Color Signal Name (Specification) Color Col |
| Connector No. E12 Connector Name IPDN E.R. (INTELLICENT POWER Donnector Type INSUBEBRYON MODULE ENGINE ROOM) Connector Type INSUBEBRYOS 11.5 12.2 27 19 18 | Terminal Color Signal Name [Specification] No. of Wire 19 B/W | Connector No. MS Connector Name VDC OFF SWITCH Connector Type TYGGFGY H.S. | Terninal Color Signal Name [Specification] |
| ILLUMINATION Gornector No. Pom E II Pom E II Pom E II | Terminal Color No. of Wire Signal Name [Specification] 9 Bi/W | Connector No. E105 Connector Name WIRE TO WIRE Connector Type TH80MV-CS16-TM4 H.S. In the Connector Type TH80MV-CS16-TM4 | Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] Sig |

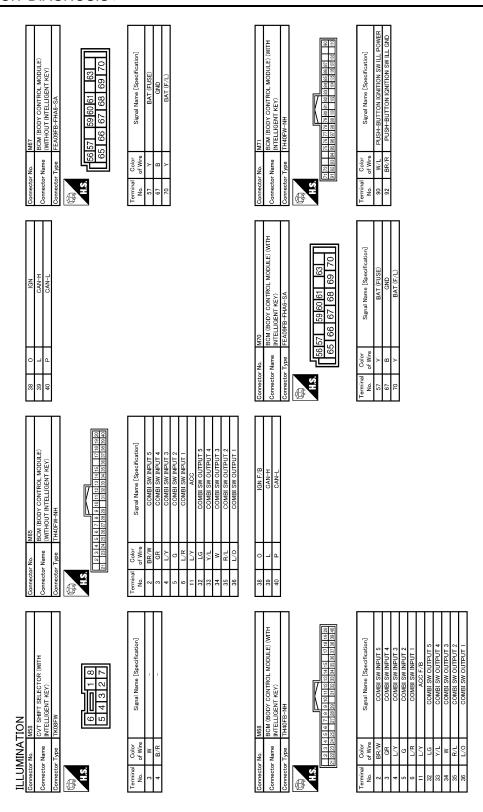
JCLWM3529GB

ILLUMINATION

< DTC/CIRCUIT DIAGNOSIS >

| Connector No. M45 Connector Name HAZARD SWITCH Connector Type ITKO4FW H.S. | Terminal Color Signal Name [Specification] 3 W - | Connector No. M87 Connector Name INTELLIGENT KEY) Connector Type ITKOBFW-IV A.S. Connector Type ITKOBFW-IV Connector Name IT | Terminal Color Signal Name Specification | | A B C |
|--|---|--|---|-------------|-------------|
| Connector No. M34 Connector Name COMBINATION METER Connector Type TH40PW-NH M.S. 2010 6 7 15 10 11 10 8 7 6 5 4 3 2 1 | Terminal Color Signal Name [Speoification] Of Wire CANH 1 L CANH 2 P CANH 13 B/R ILLIMINATION CONTROL SIGNAL 21 B GROUND 22 B GROUND 23 B GROUND 24 CANH 25 CANH 26 CANH 27 LG CANH 28 GROUND 27 LG CANH 28 GROUND 29 CANH 20 CANH 20 CANH 20 CANH 20 CANH 21 CANH 22 CANH 23 CANH 24 CANH 24 CANH 25 CANH 26 CANH 27 CANH 28 CANH 29 CANH 20 CANH 20 CANH 20 CANH 20 CANH 21 CANH 22 CANH 23 CANH 24 CANH 25 CANH 26 CANH 27 CANH 28 CANH 29 CANH 20 CANH 20 CANH 20 CANH 20 CANH 20 CANH 21 CANH 22 CANH 23 CANH 24 CANH 25 CANH 26 CANH 27 CANH 28 CANH 28 CANH 29 CANH 20 CANH 20 CANH 20 CANH 20 CANH 20 CANH 20 CANH 21 CANH 22 CANH 23 CANH 24 CANH 25 CANH 26 CANH 27 CANH 28 CANH 29 CANH 20 CANH 20 CANH 20 CANH 20 CANH 21 CANH 22 CANH 23 CANH 24 CANH 25 CANH 26 CANH 27 CANH 28 CANH 28 CANH 29 CANH 20 CANH 20 | Connector No. M53 Connector Type THI 6FW-NH H.S. | Terminal Color No. of Wire Signal Name [Speoification] 1 W - 9 B-/R - | | E F G |
| Connector No. M33 Connector Name COMBINATION SWITCH (SPIRAL CABLE) Connector Type TK08FGV-1V H.S. 24 25 26 31 32 33 34 | Terminal Color No. of Wire B./R | Connector No. M50 Connector Type Trk20FGY | Terminal Color Signal Name [Specification] No. of Wire ILLUMINATION POWER SUPPLY 11 B/R ILLUMINATION GROUND | | J |
| ILLUMINATION Connector No. M02 Connector Name COMBINATION SWITCH (SPIRAL CABLE) Connector Type TK06FY-EX-IV MS. A.S. 28 29 30 | Terminal Codor No. of Wire Signal Name [Specification] 23 W | Connector No. M46 Connector Name AUDIO UNIT Connector Type THISPW-CS2 1.3 1.4 1.9 1.1 1.1 1.1 1.1 1.1 1.1 | Terminal Color Signal Name [Spee/fication] No. of Wire Signal Name [Spee/fication] B.R. ILLUMINATION CONTROL SIGNAL (-) 9 W ILLUMINATION CONTROL SIGNAL (+) | JCLWM3530GB | M |
| | | | | | Р |

Revision: 2009 March INL-39 2009 Z12



JCLWM3531GB

ILLUMINATION

< DTC/CIRCUIT DIAGNOSIS >

| HOJ [CH | | | А |
|--|--|-------------|-----|
| MIOI PUSH-BUTTON IGNITION SWITCH TROBFER 4 5 6 7 8 Signal Name [Specification] | | | В |
| MIOII TKOBFBR 6 TKOBFBR 7/R N're | | | С |
| Connector No. Connector Name Connector Type H.S. H.S. R.S. R.S. BR/R. 6 BR/R. | | | D |
| DDIO UNITY) | | | Е |
| NNECTOR (A) 14 15 16 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | | | F |
| | | | G |
| Connector No. Connector Typ Connec | | | Н |
| Signal Name (Specification) | | | I |
| WIRE TO WIRE THEOPHY-CS16-TM4 | | | J |
| Connector No. Connector Name Connector Type H.S. H | | | K |
| | (BIE) | | INL |
| 900 Signal Name (Specification) | COMBINATION SWITCH (SPIRAL CABLE) TKGBFGY Combination Company Company | | M |
| | | | N |
| ILLUMINATION | Connector No. Connector Name Connector Type Connector Type No. 19 PP PP 20 R 20 R 20 R | | 0 |
| | | JCLWM3532GB | Р |

Revision: 2009 March INL-41 2009 Z12

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE) WITH INTELLIGENT KEY

WITH INTELLIGENT KEY: Reference Value

INFOID:0000000005185963

VALUES ON THE DIAGNOSIS TOOL

| CONSULT-III | MONITOR | ITFM |
|-------------|---------|------|
| | | |

| Monitor Item | Condition | Value/Status |
|------------------|---|----------------------------------|
| FR WIPER HI | Other than front wiper switch HI | Off |
| FR WIFER HI | Front wiper switch HI | On |
| FR WIPER LOW | Other than front wiper switch LO | Off |
| FR WIPER LOW | Front wiper switch LO | On |
| ED WACHED CW | Front washer switch OFF | Off |
| FR WASHER SW | Front washer switch ON | On |
| ED WIDED INT | Other than front wiper switch INT/AUTO | Off |
| FR WIPER INT | Front wiper switch INT/AUTO | On |
| ED WIDER STOR | Front wiper is not in STOP position | Off |
| FR WIPER STOP | Front wiper is in STOP position | On |
| INT VOLUME | Wiper intermittent dial is in a dial position 1 - 7 | Wiper intermittent dial position |
| DD WIDED ON | Other than rear wiper switch ON | Off |
| RR WIPER ON | Rear wiper switch ON | On |
| DD WIDED INT | Other than rear wiper switch INT | Off |
| RR WIPER INT | Rear wiper switch INT | On |
| | Rear washer switch OFF | Off |
| RR WASHER SW | Rear washer switch ON | On |
| RR WIPER STOP | Rear wiper is in STOP position | Off |
| KK WIPEK STOP | Rear wiper is not in STOP position | On |
| TUDNI CIONAL D | Other than turn signal switch RH | Off |
| TURN SIGNAL R | Turn signal switch RH | On |
| TUDNI CIONALI | Other than turn signal switch LH | Off |
| TURN SIGNAL L | Turn signal switch LH | On |
| TAIL LAND CW | Other than lighting switch 1ST and 2ND | Off |
| TAIL LAMP SW | Lighting switch 1ST or 2ND | On |
| HI BEAM SW | Other than lighting switch HI | Off |
| HI BEAIN SW | Lighting switch HI | On |
| LIEAD LAMD CW/A | Other than lighting switch 2ND | Off |
| HEAD LAMP SW 1 | Lighting switch 2ND | On |
| LIEAD LAMD CW O | Other than lighting switch 2ND | Off |
| HEAD LAMP SW 2 | Lighting switch 2ND | On |
| DA COINO CW | Other than lighting switch PASS | Off |
| PASSING SW | Lighting switch PASS | On |
| ALITO LICUIT CVA | Other than lighting switch AUTO | Off |
| AUTO LIGHT SW | Lighting switch AUTO | On |

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| Monitor Item | Condition | Value/Status |
|-----------------|--|--------------|
| FR FOG SW | Front fog lamp switch OFF | Off |
| K 1 0 3 3 W | Front fog lamp switch ON | On |
| DOOR SW-DR | Driver door closed | Off |
| DOOK 3W-DK | Driver door opened | On |
| DOOR SW-AS | Passenger door closed | Off |
| JOOK SW-AS | Passenger door opened | On |
| DOOD OW DD | Rear RH door closed | Off |
| DOOR SW-RR | Rear RH door opened | On |
| DOOD CW DI | Rear LH door closed | Off |
| DOOR SW-RL | Rear LH door opened | On |
| DOOD OW DV | Back door closed | Off |
| DOOR SW-BK | Back door opened | On |
| | Other than power door lock switch LOCK | Off |
| CDL LOCK SW | Power door lock switch LOCK | On |
| | Other than power door lock switch UNLOCK | Off |
| CDL UNLOCK SW | Power door lock switch UNLOCK | On |
| | Other than driver door key cylinder LOCK position | Off |
| KEY CYL LK-SW | Driver door key cylinder LOCK position | On |
| | Other than driver door key cylinder UNLOCK position | Off |
| KEY CYL UN-SW | Driver door key cylinder UNLOCK position | On |
| | Hazard switch is OFF | Off |
| HAZARD SW | Hazard switch is ON | On |
| | Rear window defogger switch OFF | Off |
| REAR DEF SW | Rear window defogger switch ON | On |
| TR/BD OPEN SW | NOTE: The item is indicated, but not monitored. | Off |
| | · | |
| TRNK/HAT MNTR | NOTE: The item is indicated, but not monitored. | Off |
| FAN ON SIG | Blower fan OFF | Off |
| | Blower fan ON | On |
| AIR COND SW | Air conditioner OFF (A/C switch indicator OFF) | Off |
| COIND OVV | Air conditioner ON (A/C switch indicator ON) | On |
| RKE-LOCK | LOCK button of the key is not pressed | Off |
| VIVE-EOOK | LOCK button of the key is pressed | On |
| DKE TIMI OCK | UNLOCK button of the key is not pressed | Off |
| RKE-UNLOCK | UNLOCK button of the key is pressed | On |
| OVE TD/DD | BACK DOOR OPEN button of the key is not pressed | Off |
| RKE-TR/BD | BACK DOOR OPEN button of the key is pressed | On |
| DIVE DANIE | PANIC button of the key is not pressed | Off |
| RKE-PANIC | PANIC button of the key is pressed | On |
| OVE MODE 2::2 | LOCK/UNLOCK button of the key is not pressed and held simultaneously | Off |
| RKE-MODE CHG | LOCK/UNLOCK button of the key is pressed and held simultaneously | On |
| | Bright outside of the vehicle | Close to 5 V |
| OPTI SEN (DTCT) | Dark outside of the vehicle | Close to 0 V |

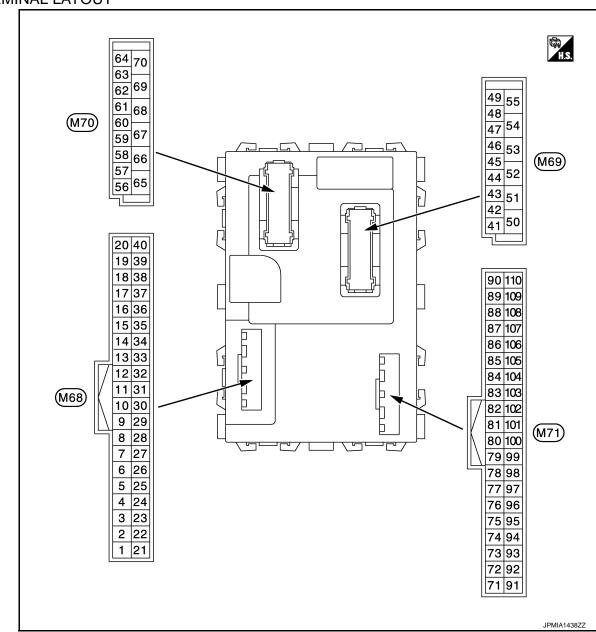
| Monitor Item | Condition | Value/Status |
|------------------|--|-----------------|
| ODTLOCKL/FILT) | Bright outside of the vehicle (Lighting switch AUTO) | Close to 5 V |
| OPTI SEN (FILT) | Dark outside of the vehicle (Lighting switch AUTO) | Close to 1.50 V |
| OPTICAL SENSOR | NOTE: The item is indicated, but not monitored. | Off |
| RAIN SENSOR | NOTE: The item is indicated, but not monitored. | Off |
| REQ SW -DR | Driver door request switch is not pressed | Off |
| | Driver door request switch is pressed | On |
| REQ SW -AS | Passenger door request switch is not pressed | Off |
| | Passenger door request switch is pressed | On |
| REQ SW -RR | NOTE: The item is indicated, but not monitored. | Off |
| REQ SW -RL | NOTE: The item is indicated, but not monitored. | Off |
| REQ SW -BD/TR | Back door request switch is not pressed | Off |
| | Back door request switch is pressed | On |
| PUSH SW | Push-button ignition switch (push switch) is not pressed | Off |
| | Push-button ignition switch (push switch) is pressed | On |
| CLUCH SW | NOTE: The item is indicated, but not monitored. | Off |
| BRAKE SW 1 | The brake pedal is not depressed | Off |
| | The brake pedal is depressed | On |
| | The brake pedal is depressed when No. 7 fuse is blown | Off |
| BRAKE SW 2 | The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal | On |
| DETE (CANCL CIA) | Selector lever in P position | Off |
| DETE/CANCL SW | Selector lever in any position other than P | On |
| CET DAI/ALC\A/ | Selector lever in any position other than P and N | Off |
| SFT PN/N SW | Selector lever in P or N position | On |
| 0/1 1 0 0 1 / | Steering is locked | Off |
| S/L -LOCK | Steering is unlocked | On |
| 0/1 11NH 001/ | Steering is unlocked | Off |
| S/L -UNLOCK | Steering is locked | On |
| | Steering is unlocked | Off |
| S/L RELAY-F/B | Steering is locked | On |
| LINIL K OFNI DD | Driver door is locked | Off |
| UNLK SEN -DR | Driver door is unlocked | On |
| | Push-button ignition switch (push-switch) is not pressed | Off |
| PUSH SW -IPDM | Push-button ignition switch (push-switch) is pressed | On |
| ION DIVA E/D | Ignition switch in OFF or ACC position | Off |
| IGN RLY1 -F/B | Ignition switch in ON position | On |
| DETE ON 15514 | Selector lever in any position other than P | Off |
| DETE SW -IPDM | Selector lever in P position | On |
| | Selector lever in any position other than P and N | Off |
| SFT PN -IPDM | Selector lever in P or N position | On |

| Monitor Item | Condition | Value/Status |
|-------------------|---|--|
| SFT P -MET | Selector lever in any position other than P | Off |
| SFI F -IVIET | Selector lever in P position | On |
| SFT N -MET | Selector lever in any position other than N | Off |
| SI I IN -IVIL I | Selector lever in N position | On |
| | Engine stopped | Stop |
| ENGINE STATE | While the engine stalls | Stall |
| ENGINE STATE | At engine cranking | Crank |
| | Engine running | Run |
| C/L L OCK IDDM | Steering is locked | Off |
| S/L LOCK-IPDM | Steering is unlocked | On |
| C/L LINIL IZ IDDM | Steering is unlocked | Off |
| S/L UNLK-IPDM | Steering is locked | On |
| 0/L DEL AV DEO | Steering is unlocked | Off |
| S/L RELAY-REQ | Steering is locked | On |
| VEH SPEED 1 | While driving | Equivalent to speed- ometer reading |
| VEH SPEED 2 | While driving | Equivalent to speed- ometer reading |
| | Driver door is locked | LOCK |
| DOOR STAT-DR | Wait with selective UNLOCK operation (5 seconds) | READY |
| | Driver door is unlocked | UNLOCK |
| DOOR STAT-AS | Passenger door is locked | LOCK |
| | Wait with selective UNLOCK operation (5 seconds) | READY |
| | Passenger door is unlocked | UNLOCK |
| ID 014 T1 4 0 | Steering is locked | Reset |
| ID OK FLAG | Steering is unlocked | Set |
| DDI IT ENO OTDT | The engine start is prohibited | Reset |
| PRMT ENG STRT | The engine start is permitted | Set |
| PRMT RKE STRT | NOTE: The item is indicated, but not monitored. | Reset |
| RKE OPE COUN1 | During the operation of the key | Operation frequency of the key |
| RKE OPE COUN2 | NOTE: The item is indicated, but not monitored. | _ |
| CONFRMIRALL | The key ID that the key slot receives is not recognized by any key ID registered to BCM. | Yet |
| CONFRM ID ALL | The key ID that the key slot receives is recognized by any key ID registered to BCM. | Done |
| CONFIDM ID4 | The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM. | Yet |
| CONFIRM ID4 | The key ID that the key slot receives is recognized by the fourth key ID registered to BCM. | Done |
| CONFIDMIDO | The key ID that the key slot receives is not recognized by the third key ID registered to BCM. | Yet |
| CONFIRM ID3 | The key ID that the key slot receives is recognized by the third key ID registered to BCM. | Done |

| Monitor Item | Condition | Value/Status |
|----------------|---|----------------------------------|
| CONFIRM ID2 | The key ID that the key slot receives is not recognized by the second key ID registered to BCM. | Yet |
| CONFIRM ID2 | The key ID that the key slot receives is recognized by the second key ID registered to BCM. | Done |
| CONFIRM ID1 | The key ID that the key slot receives is not recognized by the first key ID registered to BCM. | Yet |
| CONFIRMIDI | The key ID that the key slot receives is recognized by the first key ID registered to BCM. | Done |
| NOT REGISTERED | BCM detects registered key ID, or BCM does not detect key ID. | ID OK |
| NOT REGISTERED | BCM detects non-registration key ID. | ID NG |
| TD 4 | The ID of fourth key is not registered to BCM | Yet |
| TP 4 | The ID of fourth key is registered to BCM | Done |
| TD 0 | The ID of third key is not registered to BCM | Yet |
| TP 3 | The ID of third key is registered to BCM | Done |
| TP 2 | The ID of second key is not registered to BCM | Yet |
| | The ID of second key is registered to BCM | Done |
| TP 1 | The ID of first key is not registered to BCM | Yet |
| | The ID of first key is registered to BCM | Done |
| AIR PRESS FL | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of front LH tire |
| AIR PRESS FR | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of front RH tire |
| AIR PRESS RR | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of rear RH tire |
| AIR PRESS RL | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of rear LH tire |
| ID REGST FL1 | ID of front LH tire transmitter is registered | Done |
| ID NEOST LE | ID of front LH tire transmitter is not registered | Yet |
| ID REGST FR1 | ID of front RH tire transmitter is registered | Done |
| ID REGOTT KT | ID of front RH tire transmitter is not registered | Yet |
| ID REGST RR1 | ID of rear RH tire transmitter is registered | Done |
| ID REGGI KKI | ID of rear RH tire transmitter is not registered | Yet |
| ID DECST DI 1 | ID of rear LH tire transmitter is registered | Done |
| ID REGST RL1 | ID of rear LH tire transmitter is not registered | Yet |
| WARNING LAMP | Tire pressure indicator OFF | Off |
| WAKINING LAWP | Tire pressure indicator ON | On |
| DII77ED | Tire pressure warning alarm is not sounding | Off |
| BUZZER | Tire pressure warning alarm is sounding | On |

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



NOTE:

Connector colorM68, M70: Black

M69, M71: White

PHYSICAL VALUES

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| | nal No. color) | Description | | | | Value |
|--------------------|-------------------|----------------------------------|------------------|-------------------------------------|---|--|
| + (vvire | COIOF) | Signal name | Input/ Output | | Condition | (Approx.) |
| | | | | | All switch OFF Turn signal switch RH Lighting switch HI | 0 V |
| 2 (BR/W) Ground | Ground | Combination switch INPUT 5 | Input | Combination switch (Wiper intermit- | Lighting switch 1ST | 10 5 0 PKIB4958J |
| | | tent dial 4) | tent dial 4) | Lighting switch 2ND | (V) 15 10 5 0 10 ms | |
| | | | | | All switch OFF | 0 V |
| | | cound Combination switch INPUT 4 | Input | Combination switch (Wiper intermit- | Turn signal switch LH | |
| | | | | | Lighting switch PASS | (V) 15 |
| 3 (GR) Ground | Ground | | | | Lighting switch 2ND | 10 5 0 ***10ms PKIB4958J 1.0 V |
| | | | | tent dial 4) | Front fog lamp switch ON | (V) 15 10 5 0 +10ms PKIB4956J 0.8 V |
| | | | | | All switch OFF | 0 V |
| | | | | | Front wiper switch LO | |
| 4 (L/Y) Gr | | | | Combination | Front wiper switch MIST | (V) 15 |
| | Ground | Combination switch | Input | switch | Front wiper switch INT | 10 |
| | Ciduna | INPUT 3 | Прис | (Wiper intermit- tent dial 4) | Lighting switch AUTO | 0 → →10ms |
| | | | | | | PKIB4958J 1.0 V |

| Terminal No. (Wire color) | | Description | | | O litt | Value | |
|------------------------------|----------|----------------------------|------------------|--------------------|--|---------------------------|--|
| + (vvire | - color) | Signal name | Input/ Output | | Condition | (Approx.) | |
| | | | | | All switch OFF (Wiper intermittent dial 4) | 0 V | |
| | | | | | Front washer switch (Wiper intermittent dial 4) | (V) | |
| | | | | | Rear washer ON (Wiper intermittent dial 4) | (V) 15 10 5 | |
| | | | | | Any of the condition below with all switch OFF | 0 → 10ms | |
| 5 | Ground | Combination switch | Input | Combination | Wiper intermittent dial 1Wiper intermittent dial 5 | PKIB4958J | |
| (G) | Giodila | INPUT 2 | IIIput | switch | Wiper intermittent dial 6 | 1.0 V | |
| | | | | | Rear wiper switch ON (Wiper intermittent dial 4) | (V) 15 10 5 0 | |
| | | | | | | ++10ms PKIB4956J | |
| | | | | | All switch OFF | 0.8 V | |
| | | | | | (Wiper intermittent dial 4) | 0 V | |
| | | | | | Front wiper switch HI (Wiper intermittent dial 4) | (V) 15 | |
| | | | | | Rear wiper switch INT (Wiper intermittent dial 4) | 10 5 | |
| | | | | | Wiper intermittent dial 3 (All switch OFF) | ++10ms PKIB4958J | |
| | | | | | | | |
| 6 (L/R) | Ground | Combination switch INPUT 1 | Input | Combination switch | Any of the condition below with all switch OFF • Wiper intermittent dial 1 | (V) 15 10 5 0 | |
| | | | | | Wiper intermittent dial 2 | + 10ms PKIB4952J | |
| | | | | | | 1.9 V | |
| | | | | | | (V) 15 | |
| | | | | | Any of the condition below with all switch OFF • Wiper intermittent dial 6 • Wiper intermittent dial 7 | 10 5 0 ++10ms | |
| | | | | | | PKIB4956J 0.8 V | |

| | nal No. | Description | | | | Value |
|--------------|---------|------------------------------------|------------------|-------------------------------|------------------------------------|--|
| + (vvire | color) | Signal name | Input/ Output | | Condition | (Approx.) |
| 7 (W/R) | Ground | Door key cylinder switch UNLOCK | Input | Door key cylin- der switch | NEUTRAL position | (V) 15 10 5 0 JPMIA0587GB 8.0 - 8.5 V |
| | | | | | UNLOCK position | 0 V |
| 8 | Ground | Door key cylinder | Input | Door key cylin- | NEUTRAL position | 12 V |
| (W/B) | 0.000 | switch LOCK | | der switch | LOCK position | 0 V |
| 9 | Ground | Stop lamp switch 1 | Input | Stop lamp | OFF (Brake pedal is not depressed) | 0 V |
| (R) | Cround | Ctop tamp owner r | mpat | switch | ON (Brake pedal is depressed) | Battery voltage |
| 10 (V/W) | Ground | Tire pressure warning check switch | Input | Ignition switch O | FF | (V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V |
| 11 | Ground | ACC feedback | Input | Ignition switch O | FF | 0 V |
| (L/Y) | 0.000 | 7.00 100000 | | Ignition switch A | CC or ON | Battery voltage |
| 12 (SB) | Ground | Passenger door switch | Input | Passenger door switch | OFF (When passenger door closed) | (V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V |
| | | | | | ON (When passenger door opened) | 0 V |
| 13 (GR/L) | Ground | Rear RH door switch | Input | Rear RH door switch | OFF (When rear RH door closed) | (V) 15 10 5 0 ** 10ms PKIB4960J 7.0 - 8.0 V |
| | | | | | ON (When rear RH door opened) | 0 V |
| 14 | Ground | Optical sensor | Input | Ignition switch | When bright outside of the vehicle | Close to 5 V |
| (L/B) | | | , | ON | When dark outside of the vehicle | Close to 0 V |

| (Miro color) | | Description | | | | Value |
|--------------|----------|--|------------------|--------------------------------|---|---|
| + | - color) | Signal name | Input/ Output | | Condition | (Approx.) |
| 15 (W/L) | Ground | Rear window defog- ger switch | Input | Rear window defogger switch | Not pressed | (V) 15 10 5 0 10 ms JPMIA0012GB |
| | | | | | Pressed | 1.0 - 1.5 V 0 V |
| 17 | | Optical sensor pow- | | | OFF, ACC | 0 V |
| (R/G) | Ground | er supply | Output | Ignition switch | ON | 5 V |
| 18 (V) | Ground | Receiver and sensor ground | Input | Ignition switch ON | | 0 V |
| 19 (BR) | Ground | Remote keyless entry receiver power supply | Output | Ignition switch OFF | | (V) 15 10 5 0 500 ms |
| 20 | Ground | Remote keyless entry receiver commu- | Input | Waiting | | (V) 15 10 5 0 500 ms |
| (G/Y) | Glound | nication | три | Signal receiving | | (V) 15 10 5 0 1 ms JMKIA3841GB |
| 21 (P/L) | Ground | NATS antenna amp. | Input/ Output | During waiting | Ignition switch is pressed while inserting the key into the key slot. | Just after pressing ignition switch. Pointer of tester should move. |
| | | | | Waiting | | 0 V |
| 22 (W/G) | Ground | Remote keyless entry receiver RSSI | Input | Signal receiving | | (V) 15 10 5 0 |

| | nal No. | Description | | | | Value |
|---------------|---------|--|------------------|--------------------|---|---|
| + (Wire | color) | Signal name | Input/ Output | | Condition | (Approx.) |
| 23 (R/Y) | Ground | Security indicator lamp | Output | Security indicator | ON Blinking (Ignition switch OFF) | 0 V (V) 15 10 10 10 10 10 10 10 10 10 10 10 10 10 |
| | | | | | OFF | 12.0 V Battery voltage |
| 24* (GR/R) | Ground | Dongle link | Input/ Output | Ignition switch O | FF | 5 V |
| 25 (LG) | Ground | NATS antenna amp. | Input/ Output | During waiting | Ignition switch is pressed while inserting the key into the key slot. | Just after pressing ignition switch. Pointer of tester should move. |
| 27 (Y/G) | Ground | A/C switch | Input | Air conditioner | OFF (A/C switch indicator: OFF) | (V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V |
| | | | | | ON (A/C switch indicator: ON) | 0 V |
| 28 (G/W) | Ground | Blower fan switch | Input | Blower fan | OFF | 0 V (V) 15 10 5 0 PKIB4960J 7.0 - 8.0 V |
| 29 (L/W) | Ground | Hazard switch | Input | Hazard switch | OFF ON | 12 V 0 V |
| 31 (G/B) | Ground | Front door lock assembly driver side (Unlock sensor) | Input | Driver door | LOCK status (Unlock sensor switch OFF) UNLOCK status (Unlock sensor switch ON) | (V) 15 10 5 0 + |

< ECU DIAGNOSIS INFORMATION >

| | inal No. | Description | | | | Value | А |
|----------------------|----------|-----------------------------|------------------|--------------------|---|---|--------|
| + | e color) | Signal name | Input/ Output | | Condition | (Approx.) | |
| | | | | | All switch OFF (Wiper intermittent dial 4) | (V) 15 10 5 0 *** 10ms PKIB4960J 7.0 - 8.0 V | B C |
| 32 (LG) | Ground | Combination switch OUTPUT 5 | Output | Switch | Front fog lamp switch ON (Wiper intermittent dial 4) | 40 | |
| | | | | | Rear wiper switch ON (Wiper intermittent dial 4) | (V) 15 10 | Е |
| | | | | | Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 | 0 +10ms PKIB4956J | F |
| | | | | | Wiper intermittent dial 6Wiper intermittent dial 7 | 1.0 V | G |
| | | | | | All switch OFF (Wiper intermittent dial 4) | (V) 15 10 5 0 | Н |
| | | | | | | PKIB4960J | 1 |
| 33 (Y/L) | Ground | Combination switch OUTPUT 4 | Output | Combination switch | Lighting switch 1ST (Wiper intermittent dial 4) | | J |
| (· · - / | | | | | Lighting switch AUTO (Wiper intermittent dial 4) | (V) 15 | K |
| | | | | | Rear wiper switch INT (Wiper intermittent dial 4) | 0 | |
| | | | | | Any of the condition below with all switch OFF | + 10ms | INI |
| | | | | | Wiper intermittent dial 1Wiper intermittent dial 5Wiper intermittent dial 6 | PKIB4958J 1.2 V | N |

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Ρ

| | nal No. | Description | | | | Value |
|-----------|---------|-----------------------------|------------------|---|---|---|
| (Wire | color) | Signal name | Input/ Output | | Condition | (Approx.) |
| | | | | | All switch OFF (Wiper intermittent dial 4) | (V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V |
| 34 (W) | Ground | Combination switch OUTPUT 3 | Output | Combination switch | Lighting switch 2ND (Wiper intermittent dial 4) | |
| | | | | | Lighting switch HI (Wiper intermittent dial 4) | (V) 15 10 |
| | | | | | Rear washer switch ON (Wiper intermittent dial 4) | 0 |
| | | | | | Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 | PKIB4958J 1.2 V |
| 35 | | Combination switch OUTPUT 2 | Output | Combination switch (Wiper intermit- tent dial 4) | All switch OFF | (V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V |
| (R/L) | Ground | | | | Lighting switch 2ND | |
| | | | | | Lighting switch PASS | (V) 15 |
| | | | | | Front wiper switch INT | 10 5 |
| | | | | | Front wiper switch HI | 0 + 10ms PKIB4958J |
| 36 | Ground | Combination switch | | Combination switch | All switch OFF | (V) 15 10 5 0 +-10ms PKIB4960J 7.0 - 8.0 V |
| (L/O) | Cround | OUTPUT 1 | Output | (Wiper intermit- tent dial 4) | Turn signal switch RH | (V) |
| | | | | , | Turn signal switch LH | (V) 15 10 |
| | | | | | Front wiper switch LO (Front wiper switch MIST) | 5 0 |
| | | | | | Front washer switch ON | → +10ms PKIB4958J |
| | | | | | | 1.2 V |

| | nal No. | Description | | | | Value |
|--------------|---------|---------------------------------------|------------------|-----------------------------|---|---|
| (Wire | color) | Signal name | Input/ Output | | Condition | Value (Approx.) |
| 37 (G/O) | Ground | Selector lever P position switch | Input | Selector lever | P position Any position other than P | 0 V 12 V |
| 38 (O) | Ground | IGN feedback | Input | Ignition switch | OFF or ACC | 0 V |
| 39 (L) | Ground | CAN-H | Input/ Output | | ON | Battery voltage — |
| 40 (P) | Ground | CAN-L | Input/ Output | | _ | _ |
| 43 (W) | Ground | Back door switch | Input | Back door switch | OFF (When back door closed) | (V) 15 10 5 0 |
| | | | | | ON (M/s - h - s l d s) | 9.5 - 10.0 V 0 V |
| | | | | | (When back door opened) Rear wiper stop position | 12 V |
| 44 (LG) | Ground | Rear wiper stop position | Input | Ignition switch ON | Any position other than rear wiper stop position | 0 V |
| 45 (GR) | Ground | Door lock and unlock switch LOCK | Input | Door lock and unlock switch | NEUTRAL position | (V) 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V |
| | | | | | LOCK position | 0 V |
| 46 (BR) | Ground | Door lock and unlock switch UNLOCK | Input | Door lock and unlock switch | NEUTRAL position | (V) 15 10 5 10 ms JPMIA0012GB |
| | | | | | UNLOCK position | 1.0 - 1.5 V |
| 47 (BR/Y) | Ground | Driver door switch | Input | Driver door switch | OFF (When driver door closed) | (V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V |
| | | | | | ON (When driver door opened) | 0 V |

| | nal No. color) | Description | | | | Value |
|-------------|-------------------|---------------------------------|------------------|------------------------------|---|---|
| + | - Color) | Signal name | Input/ Output | | Condition | (Approx.) |
| 48 (W/G) | Ground | Rear LH door switch | Input | Rear LH door switch | OFF (When rear LH door closed) | (V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V |
| | | | | С | ON (When rear door LH opened) | 0 V |
| 49 | | | | Luggage room | Back door is closed (Back door lamp turns OFF) | 12 V |
| (Y) | Ground | Luggage room lamp | Output | lamp switch DOOR position | Back door is opened (Back door lamp turns ON) | 0 V |
| 54 | Ground | Rear wiper | Output | Rear wiper | OFF (Stopped) | 0 V |
| (L/W) | 0.00 | . toda mpo | | Treat inper | ON (Activated) | 12 V |
| 55 | Ground | Rear door UNLOCK | Output | Rear door | UNLOCK (Actuator is activated) | 12 V |
| (G) | Ciouna | | Output | | Other then UNLOCK (Actuator is not activated) | 0 V |
| | | | | | p battery saver is activated. room lamp power supply) | 0 V |
| 56 (L) | Ground | Interior room lamp power supply | Output | vated. | p battery saver is not acti- rior room lamp power sup- | 12 V |
| 57 (Y) | Ground | Battery power sup- ply | Input | Ignition switch O | FF | Battery voltage |
| 59 | Ground | Passenger door UN- | Output | Passenger door | UNLOCK (Actuator is activated) | 12 V |
| (G) | Ground | LOCK | Output | Passenger door | Other then UNLOCK (Actuator is not activated) | 0 V |
| | | | | | Turn signal switch OFF | 0 V |
| 60 (W/B) | Ground | Turn signal LH | Output | Ignition switch ON | Turn signal switch LH | (V) 15 10 5 0 1s 1s PKIC6370E 6.0 V |

| | nal No. color) | Description | | | O and distant | Value |
|-------------|----------------------------|---------------------------------------|--|--|---|---|
| + | - | Signal name | Input/ Output | | Condition | (Approx.) |
| | | | | | Turn signal switch OFF | 0 V |
| 61 (W/L) | Ground | Turn signal RH | Output | Ignition switch ON | Turn signal switch RH | (V) 15 10 5 0 1s PKIC6370E 6.0 V |
| 63 | | Interior room lamp | | Interior room | OFF | 12 V |
| (BR) | Ground | timer control | Output | lamp | ON | 0 V |
| 65 | Cround | All doors I OCK | Outrout | All doors | LOCK (Actuator is activated) | 12 V |
| (V) | Ground | All doors LOCK | Output | | Other then LOCK (Actuator is not activated) | 0 V |
| 66 | Ground | Driver door UN- | Output | Driver door | UNLOCK (Actuator is activated) | 12 V |
| (L/B) | Giodila | LOCK | Odiput | Silver door | Other then UNLOCK (Actuator is not activated) | 0 V |
| 67 (B) | Ground | Ground | Output | Ignition switch ON | | 0 V |
| 68 (L) | Ground | P/W power supply (IGN) | Output | Ignition switch ON | | 12 V |
| 69 (L/W) | Ground | P/W power supply (BAT) | Output | Ignition switch OFF | | 12 V |
| 70 (Y) | Ground | Battery power sup- ply | Input | Ignition switch O | FF | Battery voltage |
| 71 | Ground | Tire pressure receiv- | Input/ | Ignition switch | Standby state | (V) 6 4 2 0 • • 0.2s |
| (R) | er communication Output ON | ON | When receiving the signal from the transmitter | (V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | | |
| 72 (R/W) | Ground | Back door lock actuator relay control | Output | Back door | LOCK (Actuator is activated) Other than LOCK (Actuator is not activated) | 0 V Battery voltage |
| 75 | Ground | Driver door request | Input | Driver door re- | ON (Pressed) | 0 V |
| (SB) | Ground | switch | mput | quest switch | OFF (Not pressed) | 12 V |

| | inal No. | Description | | | | Value | |
|-------|------------|---------------------|------------------|--|---|---|--|
| (Wire | e color) | Signal name | Input/ Output | | Condition | (Approx.) | |
| 76 | Ground | Passenger door re- | Innut | Passenger door | ON (Pressed) | 0 V | |
| (G) | Giodila | quest switch | Input | request switch | OFF (Not pressed) | 12 V | |
| 77 | Ground | Back door request | lanut | Back door re- | ON (Pressed) | 0 V | |
| (W) | Ground | switch | Input | quest switch | OFF (Not pressed) | 12 V | |
| 78 | O | Driver door antenna | 0.4.4 | When the driver door request switch is operat- ed with ignition switch OFF | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | |
| (LG) | Ground (+) | | Output | | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 | |
| 79 | Ground | Driver door antenna | Outout | When the driver door request switch is operated with ignition switch OFF | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0 JMKIA38380 | |
| (V) | Ground | (-) | Output | | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 JMKIA38390 | |

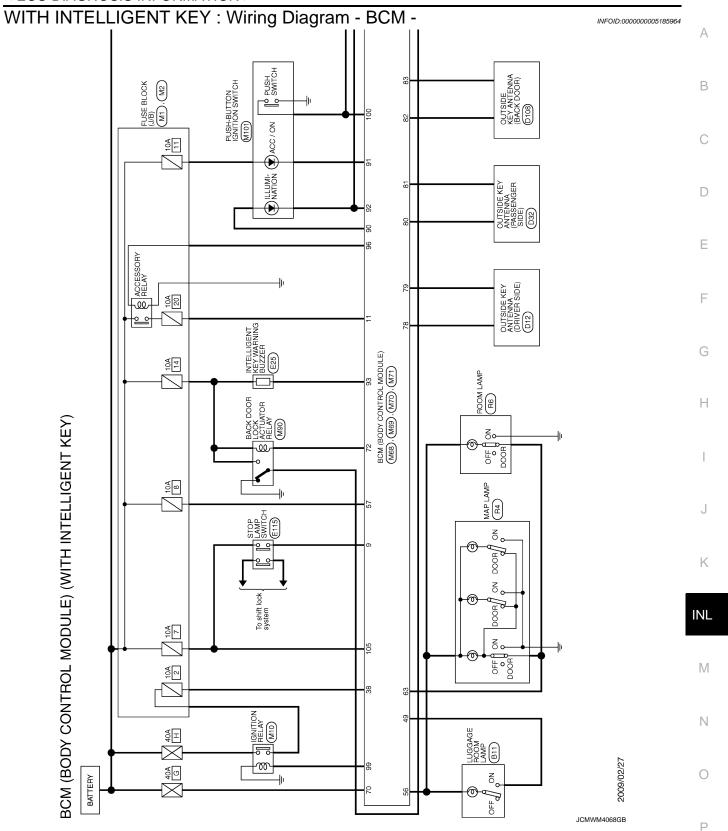
| | nal No. color) | Description | 1 | | Condition | Value | А |
|-------------------|-------------------|--------------------------|------------------|--|---|--|--------|
| + | - | Signal name | Input/ Output | | Condition | (Approx.) | |
| 80 | Ground | Passenger door an- | Output | When the passenger door re- | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0 JMKIA3838GB | B C |
| (BR/Y) | Glound | tenna (+) | Output | quest switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 1 s JMKIA3839GB | E |
| | | | | | | (V) | G |
| | | | | | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 | Н |
| 81 | | Passenger door an- | | When the pas- senger door re- | | 500 ms JMKIA3838GB | |
| (L/Y) | Ground | tenna (-) | Output | quest switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area | (V) 15 10 5 | J |
| | | | | | | JMKIA3839GB | INI |
| | | | | | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 | N |
| | | | | When the back | tion area | 500 ms JMKIA3838GB | N |
| 82 (W/B) Groun | Ground | Back door antenna (+) | Output | door request switch is operat- | | | С |
| | | | | ed with ignition switch OFF | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 1 s JMKI/A3839GB | Ρ |

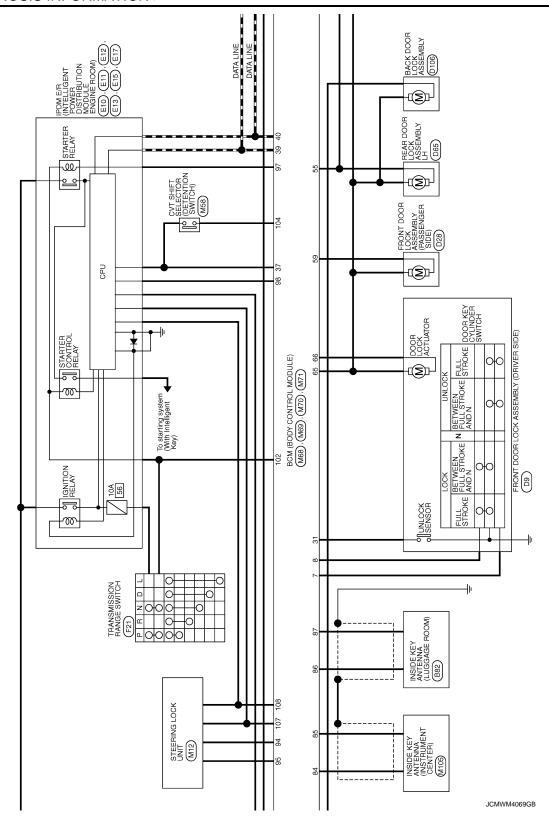
| | nal No. | Description | | | | Value |
|-------|--|----------------------|---|---|---|---|
| (Wire | e color) | Signal name | Input/ Output | | Condition | (Approx.) |
| 83 | | Back door antenna (- | | When the back door request | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0 JMKIA3838GB |
| (B/W) | Ground |) | Output | switch is operated with ignition switch OFF | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 JMKIA3839GB |
| 84 | 84 Cround Room antenna (+) Output Ignition | Ignition switch | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0 JMKIA3838GB | | |
| (Y/G) | Ground | (Instrument panel) | Output | OFF | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 1 s JMKIA3839GB |
| 85 | Ground | Room antenna (-) | Output | Ignition switch | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0 JMKIA3838GB |
| (Y/L) | Giodila | (Instrument panel) | Output | OFF | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 JMKIA3839GB |

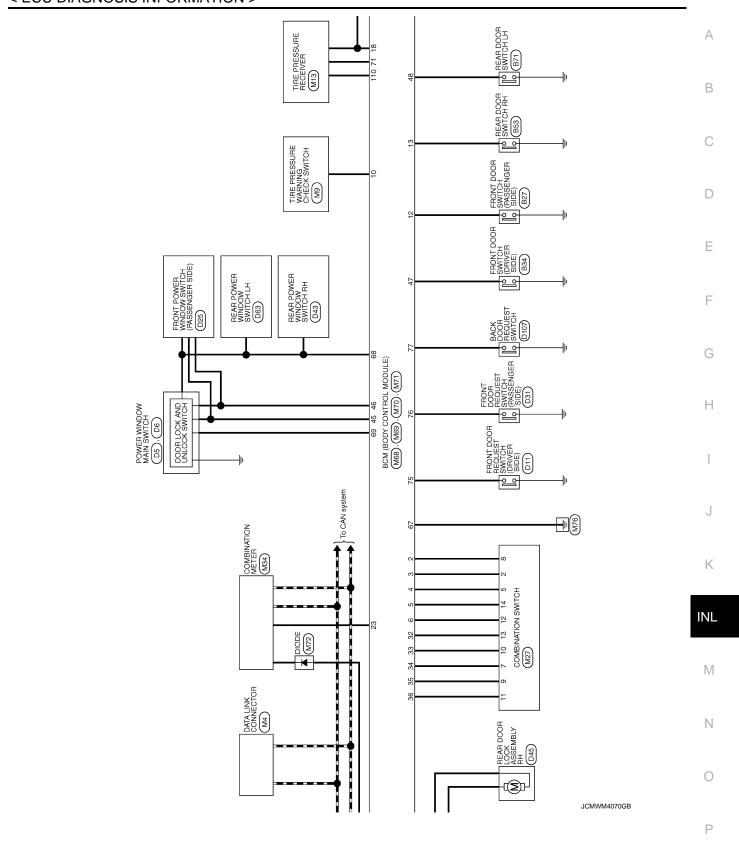
| | nal No. | Description | | | | Value |
|--------------|----------|---|------------------|---------------------------------|---|---|
| + | e color) | Signal name | Input/ Output | | Condition | (Approx.) |
| 86 | Ground | Luggage room an- | Output | Ignition switch | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0 JMKIA3838GB |
| (P) | Glound | tenna (+) | Output | ŎFF | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 JMKIA3839GB |
| | | | | | | 40 |
| | | | | | When Intelligent Key is not in the antenna detection area | (V) 15 10 5 0 |
| 87 (L) | Ground | Luggage room antenna (-) | Output | Ignition switch OFF | | 500 ms JMKIA3838GB |
| | | | | | When Intelligent Key is in the antenna detection area | (V) 15 10 5 0 1 s JMKIA3839GB |
| 90 | | Push-button ignition | | Push-button ig- | ON | 12 V |
| 90 (W/L) | Ground | switch illumination | Output | nition switch illu- mination | OFF | 0 V |
| 91 (Y) | Ground | ACC/ON indicator lamp | Output | Ignition switch | OFF ACC or ON OFF | Battery voltage 0.5 V 0 V |
| 92 (BR/R) | Ground | Push-button ignition switch illumination ground | Output | Tail lamp | ON | NOTE: When the illumination brightening/dimming level is in the neutral position (V) 15 10 5 UPMIA1554GB 6.0 - 7.0 V |

| | nal No. | Description | | | | Value |
|---------------------|----------|--|---|--------------------------------|--|----------------------------------|
| (Wire | color) | Signal name | Input/ Output | | Condition | (Approx.) |
| 93 | Ground | Intelligent Key warn- | Output | Intelligent Key | Sounding | 0 V |
| (GR/W) | 0.00 | ing buzzer | | warning buzzer | Not sounding | 12 V |
| 94 (Y/R) Ground | Ground | nd Steering lock unit communication | Input/ Output | Steering lock | LOCK status LOCK or UNLOCK | 12 V (V) 15 10 5 0 JMKIA0066GB |
| | | | For 15 seconds after UN- LOCK 15 seconds or later after | 12 V 0 V | | |
| | | | | | UNLOCK | |
| 95 | Ground | Steering lock unit | Output | Ignition switch | OFF or ACC | 12 V |
| (W/G) | | power supply | | 3 | ON | 0 V |
| 96 (BR/W) | Ground | ACC relay control | Output | Ignition switch | OFF | 0 V |
| | | | | Ignition switch | ACC or ON When selector lever is in P or N position | 12 V Battery voltage |
| 97 (L/R) | Ground | ound Starter relay control Outp | Output | ON | When selector lever is not in P or N position | 0 V |
| 98 | Ground | Ignition relay (IPDM | Output | Ignition quitab | OFF or ACC | 12 V |
| (BR) | Ground | E/R) control | Output | Ignition switch | ON | 0 V |
| 99 (W/R) | Ground | Ignition relay control | Output | Ignition switch | OFF or ACC | 0 V 12 V |
| 100 | | Push-button ignition | | Push-button ig- | Pressed | 0 V |
| (L/O) | Ground | switch (push switch) | Input | nition switch (push switch) | Not pressed | 12 V |
| 102 | Ground | Selector lever P/N | Input | Selector lever | P or N position | Battery voltage |
| (G) 104 (Y/R) | Ground | CVT shift selector (detention switch) power supply | Output | Ignition switch O | Except P and N positions | 0 V 12 V |
| 105 (B/O) | Ground | Stop lamp switch 2 | Input | Ignition switch O | FF | Battery voltage |
| 106 (Y/B) | Ground | Blower fan motor re- lay control | Output | Ignition switch | OFF or ACC | 0 V 12 V |
| 107 (L/W) | Ground | Steering lock condition No. 1 | Input | Steering lock | LOCK status UNLOCK status | 0 V 12 V |
| 108 | | Steering lock condi- | | | LOCK status | 12 V |
| (P/L) | Ground | tion No. 2 | Input | Steering lock | UNLOCK status | 0 V |
| 110 | Oracia d | Tire pressure receiv- | O : 14 m : 14 | Ignition assistate | OFF or ACC | 0 V |
| (BR/W) | Ground | er power supply | Output | Ignition switch | ON | 5 V |

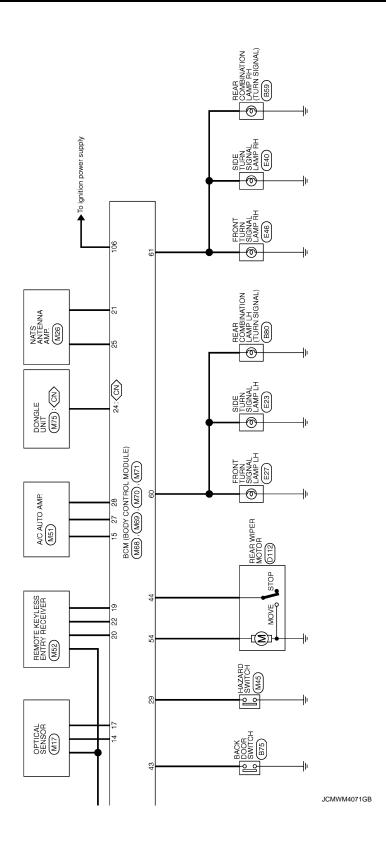
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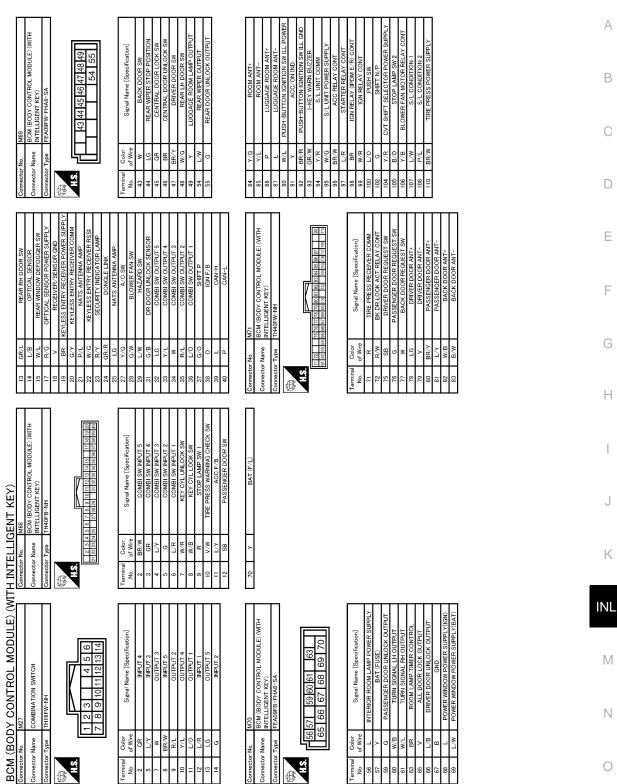








< ECU DIAGNOSIS INFORMATION >



WITH INTELLIGENT KEY: Fail-safe

FAIL-SAFE CONTROL BY DTC

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

Revision: 2009 March INL-67 2009 Z12

JCMWM4072GB

SWWWW4072GB

INFOID:0000000005185965

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| Display contents of CONSULT | Fail-safe | Cancellation | | |
|-----------------------------|---|---|--|--|
| B2013: ID DISCORD BCM-S/L | Inhibit engine cranking | When communication between BCM and steering lock unit are communicated normally. | | |
| B2014: CHAIN OF S/L-BCM | Inhibit engine cranking | When communication between BCM and steering lock unit are commicated normally. | | |
| B2192: ID DISCORD BCM-ECM | Inhibit engine cranking | Erase DTC | | |
| B2193: CHAIN OF BCM-ECM | Inhibit engine cranking | Erase DTC | | |
| B2195: ANTI-SCANNING | Inhibit engine cranking | Ignition switch ON → OFF | | |
| B2196: DONGLE NG | Inhibit engine cranking | Erase DTC | | |
| B2198: NATS ANTENNA AMP | Inhibit engine cranking | Erase DTC | | |
| B2557: VEHICLE SPEED | Inhibit steering lock | When the following CAN signal status (vehicle speed signal) becomes consistent • Vehicle speed signal (ABS) • Vehicle speed signal (Meter) | | |
| B2601: SHIFT POSITION | Inhibit steering lock | 500 ms after the following signal reception status becomes consistent Selector lever P position switch signal P range signal (CAN) | | |
| B2602: SHIFT POSITION | Inhibit steering lock | 5 seconds after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Vehicle speed: 4 km/h (2.5 MPH) or more | | |
| B2603: SHIFT POSI STATUS | Inhibit steering lock | 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P position switch signal: Except P position (12 V) Selector lever P/N position signal: Except P and N positions (0 V) Status 2 Ignition switch is in the ON position Selector lever P position switch signal: P position (0 V) Selector lever P/N position signal: P or N positions (12 V) | | |
| B2604: PNP/CLUTCH SW | Inhibit steering lock | 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P or N position (12 V) Shift position signal (CAN): P or N position Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) Shift position signal (CAN): Except P and N position | | |
| B2605: PNP/CLUTCH SW | Inhibit steering lock | 500 ms after any of the following BCM recognition conditions are fulfilled • Status 1 - Power position: IGN - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (12 V) - Interlock/PNP switch signal (CAN): ON | | |
| B2608: STARTER RELAY | Inhibit engine cranking | 500 ms after the following signal communication status becomes consistent • Starter motor relay control signal • Starter relay status signal (CAN) | | |
| B2609: S/L STATUS | Inhibit engine cranking Inhibit steering lock | When the following steering lock conditions agree BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status | | |
| B260B: STEERING LOCK UNIT | Inhibit steering lock | Erase DTC | | |

< ECU DIAGNOSIS INFORMATION >

| Display contents of CONSULT | Fail-safe | Cancellation | |
|-----------------------------|---|---|--|
| B260D: STEERING LOCK UNIT | Inhibit steering lock | Erase DTC | |
| B260F: ENG STATE SIG LOST | Inhibit engine cranking | When any of the following conditions are fulfilled • Power position changes to ACC • Receives engine status signal (CAN) | |
| B2612: S/L STATUS | Inhibit engine cranking Inhibit steering lock | When any of the following conditions are fulfilled Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R) | |
| B2619: BCM | Inhibit engine cranking | 1 second after the steering lock unit power supply output control inside BCM becomes normal | |
| B26EF: STRG LCK RELAY OFF | Inhibit engine cranking | When the following conditions are fulfilled • Steering lock relay signal (CAN): ON • Steering lock unit status signal (CAN): ON | |
| B26F0: STRG LCK RELAY ON | Inhibit engine cranking | When the following conditions are fulfilled • Steering lock relay signal (CAN): OFF • Steering lock unit status signal (CAN): OFF | |
| B26F1: IGN RELAY OFF | Inhibit engine cranking | When the following conditions are fulfilled Ignition switch ON signal (CAN: Transmitted from BCM): ON Ignition switch ON signal (CAN: Transmitted from IPDM E/R): ON | |
| B26F2: IGN RELAY ON | Inhibit engine cranking | When the following conditions are fulfilled Ignition switch ON signal (CAN: Transmitted from BCM): OFF Ignition switch ON signal (CAN: Transmitted from IPDM E/R): OFF | |
| B26F3: START CONT RLY ON | Inhibit engine cranking | When the following conditions are fulfilled • Starter control relay signal (CAN: Transmitted from BCM): OFF • Starter control relay signal (CAN: Transmitted from IPDM E/R): OFF | |
| B26F4: START CONT RLY OFF | Inhibit engine cranking | When the following conditions are fulfilled • Starter control relay signal (CAN: Transmitted from BCM): ON • Starter control relay signal (CAN: Transmitted from IPDM E/R): ON | |
| B26F7: BCM | Inhibit engine cranking by Intelligent Key sys- tem | When room antenna and luggage room antenna functions normally | |
| U0415: VEHICLE SPEED | Inhibit steering lock | When vehicle speed signal (Meter) (CAN) is received normally | |

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

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

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

- 1. More than 1 minute is passed after the rear wiper stop.
- Turn rear wiper switch OFF.
- Operate the rear wiper switch or rear washer switch.

WITH INTELLIGENT KEY: DTC Inspection Priority Chart

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

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INFOID:0000000005185966

INL-69 Revision: 2009 March 2009 Z12

| Priority | DTC |
|----------|---|
| 1 | B2562: LOW VOLTAGE |
| 2 | U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN) |
| 3 | B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI-SCANNING B2196: DONGLE NG B2198: NATS ANTENNA AMP |
| 4 | B 2013: ID DISCORD BCM-S/L B 2014: CHAIN OF S/L-BCM B 2553: IGNITION RELAY B 2555: STOP LAMP B 2556: PUSH-BTN IGN SW B 2557: VEINLCLE SPEED B 2601: SHIFT POSITION B 2602: SHIFT POSITION B 2603: SHIFT POSITION B 2604: PNP/CLUTCH SW B 2605: PNP/CLUTCH SW B 2606: PNP/CLUTCH SW B 2608: STARTER RELAY B 2609: S/L STATUS B 2609: S/L STATUS B 2609: STEERING LOCK UNIT B 2600: STEERING LOCK UNIT B 2601: SA STATUS B 2614: BCM B 2616: CM B 2617: PUSH-BTN IGN SW B 2629: LOCK MALFUNCTION B 2669: STRG LCK RELAY OFF B 2667: STRG LCK RELAY ON B 2667: IGN RELAY OF B 2667: STRA LCK RELAY ON B 2667: STRAT CONT RLY ON B 2667: STATT CONT RLY ON B 2667: BCM B 2667: STRAT CONT RLY ON B 2667: BCM B 2667: BCM B 2667: STRAT CONT RLY ON B 2667: BCM B 2667: BCM B 2667: WEY REGISTRATION C 1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED |

< ECU DIAGNOSIS INFORMATION >

| Priority | DTC | |
|----------|--|-----|
| | C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR | — A |
| | C1706. LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR | В |
| | C1710: [NO DATA] RR C1711: [NO DATA] RL C1712: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] FR | С |
| 5 | C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RL C1716: [PRESSDATA ERR] FL | D |
| | C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RL C1720: [CODE ERR] FL | Е |
| | C1721: [CODE ERR] FR C1722: [CODE ERR] RR C1723: [CODE ERR] RL C1724: [BATT VOLT LOW] FL C1725: [BATT VOLT LOW] FR | F |
| | C1726: [BATT VOLT LOW] FR C1727: [BATT VOLT LOW] RR C1734: CONTROL UNIT | G |
| 6 | B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA | Н |
| 7 | B2626: OUTSIDE ANTENNA B2627: OUTSIDE ANTENNA B2628: OUTSIDE ANTENNA | 1 |

WITH INTELLIGENT KEY: DTC Index

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NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to BCS-18, "COM-MON ITEM: CONSULT-III Function (BCM - COMMON ITEM)".

| CONSULT display | Fail-safe | Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference page |
|--|-----------|---|------------------------------------|---|----------------|
| No DTC is detected. further testing may be required. | | | | | _ |
| U1000: CAN COMM | _ | | _ | _ | BCS-39 |
| U1010: CONTROL UNIT (CAN) | _ | | | T – | BCS-40 |
| U0415: VEHICLE SPEED | × | _ | × | _ | BCS-41 |
| B2013: ID DISCORD BCM-S/L | × | × | × | _ | SEC-45 |
| B2014: CHAIN OF S/L-BCM | × | × | × | Τ – | SEC-46 |
| B2192: ID DISCORD BCM-ECM | × | | | Τ | SEC-35 |
| B2193: CHAIN OF BCM-ECM | × | | - - , | | <u>SEC-37</u> |
| B2195: ANTI-SCANNING | × | | | † <u> </u> | SEC-38 |
| B2196: DONGLE NG | × | † | <u> </u> | | SEC-39 |

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| | | Freeze Frame Data | | Tire pressure | |
|---------------------------|-----------|--|------------------------------------|----------------------------|-------------------|
| CONSULT display | Fail-safe | Vehicle Speed Odo/Trip Meter Vehicle Condition | Intelligent Key warning lamp ON | monitor warning lamp ON | Reference page |
| B2198: NATS ANTENNA AMP | × | _ | _ | _ | SEC-41 |
| B2553: IGNITION RELAY | _ | × | × | _ | PCS-78 |
| B2555: STOP LAMP | _ | × | × | _ | SEC-49 |
| B2556: PUSH-BTN IGN SW | _ | × | × | _ | SEC-51 |
| B2557: VEHICLE SPEED | × | × | × | _ | SEC-53 |
| B2562: LOW VOLTAGE | _ | × | _ | _ | BCS-42 |
| B2601: SHIFT POSITION | × | × | × | _ | SEC-54 |
| B2602: SHIFT POSITION | × | × | × | _ | SEC-57 |
| B2603: SHIFT POSI STATUS | × | × | × | _ | SEC-60 |
| B2604: PNP/CLUTCH SW | × | × | × | _ | SEC-65 |
| B2605: PNP/CLUTCH SW | × | × | × | _ | SEC-68 |
| B2608: STARTER RELAY | × | × | × | _ | SEC-70 |
| B2609: S/L STATUS | × | × | × | _ | SEC-72 |
| B260B: STEERING LOCK UNIT | × | × | × | _ | SEC-75 |
| B260C: STEERING LOCK UNIT | | × | × | _ | SEC-76 |
| B260D: STEERING LOCK UNIT | × | × | × | _ | SEC-77 |
| B260F: ENG STATE SIG LOST | × | × | × | _ | SEC-78 |
| B2612: S/L STATUS | × | × | × | _ | SEC-79 |
| B2614: BCM | | × | × | _ | PCS-80 |
| B2615: BCM | | × | × | _ | PCS-83 |
| B2616: BCM | _ | × | × | _ | PCS-86 |
| B2618: BCM | | × | × | _ | PCS-89 |
| B2619: BCM | × | × | × | _ | SEC-82 |
| B261A: PUSH-BTN IGN SW | _ | × | × | _ | PCS-90 |
| B2621: INSIDE ANTENNA | _ | × | _ | _ | DLK-44 |
| B2622: INSIDE ANTENNA | _ | × | _ | _ | DLK-46 |
| B2626: OUTSIDE ANTENNA | _ | × | _ | _ | DLK-48 |
| B2627: OUTSIDE ANTENNA | _ | × | _ | _ | DLK-50 |
| B2628: OUTSIDE ANTENNA | _ | × | _ | _ | DLK-52 |
| B26E9: LOCK MALFUNCTION | _ | × | × (Turn ON for 15 seconds) | _ | SEC-83 |
| B26EF: STRG LCK RELAY OFF | × | × | × | _ | SEC-84 |
| B26F0: STRG LCK RELAY ON | × | × | × | _ | SEC-86 |
| B26F1: IGN RELAY OFF | × | × | × | _ | PCS-92 |
| B26F2: IGN RELAY ON | × | × | × | _ | PCS-95 |
| B26F3: START CONT RLY ON | × | × | × | | SEC-87 |
| B26F4: START CONT RLY OFF | × | × | × | _ | SEC-88 |
| B26F5: STRG LCK STS SW | _ | × | × | _ | SEC-90 |
| B26F6: BCM | _ | × | × | _ | PCS-98 |
| B26F7: BCM | × | × | × | _ | SEC-93 |
| B26F8: BCM | _ | × | × | _ | SEC-94 |

< ECU DIAGNOSIS INFORMATION >

| CONSULT display | Fail-safe | Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition | Intelligent Key warning lamp ON | Tire pressure monitor warning lamp ON | Reference page |
|---------------------------|-----------|---|------------------------------------|---|-------------------|
| B26FC: KEY REGISTRATION | _ | × | × | _ | SEC-95 |
| C1704: LOW PRESSURE FL | _ | _ | _ | × | |
| C1705: LOW PRESSURE FR | _ | _ | _ | × | WT-16 |
| C1706: LOW PRESSURE RR | _ | _ | _ | × | <u> </u> |
| C1707: LOW PRESSURE RL | _ | _ | _ | × | |
| C1708: [NO DATA] FL | _ | _ | _ | × | |
| C1709: [NO DATA] FR | _ | _ | _ | × | WT-18 |
| C1710: [NO DATA] RR | _ | _ | _ | × | <u> </u> |
| C1711: [NO DATA] RL | _ | _ | _ | × | |
| C1712: [CHECKSUM ERR] FL | _ | _ | _ | × | |
| C1713: [CHECKSUM ERR] FR | _ | _ | _ | × | W/T 04 |
| C1714: [CHECKSUM ERR] RR | _ | _ | _ | × | <u>WT-21</u> |
| C1715: [CHECKSUM ERR] RL | _ | _ | _ | × | |
| C1716: [PRESSDATA ERR] FL | _ | _ | _ | × | |
| C1717: [PRESSDATA ERR] FR | _ | _ | _ | × | M/T 24 |
| C1718: [PRESSDATA ERR] RR | _ | _ | _ | × | <u>WT-24</u> |
| C1719: [PRESSDATA ERR] RL | _ | _ | _ | × | |
| C1720: [CODE ERR] FL | _ | _ | _ | × | |
| C1721: [CODE ERR] FR | _ | _ | _ | × | W/T OC |
| C1722: [CODE ERR] RR | _ | _ | _ | × | <u>WT-26</u> |
| C1723: [CODE ERR] RL | _ | _ | _ | × | |
| C1724: [BATT VOLT LOW] FL | _ | _ | _ | × | |
| C1725: [BATT VOLT LOW] FR | _ | _ | _ | × | W/T OO |
| C1726: [BATT VOLT LOW] RR | _ | _ | _ | × | <u>WT-29</u> |
| C1727: [BATT VOLT LOW] RL | _ | _ | _ | × | |
| C1729: VHCL SPEED SIG ERR | _ | _ | _ | × | <u>WT-32</u> |
| C1734: CONTROL UNIT | _ | _ | _ | × | <u>WT-34</u> |

WITHOUT INTELLIGENT KEY

WITHOUT INTELLIGENT KEY: Reference Value

VALUES ON THE DIAGNOSIS TOOL

Condition Monitor Item Value/Status Ignition switch OFF or ACC Off **IGN ON SW** Ignition switch ON On Off Mechanical key is removed from key cylinder KEY ON SW Mechanical key is inserted to key cylinder On Door lock/unlock switch does not operate Off CDL LOCK SW Press door lock/unlock switch to the lock side On Door lock/unlock switch does not operate Off CDL UNLOCK SW Press door lock/unlock switch to the unlock side On

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| Monitor Item | Condition | Value/Status |
|-------------------|--|--|
| DOOR SW-DR | Driver's door closed | Off |
| DOOK SW-DK | Driver's door opened | On |
| DOOR SW-AS | Passenger door closed | Off |
| DOOK SW-AS | Passenger door opened | On |
| DOOR SW-RR | Rear RH door closed | Off |
| DOOR SW-RR | Rear RH door opened | On |
| DOOD CW DI | Rear LH door closed | Off |
| DOOR SW-RL | Rear LH door opened | On |
| DAOK DOOD OW | Back door closed | Off |
| BACK DOOR SW | Back door opened | On |
| LOCK STATUS | NOTE: The item is indicated, but not monitored. | Off |
| ACC ON SW | Ignition switch OFF | Off |
| ACC ON SW | Ignition switch ACC or ON | On |
| VEV/ 500 L 00/ | "LOCK" button of key fob is not pressed | Off |
| KEYLESS LOCK | "LOCK" button of key fob is pressed | On |
| | "UNLOCK" button of key fob is not pressed | Off |
| KEYLESS UNLOCK | "UNLOCK" button of key fob is pressed | On |
| SHOCK SENSOR | NOTE: The item is indicated, but not monitored. | NORMAL |
| KEN ON TROM | Other than driver door key cylinder LOCK position | Off |
| KEY CYL LK-SW | Driver door key cylinder LOCK position | On |
| KEY CYL UN-SW | Other than driver door key cylinder UNLOCK position | Off |
| KEY CYL UN-SW | Driver door key cylinder UNLOCK position | On |
| VEHICLE SPEED | While driving | Equivalent to speed- ometer reading |
| DEAD DEE OW | Rear window defogger switch OFF | Off |
| REAR DEF SW | Rear window defogger switch ON | On |
| D=V=D0= 0VV 0.44 | NOTE: | Off |
| REVERSE SW CAN | The item is indicated, but not used. | On |
| | Lighting switch OFF | Off |
| TAIL LAMP SW | Lighting switch 1ST | On |
| | Front fog lamp switch OFF | Off |
| FR FOG SW | Front fog lamp switch ON | On |
| 5.10.0 5 5.11 | The seat belt (driver side) is fastened. [Seat belt switch (driver side) OFF] | Off |
| BUCKLE SW | The seat belt (driver side) is unfastened. [Seat belt switch (driver side) ON] | On |
| TRNK/HAT MNTR | NOTE: The item is indicated, but not monitored. | Off |
| 100 014 | Ignition switch OFF | Off |
| ACC SW | Ignition switch ACC or ON | On |
| KYLS TRNK/HAT | NOTE: The item is indicated, but not monitored. | Off |
| I/E//I E00 BAA''' | PANIC button of key fob is not pressed | Off |
| KEYLESS PANIC | PANIC button of key fob is pressed | On |
| | Lighting switch OFF | Off |
| HI BEAM SW | | 1 |

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< ECU DIAGNOSIS INFORMATION >

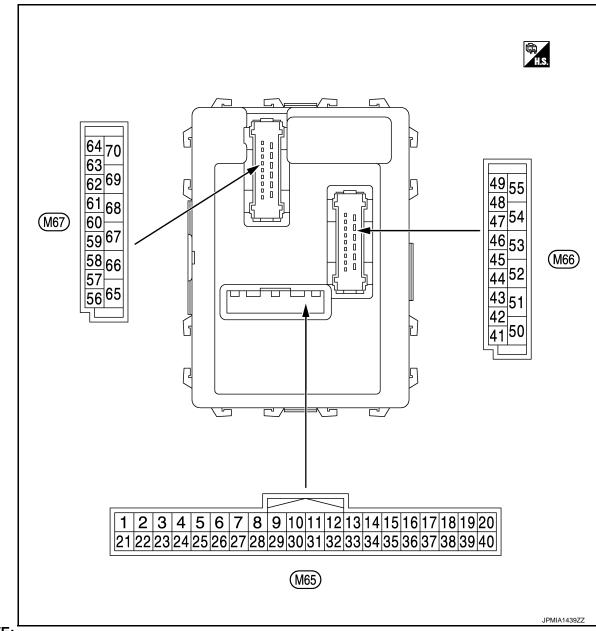
| Monitor Item | Condition | Value/Status |
|-----------------|--|-----------------|
| HEAD LAMP SW 1 | Lighting switch OFF | Off |
| TILAD LAWI OW I | Lighting switch 2ND | On |
| HEAD LAMP SW 2 | Lighting switch OFF | Off |
| HEAD LAWIF SW 2 | Lighting switch 2ND | On |
| ALITO LICHT CW/ | Lighting switch OFF | Off |
| AUTO LIGHT SW | Lighting switch AUTO | On |
| DA COINIC CVV | Other than lighting switch PASS | Off |
| PASSING SW | Lighting switch PASS | On |
| RR FOG SW | NOTE: The item is indicated, but not monitored. | Off |
| TUDNI CIONIAL D | Turn signal switch OFF | Off |
| TURN SIGNAL R | Turn signal switch RH | On |
| TUDA 010111 | Turn signal switch OFF | Off |
| TURN SIGNAL L | Turn signal switch LH | On |
| | Parking brake switch is OFF | Off |
| PKB SW | Parking brake switch is ON | On |
| | Engine stopped | Off |
| ENGINE RUN | Engine running | On |
| | Bright outside of the vehicle | Close to 5 V |
| OPTI SEN (DTCT) | Dark outside of the vehicle | Close to 0 V |
| | Bright outside of the vehicle (Lighting switch AUTO) | Close to 5 V |
| OPTI SEN (FILT) | Dark outside of the vehicle (Lighting switch AUTO) | Close to 1.50 V |
| LIG SEN COND | NOTE: The item is indicated, but not monitored. | OFF |
| 1011 011/ 0111 | Ignition switch OFF or ACC | Off |
| IGN SW CAN | Ignition switch ON | On |
| ED WIDED III | Front wiper switch OFF | Off |
| FR WIPER HI | Front wiper switch HI | On |
| | Front wiper switch OFF | Off |
| FR WIPER LOW | Front wiper switch LO | On |
| | Front wiper switch OFF | Off |
| FR WIPER INT | Front wiper switch INT | On |
| | Front washer switch OFF | Off |
| FR WASHER SW | Front washer switch ON | On |
| INT VOLUME | Wiper intermittent dial is in a dial position 1 - 7 | 1 - 7 |
| | Any position other than front wiper stop position | Off |
| FR WIPER STOP | Front wiper stop position | On |
| | Rear wiper switch OFF | Off |
| RR WIPER ON | Rear wiper switch ON | On |
| | Rear wiper switch OFF | Off |
| RR WIPER INT | Rear wiper switch INT | On |
| | Rear washer switch OFF | Off |
| RR WASHER SW | Rear washer switch ON | On |
| | Rear wiper stop position | Off |
| RR WIPER STOP | · · · · · · · · · · · · · · · · · · · | 5 |

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| Monitor Item | Condition | Value/Status | | | |
|---|--|--------------|--|--|--|
| RAIN SENSOR | NOTE: The item is indicated, but not monitored. | Off | | | |
| LIAZADD CW | Hazard switch OFF | Off | | | |
| HAZARD SW | Hazard switch ON | On | | | |
| EAN ON SIC | Blower control dial OFF | Off | | | |
| FAN ON SIG | | | | | |
| AIR COND SW | Air conditioner OFF (A/C switch indicator OFF) (Automatic air conditioner) A/C switch OFF (Manual air conditioner) | Off | | | |
| AIR COIND SW | Air conditioner ON (A/C switch indicator ON) (Automatic air conditioner) A/C switch ON (Manual air conditioner) | On | | | |
| THERMO AMP | Ignition switch ON | Off | | | |
| NOTE: At models with automatic air conditioner this item is not monitored. | Evaporator is extremely low temperature | On | | | |
| ED DEE OW | Other than A/C mode defroster ON position | Off | | | |
| FR DEF SW | A/C mode defroster ON position | On | | | |
| KEYLESS TRUNK | NOTE: The item is indicated, but not monitored. | Off | | | |
| TRNK OPNR SW | NOTE: The item is indicated, but not monitored. | Off | | | |
| TRNK OPN MNTR | NOTE: The item is indicated, but not monitored. | Off | | | |
| HOOD SW | Close the hood | Off | | | |
| HOOD SW | Open the hood | On | | | |
| TRANSPONDER | Other than the ignition switch is ON by key registered to BCM. | Off | | | |
| INANSPONDER | The ignition switch is ON by key registered to BCM. | On | | | |
| INTELLI KEY | NOTE: The item is indicated, but not used. | Off | | | |
| AUTO RELOCK | NOTE: The item is indicated, but not monitored. | Off | | | |
| OIL PRESS SW | Ignition switch OFF or ACC Engine running | Off | | | |
| | Ignition switch ON | On | | | |
| DDAKE SW | Brake pedal is not depressed | Off | | | |
| BRAKE SW | Brake pedal is depressed | On | | | |

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



NOTE:

M65, M66: WhiteM67: Black

PHYSICAL VALUES

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| | nal No. | Description | | | | Value |
|-------------|---------|-----------------------------------|------------------|---|--------------------------|---|
| (Wire | color) | Signal name | Input/ Output | | Condition | (Approx.) |
| _ | | | | | All switch OFF | 0 V |
| | | | | | Turn signal switch RH | |
| | | | | | Lighting switch HI | (V) 15 |
| 2 (BR/W) | Ground | Combination switch INPUT 5 | Input | Combination switch (Wiper intermit- | Lighting switch 1ST | 10 5 0 •••10ms 1.0 V |
| | | | | tent dial 4) | Lighting switch 2ND | (V) 15 10 5 0 ++10 ms 1 PPMIA0342JP 2.0 V |
| | | | | | All switch OFF | 0 V |
| | | Ground Combination switch INPUT 4 | Input | Combination switch (Wiper intermit- tent dial 4) | Turn signal switch LH | |
| | | | | | Lighting switch PASS | (V) 15 |
| 3 (GR) | Ground | | | | Lighting switch 2ND | 10 5 0 PKIB4958J |
| | | | | | Front fog lamp switch ON | (V) 15 10 5 0 **10ms PKIB4956J 0.8 V |
| | | | | | All switch OFF | 0 V |
| | | | | | Front wiper switch LO | 40 |
| | | | | Combination | Front wiper switch MIST | (V) 15 |
| 4 | Ground | Combination switch | Input | switch | Front wiper switch INT | 10 5 |
| (L/Y) | | INPUT 3 | | (Wiper intermittent dial 4) | Lighting switch AUTO | 0 +10ms PKIB4958J |
| | | | | | | 1.0 V |

| Terminal No. Description (Wire color) | | | 0.485 | | Value | |
|---------------------------------------|----------|----------------------------|------------------|--------------------|--|---------------------------|
| + (vvire | - color) | Signal name | Input/ Output | | Condition | (Approx.) |
| | | | | | All switch OFF (Wiper intermittent dial 4) | 0 V |
| | | | | | Front washer switch (Wiper intermittent dial 4) | (V) |
| | | | | | Rear washer switch ON (Wiper intermittent dial 4) | (V) 15 10 5 |
| | | | | | Any of the condition below with all switch OFF | + +10ms |
| 5 | Ground | Combination switch | Innut | Combination | Wiper intermittent dial 1Wiper intermittent dial 5 | PKIB4958J |
| (G) | Giouna | INPUT 2 | Input | switch | Wiper intermittent dial 6 | 1.0 V |
| | | | | | Rear wiper switch ON | (V) 15 10 5 |
| | | | | | (Wiper intermittent dial 4) | + |
| | | | | | | PKIB4956J |
| | | | | | All switch OFF (Wiper intermittent dial 4) | 0 V |
| | | | | | Front wiper switch HI (Wiper intermittent dial 4) | (V) 15 |
| | | | | | Rear wiper switch INT (Wiper intermittent dial 4) | 15 10 5 0 |
| | | | | | Wiper intermittent dial 3 (All switch OFF) | + |
| | | | | | | 1.0 V |
| 6 (L/R) | Ground | Combination switch INPUT 1 | Input | Combination switch | Any of the condition below with all switch OFF • Wiper intermittent dial 1 | (V) 15 10 5 0 |
| | | | | | Wiper intermittent dial 2 | + 10ms PKIB4952J |
| | | | | | | 1.9 V |
| | | | | | A | (V) 15 |
| | | | | | Any of the condition below with all switch OFF • Wiper intermittent dial 6 • Wiper intermittent dial 7 | 10 5 0 ++10ms |
| | | | | | | PKIB4956J 0.8 V |

| | nal No. | Description | | | | Value |
|--------------|---------|------------------------------------|------------------|-------------------------------|------------------------------------|---|
| + (vvire | color) | Signal name | Input/ Output | | Condition | (Approx.) |
| 7 (W/R) | Ground | Door key cylinder switch UNLOCK | Input | Door key cylin- der switch | NEUTRAL position | (V) 15 10 5 0 +-10ms PKIB4960J 7.0 - 8.0 V |
| | | | | | UNLOCK position | 0 V |
| 8 | Ground | Door key cylinder | Door key cylin- | | NEUTRAL position | 12 V |
| (W/B) | Ground | switch LOCK | Input | der switch | LOCK position | 0 V |
| 9 | Cround | Stan Jamp quitab | lanut | Stop lamp | OFF (Brake pedal is not depressed) | 0 V |
| (R) | Ground | Stop lamp switch | Input | switch | ON (Brake pedal is depressed) | Battery voltage |
| 10 | Cround | Rear window defog- | laavit | Rear window | OFF (Not pressed) | 12 V |
| (W/L) | Ground | ger switch | Input | defogger switch | ON (Pressed) | 0 V |
| 11 | Ground | Ignition switch ACC | Input | Ignition switch O | FF | 0 V |
| (L/Y) | Ground | Ignition switch ACC | Input | Ignition switch A | CC or ON | Battery voltage |
| 12 (SB) | Ground | Passenger door switch | Input | Passenger door switch | OFF (When passenger door closed) | (V) 15 10 5 0 ***+10ms PKIB4960J 7.0 - 8.0 V |
| | | | | | ON (When passenger door opened) | 0 V |
| 13 (GR/L) | Ground | Rear RH door switch | Input | Rear RH door switch | OFF (When rear RH door closed) | (V) 15 10 5 0 +-10ms PKIB4960J 7.0 - 8.0 V |
| | | | | | ON (When rear RH door opened) | 0 V |
| 14 (L/B) | Ground | Optical sensor | Input | Ignition switch | When bright outside of the vehicle | Close to 5 V |
| (ப/ப) | | | | | When dark outside of the vehicle | Close to 0 V |

| | nal No. | Description | | | - "" | Value | | | | |
|---|---------|------------------------------------|------------------------|--|---|---|--|--|------------------|-------|
| + | color) | Signal name | Input/ Output | | Condition | (Approx.) | | | | |
| 15 (V/W) | Ground | Tire pressure warning check switch | Input | Ignition switch OFF | | (V) 15 10 5 0 10 ms 1.0 - 1.5 V | | | | |
| 17 | Ground | Optical sensor pow- | Output | Ignition switch | OFF, ACC | 0 V | | | | |
| (R/G) | Giodila | er supply | Output | ignition switch | ON | 5 V | | | | |
| 18 (V) | Ground | Receiver and sensor ground | Input | Ignition switch C | DN | 0 V | | | | |
| . , | | | | Insert mechanical key into ignition key cylinder | 0 V | | | | | |
| | | | | | | | | Remove mechanical key from ignition key cylinder (Any door opened) | 5 V | |
| 19 (BR) | | Input | Ignition switch OFF | Remove mechanical key from ignition key cylinder (Any door closed) | (V) 6 4 2 0 ++0.2 s | | | | | |
| | | | | | Insert mechanical key into ignition key cylinder | 0 V | | | | |
| 20 (G/Y) Ground Remote keyless entry receiver communication | | Ignition switch OFF | Waiting | (V) 6 4 2 0 **1.0ms | | | | | | |
| | | Jauon | | | (V) 6 | | | | | |
| | | | | | | | | Sig | Signal receiving | 1.0ms |
| 21 (P/L) | Ground | Immobilizer anten- na (Clock) | Input/ Output | During waiting | Ignition switch is pressed while inserting the key into the key slot. | Just after pressing ignition switch. Pointer of tester should move. | | | | |

| | nal No. | Description | | | | Volue | |
|---------------------------|---------|--|------------------|--------------------|---|---|--|
| (Wire | color) | Signal name | Input/ Output | | Condition | Value (Approx.) | |
| | | | | | ON | 0 V | |
| 23 (R/Y) | Ground | Security indicator | Input | Security indicator | Blinking (Ignition switch OFF) | (V) 15 10 5 0 11.3 V | |
| | | | | | OFF | 12 V | |
| 24 (GR/R) | Ground | Dongle link | Input/ Output | Ignition switch O | FF | 5 V | |
| 25 (LG) | Ground | Immobilizer anten- na (Rx, Tx) | Input/ Output | During waiting | Ignition switch is pressed while inserting the key into the key slot. | Just after pressing ignition switch. Pointer of tester should move. | |
| 26* ¹ | Ground | Thermo control amp. | Input | Ignition switch O | N | 0 V | |
| (GR) | Ground | rnermo control amp. | Input | Evaporator is ex | tremely low temperature | 12 V | |
| | | A/C switch (Automatic air conditioner) | | A/C | OFF (A/C switch indicator: OFF) | (V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V | |
| 27 (Y/G)* ² | Ground | | Input | | ON (A/C switch indicator: ON) | 0 V | |
| (Y/R)* ³ | | A/C switch (Manual c air conditioner) | | A/C switch | OFF | (V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V | |
| | | | | | ON | 0 V | |

| Terminal No. Description (Wire color) | | | | | Value | | | | | | |
|---------------------------------------|-----------------------------|---|--------------------|--|---|--|-------|-------|-----------------------|--|--|
| + (vvire | e color) | Signal name | Input/ Output | | Condition | (Approx.) | | | | | |
| 28 | | Blower fan switch (Automatic air condi- tioner) | | Fan switch | Blower fan switch OFF Blower fan switch ON | 0 V (V) 15 10 5 0 → 10ms PKIB4960J 7.0 - 8.0 V | | | | | |
| (G/W) | Ground | Blower fan switch (Manual air condi- tioner) | Input | Fan switch | Blower fan switch OFF | (V) 15 10 5 0 ** 10ms PKIB4960J 7.0 - 8.0 V | | | | | |
| | | | | | Blower fan switch ON | 0 V | | | | | |
| 29 (L/W) | Ground | Hazard switch | Input | Hazard switch | OFF ON | Battery voltage 0 V | | | | | |
| (, | | | | | A/C mode defroster ON position | 0 V | | | | | |
| 31 (G/Y) | Ground | Front defroster switch | Input | | Input | Input | Input | Input | Ignition switch ON | Other than A/C mode de- froster ON position | (V) ₁₅ 10 5 0 → 2ms JPMIA0589GB 8.0 - 9.0 V |
| | | | | | All switch OFF (Wiper intermittent dial 4) | (V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V | | | | | |
| 32 (LG) Ground | Combination switch OUTPUT 5 | Output | Combination switch | Front fog lamp switch ON (Wiper intermittent dial 4) Rear wiper switch ON | (V) | | | | | | |
| | | | | | (Wiper intermittent dial 4) Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7 | 10 5 0 •••10ms PKIB4956J 1.0 V | | | | | |

| | nal No. | Description | | | | Value |
|-------------|----------|-----------------------------|------------------|--------------------|---|---|
| + (Wire | e color) | Signal name | Input/ Output | | Condition | (Approx.) |
| | | | | | All switch OFF (Wiper intermittent dial 4) | (V) 15 10 5 0 PKIB4960J 7.0 - 8.0 V |
| 33 (Y/L) | Ground | Combination switch OUTPUT 4 | Output | Combination switch | Lighting switch 1ST (Wiper intermittent dial 4) | |
| | | | | | Lighting switch AUTO (Wiper intermittent dial 4) | (V) 15 10 |
| | | | | | Rear wiper switch INT (Wiper intermittent dial 4) | 5 |
| | | | | | Any of the condition below with all switch OFF Wiper intermittent dial 1 Wiper intermittent dial 5 Wiper intermittent dial 6 | РКIВ4958J 1.2 V |
| | | | | | All switch OFF (Wiper intermittent dial 4) | (V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V |
| 34 (W) | Ground | Combination switch OUTPUT 3 | Output | Combination switch | Lighting switch 2ND (Wiper intermittent dial 4) | |
| | | | | | Lighting switch HI (Wiper intermittent dial 4) | (V) 15 10 |
| | | | | | Rear washer switch ON (Wiper intermittent dial 4) | 5 |
| | | | | | Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 | PKIB4958J |

< ECU DIAGNOSIS INFORMATION >

| Terminal No. Description (Wire color) | | | | Value | | |
|---------------------------------------|--------|-----------------------------|------------------|---|--|---|
| + | - | Signal name | Input/ Output | | Condition | (Approx.) |
| | | | | Combination | All switch OFF | (V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V |
| 35 (R/L) | Ground | Combination switch OUTPUT 2 | Output | switch (Wiper intermit- tent dial 4) | Lighting switch 2ND Lighting switch PASS Front wiper switch INT | (V) 15 10 5 |
| | | | | | Front wiper switch HI | → +10ms PKIB4958J |
| 36 | Ground | Combination switch | Output | Combination switch (Wiper intermittent dial 4) | All switch OFF | (V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V |
| (L/O) | Clound | OUTPUT 1 | Culput | | Turn signal switch RH Turn signal switch LH Front wiper switch LO (Front wiper switch MIST) Front washer switch ON | (V) 15 10 5 0 ++10ms PKIB4958J 1.2 V |
| 37 (R/W) | Ground | Key switch | Input | Insert mechanical key into ignition key cylinder Remove mechanical key from ignition key | | Battery voltage |
| 38 (O) | Ground | Ignition switch ON | Input | cylinder Ignition switch OFF or ACC Ignition switch ON | | 0 V Battery voltage |
| 39 (L) | Ground | CAN-H | Input/ Output | _ | | _ |
| 40 (P) | Ground | CAN-L | Input/ Output | | _ | _ |

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| | nal No. | Description | | | 0 100 | Value |
|--------------|---------|---------------------------------------|------------------|-----------------------------|--|--|
| + (vvire | color) | Signal name | Input/ Output | | Condition | (Approx.) |
| 43 (W) | Ground | Back door switch | Input | Back door switch | OFF (When back door closed) | (V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V |
| | | | | | ON (When back door opened) | 0 V |
| 44 | | Rear wiper stop po- | | Ignition switch | Rear wiper stop position | 12 V |
| (LG) | Ground | sition | Input | ON SWITCH | Any position other than rear wiper stop position | 0 V |
| 45 (GR) | Ground | Door lock and unlock switch LOCK | Input | Door lock and unlock switch | NEUTRAL position | (V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V |
| | | | | | LOCK position | 0 V |
| 46 (BR) | Ground | Door lock and unlock switch UNLOCK | Input | Door lock and unlock switch | NEUTRAL position | (V) 15 10 5 0 10 ms JPMIA0012GB 1.0 - 1.5 V |
| | | | | | UNLOCK position | 0 V |
| 47 (BR/Y) | Ground | Driver door switch | Input | Driver door switch | OFF (When driver door closed) | (V) 15 10 5 0 + 10ms PKIB4960J 7.0 - 8.0 V |
| | | | | | ON (When driver door opened) | 0 V |

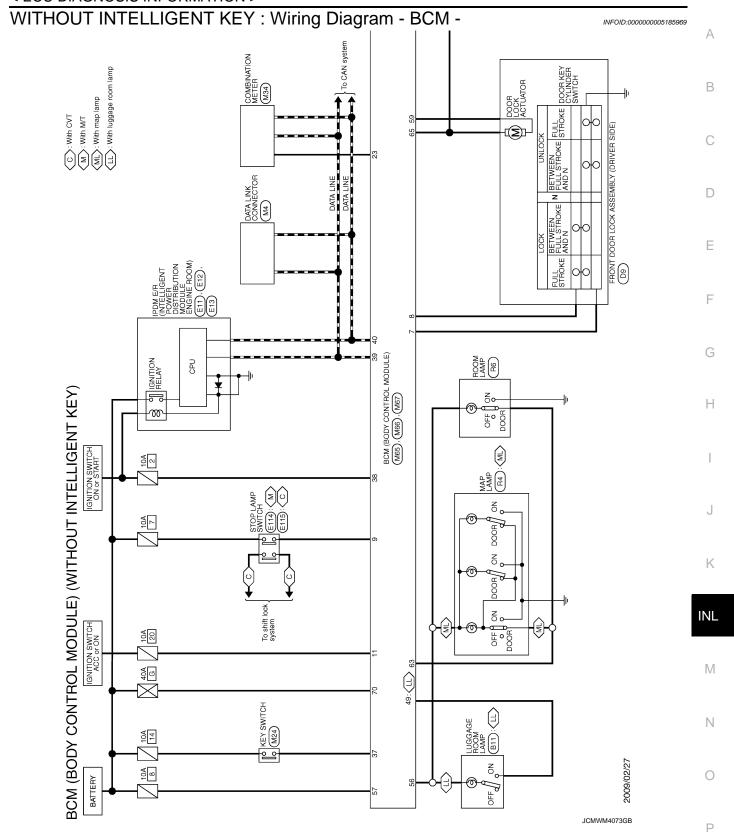
| | nal No. | Description | | | _ | Value | |
|------------------|---------|---------------------------------|------------------|--|--|--|--|
| (Wire | color) | Signal name | Input/ Output | | Condition | (Approx.) | |
| 48 (W/G) | Ground | Rear LH door switch | Input | Rear LH door switch | OFF (When rear LH door closed) | (V) 15 10 5 0 ** 10ms PKIB4960J 7.0 - 8.0 V | |
| | | | | | ON (When rear LH door opened) | 0 V | |
| 49 | | | | Luggage room | Back door is closed (Back door lamp turns OFF) | 12 V | |
| (Y) | Ground | Luggage room lamp | Output | lamp switch DOOR position | Back door is opened (Back door lamp turns ON) | 0 V | |
| 50* ¹ | Ground | A/C indicator | Output | A/C indicator | OFF | 12 V | |
| (SB) | Ciodila | , , o maioatoi | Juipui | , v o maioator | ON | 0 V | |
| 54 | Ground | Rear wiper | Output | Ignition switch | Rear wiper switch OFF | 0 V | |
| (L/W) | Orodina | rtoar mpor | Catpat | ON Rear wiper switch ON | | 12 V | |
| | | | | | np battery saver is activated. r room lamp power supply) | 0 V | |
| 56 (L) | Ground | Interior room lamp power supply | Output | Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply) | | 12 V | |
| 57 (Y) | Ground | Battery power sup- ply | Input | Ignition switch O | FF | Battery voltage | |
| 59 | Ground | Driver door UN- | Output | Driver door | UNLOCK (Actuator is activated) | 12 V | |
| (L/B) | Giodila | LOCK | Output | Driver door | Other then UNLOCK (Actuator is not activated) | 0 V | |
| | | | | | Turn signal switch OFF | 0 V | |
| 60 (W/B) | Ground | Turn signal LH | Output | Ignition switch ON | Turn signal switch LH | (V) 15 10 5 0 1s PKIC6370E 6.0 V | |
| | | | | | Turn signal switch OFF | 0 V | |
| 61 (W/L) | Ground | Turn signal RH | Output | Ignition switch ON | Turn signal switch RH | (V) 15 10 5 0 1s PKIC6370E 6.0 V | |

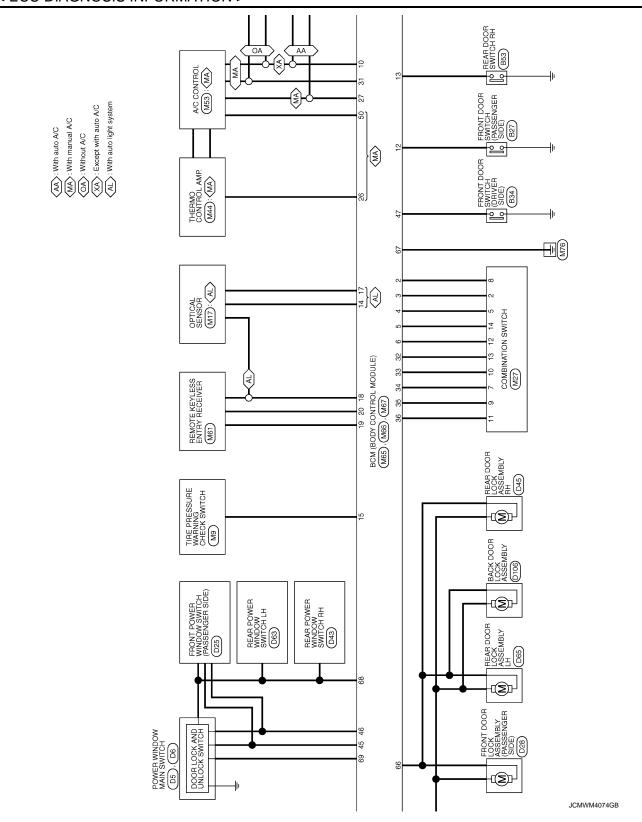
| | nal No. | Description | | Condition | | Value |
|-------------|---------|---------------------------|------------------|---------------------|---|-----------------|
| + (Wire | color) | Signal name | Input/ Output | | | (Approx.) |
| 63 | Ground | Interior room lamp | Output | Interior room | OFF | 12 V |
| (BR) | Giodila | timer control | Output | lamp | ON | 0 V |
| 65 | Ground | All doors LOCK | Output | All doors | LOCK (Actuator is activated) | 12 V |
| (V) | Ground | All doors LOCK | Output | ut All doors | Other then LOCK (Actuator is not activated) | 0 V |
| 66 | Ground | Passenger door and | Output | Passenger door | UNLOCK (Actuator is activated) | 12 V |
| (G) | Ground | rear door UNLOCK | Output | and rear door | Other then UNLOCK (Actuator is not activated) | 0 V |
| 67 (B) | Ground | Ground | Output | Ignition switch ON | | 0 V |
| 68 (L) | Ground | P/W power supply (IGN) | Output | Ignition switch ON | | 12 V |
| 69 (L/W) | Ground | P/W power supply (BAT) | Output | Ignition switch OFF | | 12 V |
| 70 (Y) | Ground | Battery power sup- ply | Input | Ignition switch O | FF | Battery voltage |

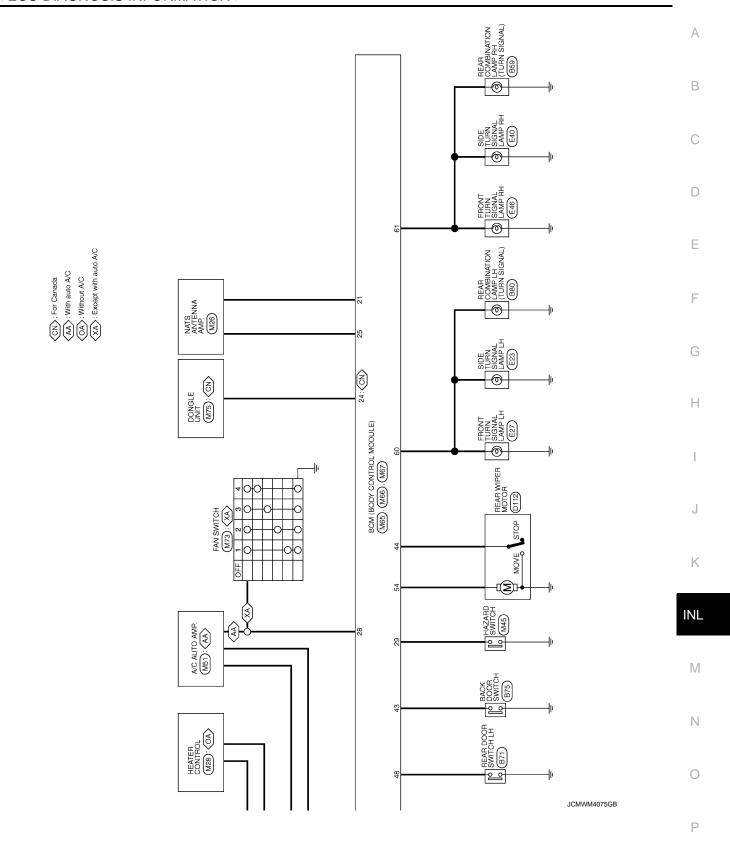
^{• *1:} Only manual air conditioner

^{• *2:} Automatic air conditioner

^{• *3:} Manual air conditioner







| BCM (BODY CONTROL MODULE) | (WITHOUT INTELLIGENT KEY) | | | |
|---|---|---------|--|------------|
| Connector No. M27 | Connector No. M65 | 13 GR/L | REAR RH DOOR SW | 40 P CAN-L |
| Connector Name COMBINATION SWITCH | Connector Name (WITHOUT INTELLIGENT KEY) | 14 L/B | OPTICAL SENSOR TIRE PRESS WARNING CHECK SW | |
| Connector Type TH16FW-NH | Connector Type TH40FW-NH | ╁ | OPTICAL SENSOR POWER SUPPLY | |
| d) | Į | Н | RECEIVER/SENSOR GND | |
| Auto | AHA | + | KEYLESS ENTRY RECEIVER POWER SUPPLY | |
| | HS. | 20 G/Y | NETLESS ENTRY RECEIVER COMM | |
| 123 456 | 17 | + | SECURITY INDICATOR LAMP | |
| 7 8 9 10 11 12 13 14 | 21 23 24 25 26 27 28 29 31 32 33 34 35 36 37 38 39 40 | 24 GR/R | DONGLE LINK | |
| 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2: 2 | | 25 LG | NATS ANTENNA AMP. | |
| | | 26 GR | THERMO CONTROL AMP. | |
| lar | leu | 27 Y/G | A/C SW[With auto A/C] | |
| No. of Wire | No. of Wire | 27 Y/R | A/C SW[With manual A/C] | |
| 2 GR INPUT 4 | 2 BR/W COMBI SW INPUT 5 | 28 G/W | BLOWER FAN SW | |
| 5 L/Y INPUT3 | 3 GR COMBI SW INPUT 4 | 29 L/W | HAZARD SW | |
| 0 | 4 L/Y COMBI SW INPUT 3 | 31 G/Y | FR DEFROSTER SW | |
| 8 BR/W INPUT 5 | 5 G COMBI SW INPUT 2 | 32 LG | COMBI SW OUTPUT 5 | |
| 9 R/L OUTPUT 2 | 6 L/R COMBI SW INPUT 1 | 33 Y/L | COMBI SW OUTPUT 4 | |
| 10 Y/L 0UTPUT 4 | 7 W/R KEY CYL UNLOCK SW | 34 W | COMBI SW OUTPUT 3 | |
| 11 L/0 0UTPUT 1 | 8 W/B KEY CYL LOCK SW | 35 R/L | COMBI SW OUTPUT 2 | |
| L/R | 9 R STOP LAMP SW | 36 L/O | COMBI SW OUTPUT 1 | |
| 13 LG 0UTPUT 5 | 10 W/L REAR WINDOW DEFOGGER SW | 37 R/W | KEY SWITCH | |
| 14 G INPUT 2 | 11 L/Y AGC | 38 0 | IGN | |
| | 12 SB PASSENGER DOOR SW | 39 L | CAN-H | |
| | | | | |
| ſ | ſ | ŀ | | |
| Connector No. M66 | Connector No. M67 | 70 Y | BAT (F/L) | |
| Connector Name (WITHOLIT INTELLIGENT KEY) | Connector Name (WITHOLIT INTELLIGENT KEY) | | | |
| Connector Type FFA09FW-FHA6-SA | Connector Tyme FFA09FB-FHA6-SA | | | |
| ٦. | odf: moon | | | |
| 4 | 4 | | | |
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| 50 54 | 65 66 67 68 69 70 | | | |
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| of Wire | of Wire | | | |
| м | L INTERIOR RO | | | |
| LG | > | | | |
| æ | L/B DR | | | |
| BR CENT | M/B | | | |
| BR/Y | W/L | | | |
| 9/M | # : | | | |
| + | + | | | |
| 50 SB A/C INDICATOR OUTPUT | 5 0 | | | |
| w | n . | | | |
| | 69 L/W POWER WINDOW POWER SUPPLY(BAT) | | | |

WITHOUT INTELLIGENT KEY: Fail-safe

FAIL-SAFE CONTROL BY DTC

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

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JCMWM4076GB

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< ECU DIAGNOSIS INFORMATION >

| Display contents of CONSULT | Fail-safe | Cancellation | _ |
|-----------------------------|-------------------------|--------------------------------------|---|
| B2190: NATS ANTENNA AMP | Inhibit engine cranking | Erase DTC | _ |
| B2191: DIFFERENCE OF KEY | Inhibit engine cranking | Erase DTC | |
| B2192: ID DISCORD BCM-ECM | Inhibit engine cranking | Erase DTC | |
| B2193: CHAIN OF BCM-ECM | Inhibit engine cranking | Erase DTC | |
| B2195: ANTI SCANNING | Inhibit engine cranking | Ignition switch $ON \rightarrow OFF$ | |
| B2196: DONGLE NG | Inhibit engine cranking | Erase DTC | |

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper auto stop signal.

When the rear wiper auto stop signal does not change more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

- 1. Pass more than 1 minute after the rear wiper stop.
- Turn rear wiper switch OFF.
- 3. Operate the rear wiper switch or rear washer switch.

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

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

WITHOUT INTELLIGENT KEY: DTC Inspection Priority Chart

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

| Priority | DTC | |
|----------|---|---|
| 1 | U1000: CAN COMM U1010: CONTROL UNIT (CAN) | |
| 2 | B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING B2196: DONGLE NG | I |

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< ECU DIAGNOSIS INFORMATION >

| Priority | DTC |
|----------|--|
| 3 | C1735: IGN CIRCUIT OPEN |
| 4 | C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RR C1712: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RR C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1717: [PRESSDATA ERR] FR C1719: [PRESSDATA ERR] RR C1720: [CODE ERR] FR C1721: [CODE ERR] FR C1722: [CODE ERR] RR C1723: [CODE ERR] RR C1724: [BATT VOLT LOW] FL C1725: [BATT VOLT LOW] FR C1727: [BATT VOLT LOW] RR C1727: [VICL SPEED SIG ERR C1729: VHCL SPEED SIG ERR C1734: CONTROL UNIT |

WITHOUT INTELLIGENT KEY: DTC Index

INFOID:0000000005185972

NOTE:

Details of time display

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- 1 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1
 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter
 remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch
 OFF → ON after returning to the normal condition if the malfunction is detected again.

| CONSULT display | Fail-safe | Tire pressure monitor warn- ing lamp ON | Reference |
|---------------------------|-----------|---|----------------|
| U1000: CAN COMM | _ | _ | BCS-116 |
| U1010: CONTROL UNIT (CAN) | _ | _ | BCS-117 |
| B2190: NATS ANTENNA AMP | × | _ | <u>SEC-217</u> |
| B2191: DIFFERENCE OF KEY | × | _ | <u>SEC-220</u> |
| B2192: ID DISCORD BCM-ECM | × | _ | <u>SEC-221</u> |
| B2193: CHAIN OF BCM-ECM | × | _ | <u>SEC-223</u> |
| B2195: ANTI SCANNING | × | _ | <u>SEC-224</u> |
| B2196: DONGLE NG | × | _ | <u>SEC-225</u> |
| C1704: LOW PRESSURE FL | _ | × | |
| C1705: LOW PRESSURE FR | _ | × | M/T 4C |
| C1706: LOW PRESSURE RR | _ | × | <u>WT-16</u> |
| C1707: LOW PRESSURE RL | _ | × | |

< ECU DIAGNOSIS INFORMATION >

| CONSULT display | Fail-safe | Tire pressure monitor warn- ing lamp ON | Reference |
|----------------------------|-----------|---|----------------|
| C1708: [NO DATA] FL | _ | × | |
| C1709: [NO DATA] FR | _ | × | WT 40 |
| C1710: [NO DATA] RR | _ | × | <u>WT-18</u> |
| C1711: [NO DATA] RL | _ | × | |
| C1712: [CHECKSUM ERR] FL | _ | × | |
| C1713: [CHECKSUM ERR] FR | _ | × | WT 04 |
| C1714: [CHECKSUM ERR] RR | _ | × | <u>WT-21</u> |
| C1715: [CHECKSUM ERR] RL | _ | × | |
| C1716: [PRESS DATA ERR] FL | _ | × | |
| C1717: [PRESS DATA ERR] FR | _ | × | WT 24 |
| C1718: [PRESS DATA ERR] RR | _ | × | <u>WT-24</u> |
| C1719: [PRESS DATA ERR] RL | _ | × | |
| C1720: [CODE ERR] FL | _ | × | |
| C1721: [CODE ERR] FR | _ | × | WT 26 |
| C1722: [CODE ERR] RR | _ | × | <u>WT-26</u> |
| C1723: [CODE ERR] RL | _ | × | |
| C1724: [BATT VOLT LOW] FL | _ | × | |
| C1725: [BATT VOLT LOW] FR | _ | × | WT-29 |
| C1726: [BATT VOLT LOW] RR | _ | × | <u>vv 1-29</u> |
| C1727: [BATT VOLT LOW] RL | _ | × | |
| C1729: VHCL SPEED SIG ERR | _ | × | <u>WT-32</u> |
| C1734: CONTROL UNIT | _ | × | <u>WT-34</u> |
| C1735: IGN CIRCUIT OPEN | _ | _ | BCS-118 |

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INTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

CAUTION:

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

| Symptom | Possible cause | Inspection item |
|--|---|--|
| All the following lamps do not turn ON. Map lamp Room lamp Luggage room lamp | Harness between BCM and each interior room lamp BCM | Interior room lamp power supply circuit Refer to INL-23. |
| Interior room lamp does not turn ON even though the door is open. | Harness between BCM and each door switch | Door switch circuit Refer to DLK-55. |
| (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 interior room lamp BCM | Interior room lamp control circuit Refer to INL-25. |
| 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-14. |
| Push-button ignition switch illumination does not illuminate. | Harness between BCM and push- button ignition switch Harness between push-button igni- tion switch and ground Push-button ignition switch BCM | Push-button ignition switch illumination circuit Refer to INL-27. |
| Interior room lamp battery saver does not activate. | _ | Check the interior room lamp battery saver setting. Refer to INL-15. |

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

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

WARNING:

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

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

WARNING:

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

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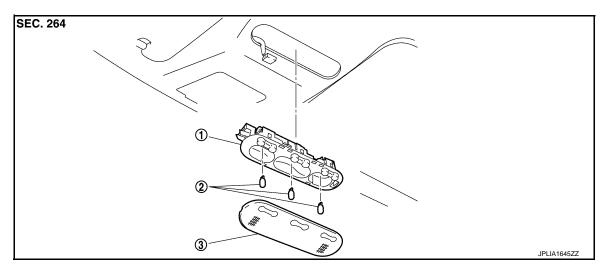
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REMOVAL AND INSTALLATION

MAP LAMP

Exploded View



1. Map lamp bulb housing

2. Bulb

3. Lens

Removal and Installation

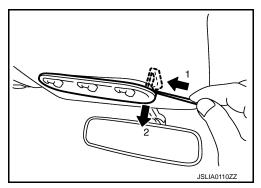
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CAUTION:

Disconnect the battery negative terminal or the fuse.

REMOVAL

 Insert any appropriate tool into the gap between the map lamp bulb housing to the headlining. And press the pawl and then pull the map lamp.



Disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

Replacement INFOID:000000004992137

CAUTION:

- Disconnect the battery negative terminal or 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

MAP LAMP

< REMOVAL AND INSTALLATION >

- 1. Remove the map lamp.
- 2. Remove the lens.
- 3. Remove the bulb.

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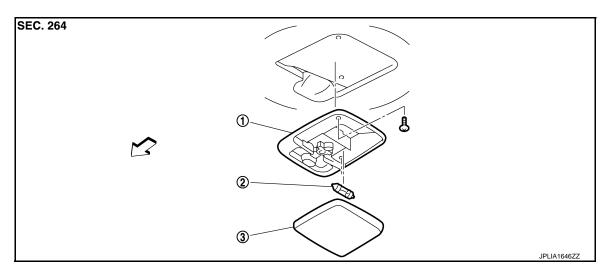
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ROOM LAMP

Exploded View



1. Room lamp bulb housing

2. Bulb

Lens

Removal and Installation

INFOID:0000000004992141

CAUTION:

Disconnect the battery negative terminal or the fuse.

REMOVAL

- 1. Insert any appropriate tool into the gap between the lens. And then remove the lens.
- 2. Remove room lamp housing mounting screw. And then remove the room lamp bulb housing.
- Disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

Replacement

CAUTION:

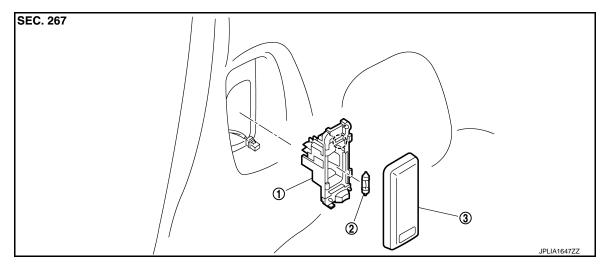
- Disconnect the battery negative terminal or the fuse.
- Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.
- Never touch bulb by hand while it is lit or right after being turned off.
- Never leave bulb out of lamp reflector for a long time because dust,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

ROOM LAMP BULB

- 1. Insert any appropriate tool into the gap between the lens. And then remove the lens.
- 2. Remove the bulb.

LUGGAGE ROOM LAMP

Exploded View



Luggage room lamp housing

2. Bulb

3. lens

() :Pawl

Removal and Installation

CAUTION:

Disconnect the battery negative terminal or the fuse.

REMOVAL

- 1. Insert any appropriate tool into the gap between the lens. Remove the lens.
- 2. Push the pawl and then remove the luggage room lamp.
- 3. Disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

Replacement INFOID:0000000004992148

CAUTION:

- Disconnect the battery negative terminal or 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.
- 2. Remove the lens.
- 3. Remove the bulb.

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Revision: 2009 March INL-101 2009 Z12

SERVICE DATA AND SPECIFICATIONS (SDS)

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SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

| Item | Туре | Wattage (W) |
|---|------|-------------|
| Map lamp | W5W | 5 |
| Room lamp | _ | 10 |
| Luggage room lamp | _ | 5 |
| Push-button ignition switch illumination* | LED | _ |

INFOID:0000000004992152

^{*:}Only with Intelligent Key