

SECTION **BCS**

BODY CONTROL SYSTEM

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

CONTENTS

| | | |
|---|---|----|
| BASIC INSPECTION | DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK) | 17 |
| INSPECTION AND ADJUSTMENT | REAR WINDOW DEFOGGER | 19 |
| ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT | REAR WINDOW DEFOGGER : CONSULT-III Function (BCM - REAR DEFOGGER) | 19 |
| ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description | BUZZER | 19 |
| ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement | BUZZER : CONSULT-III Function (BCM - BUZZER) | 19 |
| TRANSIT MODE CANCEL OPERATION | INT LAMP | 20 |
| Description | INT LAMP : CONSULT-III Function (BCM - INT LAMP) | 20 |
| Work Procedure | HEADLAMP | 21 |
| SYSTEM DESCRIPTION | HEADLAMP : CONSULT-III Function (BCM - HEAD LAMP) | 22 |
| BODY CONTROL SYSTEM | WIPER | 23 |
| System Description | WIPER : CONSULT-III Function (BCM - WIPER)..... | 23 |
| Component Parts Location | FLASHER | 24 |
| COMBINATION SWITCH READING SYSTEM | FLASHER : CONSULT-III Function (BCM - FLASHER) | 24 |
| | INTELLIGENT KEY | 25 |
| System Diagram | INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY) | 25 |
| System Description | COMB SW | 28 |
| SIGNAL BUFFER SYSTEM | COMB SW : CONSULT-III Function (BCM - COMB SW) | 28 |
| System Diagram | BCM | 29 |
| System Description | BCM : CONSULT-III Function (BCM - BCM) | 29 |
| POWER CONSUMPTION CONTROL SYSTEM | IMMU | 29 |
| System Diagram | IMMU : CONSULT-III Function (BCM - IMMU) | 29 |
| System Description | BATTERY SAVER | 30 |
| Component Parts Location | BATTERY SAVER : CONSULT-III Function (BCM - BATTERY SAVER) | 30 |
| DIAGNOSIS SYSTEM (BCM) | | |
| COMMON ITEM | | |
| COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM) | | 16 |
| DOOR LOCK | | 17 |

BCS

| | | | |
|---|----|---|----|
| TRUNK | 31 | COMBINATION SWITCH INPUT CIRCUIT | 40 |
| TRUNK : CONSULT-III Function (BCM - TRUNK) .. | 31 | Diagnosis Procedure | 40 |
| THEFT ALM | 31 | COMBINATION SWITCH OUTPUT CIRCUIT ... | 42 |
| THEFT ALM : CONSULT-III Function (BCM - | | Diagnosis Procedure | 42 |
| THEFT) | 32 | ECU DIAGNOSIS INFORMATION | 44 |
| RETAIND PWR | 32 | BCM (BODY CONTROL MODULE) | 44 |
| RETAIND PWR : CONSULT-III Function (BCM - | | Reference Value | 44 |
| RETAINED PWR) | 32 | Wiring Diagram - BCM - | 67 |
| SIGNAL BUFFER | 33 | Fail-safe | 72 |
| SIGNAL BUFFER : CONSULT-III Function (BCM | | DTC Inspection Priority Chart | 74 |
| - SIGNAL BUFFER) | 33 | DTC Index | 75 |
| AIR PRESSURE MONITOR | 33 | SYMPTOM DIAGNOSIS | 78 |
| AIR PRESSURE MONITOR : CONSULT-III Func- | | COMBINATION SWITCH SYSTEM SYMP- | |
| tion | 33 | TOMS | 78 |
| DTC/CIRCUIT DIAGNOSIS | 35 | Symptom Table | 78 |
| U1000 CAN COMM | 35 | NORMAL OPERATING CONDITION | 79 |
| Description | 35 | Description | 79 |
| DTC Logic | 35 | PRECAUTION | 80 |
| Diagnosis Procedure | 35 | PRECAUTIONS | 80 |
| U1010 CONTROL UNIT (CAN) | 36 | Precaution for Supplemental Restraint System | |
| DTC Logic | 36 | (SRS) "AIR BAG" and "SEAT BELT PRE-TEN- | |
| Diagnosis Procedure | 36 | SIONER" | 80 |
| U0415 VEHICLE SPEED | 37 | Precaution for Battery Service | 80 |
| Description | 37 | REMOVAL AND INSTALLATION | 81 |
| DTC Logic | 37 | BCM (BODY CONTROL MODULE) | 81 |
| Diagnosis Procedure | 37 | Exploded View | 81 |
| B2562 LOW VOLTAGE | 38 | Removal and Installation | 81 |
| DTC Logic | 38 | COMBINATION SWITCH | 82 |
| Diagnosis Procedure | 38 | Exploded View | 82 |
| POWER SUPPLY AND GROUND CIRCUIT | 39 | Removal and Installation | 82 |
| Diagnosis Procedure | 39 | | |

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

BASIC INSPECTION

INSPECTION AND ADJUSTMENT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Description

INFOID:000000006473456

Perform the system initialization when replacing BCM, replacing Intelligent Key or registering an additional Intelligent Key.

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT : Special Repair Requirement

INFOID:000000006473457

Refer to the CONSULT-III operation manual for the initialization procedure.

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

BCS

TRANSIT MODE CANCEL OPERATION

< BASIC INSPECTION >

TRANSIT MODE CANCEL OPERATION

Description

INFOID:000000008165549

- BCM is in transit mode if turn signal indicator on combination meter turns ON for 1 minute when ignition switch is turned from OFF to ON.
- In this case, cancel operation must be performed.

NOTE:

Do not cancel transit mode during storage of the vehicle. Always cancel transit mode before delivery of the vehicle to customer.

Work Procedure

INFOID:000000008165550

1. TRANSIT MODE CANCEL OPERATION

1. Turn ignition switch OFF.
2. Turn and hold front wiper switch to HI, and then operate turn signal switch to RH or LH.

>> GO TO 2.

2. TRANSIT MODE CANCEL CHECK

1. Turn front wiper switch and turn signal switch OFF.
2. Turn ignition switch ON.
3. Check that turn signal indicator on combination meter does not turn ON.

>> WORK END

BODY CONTROL SYSTEM

< SYSTEM DESCRIPTION >

SYSTEM DESCRIPTION

BODY CONTROL SYSTEM

System Description

INFOID:000000006473458

OUTLINE

- BCM (Body Control Module) controls the various electrical components. It inputs the information required to the control from CAN communication and the signal received from each switch and sensor.
- BCM has combination switch reading function for reading the operation status of combination switches (light, turn signal, wiper and washer) in addition to a function for controlling the operation of various electrical components. It also has the signal transmission function as the passed point of signal and the power saving control function that reduces the power consumption with the ignition switch OFF.
- BCM is equipped with the diagnosis function that performs the diagnosis with CONSULT-III and various settings.

BCM CONTROL FUNCTION LIST

| System | Reference page |
|---|--|
| Combination switch reading system | BCS-7, "System Diagram" |
| Signal buffer system | BCS-11, "System Diagram" |
| Power consumption control system | BCS-13, "System Diagram" |
| Auto light system | EXL-10, "System Diagram" |
| Turn signal and hazard warning lamp system | EXL-19, "System Diagram" |
| Headlamp system | EXL-6, "System Diagram" |
| Parking, license plate and tail lamps system | EXL-21, "System Diagram" |
| Front fog lamp system | EXL-16, "System Diagram" |
| Exterior lamp battery saver system | EXL-23, "System Diagram" |
| Daytime running light system | EXL-13, "System Diagram" |
| Interior room lamp control system | INL-5, "System Diagram" |
| Step lamp system | |
| Trunk room lamp system | |
| Interior room lamp battery saver system | INL-8, "System Diagram" |
| Front wiper and washer system | <ul style="list-style-type: none"> • WW-5, "WITH RAIN SENSOR : System Diagram" (With rain sensor) • WW-9, "WITHOUT RAIN SENSOR : System Diagram" (Without rain sensor) |
| Warning chime system | WCS-5, "WARNING CHIME SYSTEM : System Diagram" |
| Door lock system | DLK-11, "System Diagram" |
| Trunk open system | DLK-43, "System Diagram" |
| Infiniti Vehicle Immobilizer System (IVIS) - NATS | SEC-16, "System Diagram" |
| Vehicle security system | SEC-20, "System Diagram" |
| Panic alarm | SEC-20, "System Description" |
| Automatic drive positioner system | ADP-13, "AUTOMATIC DRIVE POSITIONER SYSTEM : System Diagram" |
| Rear window defogger system | DEF-4, "System Diagram" |

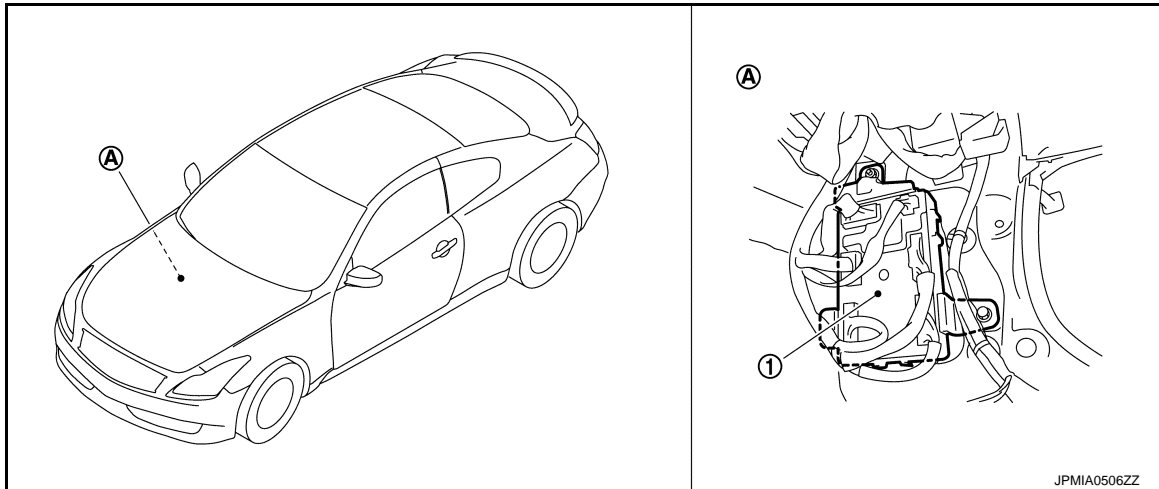
BODY CONTROL SYSTEM

< SYSTEM DESCRIPTION >

| System | | Reference page |
|--|-------------------------------|---|
| Intelligent Key system/engine start system | Door lock function | DLK-15. "INTELLIGENT KEY SYSTEM : System Diagram" |
| | Trunk open function | |
| | Remote keyless entry function | |
| | Key reminder function | |
| | Warning function | |
| | Engine start function | |
| Power window system | | PWC-7. "System Diagram" |
| Retractable hard top system | | RF-19. "RETRACTABLE HARD TOP SYSTEM : System Diagram" |
| Retained accessory power (RAP) system | | PWC-7. "System Description" |
| Tire pressure monitor system (TPMS) - AIR PRESSURE MONITOR | | WT-8. "System Description" |

Component Parts Location

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- 1. BCM
- A. Dash side lower (passenger side)

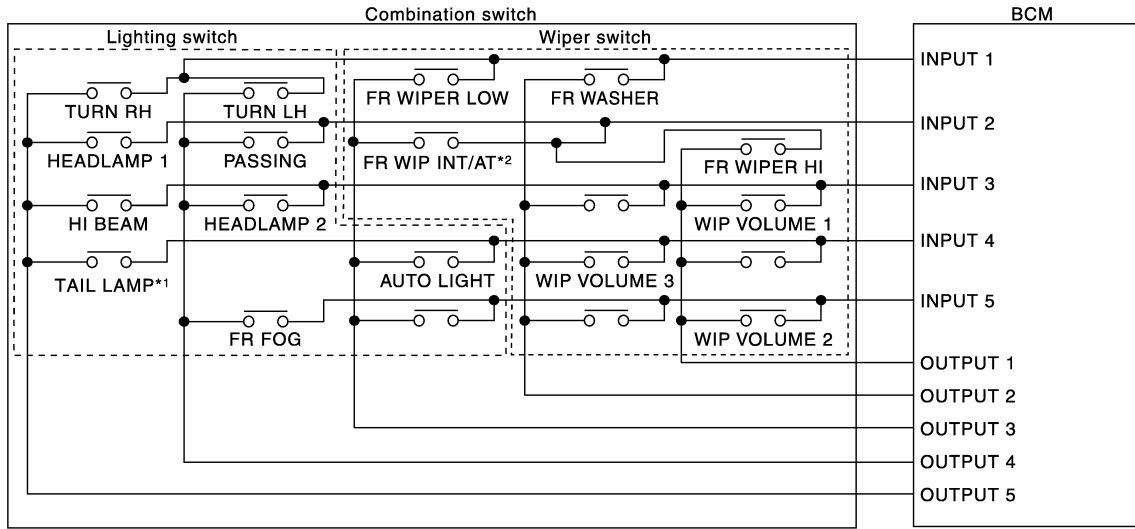
COMBINATION SWITCH READING SYSTEM

< SYSTEM DESCRIPTION >

COMBINATION SWITCH READING SYSTEM

System Diagram

INFOID:000000006473461



JPMIA1550GB

NOTE:

- *1: TAIL LAMP switch links lighting switch 1ST position.
- *2: "FR WIP INT/AT" is FR WIPER INT/AUTO.

System Description

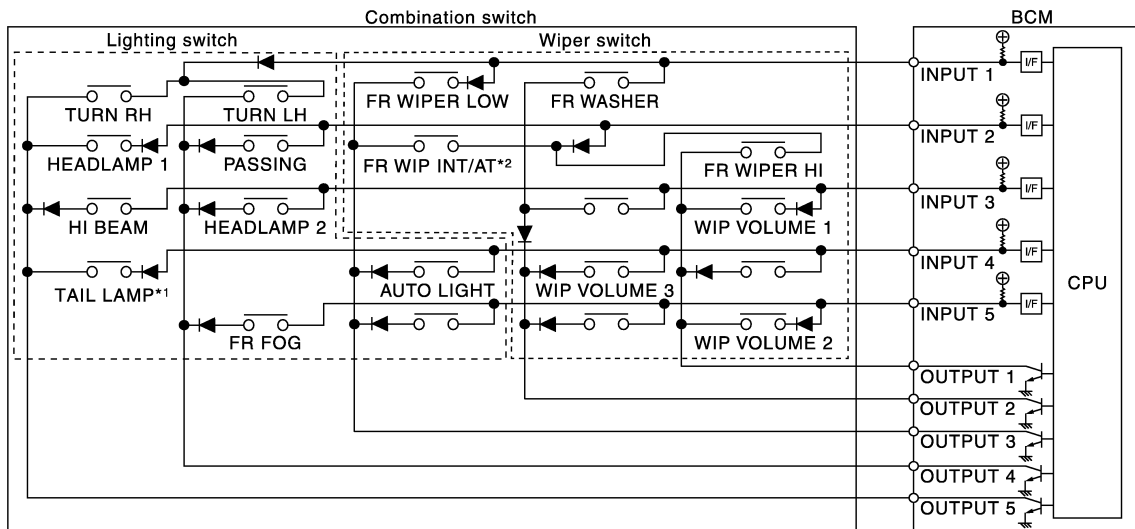
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OUTLINE

- BCM reads the status of the combination switch (light, turn signal, wiper and washer) and recognizes the status of each switch.
- BCM is a combination of 5 output terminals (OUTPUT 1 - 5) and 5 input terminals (INPUT 1 - 5). It reads a maximum of 20 switch status.

COMBINATION SWITCH MATRIX

Combination switch circuit



JPMIA1551GB

NOTE:

- *1: TAIL LAMP switch links lighting switch 1ST position.
- *2: "FR WIP INT/AT" is FR WIPER INT/AUTO.

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

BCS

COMBINATION SWITCH READING SYSTEM

< SYSTEM DESCRIPTION >

Combination switch INPUT-OUTPUT system list

| System | OUTPUT 1 | OUTPUT 2 | OUTPUT 3 | OUTPUT 4 | OUTPUT 5 |
|---------|--------------|--------------|-----------------------|------------|------------|
| INPUT 1 | — | FR WASHER | FR WIPER LOW | TURN LH | TURN RH |
| INPUT 2 | FR WIPER HI | — | FR WIPER INT/ AUTO | PASSING | HEADLAMP 1 |
| INPUT 3 | WIP VOLUME 1 | — | — | HEADLAMP 2 | HI BEAM |
| INPUT 4 | — | WIP VOLUME 3 | AUTO LIGHT | — | TAIL LAMP |
| INPUT 5 | WIP VOLUME 2 | — | — | FR FOG | — |

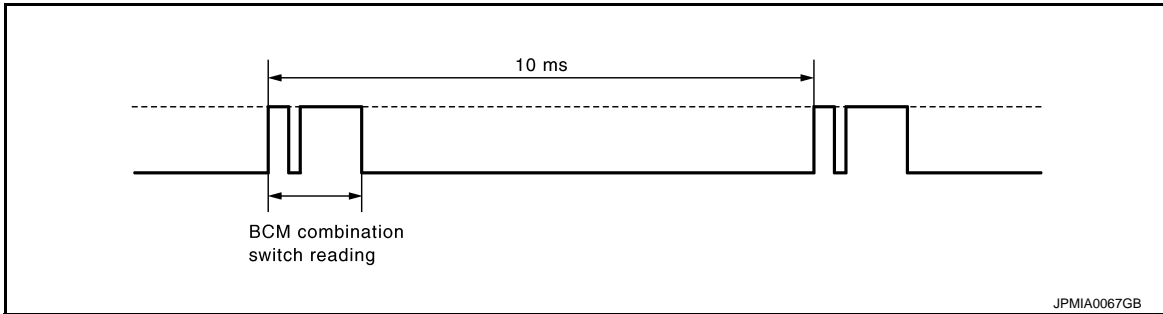
NOTE:

Headlamp has a dual system switch.

COMBINATION SWITCH READING FUNCTION

Description

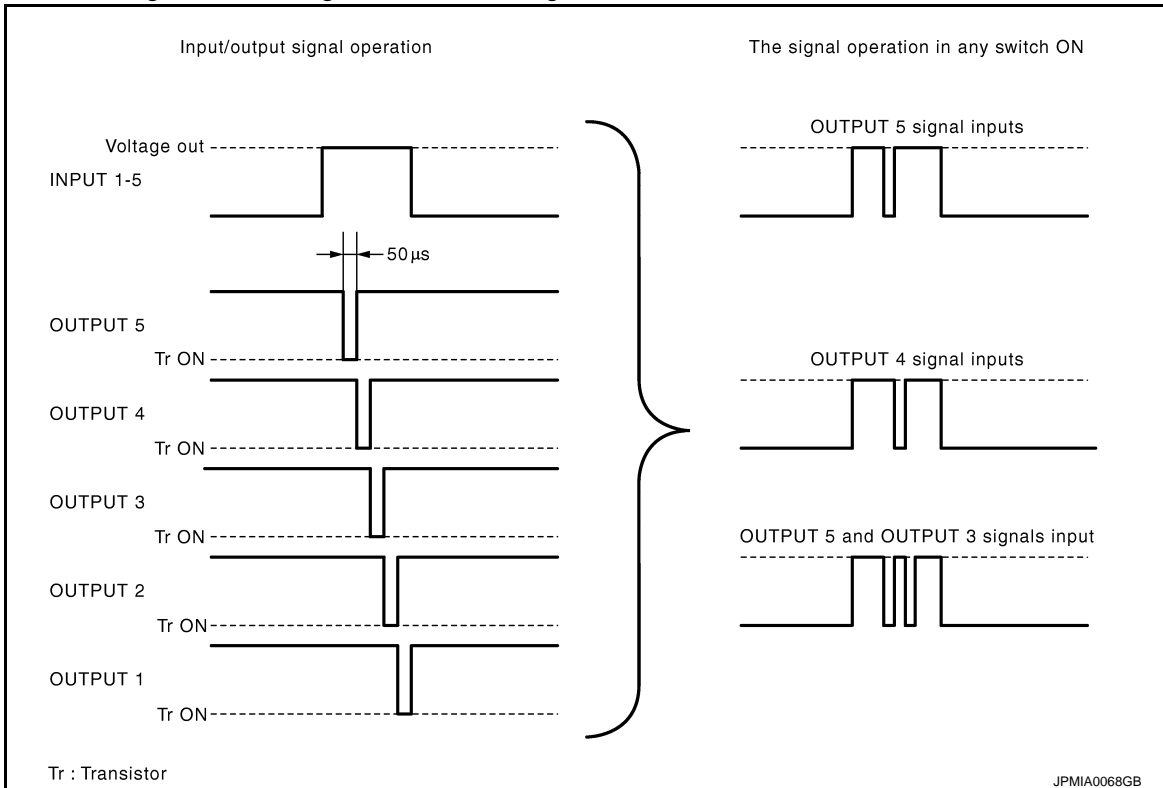
- BCM reads the status of the combination switch at 10 ms interval normally.



NOTE:

BCM reads the status of the combination switch at 60 ms interval when BCM is controlled at low power consumption mode.

- BCM operates as follows and judges the status of the combination switch.
 - INPUT 1 - 5 outputs the voltage waveforms of 5 systems simultaneously.
 - It operates the transistor on OUTPUT side in the following order: OUTPUT 5 → 4 → 3 → 2 → 1.
 - The voltage waveform of INPUT corresponding to the formed circuit changes according to the operation of the transistor on OUTPUT side if any (1 or more) switches are ON.
 - It reads this change of the voltage as the status signal of the combination switch.



COMBINATION SWITCH READING SYSTEM

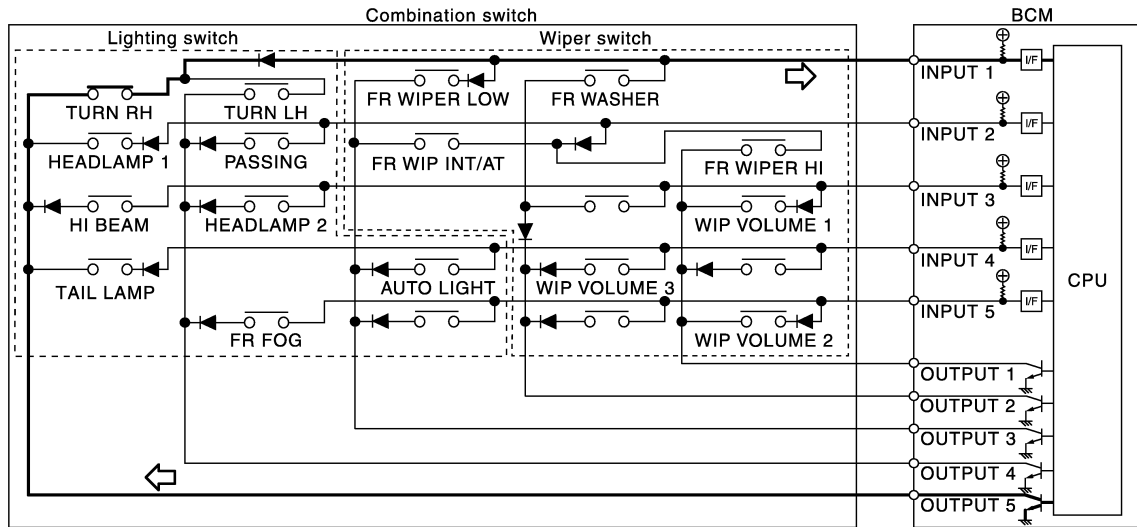
< SYSTEM DESCRIPTION >

Operation Example

In the following operation example, the combination of the status signals of the combination switch is replaced as follows: INPUT 1 - 5 to "1 - 5" and OUTPUT 1 - 5 to "A - E".

Example 1: When a switch (TURN RH switch) is turned ON

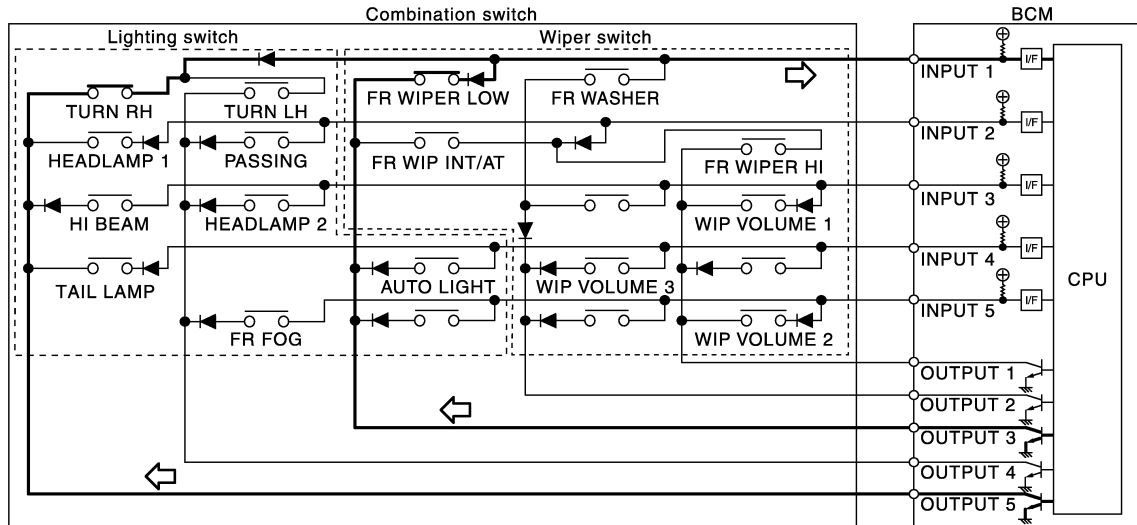
- The circuit between INPUT 1 and OUTPUT 5 is formed when the TURN RH switch is turned ON.



- BCM detects the combination switch status signal "1E" when the signal of OUTPUT 5 is input to INPUT 1.
- BCM judges that the TURN RH switch is ON when the signal "1E" is detected.

Example 2: When some switches (turn RH switch, front wiper LO switch) are turned ON

- The circuits between INPUT 1 and OUTPUT 5 and between INPUT 1 and OUTPUT 3 are formed when the TURN RH switch and FR WIPER LOW switch are turned ON.



- BCM detects the combination switch status signal "1CE" when the signals of OUTPUT 3 and OUTPUT 5 are input to INPUT 1.
- BCM judges that the TURN RH switch and FR WIPER LOW switch are ON when the signal "1CE" is detected.

WIPER VOLUME DIAL POSITION

BCM judges the wiper volume dial 1 - 7 by the status of WIP VOLUME 1, 2 and 3 switches.

| Wiper volume dial position | Switch status | | |
|----------------------------|---------------|--------------|--------------|
| | WIP VOLUME 1 | WIP VOLUME 2 | WIP VOLUME 3 |
| 1 | ON | ON | ON |
| 2 | ON | ON | OFF |

COMBINATION SWITCH READING SYSTEM

< SYSTEM DESCRIPTION >

| Wiper volume dial position | Switch status | | |
|----------------------------|---------------|--------------|--------------|
| | WIP VOLUME 1 | WIP VOLUME 2 | WIP VOLUME 3 |
| 3 | ON | OFF | OFF |
| 4 | OFF | OFF | OFF |
| 5 | OFF | OFF | ON |
| 6 | OFF | ON | ON |
| 7 | OFF | ON | OFF |

NOTE:

For details of wiper volume dial position, refer to [WW-5. "WITH RAIN SENSOR : System Description"](#) (with rain sensor), [WW-9. "WITH-OUT RAIN SENSOR : System Description"](#) (without rain sensor).

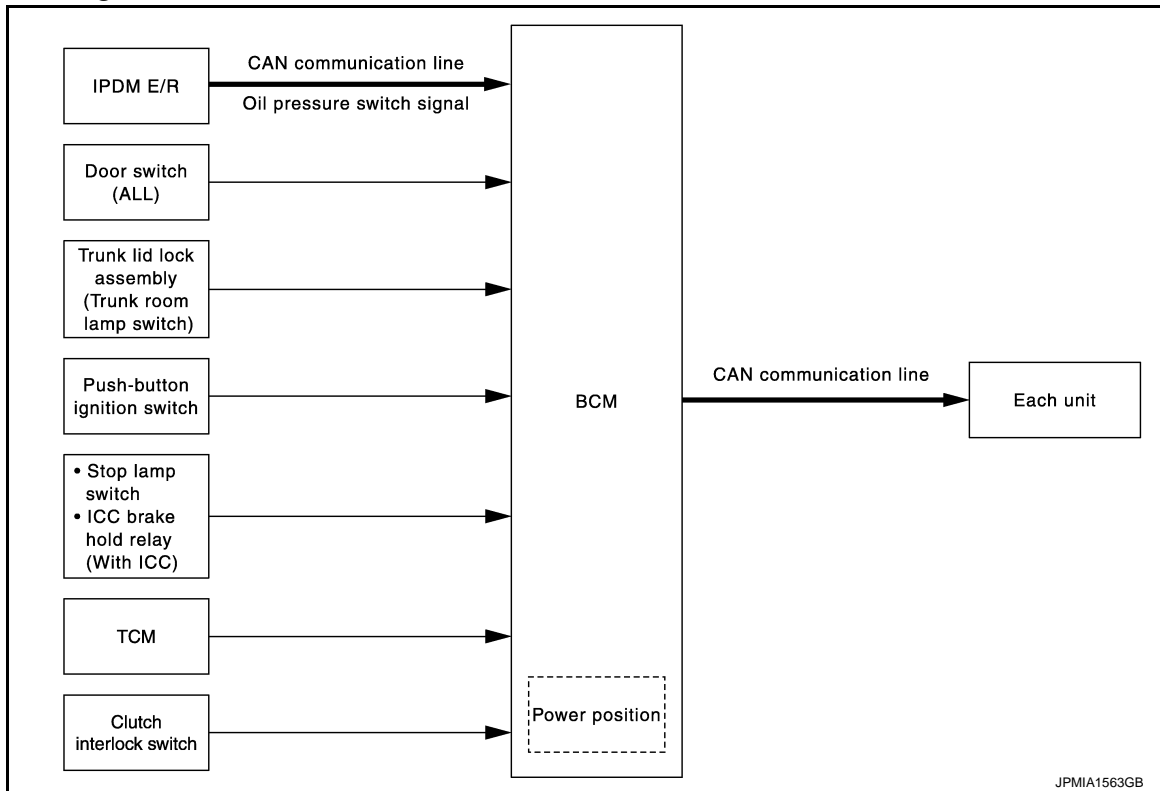
SIGNAL BUFFER SYSTEM

< SYSTEM DESCRIPTION >

SIGNAL BUFFER SYSTEM

System Diagram

INFOID:000000006473462



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System Description

INFOID:000000006473463

OUTLINE

BCM has the signal transmission function that outputs/transmits each input/received signal to each unit.

Signal transmission function list

| Signal name | Input | Output | Description |
|---|---|--|---|
| <ul style="list-style-type: none"> Ignition switch ON signal Ignition switch signal | Push-button ignition switch (push switch) | <ul style="list-style-type: none"> IPDM E/R (CAN) Driver seat control unit (CAN) Retractable hard top control unit (CAN) | Inputs the push-button ignition switch (push switch) signal and transmits the ignition switch status judged with BCM via CAN communication. |
| Door switch signal | Any door switch | <ul style="list-style-type: none"> Combination meter (through unified meter and A/C amp.) (CAN) IPDM E/R (CAN) Driver seat control unit (CAN) | Inputs the door switch signal and transmits it via CAN communication. |
| Trunk switch signal | Trunk room lamp switch | Combination meter (through unified meter and A/C amp.) (CAN) | Inputs the trunk room lamp switch signal and transmits the trunk switch signal via CAN communication. |
| Oil pressure switch signal | IPDM E/R (CAN) | Combination meter (through unified meter and A/C amp.) (CAN) | Transmits the received oil pressure switch signal via CAN communication. |
| Stop lamp switch signal | <ul style="list-style-type: none"> Stop lamp switch ICC brake hold relay (with ICC) | TCM (CAN) | Inputs the stop lamp switch 1 signal and stop lamp switch 2 signal, and transmits the stop lamp switch signal via CAN communication. |

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F

G

H

I

J

K

L

BCS

N

O

P

SIGNAL BUFFER SYSTEM

< SYSTEM DESCRIPTION >

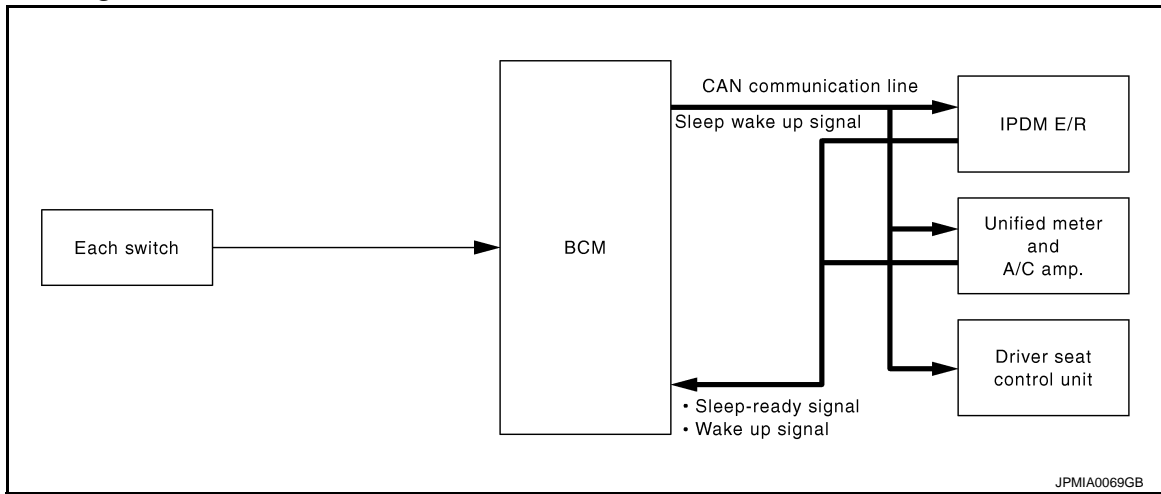
| Signal name | Input | Output | Description |
|-----------------------------|-------------------------|----------------|---|
| Interlock/PNP switch signal | TCM | IPDM E/R (CAN) | Inputs the selector lever P/N position signal, and transmits the interlock/PNP switch signal via CAN communication. |
| | Clutch interlock switch | | Inputs the clutch interlock switch signal, and transmits the interlock/PNP switch signal via CAN communication. |

POWER CONSUMPTION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

POWER CONSUMPTION CONTROL SYSTEM

System Diagram



System Description

INFOID:000000006473465

OUTLINE

- BCM incorporates a power saving control function that reduces the power consumption according to the vehicle status.
- BCM switches the status (control mode) by itself with the power saving control function. It performs the sleep request to each unit [IPDM E/R, combination meter (unified meter and A/C amp.) and driver seat control unit] that operates with the ignition switch OFF.

Normal mode (wake-up)

- CAN communication is normally performed with other units
- Each control with BCM is operating properly

CAN communication sleep mode (CAN sleep)

- CAN transmission is stopped
- Control with BCM only is operating

Low power consumption mode (BCM sleep)

- Low power consumption control is active
- CAN transmission is stopped

LOW POWER CONSUMPTION CONTROL WITH BCM

BCM reduces the power consumption with the following operation in the low power consumption mode.

- The reading interval of the each switches changes from 10 ms interval to 60 ms interval.

Sleep mode activation

- BCM receives the sleep-ready signal (ready) from IPDM E/R and unified meter and A/C amp. via CAN communication.
- BCM transmits the sleep wake up signal (sleep) to each unit when all of the CAN sleep conditions are fulfilled.
- Each unit stops the transmission of CAN communication with the sleep wake up signal. BCM is in CAN communication sleep mode.
- BCM is in the low power consumption mode and perform the low power consumption control when all of the BCM sleep conditions are fulfilled with CAN sleep condition.

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

BCS

POWER CONSUMPTION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

Sleep condition

| CAN sleep condition | BCM sleep condition |
|---|--|
| <ul style="list-style-type: none"> • Receiving the sleep-ready signal (ready) from all units • Ignition switch: OFF • Vehicle security system and panic alarm: Not operation • Warning chime: Not operation • Intelligent Key system buzzer: Not operation • Trunk room lamp switch status: No change • Stop lamp switch: OFF • ICC brake hold relay (with ICC): OFF • Key slot (card switch) status: No change • Turn signal indicator lamp: Not operation • Exterior lamp: OFF • Door lock status: No change • CONSULT-III communication status: Not communication • Meter display signal: Non-transmission • Door switch status: No change • Rear window defogger: OFF | <ul style="list-style-type: none"> • Interior room lamp battery saver: Time out • Power window switch and retractable hard top control unit communication: No transmission • Push-button ignition switch illumination: OFF • Infiniti Vehicle Immobilizer System (IVIS) - NATS: Not operation • Remote keyless entry receiver communication status: No communication • Tire pressure monitor system (TPMS) - AIR PRESSURE MONITOR: Stop • LOCK indicator lamp: OFF • ACC indicator lamp: OFF • ON indicator lamp: OFF |

Wake-up operation

- BCM changes from the low power consumption mode to the CAN communication sleep mode when the any of the BCM wake-up conditions is fulfilled. Only the control with BCM is activated.
- BCM transmits the sleep wake up signal (wake up) to each unit when any of the CAN wake-up conditions is fulfilled. It changes from the low power consumption mode or the CAN communication sleep mode to the normal mode.
- Each unit starts the transmission of CAN communication with the sleep wake up signal. In addition, the unified meter and A/C amp. transmits the wake up signal to BCM via CAN communication to report the CAN communication start.

Wake-up condition

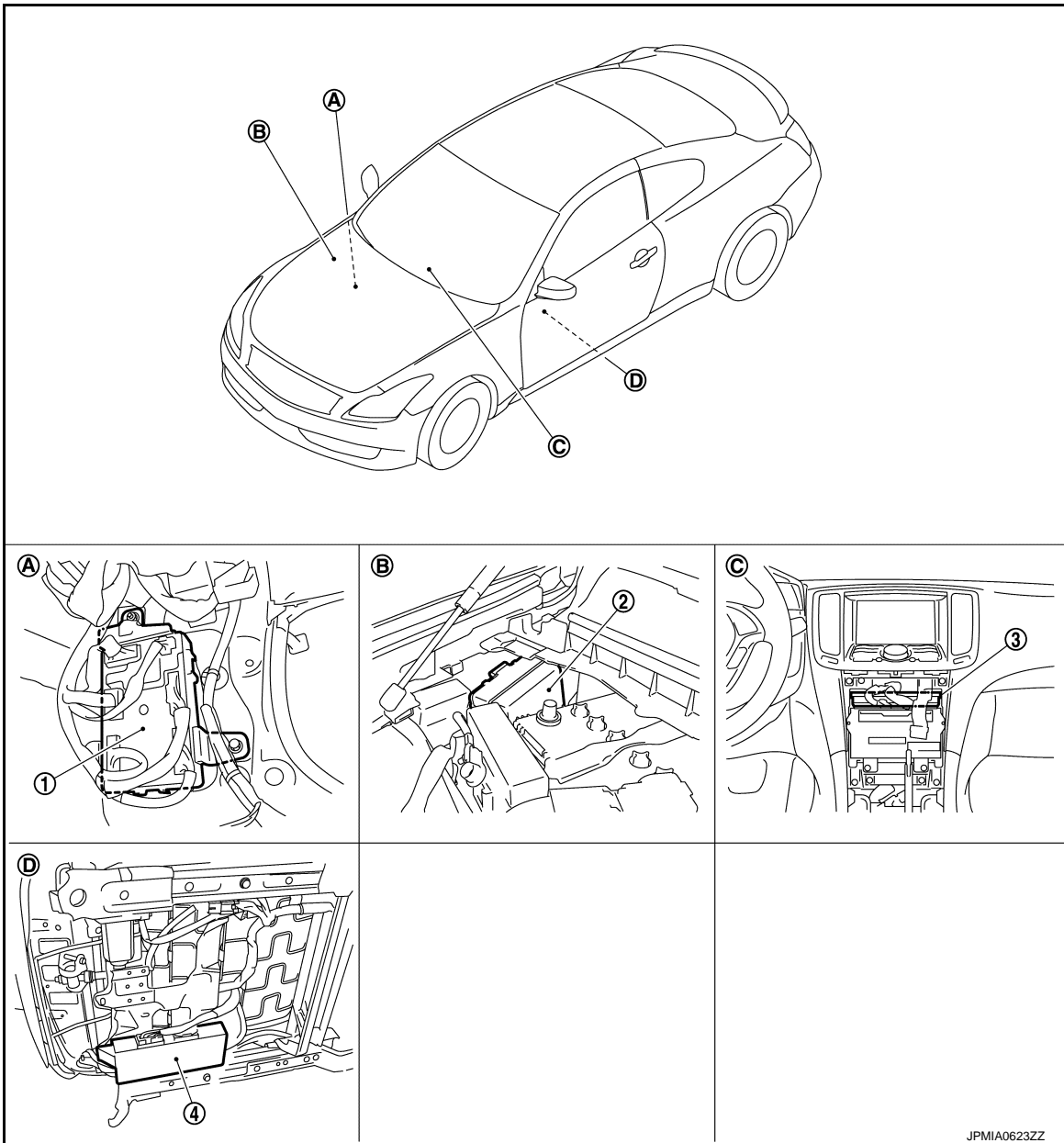
| BCM wake-up condition | CAN wake-up condition |
|---|---|
| <ul style="list-style-type: none"> • Trunk lid opener switch: OFF → ON • Power window switch and retractable hard top control unit communication: Receiving • Remote keyless entry receiver communication: Receiving | <ul style="list-style-type: none"> • Receiving the sleep-ready signal (Not-ready) from any units • Key slot (key switch): OFF → ON, ON → OFF • Push-button ignition switch (push switch): OFF → ON • Hazard switch: OFF → ON • PASSING switch: OFF → ON, ON → OFF • TAIL LAMP switch: OFF → ON • Driver door switch: OFF → ON, ON → OFF • Passenger door switch: OFF → ON, ON → OFF • Trunk room lamp switch: OFF → ON, ON → OFF • Driver door request switch: OFF → ON • Passenger door request switch: OFF → ON • Trunk lid opener request switch: OFF → ON • Stop lamp switch: ON • ICC brake hold relay (with ICC): ON • Clutch interlock switch: OFF → ON |

POWER CONSUMPTION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000006473466



- | | | |
|---|--------------------------------|-------------------------------|
| 1. BCM | 2. IPDM E/R | 3. Unified meter and A/C amp. |
| 4. Driver seat control unit | | |
| A. Dash side lower (passenger side) | B. Engine room dash panel (RH) | C. Behind Cluster lid C |
| D. Backside of the seat cushion (driver seat) | | |

A
B
C
D
E
F
G
H
I
J
K
L

BCS

N
O
P

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:000000006473467

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 | This function is not used even though it is displayed. |

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

| System | Sub system selection item | Diagnosis mode | | |
|---|-----------------------------|----------------|--------------|-------------|
| | | Work Support | Data Monitor | Active Test |
| Door lock | DOOR LOCK | × | × | × |
| Rear window defogger | REAR DEFOGGER | | × | × |
| Warning chime | BUZZER | | × | × |
| Interior room lamp timer | INT LAMP | × | × | × |
| — | MULTI REMOTE ENT*1 | | | |
| Exterior lamp | HEAD LAMP | × | × | × |
| Wiper and washer | WIPER | ×*2 | × | × |
| Turn signal and hazard warning lamps | FLASHER | × | × | × |
| — | AIR CONDITONER*1 | | | |
| <ul style="list-style-type: none"> • Intelligent Key system • Engine start system | INTELLIGENT KEY | × | × | × |
| Combination switch | COMB SW | | × | |
| Body control system | BCM | × | | |
| IVIS - NATS | IMMU | | × | × |
| Interior room lamp battery saver | BATTERY SAVER | × | × | × |
| Trunk lid open | TRUNK | | × | × |
| Vehicle security system | THEFT ALM | × | × | × |
| RAP system | RETAINED PWR | | × | |
| Signal buffer system | SIGNAL BUFFER | | × | × |
| TPMS | TPMS (AIR PRESSURE MONITOR) | × | × | × |

NOTE:

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

FREEZE FRAME DATA (FFD)

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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

| CONSULT screen item | Indication/Unit | Description |
|---------------------|--|---|
| Vehicle Speed | km/h | Vehicle speed of the moment a particular DTC is detected |
| Odo/Trip Meter | km | Total mileage (Odometer value) of the moment a particular DTC is detected |
| Vehicle Condition | SLEEP>LOCK | While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*) |
| | SLEEP>OFF | While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".) |
| | LOCK>ACC | While turning power supply position from "LOCK"* to "ACC" |
| | ACC>ON | While turning power supply position from "ACC" to "IGN" |
| | RUN>ACC | While turning power supply position from "RUN" to "ACC" (Except emergency stop operation) |
| | CRANK>RUN | While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it) |
| | RUN>URGENT | While turning power supply position from "RUN" to "ACC" (Emergency stop operation) |
| | ACC>OFF | While turning power supply position from "ACC" to "OFF" |
| | OFF>LOCK | While turning power supply position from "OFF" to "LOCK"* |
| | OFF>ACC | While turning power supply position from "OFF" to "ACC" |
| | ON>CRANK | While turning power supply position from "IGN" to "CRANKING" |
| | OFF>SLEEP | While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode |
| | LOCK>SLEEP | While turning BCM status from normal mode (Power supply position is "LOCK"*.) to low power consumption mode |
| | LOCK | Power supply position is "LOCK" (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 | <p>The number of times that ignition switch is turned ON after DTC is detected</p> <ul style="list-style-type: none"> • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. |

NOTE:

*: For models without steering lock unit, power supply position changes from "OFF" to "LOCK" when steering lock conditions are satisfied.

DOOR LOCK

DOOR LOCK : CONSULT-III Function (BCM - DOOR LOCK)

INFOID:000000006956225

BCM CONSULT-III FUNCTION

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Diagnosis mode | Function Description |
|----------------|---|
| WORK SUPPORT | Changes the setting for each system function |
| DATA MONITOR | The BCM input/output signals are displayed |
| ACTIVE TEST | The signals used to activate each device are forcibly supplied from BCM |

WORK SUPPORT

| Monitor item | Description |
|------------------------------|---|
| DOOR LOCK-UNLOCK SET | Selective unlock function mode can be changed to operate (ON) or not operate (OFF) with this mode |
| AUTOMATIC DOOR LOCK SELECT | Automatic door lock function mode can be selected from the following in this mode <ul style="list-style-type: none"> • VH SPD: All doors are locked when vehicle speed more than 24km/h (15MPH) • P RANGE*: All doors are locked when shifting the selector lever from P position to other than the P position |
| AUTOMATIC DOOR UNLOCK SELECT | Automatic door unlock function mode can be selected from the following in the mode <ul style="list-style-type: none"> • MODE 1: All doors are unlocked when the power supply position is changed from ON to OFF • MODE 2*: All doors are unlocked when shifting the selector lever from any position other than the P to P position • MODE 3: Driver side door is unlocked when the power supply position is changed from ON to OFF • MODE 4*: Driver side door is unlocked when shifting the selector lever from any position other than the P to P position |
| AUTOMATIC LOCK/UNLOCK SET | Automatic door lock/unlock function mode can be selected from the following in this mode <ul style="list-style-type: none"> • Off: non-operational • Unlock Only: door unlock operation only • Lock Only: door lock operation only • Lock/Unlock: lock/unlock operation |

*: P range interlock door lock can be selected for M/T models, but automatic door lock/unlock function does not operate.

DATA MONITOR

| Monitor Item | Contents |
|---------------|--|
| REQ SW-DR | Indicated [ON/OFF] condition of door request switch (driver side) |
| REQ SW-AS | Indicated [ON/OFF] condition of door request switch (passenger side) |
| REQ SW-BD/TR | Indicated [ON/OFF] condition of trunk lid opener request switch |
| DOOR SW-DR | Indicated [ON/OFF] condition of front door switch (driver side) |
| DOOR SW-AS | Indicated [ON/OFF] condition of front door switch (passenger side) |
| DOOR SW-RR | NOTE: This item is displayed, but cannot be monitored |
| DOOR SW-RL | NOTE: This item is displayed, but cannot be monitored |
| DOOR SW-BK | NOTE: This item is displayed, but cannot be monitored |
| CDL LOCK SW | Indicated [ON/OFF] condition of lock signal from door lock unlock switch |
| CDL UNLOCK SW | Indicated [ON/OFF] condition of unlock signal from door lock unlock switch |
| KEY CYL LK-SW | Indicated [ON/OFF] condition of lock signal from door key cylinder |
| KEY CYL UN-SW | Indicated [ON/OFF] condition of unlock signal from door key cylinder |

ACTIVE TEST

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Test item | Description |
|-----------|--|
| DOOR LOCK | <p>This test is able to check door lock/unlock operation</p> <ul style="list-style-type: none"> • The all door lock actuators are locked when "ALL LCK" on CONSULT-III screen is touched • The all door lock actuators are unlocked when "ALL UNLK" on CONSULT-III screen is touched • The door lock actuator (driver side) is unlocked when "DR UNLK" on CONSULT-III screen is touched • The door lock actuator (passenger side) is unlocked when "AS UNLK" on CONSULT- III screen is touched • "OTR ULK" item is displayed, but cannot be monitored |

REAR WINDOW DEFOGGER

REAR WINDOW DEFOGGER : CONSULT-III Function (BCM - REAR DEFOGGER)

INFOID:000000006956232

Data monitor

| Monitor Item | Description |
|--------------|---|
| REAR DEF SW | This is displayed even when it is not equipped. |
| PUSH SW | Indicates [ON/OFF] condition of push switch. |

ACTIVE TEST

| Test Item | Description |
|---------------|--|
| REAR DEFOGGER | This test is able to check rear window defogger operation. Rear window defogger operates when "ON" on CONSULT-III screen is touched. |

BUZZER

BUZZER : CONSULT-III Function (BCM - BUZZER)

INFOID:000000006956235

CONSULT-III APPLICATION ITEMS

| Test item | Diagnosis mode | Description |
|-----------|----------------|---|
| BUZZER | Data Monitor | Displays BCM input data in real time. |
| | Active Test | Operation of electrical loads can be checked by sending driving signal to them. |

DATA MONITOR

| Display item [Unit] | Description |
|--------------------------|--|
| VEH SPEED 1 [Km/h] | Value of vehicle speed signal received from ABS actuator and electric unit (control unit) with CAN communication line. |
| PUSH SW [On/Off] | Status of push button ignition switch judged by BCM. |
| UNLK SEN-DR [On/Off] | Status of unlock sensor judged by BCM. |
| KEY SW-SLOT [On/Off] | Status of key slot judged by BCM. |
| TAIL LAMP SW [On/Off] | Status of each switch judged by BCM using the combination switch readout function. |
| FR FOG SW [On/Off] | Status of front fog lamp switch judged by BCM. |
| DOOR SW-DR [On/Off] | Status of driver side door switch judged by BCM. |

ACTIVE TEST

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

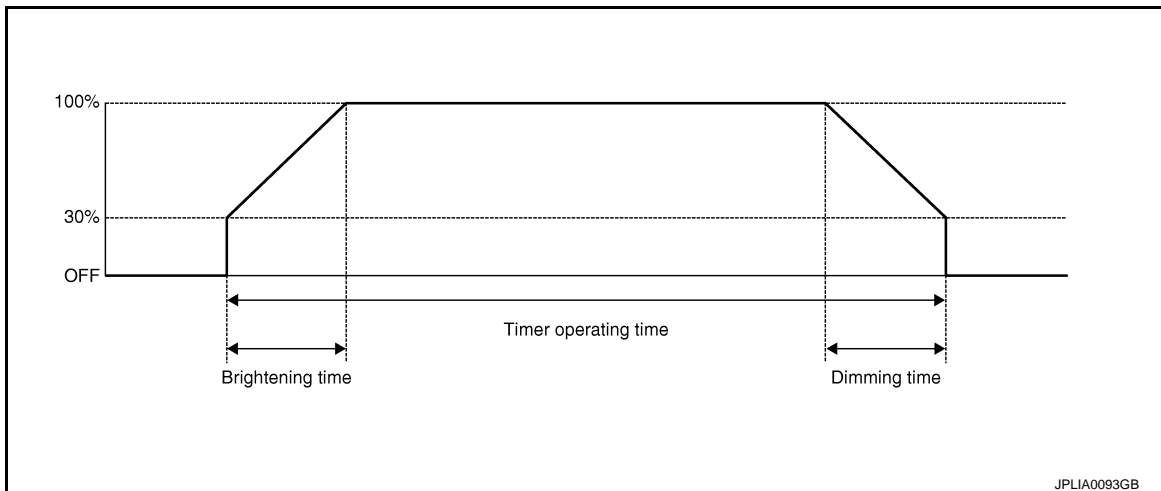
| Display item [Unit] | Description |
|------------------------|---|
| IGN KEY WARN ALM | The key warning chime operation can be checked by operating the relevant function (On/Off). |
| SEAT BELT WARN TEST | The seat belt warning chime operation can be checked by operating the relevant function (On/Off). |
| ID REGIST WARNING | The ID regist warning chime operation can be checked by operating the relevant function (On/Off). |
| LIGHT WARN ALM | The light warning chime operation can be checked by operating the relevant function (On/Off). |
| RUN FLAT/T WARN BUZZER | The run-flat tire warning chime operation can be checked by operating the relevant function (On/Off). |

INT LAMP

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

INFOID:000000006956229

WORK SUPPORT



JPLIA0093GB

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

*: Factory setting

DATA MONITOR

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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

ACTIVE TEST

| Test item | Operation | Description |
|-------------------|-----------|--|
| INT LAMP | On | Outputs the interior room lamp control signal to turn map lamp ON (Map lamp switch is in DOOR position). |
| | Off | Stops the interior room lamp control signal to turn map lamp OFF. |
| STEP LAMP TEST | On | Outputs the step lamp control signal to turn step lamp ON. |
| | Off | Stops the step lamp control signal to turn step lamp OFF. |
| LUGGAGE LAMP TEST | On | Outputs the trunk room lamp control signal to turn the trunk room lamp ON. |
| | Off | Stops the trunk room lamp control signal to turn the trunk room lamp OFF. |

HEADLAMP

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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

INFOID:000000006956227

WORK SUPPORT

| Service item | Setting item | Setting |
|------------------------|--------------|--|
| BATTERY SAVER SET | On* | With the exterior lamp battery saver function |
| | Off | Without the exterior lamp battery saver function |
| ILL DELAY SET | MODE 1* | 45 sec. |
| | MODE 2 | Without the function |
| | MODE 3 | 30 sec. |
| | MODE 4 | 60 sec. |
| | MODE 5 | 90 sec. |
| | MODE 6 | 120 sec. |
| | MODE 7 | 150 sec. |
| | MODE 8 | 180 sec. |
| | | Sets delay timer function timer operation time. (All doors closed) |
| CUSTOM A/LIGHT SETTING | MODE 1* | Normal |
| | MODE 2 | More sensitive setting than normal setting (Turns ON earlier than normal operation.) |
| | MODE 3 | More sensitive setting than MODE 2 (Turns ON earlier than MODE 2.) |
| | MODE 4 | Less sensitive setting than normal setting (Turns ON later than normal operation.) |

*: Factory setting

DATA MONITOR

| Monitor item [Unit] | Description |
|--|--|
| PUSH SW [On/Off] | The switch status input from push-button ignition switch |
| ENGINE STATE [Stop/Stall/Crank/Run] | The engine status received from ECM with CAN communication |
| VEH SPEED 1 [km/h] | The value of the vehicle speed received from unified meter and A/C amp. with CAN communication |
| KEY SW-SLOT [On/Off] | Key switch status input from key slot |
| TURN SIGNAL R [On/Off] | Each switch status that BCM judges from the combination switch reading function |
| TURN SIGNAL L [On/Off] | |
| TAIL LAMP SW [On/Off] | |
| HI BEAM SW [On/Off] | |
| HEAD LAMP SW1 [On/Off] | |
| HEAD LAMP SW2 [On/Off] | |
| PASSING SW [On/Off] | |
| AUTO LIGHT SW [On/Off] | |
| FR FOG SW [On/Off] | |

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Monitor item [Unit] | Description |
|-------------------------|--|
| DOOR SW-DR [On/Off] | The switch status input from driver side door switch |
| DOOR SW-AS [On/Off] | The switch status input from passenger side door switch |
| DOOR SW-RR [On/Off] | NOTE: The item is indicated, but not monitored. |
| DOOR SW- RL [On/Off] | NOTE: The item is indicated, but not monitored. |
| DOOR SW-BK [On/Off] | NOTE: The item is indicated, but not monitored. |
| OPTICAL SENSOR [V] | The value of exterior brightness voltage input from the optical sensor |

ACTIVE TEST

| Test item | Operation | Description |
|----------------|-----------|--|
| TAIL LAMP | On | Transmits the position light request signal to IPDM E/R with CAN communication to turn the tail lamp ON. |
| | Off | Stops the position light request signal transmission. |
| HEAD LAMP | Hi | Transmits the high beam request signal with CAN communication to turn the headlamp (HI). |
| | Low | Transmits the low beam request signal with CAN communication to turn the headlamp (LO). |
| | Off | Stops the high & low beam request signal transmission. |
| FR FOG LAMP | On | Transmits the front fog light request signal to IPDM E/R with CAN communication to turn the front fog lamp ON. |
| | Off | Stops the front fog light request signal transmission. |
| RR FOG LAMP | On | NOTE: The item is indicated, but cannot be tested. |
| | Off | |
| CORNERING LAMP | RH | NOTE: The item is indicated, but cannot be tested. |
| | LH | |
| | Off | |
| ILL DIM SIGNAL | On | NOTE: The item is indicated, but cannot be tested. |
| | Off | |

WIPER

WIPER : CONSULT-III Function (BCM - WIPER)

INFOID:000000006956231

WORK SUPPORT

| Service item | Setting item | Description |
|------------------------|--------------|--|
| WIPER SPEED SETTING | On | With vehicle speed (Front wiper intermittent time linked with the vehicle speed and wiper intermittent dial position) |
| | Off* | Without vehicle speed (Front wiper intermittent time linked with the wiper intermittent dial position) |

*:Initial setting

NOTE:

Work support item is not indicated when the vehicle with rain sensor.

DATA MONITOR

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Monitor Item [Unit] | Description |
|---------------------------|---|
| VEH SPEED 1 [km/h] | Displays the value of the vehicle speed signal received from unified meter and A/C amp. with CAN communication. |
| PUSH SW [Off/On] | The switch status input from push-button ignition switch. |
| FR WIPER HI [Off/On] | |
| FR WIPER LOW [Off/On] | |
| FR WASHER SW [Off/On] | |
| FR WIPER INT [Off/On] | |
| FR WIPER STOP [Off/On] | Status of each switch judged by BCM using the combination switch reading function |
| FR WIPER STOP [Off/On] | Displays the status of the front wiper stop position signal received from IPDM E/R with CAN communication. |
| INT VOLUME [1 - 7] | Status of each switch judged by BCM using the combination switch reading function |

ACTIVE TEST

| Test item | Operation | Description |
|-------------|-----------|---|
| FRONT WIPER | Hi | Transmits the front wiper request signal (HI) to IPDM E/R with CAN communication to operate the front wiper HI operation. |
| | Lo | Transmits the front wiper request signal (LO) to IPDM E/R with CAN communication to operate the front wiper LO operation. |
| | INT | Transmits the front wiper request signal (INT) to IPDM E/R with CAN communication to operate the front wiper INT operation. |
| | Off | Stops transmitting the front wiper request signal to stop the front wiper operation. |

FLASHER

FLASHER : CONSULT-III Function (BCM - FLASHER)

INFOID:000000006956228

WORK SUPPORT

| Service item | Setting item | Setting | |
|-----------------------|--------------|------------------------|--|
| HAZARD ANSWER BACK | Lock Only* | With locking only | Sets the hazard warning lamp answer back function when the door is lock/unlock with the request switch or the key fob. |
| | Unlk Only | With unlocking only | |
| | Lock/Unlk | With locking/unlocking | |
| | Off | Without the function | |

*: Factory setting

DATA MONITOR

| Monitor item [Unit] | Description |
|------------------------|--|
| REQ SW-DR [On/Off] | The switch status input from the request switch (driver side) |
| REQ SW-AS [On/Off] | The switch status input from the request switch (passenger side) |
| PUSH SW [On/Off] | The switch status input from the push-button ignition switch |

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Monitor item [Unit] | Description |
|---------------------------|--|
| TURN SIGNAL R [On/Off] | Each switch condition that BCM judges from the combination switch reading function |
| TURN SIGNAL L [On/Off] | |
| HAZARD SW [On/Off] | The switch status input from the hazard switch |
| RKE-LOCK [On/Off] | Lock signal status received from the remote keyless entry receiver |
| RKE-UNLOCK [On/Off] | Unlock signal status received from the remote keyless entry receiver |
| RKE-PANIC [On/Off] | Panic alarm signal status received from the remote keyless entry receiver |

ACTIVE TEST

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

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT-III Function (BCM - INTELLIGENT KEY)

INFOID:0000000006956226

WORK SUPPORT

| Monitor item | Description |
|------------------------|---|
| CONFIRM KEY FOB ID | It can be checked whether Intelligent Key ID code is registered or not in this mode |
| AUTO LOCK SET | Auto door lock time can be changed in this mode <ul style="list-style-type: none"> • MODE 1: 1 minute • MODE 2: 5 minutes • MODE 3: 30 seconds • MODE 4: 2 minutes |
| LOCK/UNLOCK BY I-KEY | Door lock/unlock function by door request switch (driver side and passenger side) mode can be changed to operate (ON) or not operate (OFF) in this mode |
| ENGINE START BY I-KEY | Engine start function mode can be changed to operate (ON) or not operate (OFF) with this mode |
| TRUNK/GLASS HATCH OPEN | Buzzer reminder function mode by trunk lid opener request switch can be changed to operate (ON) or not operate (OFF) with this mode |
| PANIC ALARM SET | Panic alarm button pressing time on Intelligent Key remote control button can be selected from the following with this mode <ul style="list-style-type: none"> • MODE 1: 0.5 sec • MODE 2: Non-operation • MODE 3: 1.5 sec |
| PW DOWN SET | Unlock button pressing time on Intelligent Key button can be selected from the following with this mode <ul style="list-style-type: none"> • MODE 1: 3 sec • MODE 2: Non-operation • MODE 3: 5 sec |
| TRUNK OPEN DELAY | Trunk button pressing on Intelligent Key button can be selected as per the following in this mode <ul style="list-style-type: none"> • MODE 1: Press and hold • MODE 2: Press twice • MODE 3: Press and hold, or press twice |

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Monitor item | Description |
|--------------------------|---|
| LO- BATT OF KEY FOB WARN | Intelligent Key low battery warning mode can be changed to operate (ON) or not operate (OFF) with this mode |
| ANTI KEY LOCK IN FUNCTI | Key reminder function mode can be changed to operate (ON) or not operate (OFF) with this mode |
| HAZARD ANSWER BACK | Hazard reminder function mode can be selected from the following with this mode <ul style="list-style-type: none"> • LOCK ONLY: Door lock operation only • UNLOCK ONLY: Door unlock operation only • LOCK/UNLOCK: Lock/unlock operation • OFF: Non-operation |
| ANS BACK I-KEY LOCK | Buzzer reminder function (lock operation) mode by door request switch (driver side and passenger side) can be selected from the following with this mode <ul style="list-style-type: none"> • Horn chirp: Sound horn • Buzzer: Sound Intelligent Key warning buzzer • OFF: Non-operation |
| ANS BACK I-KEY UNLOCK | Buzzer reminder function (unlock operation) mode by door request switch can be changed to operate (ON) or not operate (OFF) with this mode |
| SHORT CRANKING OUTPUT | Starter motor can operate during the times below <ul style="list-style-type: none"> • 70 msec • 100 msec • 200 msec |
| INSIDE ANT DIAGNOSIS | This function allows inside key antenna self-diagnosis |
| HORN WITH KEYLESS LOCK | Horn reminder function mode by Intelligent Key button can be changed to operate (ON) or not operate (OFF) with this mode |

SELF-DIAG RESULT

Refer to [BCS-75, "DTC Index"](#).

DATA MONITOR

| Monitor Item | Condition |
|-----------------------------|---|
| REQ SW -DR | Indicates [ON/OFF] condition of door request switch (driver side) |
| REQ SW -AS | Indicates [ON/OFF] condition of door request switch (passenger side) |
| REQ SW -BD/TR | Indicates [ON/OFF] condition of trunk lid opener request switch |
| PUSH SW | Indicates [ON/OFF] condition of push-button ignition switch |
| IGN RLY2 -F/B | Indicates [ON/OFF] condition of ignition relay 2 |
| ACC RLY-FB | NOTE: This item is displayed, but cannot be monitored |
| CLUTCH SW* ¹ | Indicates [ON/OFF] condition of clutch switch |
| BRAKE SW 1 | Indicates [ON/OFF]* ³ condition of brake switch power supply |
| BRAKE SW 2 | Indicates [ON/OFF] condition of brake switch |
| DETE/CANCL SW* ² | Indicates [ON/OFF] condition of P position |
| SFT PN/N SW* ² | Indicates [ON/OFF] condition of P or N position |
| S/L -LOCK | Indicates [ON/OFF] condition of steering lock unit (LOCK) |
| S/L -UNLOCK | Indicates [ON/OFF] condition of steering lock unit (UNLOCK) |
| S/L RELAY -F/B | Indicates [ON/OFF] condition of steering lock relay |
| UNLK SEN -DR | Indicates [ON/OFF] condition of driver door UNLOCK status |
| PUSH SW -IPDM | Indicates [ON/OFF] condition of push-button ignition switch |
| IGN RLY1 -F/B | Indicates [ON/OFF] condition of ignition relay 1 |
| DETE SW -IPDM* ² | Indicates [ON/OFF] condition of P position |
| SFT PN -IPDM* ² | Indicates [ON/OFF] condition of P or N position |

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Monitor Item | Condition | |
|---------------|---|---|
| SFT P -MET*2 | Indicates [ON/OFF] condition of P position | A |
| SFT N -MET*2 | Indicates [ON/OFF] condition of N position | |
| ENGINE STATE | Indicates [STOP/STALL/CRANK/RUN] condition of engine states | B |
| S/L LOCK-IPDM | Indicates [ON/OFF] condition of steering lock unit (LOCK) | |
| S/L UNLK-IPDM | Indicates [ON/OFF] condition of steering lock unit (UNLOCK) | C |
| S/L RELAY-REQ | Indicates [ON/OFF] condition of steering lock relay | |
| VEH SPEED 1 | Display the vehicle speed signal received from combination meter by numerical value [Km/h] | |
| VEH SPEED 2 | Display the vehicle speed signal received from ABS or VDC or TCM by numerical value [Km/h] | D |
| DOOR STAT-DR | Indicates [LOCK/READY/UNLOCK] condition of driver side door status | |
| DOOR STAT-AS | Indicates [LOCK/READY/UNLOCK] condition of passenger side door status | |
| ID OK FLAG | Indicates [SET/RESET] condition of key ID | E |
| PRMT ENG STRT | Indicates [SET/RESET] condition of engine start possibility | |
| PRMT RKE STRT | NOTE: This item is displayed, but cannot be monitored | F |
| KEY SW -SLOT | Indicates [ON/OFF] condition of key slot | |
| TRNK/HAT MNTR | Indicates [ON/OFF] condition of trunk lid | G |
| RKE-LOCK | Indicates [ON/OFF] condition of LOCK signal from Intelligent Key | |
| RKE-UNLOCK | Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key | |
| RKE-TR/BD | Indicates [ON/OFF] condition of TRUNK LID OPEN signal from Intelligent Key | H |
| RKE-PANIC | Indicates [ON/OFF] condition of PANIC button of Intelligent Key | |
| RKE-P/W OPEN | Indicates [ON/OFF] condition of P/W DOWN signal from Intelligent Key | I |
| RKE-MODE CHG | Indicates [ON/OFF] condition of MODE CHANGE signal from Intelligent Key | |
| RKE OPE COUN1 | When remote keyless entry receiver receives the signal transmitted while operating on Intelligent Key, the numerical value start changing | J |
| RKE OPE COUN2 | NOTE: This item is displayed, but cannot be monitored | |
| REVERSE SW*1 | Indicates [ON/OFF] condition of R position | K |

*1: It is displayed but does not operate on A/T models.

*2: It is displayed but does not operate on M/T models.

*3: OFF is displayed when brake pedal is depressed while brake switch power supply is OFF.

ACTIVE TEST

| Test item | Description | |
|--------------------|---|---|
| BATTERY SAVER | This test is able to check interior room lamp operation The interior room lamp is activated after "On" on CONSULT-III screen is touched | N |
| PW REMOTO DOWN SET | This test is able to check power window down operation The power window down is activated after "On" on CONSULT-III screen is touched | |
| OUTSIDE BUZZER | This test is able to check Intelligent Key warning buzzer operation The Intelligent Key warning buzzer is activated after "On" on CONSULT-III screen is touched | O |
| INSIDE BUZZER | This test is able to check warning chime in combination meter operation <ul style="list-style-type: none"> Take away warning chime sounds when "Take out" on CONSULT-III screen is touched Key warning chime sounds when "Key" on CONSULT-III screen is touched OFF position warning chime sounds when "Knob" on CONSULT-III screen is touched | P |
| INDICATOR | This test is able to check warning lamp operation <ul style="list-style-type: none"> "KEY" Warning lamp illuminates when "KEY ON" on CONSULT-III screen is touched "KEY" Warning lamp blinks when "KEY IND" on CONSULT-III screen is touched | |
| INT LAMP | This test is able to check interior room lamp operation The interior room lamp is activated after "On" on CONSULT-III screen is touched | |

BCS

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Test item | Description |
|-------------------|---|
| LCD | <p>This test is able to check meter display information</p> <ul style="list-style-type: none"> • Engine start information displays when "BP N" on CONSULT-III screen is touched • Engine start information displays when "BP I" on CONSULT-III screen is touched • Key ID warning displays when "ID NG" on CONSULT-III screen is touched • Steering lock information displays when "ROTAT" on CONSULT-III screen is touched • P position warning displays when "SFT P" on CONSULT-III screen is touched • Intelligent Key insert information displays when "INSRT" on CONSULT-III screen is touched • Intelligent Key low battery warning displays when "BATT" on CONSULT-III screen is touched • Take away through window warning displays when "NO KY" on CONSULT-III screen is touched • Take away warning display when "OUTKEY" on CONSULT-III screen is touched • OFF position warning display when "LK WN" on CONSULT-III screen is touched |
| TRUNK/GLASS HATCH | <p>This test is able to check trunk lid opener actuator open operation This actuator opens when "Open" on CONSULT-III screen is touched</p> |
| FLASHER | <p>This test is able to check security hazard lamp operation The hazard lamps are activated after "LH/RH/Off" on CONSULT-III screen is touched</p> |
| HORN | <p>This test is able to check horn operation The horn is activated after "On" on CONSULT-III screen is touched</p> |
| P RANGE | <p>This test is able to check control device power supply Control device power is supplied when "On" on CONSULT-III screen is touched</p> |
| ENGINE SW ILLUMI | <p>This test is able to check push-ignition switch illumination operation Push-ignition switch illumination illuminates when "On" on CONSULT-III screen is touched</p> |
| LOCK INDICATOR | <p>This test is able to check LOCK indicator in push-ignition switch operation LOCK indicator in push-ignition switch illuminates when "On" on CONSULT-III screen is touched</p> |
| ACC INDICATOR | <p>This test is able to check ACC indicator in push-ignition switch operation ACC indicator in push-ignition switch illuminates when "On" on CONSULT-III screen is touched</p> |
| IGNITION ON IND | <p>This test is able to check on indicator in push-ignition switch operation ON indicator in push-ignition switch illuminates when "On" on CONSULT-III screen is touched</p> |
| KEY SLOT ILLUMI | <p>This test is able to check key slot illumination operation Key slot illumination blinks when "On" on CONSULT-III screen is touched</p> |
| TRUNK/BACK DOOR | <p>This test is able to check trunk lid opener actuator open operation This actuator opens when "Open" on CONSULT-III screen is touched</p> |

COMB SW

COMB SW : CONSULT-III Function (BCM - COMB SW)

INFOID:000000006473476

DATA MONITOR

| Monitor item [UNIT] | Description |
|---------------------------|---|
| FR WIPER HI [Off/On] | Displays the status of the FR WIPER HI switch in combination switch judged by BCM with the combination switch reading function. |
| FR WIPER LOW [Off/On] | Displays the status of the FR WIPER LOW switch in combination switch judged by BCM with the combination switch reading function. |
| FR WASHER SW [Off/On] | Displays the status of the FR WASHER switch in combination switch judged by BCM with the combination switch reading function. |
| FR WIPER INT [Off/On] | Displays the status of the FR WIPER INT/AUTO switch in combination switch judged by BCM with the combination switch reading function. |
| FR WIPER STOP [Off/On] | Displays the status of the front wiper stop position signal received from IPDM E/R via CAN communication. |
| INT VOLUME [1 - 7] | Displays the status of wiper volume dial position judged by BCM with the combination switch reading function. |

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Monitor item [UNIT] | Description |
|----------------------------|--|
| TURN SIGNAL R [Off/On] | Displays the status of the TURN RH switch in combination switch judged by BCM with the combination switch reading function. |
| TURN SIGNAL L [Off/On] | Displays the status of the TURN LH switch in combination switch judged by BCM with the combination switch reading function. |
| TAIL LAMP SW [Off/On] | Displays the status of the TAIL LAMP switch in combination switch judged by BCM with the combination switch reading function. |
| HI BEAM SW [Off/On] | Displays the status of the HI BEAM switch in combination switch judged by BCM with the combination switch reading function. |
| HEAD LAMP SW 1 [Off/On] | Displays the status of the HEADLAMP 1 switch in combination switch judged by BCM with the combination switch reading function. |
| HEAD LAMP SW 2 [Off/On] | Displays the status of the HEADLAMP 2 switch in combination switch judged by BCM with the combination switch reading function. |
| PASSING SW [Off/On] | Displays the status of the PASSING switch in combination switch judged by BCM with the combination switch reading function. |
| AUTO LIGHT SW [Off/On] | Displays the status of the AUTO LIGHT switch in combination switch judged by BCM with the combination switch reading function. |
| FR FOG SW [Off/On] | Displays the status of the FR FOG switch in combination switch judged by BCM with the combination switch reading function. |
| RR FOG SW [Off/On] | NOTE: The item is indicated, but not monitored. |

BCM

BCM : CONSULT-III Function (BCM - BCM)

INFOID:000000006473477

WORK SUPPORT

| Item | Description |
|---------------------|---|
| RESET SETTING VALUE | Return a value set with Work Support of each system to a default value in factory shipment. |

IMMU

IMMU : CONSULT-III Function (BCM - IMMU)

INFOID:000000006956238

DATA MONITOR

| Monitor item | Content |
|----------------|---|
| CONFIRM ID ALL | Indicates [YET] at all time. Switch to [DONE] when a registered Intelligent Key is inserted into the key slot. |
| CONFIRM ID4 | |
| CONFIRM ID3 | |
| CONFIRM ID2 | |
| CONFIRM ID1 | |
| TP 4 | Indicates the number of ID which has been registered. |
| TP 3 | |
| TP 2 | |
| TP 1 | |
| PUSH SW | Indicates [ON/OFF] condition of push-button ignition switch. |
| KEY SW -SLOT | Indicates [ON/OFF] condition of key slot. |

ACTIVE TEST

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Test item | Description |
|-----------|---|
| THEFT IND | This test is able to check security indicator lamp operation. Security indicator lamp will be turned on when "ON" on CONSULT-III screen touched. |

BATTERY SAVER

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

INFOID:000000006956230

WORK SUPPORT

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

*: Factory setting

DATA MONITOR

| Monitor item [Unit] | Description |
|-------------------------|---|
| REQ SW-DR [On/Off] | The switch status input from request switch (driver side) |
| REQ SW-AS [On/Off] | The switch status input from front request switch (passenger side) |
| REQ SW-RR [On/Off] | NOTE: The item is indicated, but not monitored. |
| REQ SW-RL [On/Off] | |
| PUSH SW [On/Off] | The switch status input from push-button ignition switch |
| ACC RLY-F/B [On/Off] | NOTE: The item is indicated, but not monitored. |
| KEY SW-SLOT [On/Off] | Key switch status input from key slot |
| UNLK SEN-DR [On/Off] | Driver door unlock status input from unlock sensor |
| DOOR SW-DR [On/Off] | The switch status input driver side front door switch |
| DOOR SW-AS [On/Off] | The switch status input from passenger side door switch |
| DOOR SW-RR [On/Off] | NOTE: The item is indicated, but not monitored. |
| DOOR SW-RL [On/Off] | |
| DOOR SW-BK [On/Off] | |
| CDL LOCK SW [On/Off] | Lock switch status received from the door lock and unlock switch by power window switch serial link |

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Monitor item [Unit] | Description |
|---------------------------|---|
| CDL UNLOCK SW [On/Off] | Unlock switch status received from the door lock and unlock switch by power window switch serial link |
| KEY CYL LK-SW [On/Off] | Lock switch status received from key cylinder switch by power window switch serial link |
| KEY CYL UN-SW [On/Off] | Unlock switch status received from key cylinder switch by power window switch serial link |
| TRNK/HAT MNTR [On/Off] | The switch status input from trunk room lamp switch |
| RKE-LOCK [On/Off] | Lock signal status received from remote keyless entry receiver |
| RKE-UNLOCK [On/Off] | Unlock signal status received from remote keyless entry receiver |

ACTIVE TEST

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

*: Each lamp switch is in ON position.

TRUNK

TRUNK : CONSULT-III Function (BCM - TRUNK)

INFOID:000000006956236

BCM CONSULT-III FUNCTION

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

| Diagnosis mode | Function Description |
|----------------|--|
| DATA MONITOR | The BCM input/output signals are displayed |

DATA MONITOR

| Monitor Item | Contents |
|---------------|---|
| PUSH SW | Indicates [ON/OFF] condition of push switch |
| UNLK SEN -DR | Indicates [ON/OFF] condition of unlock sensor |
| VEH SPEED 1 | Indicates [Km/h] condition of vehicle speed signal from combination meter |
| KEY CYL SW-TR | NOTE: This item is displayed, but cannot be monitored |
| TR CANCEL SW | Indicates [ON/OFF] condition of trunk lid opener cancel switch |
| TR/BD OPEN SW | Indicates [ON/OFF] condition of trunk lid opener switch |
| TRNK/HAT MNTR | Indicates [ON/OFF] condition of trunk room lamp switch |
| RKE-TR/BD | Indicates [ON/OFF] condition of trunk lid open signal from Intelligent Key remote controller button |

ACTIVE TEST

| Test item | Description |
|-------------------|---|
| TRUNK/GLASS HATCH | This test is able to check trunk lid opener actuator open operation This actuator opens when "OPEN" on CONSULT-III screen is touched |

THEFT ALM

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

THEFT ALM : CONSULT-III Function (BCM - THEFT)

INFOID:000000006956237

DATA MONITOR

| Monitored Item | Description |
|----------------|---|
| REQ SW-DR | Indicates [ON/OFF] condition of door request switch (driver side). |
| REQ SW-AS | Indicates [ON/OFF] condition of door request switch (passenger side). |
| REQ SW-BD/TR | Indicates [ON/OFF] condition of trunk opener request switch. |
| PUSH SW | Indicates [ON/OFF] condition of push-button ignition switch |
| UNLK SEN-DR | Indicates [ON/OFF] condition of driver door UNLOCK status. |
| KEY SW -SLOT | Indicates [ON/OFF] condition of key slot. |
| DOOR SW-DR | Indicates [ON/OFF] condition of front door switch LH. |
| DOOR SW-AS | Indicates [ON/OFF] condition of front door switch RH. |
| DOOR SW-RR | Indicates [ON/OFF] condition of rear door switch RH. |
| DOOR SW-RL | Indicates [ON/OFF] condition of rear door switch LH. |
| DOOR SW-BK | This is displayed even when it is not equipped. |
| CDL LOCK SW | Indicates [ON/OFF] condition of lock signal from door lock/unlock switch LH and RH. |
| CDL UNLOCK SW | Indicates [ON/OFF] condition of unlock signal from door lock/unlock switch LH and RH. |
| KEY CYL LK-SW | Indicates [ON/OFF] condition of lock signal from front door key cylinder switch. |
| KEY CYL UN-SW | Indicates [ON/OFF] condition of unlock signal from front door key cylinder switch. |
| KEY CYL SW-TR | This is displayed even when it is not equipped. |
| TR/BD OPEN SW | Indicates [ON/OFF] condition of trunk lid opener switch. |
| TRNK/HAT MNTR | Indicates [ON/OFF] condition of trunk room lamp switch. |
| RKE-LOCK | Indicates [ON/OFF] condition of LOCK signal from Intelligent Key. |
| RKE-UNLOCK | Indicates [ON/OFF] condition of UNLOCK signal from Intelligent Key. |
| RKE-TR/BD | Indicates [ON/OFF] condition of TRUNK OPEN signal from Intelligent Key. |

WORK SUPPORT

| Test Item | Description |
|--------------------|---|
| SECURITY ALARM SET | This mode is able to confirm and change security alarm ON-OFF setting. |
| THEFT ALM TRG | The switch which triggered vehicle security alarm is recorded. This mode is able to confirm and erase the record of vehicle security alarm. The trigger data can be erased by touching "CLEAR" on CONSULT-III screen. |

ACTIVE TEST

| Test Item | Description |
|-----------------------|---|
| THEFT IND | This test is able to check security indicator lamp operation. Security indicator lamp will be turned on when "ON" on CONSULT-III screen is touched. |
| VEHICLE SECURITY HORN | This test is able to check horn operation. Horns will be activated for 0.5 seconds after "ON" on CONSULT-III screen is touched. |
| HEADLAMP(HI) | This test is able to check headlamp operation. Headlamps will be activated for 0.5 seconds after "ON" on CONSULT-III screen is touched. |
| FLASHER | This test is able to check hazard warning lamp operation. Hazard warning lamps will be activated after "ON" on CONSULT-III screen is touched. |

RETAINED PWR

RETAINED PWR : CONSULT-III Function (BCM - RETAINED PWR)

INFOID:000000006956233

Data monitor

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Monitor Item | Description |
|--------------|---|
| DOOR SW-DR | Indicates [ON/OFF] condition of driver side door switch. |
| DOOR SW-AS | Indicates [ON/OFF] condition of passenger side door switch. |

SIGNAL BUFFER

SIGNAL BUFFER : CONSULT-III Function (BCM - SIGNAL BUFFER)

INFOID:000000006473483

DATA MONITOR

| Monitor item [UNIT] | Description |
|---------------------|---|
| PUSH SW [Off/On] | Displays the status of the push-button ignition switch (push switch) judged by BCM. |

ACTIVE TEST

| Test item | Operation | Description |
|-----------------|-----------|---|
| OIL PRESSURE SW | Off | OFF |
| | On | BCM transmits the oil pressure switch signal to the unified meter and A/C amp. via CAN communication, which illuminates the oil pressure warning lamp in the combination meter. |

AIR PRESSURE MONITOR

AIR PRESSURE MONITOR : CONSULT-III Function

INFOID:000000006956234

FUNCTION

The diagnosis functions (main functions) include the following: "WORK SUPPORT", "SELF DIAGNOSTIC RESULT", "DATA MONITOR" and "ACTIVE TEST".

| Diagnostic test mode | Function |
|------------------------|---|
| Work support | In this mode, it is possible to make quick and accurate adjustments by following the instructions on the CONSULT-III display. |
| Self diagnostic result | Receives self-diagnosis results from the BCM, and indicates DTCs and the number of malfunctions. |
| Data monitor | Receives input/output signals from the BCM and indicates and stores them to facilitate locating the causes of malfunctions. |
| Active test | Transmits command to the BCM to change output signals and check operation of output system. |

WORK SUPPORT MODE

Refer to [WT-22, "Work Procedure"](#).

SELF-DIAG RESULTS MODE

Refer to [BCS-75, "DTC Index"](#).

DATA MONITOR MODE

Screen of data monitor mode is displayed.

NOTE:

When malfunction is detected, CONSULT-III perform REAL-TIME DIAGNOSIS. Also, any malfunction detected while in this mode will be displayed at real time.

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DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

| Monitor item (Unit) | Remark |
|--|--|
| AIR PRESS FL (kPa), (kg/cm ²), (Psi) | Air pressure of tires |
| AIR PRESS FR (kPa), (kg/cm ²), (Psi) | |
| AIR PRESS RR (kPa), (kg/cm ²), (Psi) | |
| AIR PRESS RL (kPa), (kg/cm ²), (Psi) | |
| ID REGST FL1 | ID is registered: Done ID is not registered: Yet |
| ID REGST FR1 | |
| ID REGST RR1 | |
| ID REGST RL1 | |
| WARNING LAMP | Low tire pressure warning lamp ON: On Low tire pressure warning lamp OFF: Off |
| BUZZER | Combination meter buzzer ON: On Combination meter buzzer OFF: Off |

NOTE:

Before performing the self-diagnosis, be sure to register the ID, or erase the actual malfunction location may be different from that displayed on CONSULT-III.

ACTIVE TEST MODE

NOTE:

Before performing the self-diagnosis, be sure to register the ID, or erase the actual malfunction may be different from that displayed on CONSULT-III.

TEST ITEM LIST

| Test item | Content |
|-------------------|--|
| WARNING LAMP | This test is able to check to check that the low tire pressure warning lamp turns on. |
| ID REGIST WARNING | This test is able to check to check that the buzzer sounds or the low tire pressure warning lamp turns on. |
| FLASHER | This test is able to check to check that each turn signal lamp turns on. |
| HORN | This test is able to check to check that the horn sounds. |

U1000 CAN COMM

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM

Description

INFOID:000000006473485

CAN (Controller Area Network) is a serial communication line for real time applications. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Modern vehicle is equipped with many electronic control unit, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN H-line, CAN L-line) allowing a high rate of information transmission with less wiring. Each control unit transmits/receives data but selectively reads required data only.
CAN Communication Signal Chart. Refer to [LAN-23, "CAN Communication Signal Chart"](#).

DTC Logic

INFOID:000000006473486

DTC DETECTION LOGIC

| DTC | CONSULT-III display description | DTC Detection Condition | Possible cause |
|-------|---------------------------------|--|--------------------------|
| U1000 | CAN COMM | When BCM cannot communicate CAN communication signal continuously for 2 seconds or more. | CAN communication system |

Diagnosis Procedure

INFOID:000000006473487

1.PERFORM SELF DIAGNOSTIC

1. Turn ignition switch ON and wait for 2 seconds or more.
2. Check "Self Diagnostic Result".

Is DTC "U1000" displayed?

- YES >> Refer to [LAN-14, "Trouble Diagnosis Flow Chart"](#).
NO >> Refer to [GI-43, "Intermittent Incident"](#).

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U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:000000006473488

DTC DETECTION LOGIC

| DTC | CONSULT-III display description | DTC Detection Condition | Possible cause |
|-------|---------------------------------|--|----------------|
| U1010 | CONTROL UNIT(CAN) | BCM detected internal CAN communication circuit malfunction. | BCM |

Diagnosis Procedure

INFOID:000000006473489

1. REPLACE BCM

When DTC "U1010" is detected, replace BCM.

>> Replace BCM. Refer to [BCS-81. "Exploded View"](#).

U0415 VEHICLE SPEED

< DTC/CIRCUIT DIAGNOSIS >

U0415 VEHICLE SPEED

Description

INFOID:000000006956220

U0415 is displayed if any unusual condition is present in the reception status of the vehicle speed signal from the ABS actuator and electric unit (control unit).

DTC Logic

INFOID:000000006956221

DTC DETECTION LOGIC

| DTC | CONSULT-III display description | DTC Detection Condition | Probable cause |
|-------|---------------------------------|---|---|
| U0415 | VEHICLE SPEED | When the vehicle speed signal received from the ABS actuator and electric unit (control unit) remains abnormal for 2 seconds or more. | <ul style="list-style-type: none">• ABS actuator and electric unit (control unit)• BCM |

DTC CONFIRMATION PROCEDURE

1. DTC CONFIRMATION

1. Erase the DTC.
2. Turn ignition switch OFF.
3. Perform the "Self Diagnostic Result" of CONSULT-III, when passed 2 seconds or more after the ignition switch is turned ON.

Is any DTC detected?

- YES >> Refer to [BCS-37, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000006956222

1. ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) SELF-DIAG RESULTS

Perform "Self-Diagnostic Result" of ABS actuator and electric unit (control unit) with CONSULT-III. Refer to [BRC-27, "CONSULT-III Function"](#).

Is any DTC detected?

- YES >> Repair or replace the malfunctioning part.
NO >> Replace BCM. Refer to [BCS-81, "Removal and Installation"](#).

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B2562 LOW VOLTAGE

< DTC/CIRCUIT DIAGNOSIS >

B2562 LOW VOLTAGE

DTC Logic

INFOID:000000006956223

DTC DETECTION LOGIC

| DTC | CONSULT-III display description | DTC Detection Condition | Possible cause |
|-------|---------------------------------|--|---|
| B2562 | LOW VOLTAGE | When the power supply voltage to BCM remains less than 8.8 V for 120 seconds or more | Harness or connector (power supply circuit) |

DTC CONFIRMATION PROCEDURE

1. DTC CONFIRMATION

1. Erase DTC.
2. Turn ignition switch OFF.
3. Perform the "Self Diagnostic Result" of CONSULT-III, when passed 120 seconds or more after the ignition switch is turned ON.

Is any DTC detected?

- YES >> Refer to [BCS-38, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000006956224

1. CHECK POWER SUPPLY CIRCUIT

Check BCM power supply circuit. Refer to [PCS-65, "BCM : Diagnosis Procedure"](#).

Is the circuit normal?

- YES >> Replace BCM. Refer to [BCS-81, "Removal and Installation"](#).
NO >> Repair the malfunctioning part.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000006473495

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 | K |
| | 10 |

Is the fuse fusing?

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

2.CHECK POWER SUPPLY CIRCUIT

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

| Terminals | | Voltage (Approx.) |
|-----------|----------|-------------------------------|
| (+) | (-) | |
| BCM | | Ground Battery voltage |
| Connector | Terminal | |
| M118 | 1 | |
| M119 | 11 | |

Is the measurement value normal?

- YES >> GO TO 3.
NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

| BCM | | Ground | Continuity |
|-----------|----------|--------|------------|
| Connector | Terminal | | |
| M119 | 13 | | Existed |

Does continuity exist?

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

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BCS

COMBINATION SWITCH INPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

COMBINATION SWITCH INPUT CIRCUIT

Diagnosis Procedure

INFOID:000000006473496

1. CHECK INPUT 1 - 5 SYSTEM CIRCUIT FOR OPEN

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

| System | BCM | | Combination switch | | Continuity |
|---------|-----------|----------|--------------------|----------|------------|
| | Connector | Terminal | Connector | Terminal | |
| INPUT 1 | M122 | 107 | M33 | 11 | Existed |
| INPUT 2 | | 109 | | 9 | |
| INPUT 3 | | 88 | | 7 | |
| INPUT 4 | | 108 | | 10 | |
| INPUT 5 | | 87 | | 13 | |

Does continuity exist?

YES >> GO TO 2.

NO >> Repair the harnesses or connectors.

2. CHECK INPUT 1 - 5 SYSTEM CIRCUIT FOR SHORT

Check for continuity between BCM harness connector and ground.

| System | BCM | | Ground | Continuity |
|---------|-----------|----------|--------|-------------|
| | Connector | Terminal | | |
| INPUT 1 | M122 | 107 | Ground | Not existed |
| INPUT 2 | | 109 | | |
| INPUT 3 | | 88 | | |
| INPUT 4 | | 108 | | |
| INPUT 5 | | 87 | | |

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 3.

3. CHECK BCM OUTPUT VOLTAGE

1. Connect the BCM connector.
2. Check voltage between BCM harness connector and ground.

| System | Terminals | | Voltage (Approx.) |
|---------|-----------|----------|-------------------|
| | (+) | (-) | |
| | BCM | | |
| | Connector | Terminal | |
| INPUT 1 | M122 | 107 | Ground |
| INPUT 2 | | 109 | |
| INPUT 3 | | 88 | |
| INPUT 4 | | 108 | |
| INPUT 5 | | 87 | |

Is the measurement value normal?

YES >> GO TO 4.

NO >> Replace BCM. Refer to [BCS-81. "Exploded View"](#).

COMBINATION SWITCH INPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

4. CHECK BCM INPUT SIGNAL

1. Connect the combination switch connector.
2. Turn ON any switch in the system that is malfunctioning.
3. Check voltage between BCM harness connector and ground.

| System | Terminals | | Voltage (Approx.) | |
|---------|-----------|----------|----------------------|--|
| | (+) | (-) | | |
| | BCM | | | |
| | Connector | Terminal | Ground | Refer to BCS-44 . "Reference Value". |
| INPUT 1 | M122 | 107 | | |
| INPUT 2 | | 109 | | |
| INPUT 3 | | 88 | | |
| INPUT 4 | | 108 | | |
| INPUT 5 | | 87 | | |

Is the measurement value normal when any of the switches is turned ON?

- YES >> Replace BCM. Refer to [BCS-81](#). "Exploded View".
 NO >> Replace the combination switch.

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COMBINATION SWITCH OUTPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

COMBINATION SWITCH OUTPUT CIRCUIT

Diagnosis Procedure

INFOID:00000006473497

1. CHECK OUTPUT 1 - 5 SYSTEM CIRCUIT FOR OPEN

1. Turn the ignition switch OFF.
2. Disconnect the BCM and combination switch connectors.

NOTE:

BCM connector disconnects M123 only.

3. Check continuity between BCM harness connector and combination switch harness connector.

| System | BCM | | Combination switch | | Continuity |
|----------|-----------|----------|--------------------|----------|------------|
| | Connector | Terminal | Connector | Terminal | |
| OUTPUT 1 | M123 | 143 | M33 | 12 | Existed |
| OUTPUT 2 | | 144 | | 14 | |
| OUTPUT 3 | | 145 | | 5 | |
| OUTPUT 4 | | 146 | | 2 | |
| OUTPUT 5 | | 142 | | 8 | |

Does continuity exist?

YES >> GO TO 2.

NO >> Repair the harnesses or connectors.

2. CHECK OUTPUT 1 - 5 SYSTEM CIRCUIT FOR SHORT

Check for continuity between BCM harness connector and ground.

| System | BCM | | Ground | Continuity |
|----------|-----------|----------|--------|-------------|
| | Connector | Terminal | | |
| OUTPUT 1 | M123 | 143 | Ground | Not existed |
| OUTPUT 2 | | 144 | | |
| OUTPUT 3 | | 145 | | |
| OUTPUT 4 | | 146 | | |
| OUTPUT 5 | | 142 | | |

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> GO TO 3.

3. CHECK COMBINATION SWITCH INTERNAL CIRCUIT

1. Connect the combination switch connector.
2. Turn ON any switch in the system that is malfunctioning.
3. Check voltage between combination switch harness connector and ground.

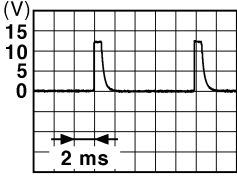
NOTE:

Check that the combination switch outputs a signal from combination switch input system.

COMBINATION SWITCH OUTPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

| System | Terminals | | Value (Approx.) |
|----------|--------------------|----------|-----------------|
| | (+) | (-) | |
| | Combination switch | | |
| | Connector | Terminal | |
| OUTPUT 1 | M33 | 12 | Ground |
| OUTPUT 2 | | 14 | |
| OUTPUT 3 | | 5 | |
| OUTPUT 4 | | 2 | |
| OUTPUT 5 | | 8 | |



Is the measurement value normal when any of the switches is turned ON?

- YES >> Replace BCM. Refer to [BCS-81, "Exploded View"](#).
- NO >> Replace the combination switch.

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000006473498

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

| Monitor Item | Condition | Value/Status |
|----------------|---|----------------------------|
| FR WIPER HI | Other than front wiper switch HI | Off |
| | Front wiper switch HI | On |
| FR WIPER LOW | Other than front wiper switch LO | Off |
| | Front wiper switch LO | On |
| FR WASHER SW | Front washer switch OFF | Off |
| | Front washer switch ON | On |
| FR WIPER INT | Other than front wiper switch INT/AUTO | Off |
| | Front wiper switch INT/AUTO | On |
| FR WIPER STOP | Front wiper is not in STOP position | Off |
| | Front wiper is in STOP position | On |
| INT VOLUME | Wiper volume dial is in a dial position 1 - 7 | Wiper volume dial position |
| TURN SIGNAL R | Other than turn signal switch RH | Off |
| | Turn signal switch RH | On |
| TURN SIGNAL L | Other than turn signal switch LH | Off |
| | Turn signal switch LH | On |
| TAIL LAMP SW | Other than lighting switch 1ST and 2ND | Off |
| | Lighting switch 1ST or 2ND | On |
| HI BEAM SW | Other than lighting switch HI | Off |
| | Lighting switch HI | On |
| HEAD LAMP SW 1 | Other than lighting switch 2ND | Off |
| | Lighting switch 2ND | On |
| HEAD LAMP SW 2 | Other than lighting switch 2ND | Off |
| | Lighting switch 2ND | On |
| PASSING SW | Other than lighting switch PASS | Off |
| | Lighting switch PASS | On |
| AUTO LIGHT SW | Other than lighting switch AUTO | Off |
| | Lighting switch AUTO | On |
| FR FOG SW | Front fog lamp switch OFF | Off |
| | Front fog lamp switch ON | On |
| RR FOG SW | NOTE: The item is indicated, but not monitored. | Off |
| DOOR SW-DR | Driver door closed | Off |
| | Driver door opened | On |
| DOOR SW-AS | Passenger door closed | Off |
| | Passenger door opened | On |
| DOOR SW-RR | NOTE: The item is indicated, but not monitored. | Off |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Monitor Item | Condition | Value/Status | |
|----------------|--|--------------|-----|
| DOOR SW-RL | NOTE: The item is indicated, but not monitored. | Off | A |
| DOOR SW-BK | NOTE: The item is indicated, but not monitored. | Off | B |
| CDL LOCK SW | Other than power door lock switch LOCK | Off | C |
| | Power door lock switch LOCK | On | |
| CDL UNLOCK SW | Other than power door lock switch UNLOCK | Off | D |
| | Power door lock switch UNLOCK | On | |
| KEY CYL LK-SW | Other than driver door key cylinder LOCK position | Off | E |
| | Driver door key cylinder LOCK position | On | |
| KEY CYL UN-SW | Other than driver door key cylinder UNLOCK position | Off | F |
| | Driver door key cylinder UNLOCK position | On | |
| KEY CYL SW-TR | NOTE: The item is indicated, but not monitored. | Off | G |
| HAZARD SW | Hazard switch is OFF | Off | H |
| | Hazard switch is ON | On | |
| REAR DEF SW | NOTE: The item is indicated, but not monitored. | Off | I |
| H/L WASH SW | NOTE: The item is indicated, but not monitored. | Off | J |
| TR CANCEL SW | Trunk lid opener cancel switch OFF | Off | K |
| | Trunk lid opener cancel switch ON | On | |
| TR/BD OPEN SW | Trunk lid opener switch OFF | Off | L |
| | While the trunk lid opener switch is turned ON | On | |
| TRNK/HAT MNTR | Trunk lid closed | Off | J |
| | Trunk lid opened | On | |
| RKE-LOCK | LOCK button of the Intelligent Key is not pressed | Off | K |
| | LOCK button of the Intelligent Key is pressed | On | |
| RKE-UNLOCK | UNLOCK button of the Intelligent Key is not pressed | Off | L |
| | UNLOCK button of the Intelligent Key is pressed | On | |
| RKE-TR/BD | TRUNK OPEN button of the Intelligent Key is not pressed | Off | BCS |
| | TRUNK OPEN button of the Intelligent Key is pressed | On | |
| RKE-PANIC | PANIC button of the Intelligent Key is not pressed | Off | N |
| | PANIC button of the Intelligent Key is pressed | On | |
| RKE-P/W OPEN | UNLOCK button of the Intelligent Key is not pressed | Off | O |
| | UNLOCK button of the Intelligent Key is pressed and held | On | |
| RKE-MODE CHG | LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously | Off | P |
| | LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously | On | |
| OPTICAL SENSOR | Bright outside of the vehicle | Close to 5 V | P |
| | Dark outside of the vehicle | Close to 0 V | |
| REQ SW -DR | Driver door request switch is not pressed | Off | |
| | Driver door request switch is pressed | On | |
| REQ SW -AS | Passenger door request switch is not pressed | Off | |
| | Passenger door request switch is pressed | On | |
| REQ SW -RR | NOTE: The item is indicated, but not monitored. | Off | |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Monitor Item | Condition | Value/Status |
|---|---|--------------|
| REQ SW -RL | NOTE: The item is indicated, but not monitored. | Off |
| REQ SW -BD/TR | Trunk lid opener request switch is not pressed | Off |
| | Trunk lid opener request switch is pressed | On |
| PUSH SW | Push-button ignition switch (push switch) is not pressed | Off |
| | Push-button ignition switch (push switch) is pressed | On |
| IGN RLY2 -F/B | Ignition switch in OFF or ACC position | Off |
| | Ignition switch in ON position | On |
| ACC RLY -F/B | NOTE: The item is indicated, but not monitored. | Off |
| CLUCH SW | The clutch pedal is not depressed | Off |
| | The clutch pedal is depressed | On |
| BRAKE SW 1 | The brake pedal is depressed when No. 7 fuse is blown | Off |
| | The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal | On |
| BRAKE SW 2 | The brake pedal is not depressed | Off |
| | The brake pedal is depressed | On |
| DETE/CANCL SW | <ul style="list-style-type: none"> • Selector lever in P position (Except M/T models) • The clutch pedal is depressed (M/T models) | Off |
| | <ul style="list-style-type: none"> • Selector lever in any position other than P (Except M/T models) • The clutch pedal is not depressed (M/T models) | On |
| SFT PN/N SW | Selector lever in any position other than P and N | Off |
| | Selector lever in P or N position | On |
| S/L -LOCK NOTE: For models without steering lock unit, this item is not monitored. | Steering is unlocked | Off |
| | Steering is locked | On |
| S/L -UNLOCK NOTE: For models without steering lock unit, this item is not monitored. | Steering is locked | Off |
| | Steering is unlocked | On |
| S/L RELAY-F/B NOTE: For models without steering lock unit, this item is not monitored. | Ignition switch in OFF or ACC position | Off |
| | Ignition switch in ON position | On |
| UNLK SEN -DR | Driver door is unlocked | Off |
| | Driver door is locked | On |
| PUSH SW -IPDM | Push-button ignition switch (push-switch) is not pressed | Off |
| | Push-button ignition switch (push-switch) is pressed | On |
| IGN RLY1 -F/B | Ignition switch in OFF or ACC position | Off |
| | Ignition switch in ON position | On |
| DETE SW -IPDM | Selector lever in any position other than P | Off |
| | Selector lever in P position | On |
| SFT PN -IPDM | <ul style="list-style-type: none"> • Selector lever in any position other than P and N (Except M/T models) • The clutch pedal is not depressed (M/T models) | Off |
| | <ul style="list-style-type: none"> • Selector lever in P or N position • The clutch pedal is depressed | On |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Monitor Item | Condition | Value/Status | |
|---|--|--|-----|
| SFT P -MET | Selector lever in any position other than P | Off | A |
| | Selector lever in P position | On | |
| SFT N -MET | Selector lever in any position other than N | Off | B |
| | Selector lever in N position | On | |
| ENGINE STATE | Engine stopped | Stop | |
| | While the engine stalls | Stall | C |
| | At engine cranking | Crank | |
| | Engine running | Run | D |
| S/L LOCK-IPDM NOTE: For models without steering lock unit, this item is not monitored. | Steering is unlocked | Off | E |
| | Steering is locked | On | |
| S/L UNLK-IPDM NOTE: For models without steering lock unit, this item is not monitored. | Steering is locked | Off | F |
| | Steering is unlocked | On | |
| S/L RELAY-REQ NOTE: For models without steering lock unit, this item is not monitored. | Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK | Off | G |
| | Steering lock system are not the LOCK condition or the changing condition from LOCK to UNLOCK | On | H |
| VEH SPEED 1 | While driving | Equivalent to speedometer reading | I |
| VEH SPEED 2 | While driving | Equivalent to speedometer reading | |
| DOOR STAT-DR | Driver door is locked | LOCK | J |
| | Wait with selective UNLOCK operation (60 seconds) | READY | |
| | Driver door is unlocked | UNLOCK | |
| DOOR STAT-AS | Passenger door is locked | LOCK | K |
| | Wait with selective UNLOCK operation (60 seconds) | READY | |
| | Passenger door is unlocked | UNLOCK | L |
| ID OK FLAG | Driver side door is open after ignition switch is turned OFF (Selector lever is in the P position except for M/T models) | Reset | |
| | Ignition switch ON | Set | BCS |
| PRMT ENG STRT | The engine start is prohibited | Reset | |
| | The engine start is permitted | Set | |
| PRMT RKE STRT | NOTE: The item is indicated, but not monitored. | Reset | N |
| KEY SW -SLOT | The Intelligent Key is not inserted into key slot | Off | O |
| | The Intelligent Key is inserted into key slot | On | |
| RKE OPE COUN1 | During the operation of the Intelligent Key | Operation frequency of the Intelligent Key | |
| RKE OPE COUN2 | NOTE: The item is indicated, but not monitored. | — | P |
| CONFRM ID ALL | The key ID that the key slot receives is not recognized by any key ID registered to BCM. | Yet | |
| | The key ID that the key slot receives is recognized by any key ID registered to BCM. | Done | |

BCM (BODY CONTROL MODULE)

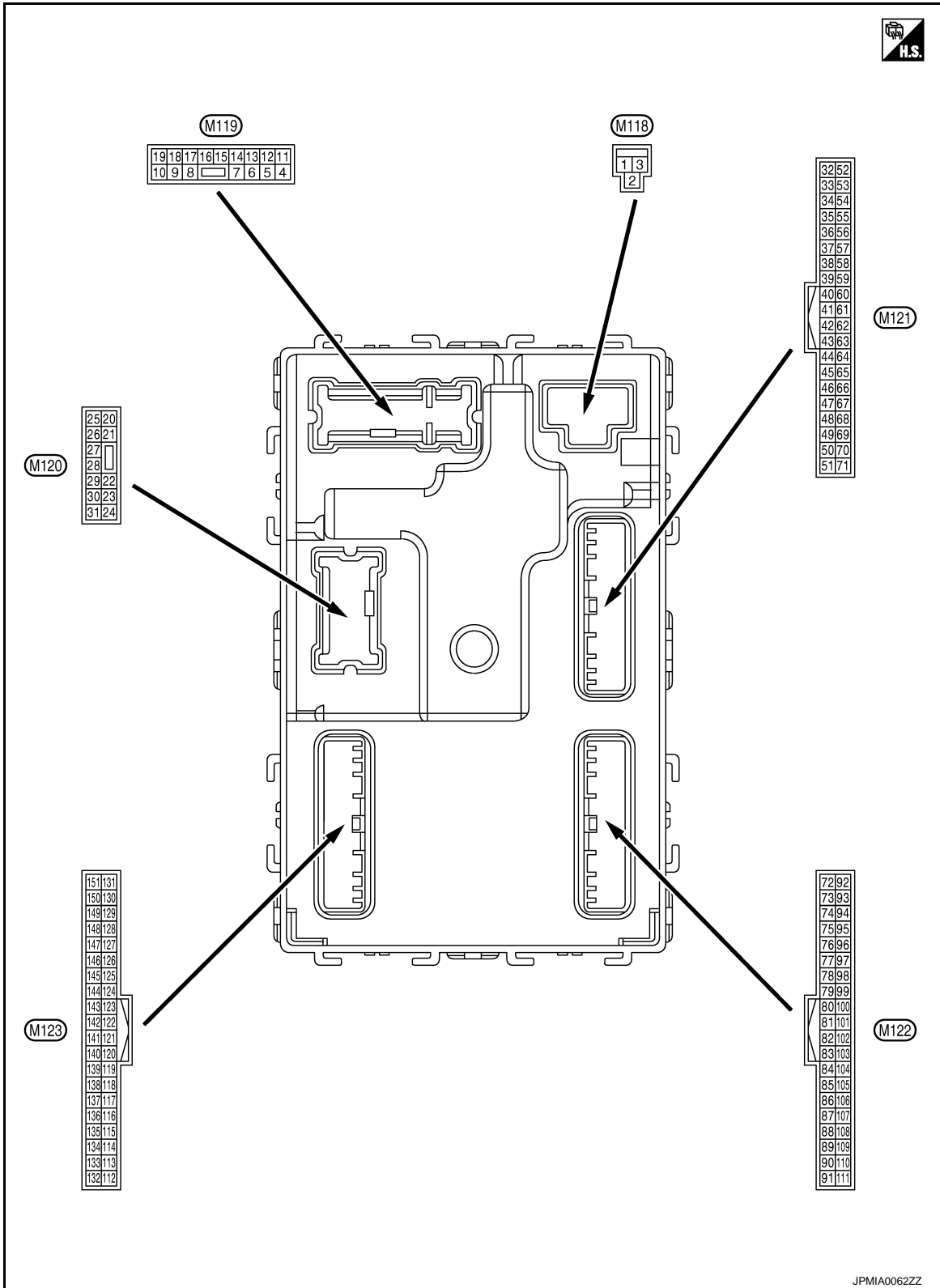
< ECU DIAGNOSIS INFORMATION >

| Monitor Item | Condition | Value/Status |
|--------------|---|-------------------------------|
| CONFIRM ID4 | The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the fourth key ID registered to BCM. | Done |
| CONFIRM ID3 | The key ID that the key slot receives is not recognized by the third key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the third key ID registered to BCM. | Done |
| CONFIRM ID2 | The key ID that the key slot receives is not recognized by the second key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the second key ID registered to BCM. | Done |
| CONFIRM ID1 | The key ID that the key slot receives is not recognized by the first key ID registered to BCM. | Yet |
| | The key ID that the key slot receives is recognized by the first key ID registered to BCM. | Done |
| TP 4 | The ID of fourth Intelligent Key is not registered to BCM | Yet |
| | The ID of fourth Intelligent Key is registered to BCM | Done |
| TP 3 | The ID of third Intelligent Key is not registered to BCM | Yet |
| | The ID of third Intelligent Key is registered to BCM | Done |
| TP 2 | The ID of second Intelligent Key is not registered to BCM | Yet |
| | The ID of second Intelligent Key is registered to BCM | Done |
| TP 1 | The ID of first Intelligent Key is not registered to BCM | Yet |
| | The ID of first Intelligent Key is registered to BCM | Done |
| AIR PRESS FL | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of front LH tire |
| AIR PRESS FR | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of front RH tire |
| AIR PRESS RR | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of rear RH tire |
| AIR PRESS RL | Ignition switch ON (Only when the signal from the transmitter is received) | Air pressure of rear LH tire |
| ID REGST FL1 | ID of front LH tire transmitter is registered | Done |
| | ID of front LH tire transmitter is not registered | Yet |
| ID REGST FR1 | ID of front RH tire transmitter is registered | Done |
| | ID of front RH tire transmitter is not registered | Yet |
| ID REGST RR1 | ID of rear RH tire transmitter is registered | Done |
| | ID of rear RH tire transmitter is not registered | Yet |
| ID REGST RL1 | ID of rear LH tire transmitter is registered | Done |
| | ID of rear LH tire transmitter is not registered | Yet |
| WARNING LAMP | Tire pressure indicator OFF | Off |
| | Tire pressure indicator ON | On |
| BUZZER | Tire pressure warning alarm is not sounding | Off |
| | Tire pressure warning alarm is sounding | On |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



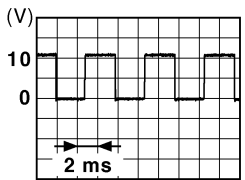
PHYSICAL VALUES

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|---|------------------|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 1 (W) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 2 (Y) | Ground | P/W power supply (BAT) | Output | Ignition switch OFF | | 12 V |
| 3 (BG) | Ground | P/W power supply (RAP) | Output | Ignition switch ON | | 12 V |
| 4 (LG) | Ground | Interior room lamp power supply | Output | Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply) | | 0 V |
| | | | | Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply) | | 12 V |
| 5 (P) | Ground | Passenger door UN- LOCK | Output | Passenger door | UNLOCK (Actuator is activated) | 12 V |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 7 (SB) | Ground | Step lamp | Output | Step lamp | ON | 0 V |
| | | | | | OFF | 12 V |
| 8 (V) | Ground | All doors, fuel lid LOCK | Output | All doors, fuel lid | LOCK (Actuator is activated) | 12 V |
| | | | | | Other than LOCK (Actuator is not activated) | 0 V |
| 9 (G) | Ground | Driver door, fuel lid UNLOCK | Output | Driver door, fuel lid | UNLOCK (Actuator is activated) | 12 V |
| | | | | | Other than UNLOCK (Actuator is not activated) | 0 V |
| 11 (GR) | Ground | Battery power supply | Input | Ignition switch OFF | | Battery voltage |
| 13 (B) | Ground | Ground | — | Ignition switch ON | | 0 V |
| 14 (W) | Ground | Push-button ignition switch illumination ground | Output | Tail lamp | OFF | 0 V |
| | | | | | ON | <p style="text-align: center;">NOTE: When the illumination brightening/dimming level is in the neutral position.</p>  <p style="text-align: right; font-size: small;">JSNIA0010GB</p> |
| 15 (BG) | Ground | ACC indicator lamp | Output | Ignition switch | OFF (LOCK indicator is not illuminated) | Battery voltage |
| | | | | | ACC | 0 V |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

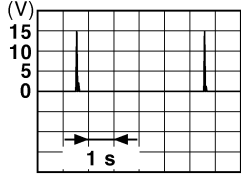
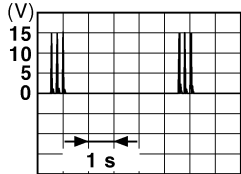
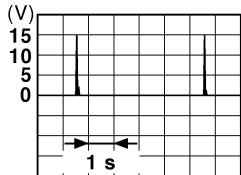
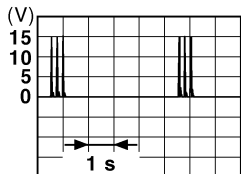
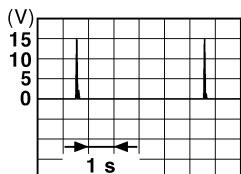
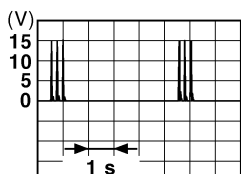
| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|----------------------------|------------------|--|---|
| + | - | Signal name | Input/ Output | | |
| 17 (BR) | Ground | Turn signal RH (Front) | Output | Ignition switch OFF | 0 V |
| | | | | Ignition switch ON | Turn signal switch RH |
| 18 (BG) | Ground | Turn signal LH (Front) | Output | Ignition switch OFF | 0 V |
| | | | | Ignition switch ON | Turn signal switch LH |
| 19 (V) | Ground | Room lamp timer control | Output | Interior room lamp | OFF |
| | | | | ON | 12 V |
| 20 (V) | Ground | Turn signal RH (Rear) | Output | Ignition switch OFF | 0 V |
| | | | | Ignition switch ON | Turn signal switch RH |
| 23 (Y) | Ground | Trunk lid open | Output | Trunk lid | OPEN (Trunk lid opener actuator is activated) |
| | | | | Other than OPEN (Trunk lid opener actuator is not activated) | 12 V |
| 25 (Y) | Ground | Turn signal LH (Rear) | Output | Ignition switch OFF | 0 V |
| | | | | Ignition switch ON | Turn signal switch LH |
| 30 (P) | Ground | Trunk room lamp | Output | Trunk room lamp | ON |
| | | | | OFF | 12 V |

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|------------------------------|------------------|--|---|
| + | - | Signal name | Input/ Output | | |
| 34 (SB) | Ground | Trunk room antenna (-) | Output | Ignition switch OFF |  <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the passenger compart- ment |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |
| 35 (V) | Ground | Trunk room antenna (+) | Output | Ignition switch OFF |  <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the passenger compart- ment |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |
| 38 (B) | Ground | Rear bumper anten- na (-) | Output | When the trunk lid opener re- quest switch is operated with ignition switch OFF |  <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When Intelligent Key is not in the antenna detection area |  <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

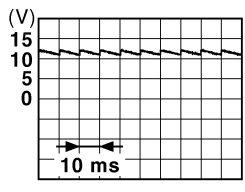
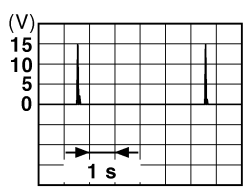
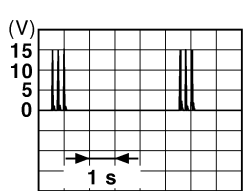
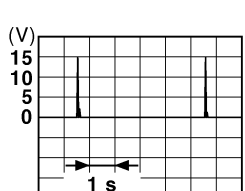
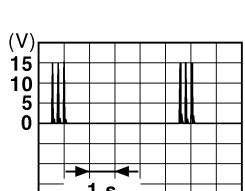
| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|--|------------------|---|---|-----------------|
| + | - | Signal name | Input/ Output | | | |
| 39 (W) | Ground | Rear bumper antenna (+) | Output | When Intelligent Key is in the antenna detection area | | |
| | | | | When the trunk lid opener request switch is operated with ignition switch OFF | | |
| 47 (Y) | Ground | Ignition relay (IPDM E/R) control | Output | Ignition switch | OFF or ACC | 12 V |
| | | | | ON | 0 V | |
| 50 (G) | Ground | Trunk room lamp switch | Input | Trunk room lamp switch | OFF (Trunk lid is closed) | |
| | | | | | ON (Trunk lid is opened) | 0 V |
| 52 (BR) | Ground | Starter relay control | Output | Ignition switch ON (A/T models) | When selector lever is in P or N position | 12 V |
| | | | | | When selector lever is not in P or N position | 0 V |
| | | | | Ignition switch ON (M/T models) | When the clutch pedal is depressed | Battery voltage |
| | | | | | When the clutch pedal is not depressed | 0 V |
| 60*1 (BR) | Ground | Push-button ignition switch (Push switch) | Input | Push-button ignition switch (push switch) | Pressed | 0 V |
| | | | | | Not pressed | Battery voltage |
| 61 (SB) | Ground | Trunk lid opener request switch | Input | Trunk lid opener request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) | |
| 64 (G) | Ground | Intelligent Key warning buzzer (Engine room) | Output | Intelligent Key warning buzzer (Engine room) | Sounding | 0 V |
| | | | | | Not sounding | 12 V |

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|--|------------------|------------------------------|--|---|
| + | - | Signal name | Input/ Output | | | |
| 67 (GR) | Ground | Trunk lid opener switch | Input | Trunk lid open- er switch | Pressed | 0 V |
| | | | | | Not pressed |  <p style="text-align: center;">11.8 V</p> |
| 72 (R) | Ground | Room antenna 2 (-) (Center console) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compart- ment |  |
| | | | | | When Intelligent Key is not in the passenger compart- ment |  |
| 73 (G) | Ground | Room antenna 2 (+) (Center console) | Output | Ignition switch OFF | When Intelligent Key is in the passenger compart- ment |  |
| | | | | | When Intelligent Key is not in the passenger compart- ment |  |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|----------------------------|------------------|---|---|
| + | - | Signal name | Input/ Output | | |
| 74 (SB) | Ground | Passenger door antenna (-) | Output | When Intelligent Key is in the antenna detection area | <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When the passenger door request switch is operated with ignition switch OFF | <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |
| 75 (BR) | Ground | Passenger door antenna (+) | Output | When Intelligent Key is in the antenna detection area | <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When the passenger door request switch is operated with ignition switch OFF | <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |
| 76 (V) | Ground | Driver door antenna (-) | Output | When Intelligent Key is in the antenna detection area | <p style="text-align: right; font-size: small;">JMKIA0062GB</p> |
| | | | | When the driver door request switch is operated with ignition switch OFF | <p style="text-align: right; font-size: small;">JMKIA0063GB</p> |

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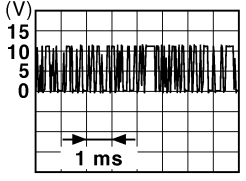
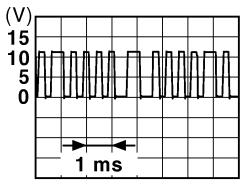
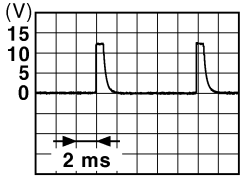
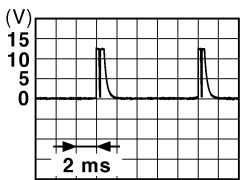
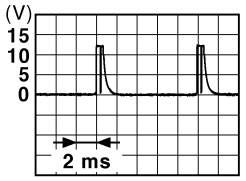
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

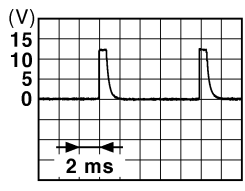
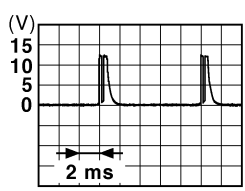

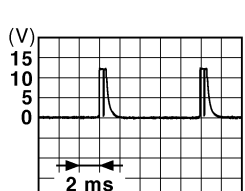
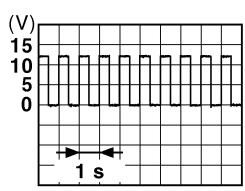
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|---|------------------|---|---|--|
| + | - | Signal name | Input/ Output | | | |
| 80 (GR) | Ground | NATS antenna amp. | Input/ Output | During waiting | Ignition switch is pressed while inserting the Intelligent Key into the key slot. | Just after pressing ignition switch. Pointer of tester should move. |
| 81 (W) | Ground | NATS antenna amp. | Input/ Output | During waiting | Ignition switch is pressed while inserting the Intelligent Key into the key slot. | Just after pressing ignition switch. Pointer of tester should move. |
| 82 (R) | Ground | Ignition relay [Fuse block (J/B)] control | Output | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | 12 V |
| 83 (Y) | Ground | Remote keyless entry receiver communication | Input/ Output | During waiting | |  <p style="text-align: right; font-size: small;">JMKIA0064GB</p> |
| | | | | When operating either button on the Intelligent Key | |  <p style="text-align: right; font-size: small;">JMKIA0065GB</p> |
| 87 (Y) | Ground | Combination switch INPUT 5 | Input | Combination switch | All switches OFF (Wiper volume dial 4) |  <p style="text-align: right; font-size: small;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p> |
| | | | | | Front fog lamp switch ON (Wiper volume dial 4) |  <p style="text-align: right; font-size: small;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | | Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 6 • Wiper volume dial 7 |  <p style="text-align: right; font-size: small;">JPMIA0040GB</p> <p style="text-align: center;">1.3 V</p> |

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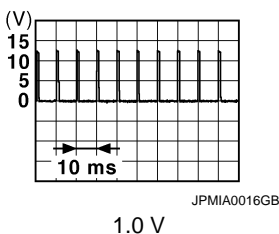
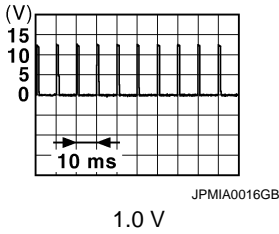
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|--|------------------|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 88 (BG) | Ground | Combination switch INPUT 3 | Input | Combination switch | All switches OFF (Wiper volume dial 4) |  <p style="text-align: right; font-size: small;">JPMA0041GB</p> <p style="text-align: center;">1.4 V</p> |
| | | | | | Lighting switch HI (Wiper volume dial 4) |  <p style="text-align: right; font-size: small;">JPMA0036GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | | Lighting switch 2ND (Wiper volume dial 4) |  <p style="text-align: right; font-size: small;">JPMA0037GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | | Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3 |  <p style="text-align: right; font-size: small;">JPMA0040GB</p> <p style="text-align: center;">1.3 V</p> |
| 89*2 (BR) | Ground | Push-button ignition switch (Push switch) | Input | Push-button ig- nition switch (push switch) | Pressed | 0 V |
| | | | | | Not pressed | Battery voltage |
| 90 (P) | Ground | CAN-L | Input/ Output | | — | — |
| 91 (L) | Ground | CAN-H | Input/ Output | | — | — |
| 92 (LG) | Ground | Key slot illumination | Output | Key slot illumi- nation | OFF | 0 V |
| | | | | | Blinking |  <p style="text-align: right; font-size: small;">JPMA0015GB</p> <p style="text-align: center;">6.5 V</p> |
| | | | | | ON | 12 V |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|--|------------------|-------------------------------|---|---|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 93 (V) | Ground | ON indicator lamp | Output | Ignition switch | OFF (LOCK indicator is not illuminated) | Battery voltage |
| | | | | | ON | 0 V |
| 95 (BG) | Ground | ACC relay control | Output | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | 12 V |
| 96 (GR) | Ground | A/T shift selector (Detention switch) power supply | Output | — | | 12 V |
| 97*2 (L) | Ground | Steering lock condition No. 1 | Input | Steering lock | LOCK status | 0 V |
| | | | | | UNLOCK status | 12 V |
| 98*2 (SB) | Ground | Steering lock condition No. 2 | Input | Steering lock | LOCK status | 12 V |
| | | | | | UNLOCK status | 0 V |
| 99 (R) | Ground | Selector lever P position switch | Input | Selector lever | P position | 0 V |
| | | | | | Any position other than P | 12 V |
| | | ASCD clutch switch (M/T models without ICC) | | ASCD clutch switch | OFF (Clutch pedal is depressed) | 0 V |
| | | | | | ON (Clutch pedal is not depressed) | 12 V |
| | | ICC clutch switch (M/T models with ICC) | | ICC clutch switch | OFF (Clutch pedal is depressed) | 0 V |
| | | | | | ON (Clutch pedal is not depressed) | 12 V |
| 100 (Y) | Ground | Passenger door request switch | Input | Passenger door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  |
| 101 (P) | Ground | Driver door request switch | Input | Driver door request switch | ON (Pressed) | 0 V |
| | | | | | OFF (Not pressed) |  |
| 102 (BG) | Ground | Blower fan motor relay control | Output | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | 12 V |
| 103 (LG) | Ground | Remote keyless entry receiver power supply | Output | Ignition switch OFF | | 12 V |
| 106*2 (W) | Ground | Steering lock unit power supply | Output | Ignition switch | OFF or ACC | 12 V |
| | | | | | ON | 0 V |

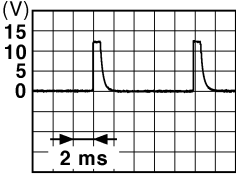




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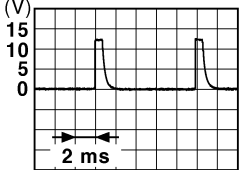

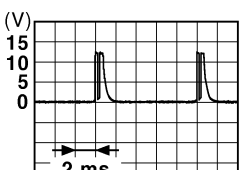
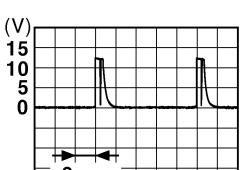
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|-------------------------------|------------------|---|------------------------|--|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 107 (LG) | Ground | Combination switch INPUT 1 | Input | Combination switch (Wiper volume dial 4) | All switches OFF |  <p style="text-align: right;">JPMIA0041GB</p> <p style="text-align: center;">1.4 V</p> |
| | | | | | Turn signal switch LH |  <p style="text-align: right;">JPMIA0037GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | | Turn signal switch RH |  <p style="text-align: right;">JPMIA0036GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | | Front wiper switch LO |  <p style="text-align: right;">JPMIA0038GB</p> <p style="text-align: center;">1.3 V</p> |
| | | | | | Front washer switch ON |  <p style="text-align: right;">JPMIA0039GB</p> <p style="text-align: center;">1.3 V</p> |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) |
|------------------------------|--------|-------------------------------|------------------|-----------------------|--|
| + | - | Signal name | Input/ Output | | |
| 108 (R) | Ground | Combination switch INPUT 4 | Input | Combination switch | All switches OFF (Wiper volume dial 4)  1.4 V |
| | | | | | Lighting switch AUTO (Wiper volume dial 4)  1.3 V |
| | | | | | Lighting switch 1ST (Wiper volume dial 4)  1.3 V |
| | | | | | Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6  1.3 V |

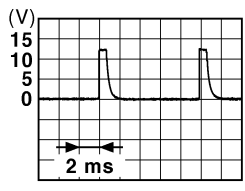
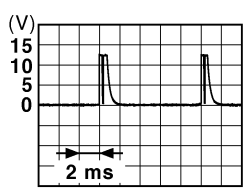
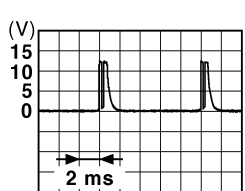
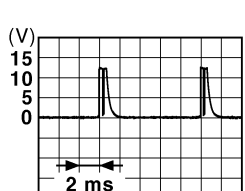
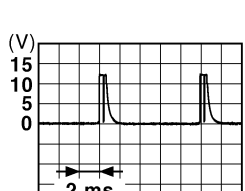
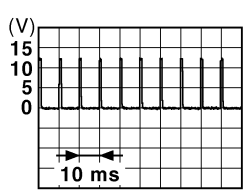
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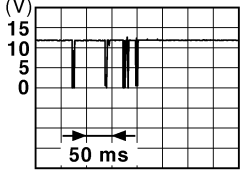
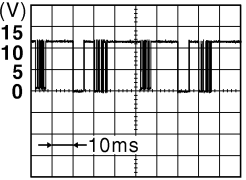
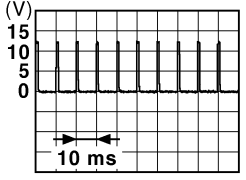
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|-------------------------------|------------------|---|---------------------------------|--|
| + | - | Signal name | Input/ Output | | | |
| 109 (W) | Ground | Combination switch INPUT 2 | Input | Combination switch (Wiper volume dial 4) | All switches OFF |  <small>JPMIA0041GB</small> 1.4 V |
| | | | | | Lighting switch PASS |  <small>JPMIA0037GB</small> 1.3 V |
| | | | | | Lighting switch 2ND |  <small>JPMIA0036GB</small> 1.3 V |
| | | | | | Front wiper switch INT/ AUTO |  <small>JPMIA0038GB</small> 1.3 V |
| | | | | | Front wiper switch HI |  <small>JPMIA0040GB</small> 1.3 V |
| | | | | | ON | 0 V |
| 110 (G) | Ground | Hazard switch | Input | Hazard switch | OFF |  <small>JPMIA0012GB</small> 1.1 V |
| | | | | OFF | OFF | |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

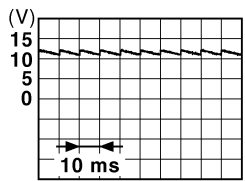
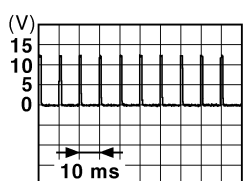
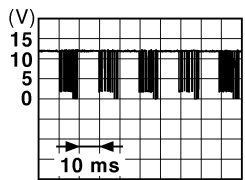
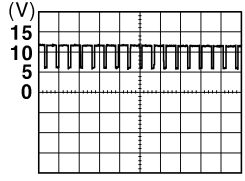
| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|--|------------------|---|---|---|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 111*2 (Y) | Ground | Steering lock unit communication | Input/ Output | Steering lock | LOCK status | 12 V |
| | | | | | LOCK or UNLOCK |  <p style="text-align: right; font-size: small;">JMKIA0066GB</p> |
| | | | | | For 15 seconds after UN- LOCK | 12 V |
| | | | | 15 seconds or later after UNLOCK | 0 V | |
| 112 (BR) | Ground | Rain sensor serial link | Input/ Output | Ignition switch ON |  <p style="text-align: right; font-size: small;">JPMIA0156GB</p> | |
| | | | | | 8.7 V | |
| 113 (G) | Ground | Optical sensor | Input | Ignition switch ON | When bright outside of the vehicle | Close to 5 V |
| | | | | When dark outside of the vehicle | Close to 0 V | |
| 114 (R) | Ground | Clutch interlock switch | Input | Clutch interlock switch | OFF (Clutch pedal is not depressed) | 0 V |
| | | | | | ON (Clutch pedal is de- pressed) | Battery voltage |
| 116 (SB) | Ground | Stop lamp switch 1 | Input | — | Battery voltage | |
| 118 (BR) | Ground | Stop lamp switch 2 (Without ICC) | Input | Stop lamp switch | OFF (Brake pedal is not depressed) | 0 V |
| | | | | | ON (Brake pedal is de- pressed) | Battery voltage |
| | | Stop lamp switch 2 (With ICC) | | Stop lamp switch OFF (Brake pedal is not depressed) and ICC brake hold relay OFF | 0 V | |
| | | | | Stop lamp switch ON (Brake pedal is de- pressed) or ICC brake hold relay ON | Battery voltage | |
| 119 (GR) | Ground | Driver side door lock assembly (Unlock sensor) | Input | Driver door | LOCK status (Unlock sensor switch OFF) |  <p style="text-align: right; font-size: small;">JPMIA0012GB</p> |
| | | | | | UNLOCK status (Unlock switch sensor ON) | 0 V |

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BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|---|------------------|--|---|---|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 121 (SB) | Ground | Key slot switch | Input | When the Intelligent Key is inserted into key slot | 12 V | |
| | | | | When the Intelligent Key is not inserted into key slot | 0 V | |
| 123 (W) | Ground | IGN feedback | Input | Ignition switch | OFF or ACC | 0 V |
| | | | | | ON | Battery voltage |
| 124 (BG) | Ground | Passenger door switch | Input | Passenger door switch | OFF (Door close) |  <small>JPMIA0011GB</small> 11.8 V |
| | | | | | ON (Door open) | 0 V |
| 129 (BG) | Ground | Trunk lid opener cancel switch | Input | Trunk lid opener cancel switch | CANCEL |  <small>JPMIA0012GB</small> 1.1 V |
| | | | | | ON | 0 V |
| 132 (LG) | Ground | Power window switch and R.H.T. control unit communication | Input/ Output | Ignition switch ON |  <small>JPMIA0013GB</small> 10.2 V | |
| | | | | Ignition switch OFF or ACC | 12 V | |
| 133 (Y) | Ground | Push-button ignition switch illumination | Output | Push-button ignition switch illumination | ON (Tail lamps OFF) | 9.5 V |
| | | | | | ON (Tail lamps ON) | <p style="text-align: center;">NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level.</p>  <small>JPMIA0159GB</small> |
| | | | | | OFF | 0 V |
| 134 (LG) | Ground | LOCK indicator lamp | Output | LOCK indicator lamp | OFF | Battery voltage |
| | | | | | ON | 0 V |
| 137 (BG) | Ground | Receiver and sensor ground | Input | Ignition switch ON | 0 V | |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

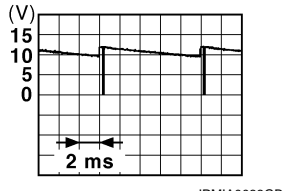
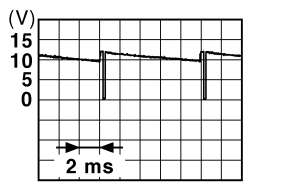
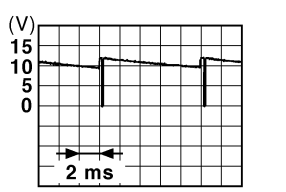
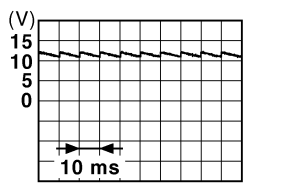
| Terminal No. (Wire color) | | Description | | Condition | | Value (Approx.) |
|------------------------------|--------|--|------------------|--|---|--------------------|
| | | Signal name | Input/ Output | | | |
| + | - | | | | | |
| 138 (Y) | Ground | Receiver and sensor power supply | Output | Ignition switch | OFF | 0 V |
| | | | | | ACC or ON | 5.0 V |
| 139 (L) | Ground | Tire pressure receiver communication | Input/ Output | Ignition switch ON | Standby state | |
| | | | | | When receiving the signal from the transmitter | |
| 140 (GR) | Ground | Selector lever P/N position (A/T models) | Input | Selector lever | P or N position | 12 V |
| | | | | | Except P and N positions | 0 V |
| 141 (R) | Ground | Security indicator lamp | Output | Security indicator lamp | ON | 0 V |
| | | | | | Blinking | |
| 142 (BR) | Ground | Combination switch OUTPUT 5 | Output | Combination switch (Wiper volume dial 4) | All switches OFF | 0 V |
| | | | | | Lighting switch 1ST | |
| | | | | | Lighting switch HI | |
| | | | | | Lighting switch 2ND | |
| | | | | | Turn signal switch RH | |
| Turn signal switch RH | 10.7 V | | | | | |
| 143 (V) | Ground | Combination switch OUTPUT 1 | Output | Combination switch | All switches OFF (Wiper volume dial 4) | 0 V |
| | | | | | Front wiper switch HI (Wiper volume dial 4) | |
| | | | | | Any of the conditions below with all switches OFF | |
| | | | | | <ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 2 • Wiper volume dial 3 • Wiper volume dial 6 • Wiper volume dial 7 | |

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BCS

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Terminal No. (Wire color) | | Description | | Condition | Value (Approx.) | |
|------------------------------|--------|---------------------------------------|------------------|---|---|---|
| + | - | Signal name | Input/ Output | | | |
| 144 (G) | Ground | Combination switch OUTPUT 2 | Output | Combination switch | All switches OFF (Wiper volume dial 4) | 0 V |
| | | | | | Front washer switch ON (Wiper volume dial 4) |  |
| | | | | | Any of the conditions below with all switches OFF <ul style="list-style-type: none"> • Wiper volume dial 1 • Wiper volume dial 5 • Wiper volume dial 6 | |
| 145 (L) | Ground | Combination switch OUTPUT 3 | Output | Combination switch (Wiper volume dial 4) | All switches OFF | 0 V |
| | | | | | Front wiper switch INT/ AUTO |  |
| | | | | | Lighting switch AUTO | |
| 146 (SB) | Ground | Combination switch OUTPUT 4 | Output | Combination switch (Wiper volume dial 4) | All switches OFF | 0 V |
| | | | | | Front fog lamp switch ON |  |
| | | | | | Lighting switch 2ND | |
| | | | | | Lighting switch PASS | |
| Turn signal switch LH | 10.7 V | | | | | |
| 150 (R) | Ground | Driver door switch | Input | Driver door switch | OFF (Door close) |  |
| | | | | | ON (Door open) | 0 V |
| 151 (G) | Ground | Rear window defogger relay control | Output | Rear window defogger | Active | 0 V |
| | | | | Not activated | Battery voltage | |

*1: Without steering lock unit

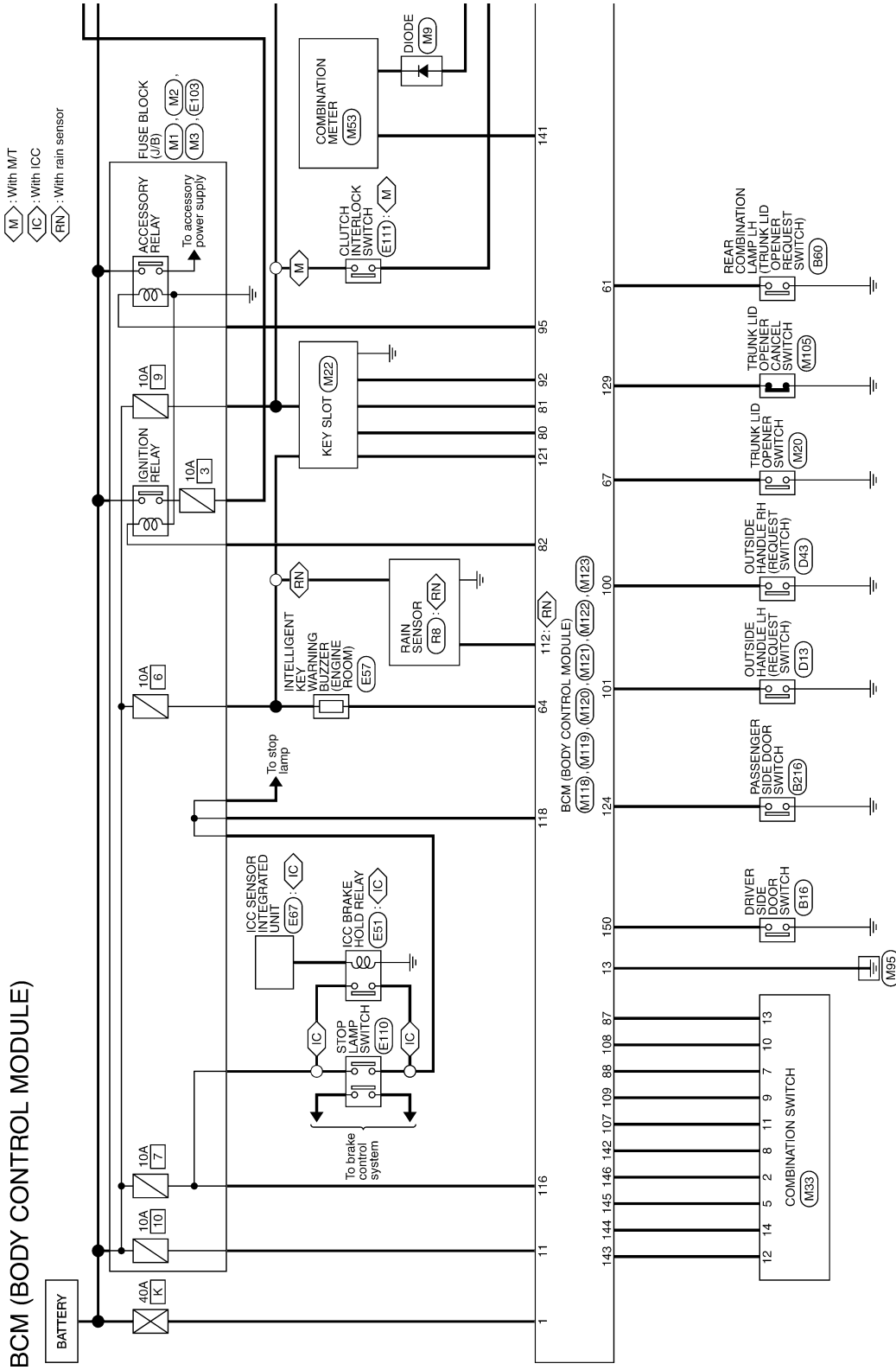
*2: With steering lock unit

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - BCM -

INFOID:000000006473499



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BCS

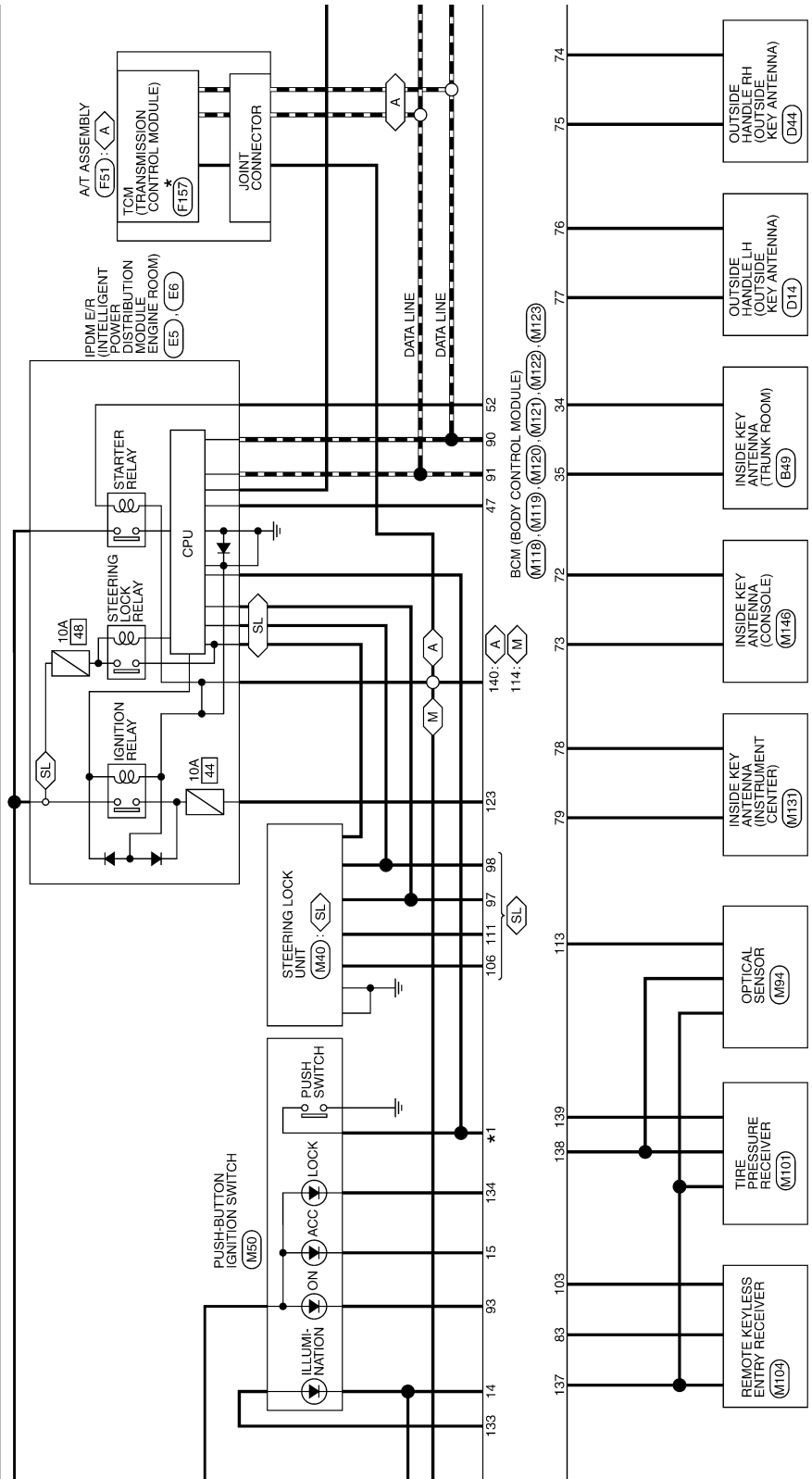
2010/10/12

JCMWN0248GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

SL : With steering lock unit *1
XS : Without steering lock unit
A : With A/T
M : With M/T

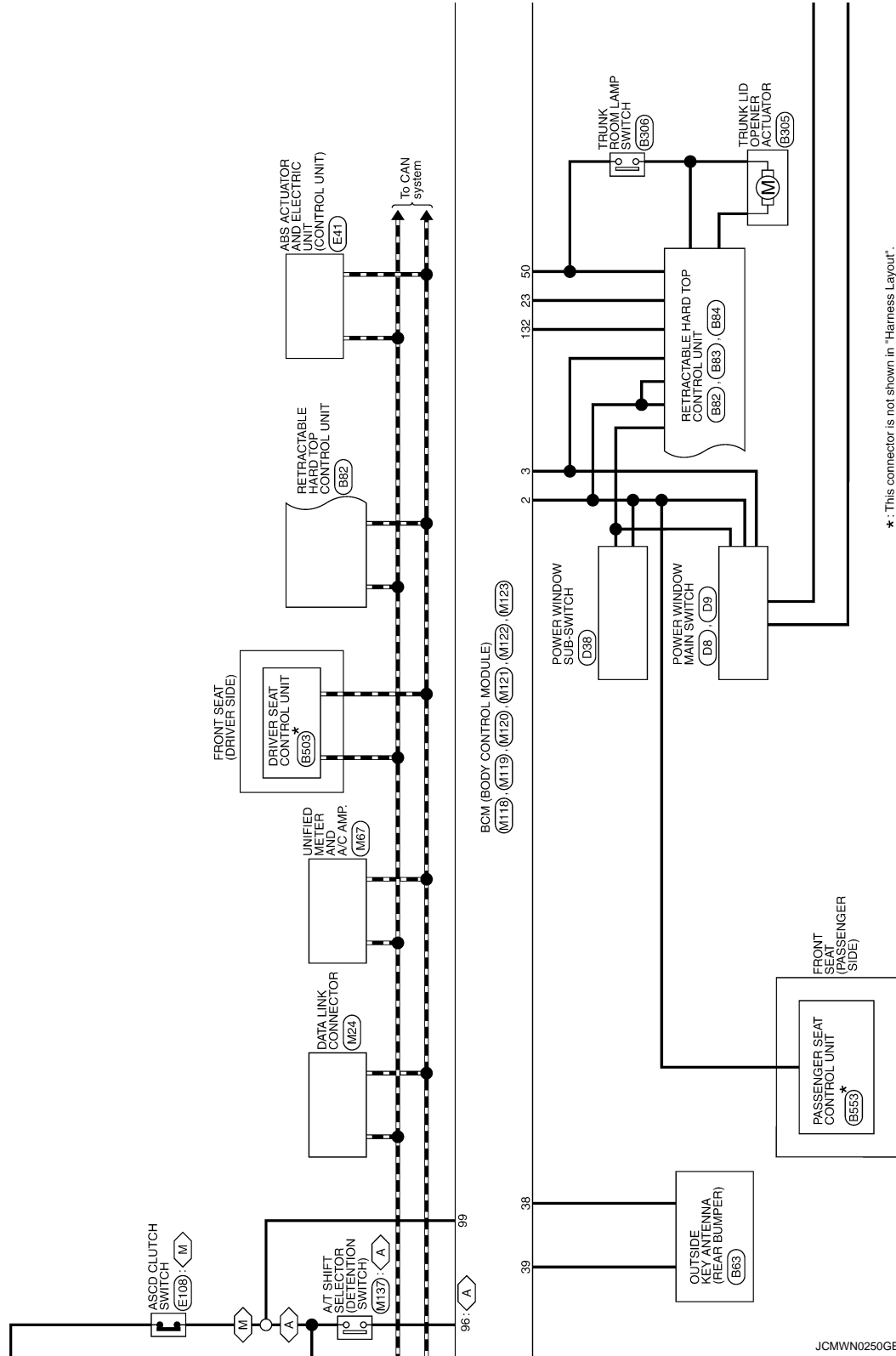


*: This connector is not shown in "Harness Layout".

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

A : With A/T
M : With M/T



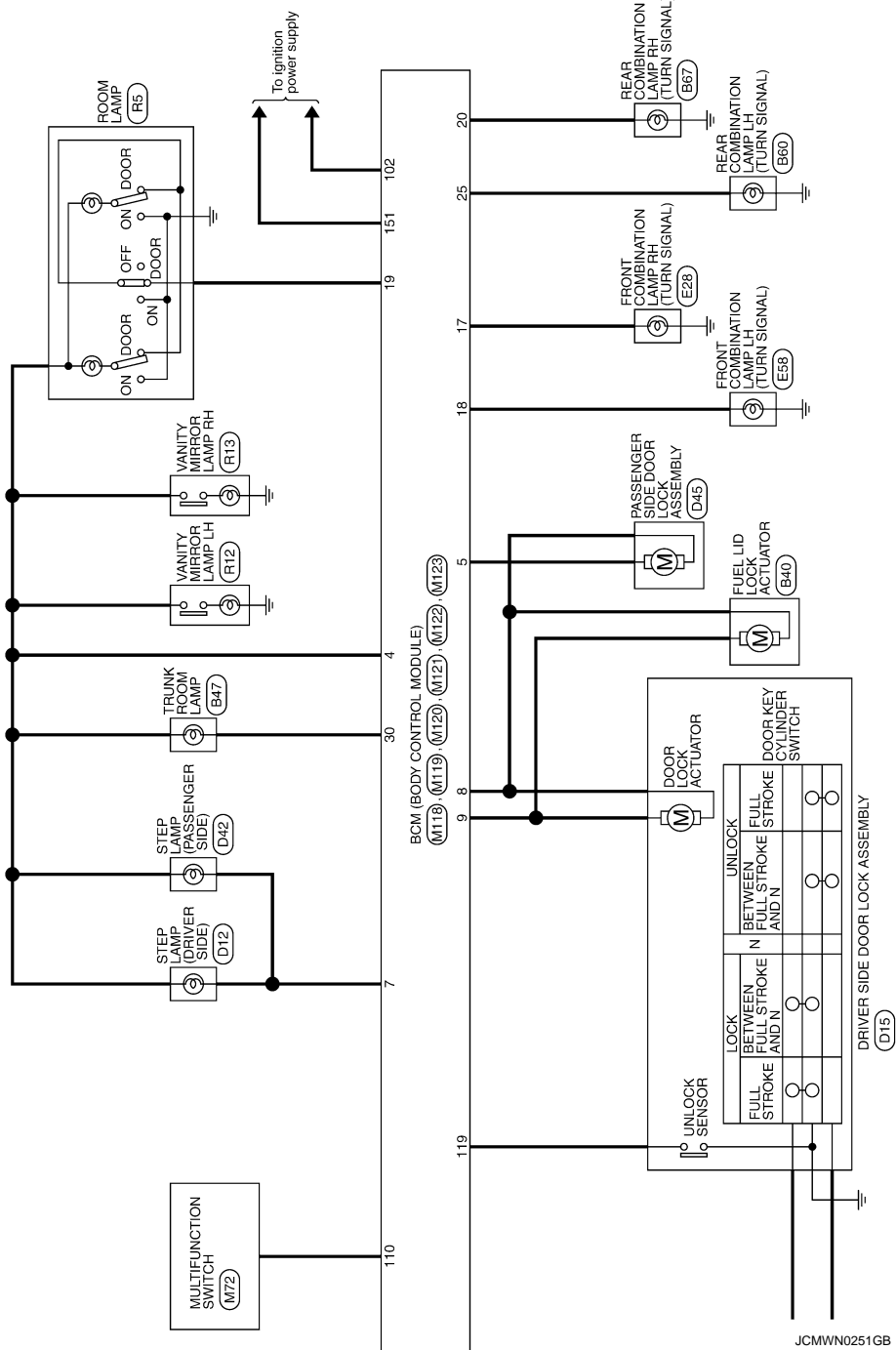
*: This connector is not shown in "Harness Layout".

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BCS

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

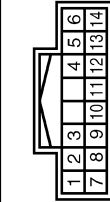


BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

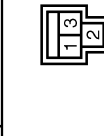
BCM (BODY CONTROL MODULE)

| | |
|----------------|--------------------|
| Connector No. | M33 |
| Connector Name | COMBINATION SWITCH |
| Connector Type | TH167V-NH |



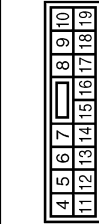
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 1 | P | FR WASHER (-) |
| 2 | SB | OUTPUT 4 |
| 3 | L | OUTPUT 3 |
| 4 | B | GND |
| 5 | EG | INPUT 3 |
| 6 | BR | OUTPUT 5 |
| 7 | W | INPUT 2 |
| 8 | R | INPUT 4 |
| 9 | LG | INPUT 1 |
| 10 | V | OUTPUT 1 |
| 11 | Y | INPUT 5 |
| 12 | G | OUTPUT 2 |
| 13 | | |
| 14 | | |

| | |
|----------------|---------------------------|
| Connector No. | M18 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | M03FB-LG |



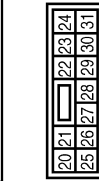
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|---------------------------------|
| 1 | W | BAT (F/L) |
| 2 | Y | POWER WINDOW POWER SUPPLY (BAT) |
| 3 | EG | POWER WINDOW POWER SUPPLY (RAP) |

| | |
|----------------|---------------------------|
| Connector No. | M119 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | NS16FF-CS |



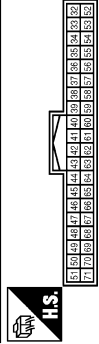
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|------------------------------------|
| 4 | LG | INTERIOR ROOM LAMP POWER SUPPLY |
| 5 | P | PASSENGER DOOR UNLOCK OUTPUT |
| 6 | SB | STEP LAMP |
| 7 | V | ALL DOOR FUEL LID LOCK OUTPUT |
| 8 | G | DRIVER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

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



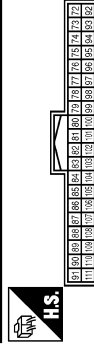
| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 20 | V | TURN SIGNAL RH (REAR) |
| 21 | Y | TRUNK LID OPEN OUTPUT |
| 22 | Y | TURN SIGNAL LH (REAR) |
| 23 | P | TRUNK ROOM LAMP |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|------------------------------|
| 34 | SB | TRUNK ROOM ANT- |
| 35 | V | TRUNK ROOM ANT+ |
| 36 | B | REAR BUMPER ANT- |
| 37 | W | REAR BUMPER ANT+ |
| 38 | Y | IGN RELAY (BDM F/R) CONT |
| 39 | G | TRUNK ROOM LAMP SW |
| 40 | BR | STARTER RELAY CONT |
| 41 | BR | PUSH SW |
| 42 | SB | TRUNK LID OPENER REQUEST SW |
| 43 | G | I-KEY WARN BUZZER (ENG ROOM) |
| 44 | GR | TRUNK LID OPENER SW |

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



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------|
| 72 | R | ROOM ANT 2- |
| 73 | G | ROOM ANT 2+ |
| 74 | SB | PASSENGER DOOR ANT- |
| 75 | BR | PASSENGER DOOR ANT+ |
| 76 | V | DRIVER DOOR ANT- |
| 77 | LG | DRIVER DOOR ANT+ |
| 78 | Y | ROOM ANT 1- |
| 79 | BR | ROOM ANT 1+ |
| 80 | GR | NATS ANTENNA AMP |
| 81 | W | NATS ANTENNA AMP |
| 82 | R | IGN RELAY (F/B) CONT |

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

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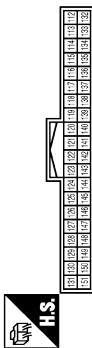
BCS

JCMWN0252GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| | |
|----------------------------------|---------------------------|
| BCM (BODY CONTROL MODULE) | |
| Connector No. | M123 |
| Connector Name | BCM (BODY CONTROL MODULE) |
| Connector Type | TH40FG-1N1 |



| Terminal No. | Color of Wire | Signal Name [Specification] |
|--------------|---------------|-----------------------------------|
| 112 | BR | RAIN SENSOR SERIAL LINK |
| 113 | G | OPTICAL SENSOR |
| 114 | R | CLUTCH INTERLOCK SW |
| 116 | SB | STOP LAMP SW 1 |
| 118 | BR | STOP LAMP SW 2 |
| 119 | GR | DR DOOR UNLOCK SENSOR |
| 121 | SB | KEY SLOT SW |
| 123 | W | IGN P/B |
| 124 | BG | PASSENGER DOOR SW |
| 129 | BG | TRUNK LID OPENER CANCEL SW |
| 132 | LG | P/W SW & PRT C/U COMM |
| 133 | Y | PUSH-BUTTON IGNITION SW ILL POWER |
| 134 | LG | LOCK IND |
| 137 | BG | RECEIVER / SENSOR GND |
| 138 | Y | RECEIVER / SENSOR POWER SUPPLY |
| 139 | L | TIRE PRESSURE RECEIVER COMM |
| 140 | GR | SHIFT N/P |
| 141 | R | SECURITY INDICATOR LAMP |
| 142 | BR | COMBI SW OUTPUT 5 |
| 143 | V | COMBI SW OUTPUT 1 |
| 144 | G | COMBI SW OUTPUT 2 |
| 145 | L | COMBI SW OUTPUT 3 |
| 146 | SB | COMBI SW OUTPUT 4 |
| 150 | R | DRIVER DOOR SW |
| 151 | G | REAR WINDOW DEFROGGER RELAY CONT |

JCMWN0253GB

Fail-safe

INFOID:000000006473500

FAIL-SAFE CONTROL BY DTC

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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Display contents of CONSULT | Fail-safe | Cancellation | A |
|-----------------------------|-------------------------|--|---|
| B2013: ID DISCORD BCM-S/L | Inhibit engine cranking | Erase DTC | A |
| B2014: CHAIN OF S/L-BCM | Inhibit engine cranking | Erase DTC | B |
| B2190: NATS ANTENNA AMP | Inhibit engine cranking | Erase DTC | B |
| B2191: DIFFERENCE OF KEY | Inhibit engine cranking | Erase DTC | C |
| B2192: ID DISCORD BCM-ECM | Inhibit engine cranking | Erase DTC | C |
| B2193: CHAIN OF BCM-ECM | Inhibit engine cranking | Erase DTC | D |
| B2195: ANTI-SCANNING | Inhibit engine cranking | Ignition switch ON → OFF | D |
| B2557: VEHICLE SPEED | Inhibit steering lock | When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms | E |
| B2560: STARTER CONT RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> • Starter control relay signal • Starter relay status signal | E |
| B2601: SHIFT POSITION | Inhibit steering lock | 500 ms after the following signal reception status becomes consistent <ul style="list-style-type: none"> • Selector lever P position switch signal • P range signal (CAN) | F |
| B2602: SHIFT POSITION | Inhibit steering lock | 5 seconds after the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch is in the ON position • Selector lever P position switch signal: Except P position (12 V) • Vehicle speed: 4 km/h (2.5 MPH) or more | F |
| B2603: SHIFT POSI STATUS | Inhibit steering lock | 500 ms after the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • 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) | G |
| B2604: PNP/CLUTCH SW | Inhibit steering lock | 500 ms after any of the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Status 1 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: P and N position (12 V) - P range signal or N range signal (CAN): ON • Status 2 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - P range signal and N range signal (CAN): OFF | G |
| B2605: PNP/CLUTCH SW | Inhibit steering lock | 500 ms after any of the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> • Status 1 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 <ul style="list-style-type: none"> - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (12 V) - PNP switch signal (CAN): ON | H |
| B2606: S/L RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status becomes consistent <ul style="list-style-type: none"> • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal) | H |
| B2607: S/L RELAY | Inhibit engine cranking | 500 ms after the following CAN signal communication status has become consistent <ul style="list-style-type: none"> • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal) | I |

BCS

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Display contents of CONSULT | Fail-safe | Cancellation |
|-----------------------------|--|---|
| B2608: STARTER RELAY | Inhibit engine cranking | 500 ms after the following signal communication status becomes consistent <ul style="list-style-type: none"> Starter motor relay control signal Starter relay status signal (CAN) |
| B2609: S/L STATUS | <ul style="list-style-type: none"> Inhibit engine cranking Inhibit steering lock | When the following steering lock conditions agree <ul style="list-style-type: none"> BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status |
| B260A: IGNITION RELAY | Inhibit engine cranking | 500 ms after the following conditions are fulfilled <ul style="list-style-type: none"> IGN relay (IPDM E/R) control signal: OFF (12 V) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal) |
| B260F: ENG STATE SIG LOST | Maintains the power supply position attained at the time of DTC detection | When any of the following conditions are fulfilled <ul style="list-style-type: none"> Power position changes to ACC Receives engine status signal (CAN) |
| B2612: S/L STATUS | <ul style="list-style-type: none"> Inhibit engine cranking Inhibit steering lock | When any of the following conditions are fulfilled <ul style="list-style-type: none"> Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R) |
| B2617: BCM | Inhibit engine cranking | 1 second after the starter motor relay control inside BCM becomes normal |
| B2618: BCM | Inhibit engine cranking | 1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal |
| B2619: BCM | Inhibit engine cranking | 1 second after the steering lock unit power supply output control inside BCM becomes normal |
| B261E: VEHICLE TYPE | Inhibit engine cranking | BCM initialization |
| B26E8: CLUTCH SW | Inhibit engine cranking | When any of the following BCM recognition conditions are fulfilled <ul style="list-style-type: none"> Status 1 <ul style="list-style-type: none"> Clutch switch signal (CAN from ECM): ON Clutch interlock switch signal: OFF (0 V) Status 2 <ul style="list-style-type: none"> Clutch switch signal (CAN from ECM): OFF Clutch interlock switch signal: ON (Battery voltage) |
| B26E9: S/L STATUS | <ul style="list-style-type: none"> Inhibit engine cranking Inhibit steering lock | When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled <ul style="list-style-type: none"> Steering condition No. 1 signal: LOCK (0 V) Steering condition No. 2 signal: LOCK (12 V) |

DTC Inspection Priority Chart

INFOID:000000006473501

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

| Priority | DTC |
|----------|---|
| 1 | B2562: LOW VOLTAGE |
| 2 | <ul style="list-style-type: none"> U1000: CAN COMM U1010: CONTROL UNIT (CAN) |
| 3 | <ul style="list-style-type: none"> B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI-SCANNING |

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

| Priority | DTC | |
|-----------------------------|-----------------------------|---|
| 4 | • B2013: ID DISCORD BCM-S/L | A |
| | • B2014: CHAIN OF S/L-BCM | |
| | • B2553: IGNITION RELAY | |
| | • B2555: STOP LAMP | B |
| | • B2556: PUSH-BTN IGN SW | |
| | • B2557: VEHICLE SPEED | |
| | • B2560: STARTER CONT RELAY | |
| | • B2601: SHIFT POSITION | C |
| | • B2602: SHIFT POSITION | |
| | • B2603: SHIFT POSI STATUS | |
| | • B2604: PNP/CLUTCH SW | |
| | • B2605: PNP/CLUTCH SW | D |
| | • B2606: S/L RELAY | |
| | • B2607: S/L RELAY | |
| | • B2608: STARTER RELAY | |
| | • B2609: S/L STATUS | E |
| | • B260A: IGNITION RELAY | |
| | • B260B: STEERING LOCK UNIT | |
| | • B260C: STEERING LOCK UNIT | F |
| | • B260D: STEERING LOCK UNIT | |
| | • B260F: ENG STATE SIG LOST | |
| | • B2612: S/L STATUS | |
| | • B2614: BCM | G |
| | • B2615: BCM | |
| | • B2616: BCM | |
| | • B2617: BCMC | |
| • B2618: BCM | H | |
| • B2619: BCM | | |
| • B261A: PUSH-BTN IGN SW | | |
| • B261E: VEHICLE TYPE | | |
| • B26E8: CLUTCH SW | I | |
| • B26E9: S/L STATUS | | |
| • B26EA: KEY REGISTRATION | | |
| • C1729: VHCL SPEED SIG ERR | J | |
| • U0415: VEHICLE SPEED | | |
| 5 | • C1704: LOW PRESSURE FL | |
| | • C1705: LOW PRESSURE FR | |
| | • C1706: LOW PRESSURE RR | K |
| | • C1707: LOW PRESSURE RL | |
| | • C1708: [NO DATA] FL | |
| | • C1709: [NO DATA] FR | |
| | • C1710: [NO DATA] RR | L |
| | • C1711: [NO DATA] RL | |
| | • C1716: [PRESSDATA ERR] FL | |
| | • C1717: [PRESSDATA ERR] FR | |
| | • C1718: [PRESSDATA ERR] RR | |
| | • C1719: [PRESSDATA ERR] RL | |
| | • C1734: CONTROL UNIT | |
| 6 | • B2621: INSIDE ANTENNA | N |
| | • B2622: INSIDE ANTENNA | |
| | • B2623: INSIDE ANTENNA | |

DTC Index

INFOID:000000006473502

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-16. "COMMON ITEM : CONSULT-III Function \(BCM - COMMON ITEM\)".](#)

BCM (BODY CONTROL MODULE)

< 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 | Refer- ence page |
|--|-----------|--|------------------------------------|---|------------------------|
| No DTC is detected. further testing may be required. | — | — | — | — | — |
| U1000: CAN COMM | — | — | — | — | BCS-35 |
| U1010: CONTROL UNIT (CAN) | — | — | — | — | BCS-36 |
| U0415: VEHICLE SPEED | — | — | — | — | BCS-37 |
| B2013: ID DISCORD BCM-S/L* | × | × | — | — | SEC-49 |
| B2014: CHAIN OF S/L-BCM* | × | × | — | — | SEC-50 |
| B2190: NATS ANTENNA AMP | × | — | — | — | SEC-41 |
| B2191: DIFFERENCE OF KEY | × | — | — | — | SEC-44 |
| B2192: ID DISCORD BCM-ECM | × | — | — | — | SEC-45 |
| B2193: CHAIN OF BCM-ECM | × | — | — | — | SEC-47 |
| B2195: ANTI-SCANNING | × | — | — | — | SEC-48 |
| B2553: IGNITION RELAY | — | × | — | — | PCS-49 |
| B2555: STOP LAMP | — | × | — | — | SEC-53 |
| B2556: PUSH-BTN IGN SW | — | × | × | — | SEC-55 |
| B2557: VEHICLE SPEED | × | × | × | — | SEC-57 |
| B2560: STARTER CONT RELAY | × | × | × | — | SEC-58 |
| B2562: LOW VOLTAGE | — | × | — | — | BCS-38 |
| B2601: SHIFT POSITION | × | × | × | — | SEC-59 |
| B2602: SHIFT POSITION | × | × | × | — | SEC-62 |
| B2603: SHIFT POSI STATUS | × | × | × | — | SEC-64 |
| B2604: PNP/CLUTCH SW | × | × | × | — | SEC-67 |
| B2605: PNP/CLUTCH SW | × | × | × | — | SEC-69 |
| B2606: S/L RELAY* | × | × | × | — | SEC-71 |
| B2607: S/L RELAY* | × | × | × | — | SEC-72 |
| B2608: STARTER RELAY | × | × | × | — | SEC-74 |
| B2609: S/L STATUS* | × | × | × | — | SEC-76 |
| B260A: IGNITION RELAY | × | × | × | — | PCS-51 |
| B260B: STEERING LOCK UNIT* | — | × | × | — | SEC-80 |
| B260C: STEERING LOCK UNIT* | — | × | × | — | SEC-81 |
| B260D: STEERING LOCK UNIT* | — | × | × | — | SEC-82 |
| B260F: ENG STATE SIG LOST | × | × | × | — | SEC-83 |
| B2612: S/L STATUS* | × | × | × | — | SEC-88 |
| B2614: BCM | — | × | × | — | PCS-53 |
| B2615: BCM | — | × | × | — | PCS-56 |
| B2616: BCM | — | × | × | — | PCS-59 |
| B2617: BCM | × | × | × | — | SEC-92 |
| B2618: BCM | × | × | × | — | PCS-62 |
| B2619: BCM* | × | × | × | — | SEC-94 |
| B261A: PUSH-BTN IGN SW | — | × | × | — | PCS-63 |
| B261E: VEHICLE TYPE | × | × | × (Turn ON for 15 seconds) | — | SEC-95 |

BCM (BODY CONTROL MODULE)

< 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 | Refer- ence page |
|---------------------------|-----------|--|------------------------------------|---|------------------------|
| B2621: INSIDE ANTENNA | — | × | — | — | DLK-62 |
| B2622: INSIDE ANTENNA | — | × | — | — | DLK-64 |
| B2623: INSIDE ANTENNA | — | × | — | — | DLK-66 |
| B26E8: CLUTCH SW | × | × | × | — | SEC-84 |
| B26E9: S/L STATUS* | × | × | × (Turn ON for 15 seconds) | — | SEC-86 |
| B26EA: KEY REGISTRATION | — | × | × (Turn ON for 15 seconds) | — | SEC-87 |
| C1704: LOW PRESSURE FL | — | — | — | × | WT-24 |
| C1705: LOW PRESSURE FR | — | — | — | × | |
| C1706: LOW PRESSURE RR | — | — | — | × | |
| C1707: LOW PRESSURE RL | — | — | — | × | |
| C1708: [NO DATA] FL | — | — | — | × | WT-26 |
| C1709: [NO DATA] FR | — | — | — | × | |
| C1710: [NO DATA] RR | — | — | — | × | |
| C1711: [NO DATA] RL | — | — | — | × | |
| C1716: [PRESSDATA ERR] FL | — | — | — | × | WT-29 |
| C1717: [PRESSDATA ERR] FR | — | — | — | × | |
| C1718: [PRESSDATA ERR] RR | — | — | — | × | |
| C1719: [PRESSDATA ERR] RL | — | — | — | × | |
| C1729: VHCL SPEED SIG ERR | — | — | — | × | WT-30 |
| C1734: CONTROL UNIT | — | — | — | × | WT-31 |

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

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BCS

COMBINATION SWITCH SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

COMBINATION SWITCH SYSTEM SYMPTOMS

Symptom Table

INFOID:000000006473503

1. Perform "Data Monitor" of CONSULT-III to check for any malfunctioning item.
2. Check the malfunction combinations.

Malfunction item: x

| Malfunction combination | Data monitor item | | | | | | | | | | | | | |
|-------------------------|---|--------------|--------------|--------------|------------|---------------|---------------|--------------|------------|----------------|----------------|------------|---------------|-----------|
| | FR WIPER HI | FR WIPER LOW | FR WASHER SW | FR WIPER INT | INT VOLUME | TURN SIGNAL R | TURN SIGNAL L | TAIL LAMP SW | HI BEAM SW | HEAD LAMP SW 1 | HEAD LAMP SW 2 | PASSING SW | AUTO LIGHT SW | FR FOG SW |
| A | | x | x | | | x | x | | | | | | | |
| B | x | | | x | | | | | | x | | x | | |
| C | | | | | x | | | | x | | x | | | |
| D | | | | | x | | | x | | | | | x | |
| E | | | | | x | | | | | | | | | x |
| F | x | | | | x | | | | | | | | | |
| G | | | x | | x | | | | | | | | | |
| H | | x | | x | | | | | | | | | x | |
| I | | | | | | | x | | | | x | x | | x |
| J | | | | | | x | | x | x | x | | | | |
| K | All Items | | | | | | | | | | | | | |
| L | If only one item is detected or the item is not applicable to the combinations A to K | | | | | | | | | | | | | |

3. Identify the malfunctioning part from the agreed combination and repair or replace the part.

| Malfunction combination | Malfunctioning part | Repair or replace |
|-------------------------|-------------------------------------|---|
| A | Combination switch INPUT 1 circuit | Inspect the combination switch input circuit applicable to the malfunctioning part. Refer to BCS-40, "Diagnosis Procedure" . |
| B | Combination switch INPUT 2 circuit | |
| C | Combination switch INPUT 3 circuit | |
| D | Combination switch INPUT 4 circuit | |
| E | Combination switch INPUT 5 circuit | |
| F | Combination switch OUTPUT 1 circuit | Inspect the combination switch output circuit applicable to the malfunctioning part. Refer to BCS-42, "Diagnosis Procedure" . |
| G | Combination switch OUTPUT 2 circuit | |
| H | Combination switch OUTPUT 3 circuit | |
| I | Combination switch OUTPUT 4 circuit | |
| J | Combination switch OUTPUT 5 circuit | |
| K | BCM | Replace BCM. Refer to BCS-81, "Exploded View" |
| L | Combination switch | Replace the combination switch. |

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

Description

INFOID:000000008165551

TRANSIT MODE

- Transit mode inhibits battery power consumption during transportation or storage of the vehicle.
- BCM is set to transit mode before delivery.
- In transit mode, remote keyless entry function, headlamp ON/OFF function, theft warning alarm function, and other BCM control functions do not operate normally.
- Therefore, cancel operation must be performed so that the vehicle is used in normal status.
- For transit mode cancel operation, refer to [BCS-4, "Description"](#).

NOTE:

Do not cancel transit mode during storage of the vehicle. Always cancel transit mode before delivery of the vehicle to customer.

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BCS

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000006473504

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

Precaution for Battery Service

INFOID:000000006473505

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

BCM (BODY CONTROL MODULE)

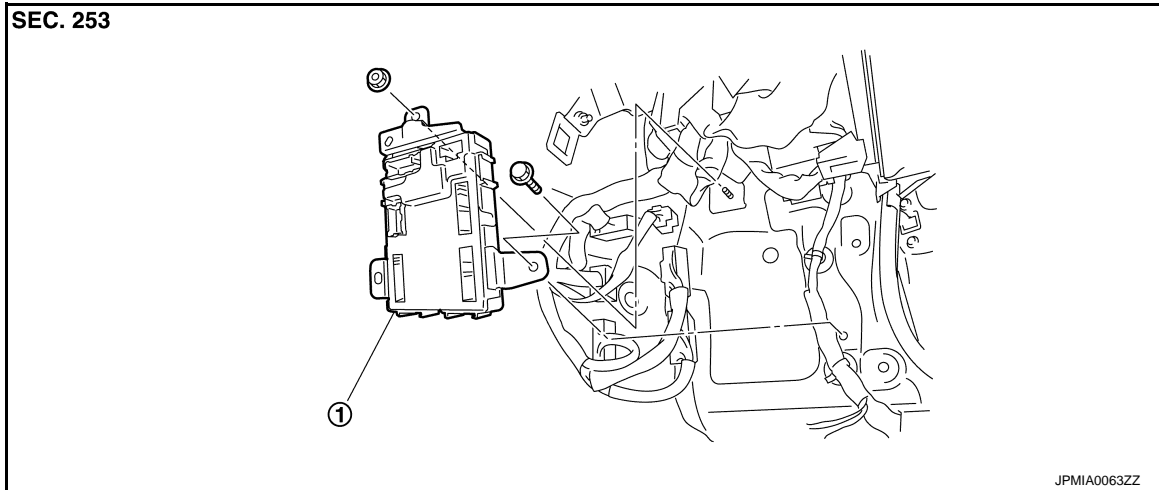
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

BCM (BODY CONTROL MODULE)

Exploded View

INFOID:000000006473506



1. BCM

Removal and Installation

INFOID:000000006473507

REMOVAL

1. Remove dash side finisher (passenger side). Refer to [INT-15, "Exploded View"](#).
2. Remove bolt and nut.
3. Remove BCM and disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

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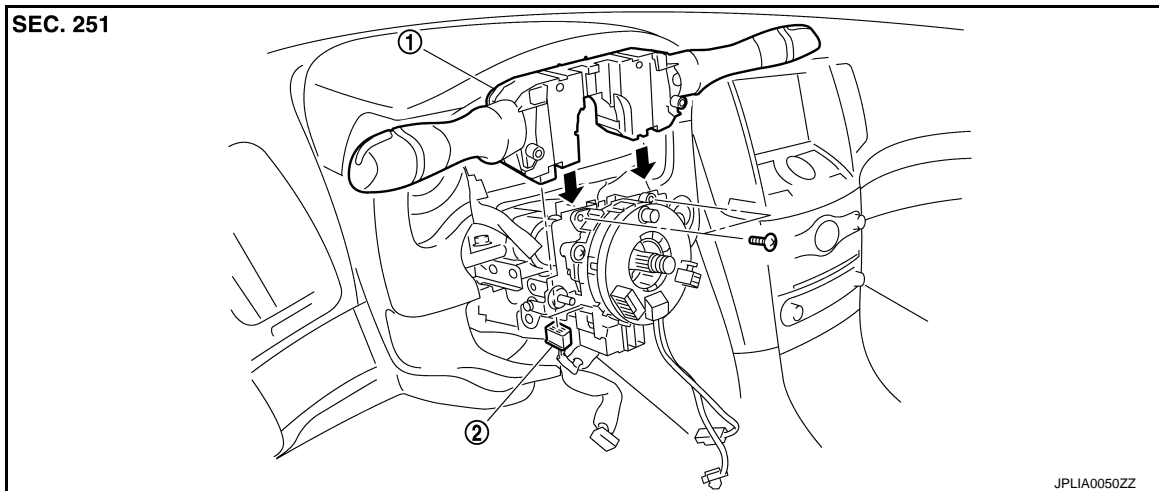
COMBINATION SWITCH

< REMOVAL AND INSTALLATION >

COMBINATION SWITCH

Exploded View

INFOID:000000006473508



1. Combination switch

2. Combination switch connector

Removal and Installation

INFOID:000000006473509

REMOVAL

1. Remove steering column cover. Refer to [IP-12. "A/T MODELS : Exploded View"](#) (A/T models), [IP-23. "M/T MODELS : Exploded View"](#) (M/T models).
2. Remove screws.
3. Disconnect the connector.
4. Pull up the combination switch to remove it.

INSTALLATION

Install in the reverse order of removal.