

SECTION **BCS**

BODY CONTROL SYSTEM

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< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

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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, it is recommended that all maintenance and repair be performed by an authorized NISSAN/INFINITI dealer.
- Improper repair, 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 or batteries, and wait at least 3 minutes before performing any service.

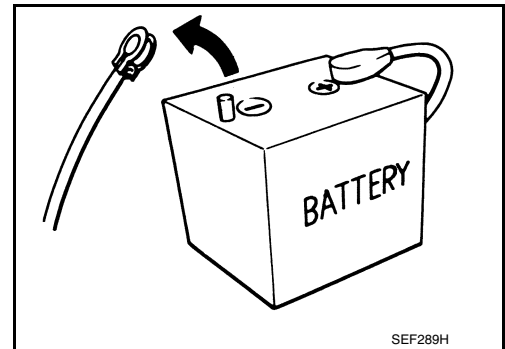
Precautions for Removing Battery Terminal

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When disconnecting the battery terminal, pay attention to the following.

- Always use a 12V battery as power source.
- Never disconnect battery terminal while engine is running.
- When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.
- For vehicles with the engine listed below, remove the battery terminal after a lapse of the specified time:

D4D engine	: 20 minutes	YS23DDT	: 4 minutes
HRA2DDT	: 12 minutes	YS23DDTT	: 4 minutes
K9K engine	: 4 minutes	ZD30DDTi	: 60 seconds
M9R engine	: 4 minutes	ZD30DDTT	: 60 seconds
R9M engine	: 4 minutes		
V9X engine	: 4 minutes		
YD25DDTi	: 2 minutes		



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NOTE:

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

- After high-load driving, if the vehicle is equipped with the V9X engine, turn the ignition switch OFF and wait for at least 15 minutes to remove the battery terminal.

NOTE:

PRECAUTIONS

< PRECAUTION >

[WITH INTELLIGENT KEY SYSTEM]

- Turbocharger cooling pump may operate in a few minutes after the ignition switch is turned OFF.
- Example of high-load driving
 - Driving for 30 minutes or more at 140 km/h (86 MPH) or more.
 - Driving for 30 minutes or more on a steep slope.
- For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

NOTE:

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.

- After installing the 12V battery, always check "Self Diagnosis Result" of all ECUs and erase DTC.

NOTE:

The removal of 12V battery may cause a DTC detection error.

COMPONENT PARTS

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[WITH INTELLIGENT KEY SYSTEM]

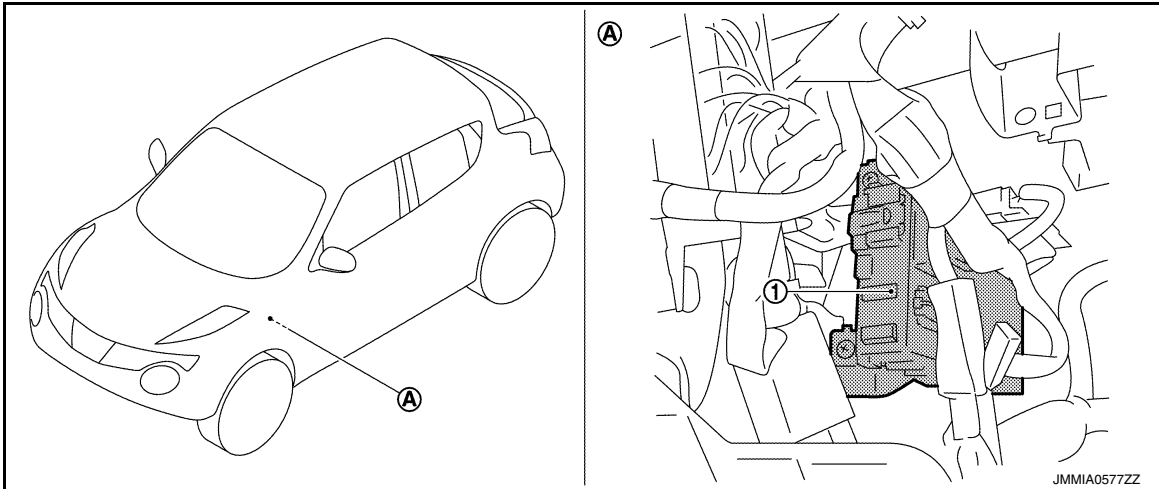
SYSTEM DESCRIPTION

COMPONENT PARTS

BODY CONTROL SYSTEM

BODY CONTROL SYSTEM : Component Parts Location

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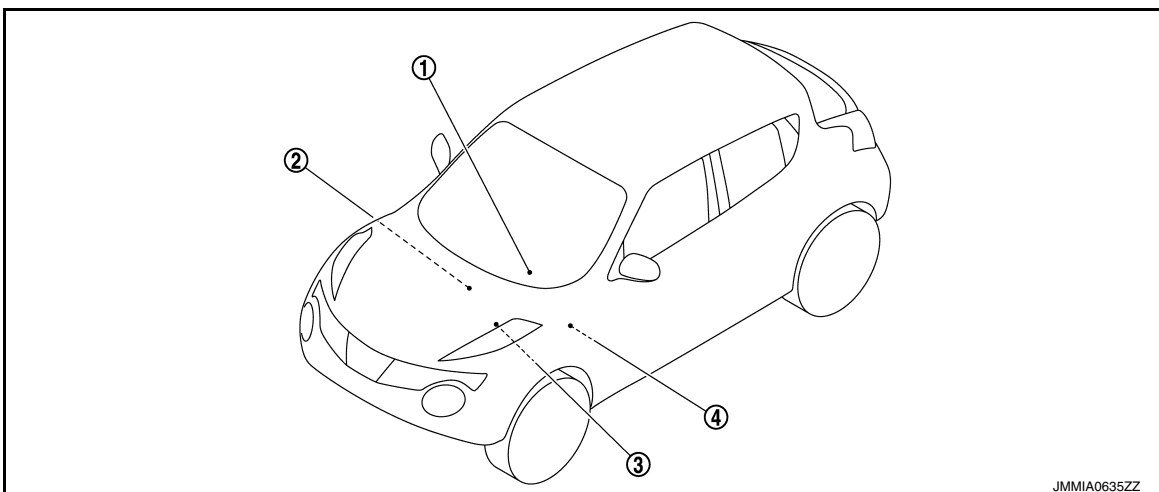


- 1. BCM
- A. Behind of instrument lower panel LH
(Left side)

POWER CONSUMPTION CONTROL SYSTEM

POWER CONSUMPTION CONTROL SYSTEM : Component Parts Location

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- 1. Combination meter
- 2. Multi display unit
Refer to [DMS-4. "Component Parts Location"](#).
- 3. IPDM E/R
Refer to [PCS-5. "Component Parts Location"](#).
- 4. BCM
Refer to [BCS-5. "BODY CONTROL SYSTEM : Component Parts Location"](#).

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BODY CONTROL SYSTEM

BODY CONTROL SYSTEM : System Description

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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 and various settings.

BCM CONTROL FUNCTION LIST

System	Reference
Combination switch reading system	BCS-8, "COMBINATION SWITCH READING SYSTEM : System Diagram"
Signal buffer system	BCS-12, "SIGNAL BUFFER SYSTEM : System Diagram"
Power consumption control system	BCS-13, "POWER CONSUMPTION CONTROL SYSTEM : System Diagram"
Auto light system	<ul style="list-style-type: none"> • EXL-12, "AUTO LIGHT SYSTEM : System Diagram" (Xenon type headlamp) • EXL-124, "AUTO LIGHT SYSTEM : System Diagram" (Halogen type headlamp)
Turn signal and hazard warning lamp system	<ul style="list-style-type: none"> • EXL-15, "TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Diagram" (Xenon type headlamp) • EXL-127, "TURN SIGNAL AND HAZARD WARNING LAMP SYSTEM : System Diagram" (Halogen type headlamp)
Headlamp system	<ul style="list-style-type: none"> • EXL-11, "HEADLAMP SYSTEM : System Diagram" (Xenon type headlamp) • EXL-123, "HEADLAMP SYSTEM : System Diagram" (Halogen type headlamp)
Parking, license plate, side marker and tail lamps system	<ul style="list-style-type: none"> • EXL-16, "PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM : System Diagram" (Xenon type headlamp) • EXL-128, "PARKING, LICENSE PLATE, SIDE MARKER AND TAIL LAMP SYSTEM : System Diagram" (Halogen type headlamp)
Front fog lamp system	<ul style="list-style-type: none"> • EXL-17, "FRONT FOG LAMP SYSTEM : System Diagram" (Xenon type headlamp) • EXL-129, "FRONT FOG LAMP SYSTEM : System Diagram" (Halogen type headlamp)
Exterior lamp battery saver system	<ul style="list-style-type: none"> • EXL-18, "EXTERIOR LAMP BATTERY SAVER SYSTEM : System Diagram" (Xenon type headlamp) • EXL-130, "EXTERIOR LAMP BATTERY SAVER SYSTEM : System Diagram" (Halogen type headlamp)
Daytime running light system	<ul style="list-style-type: none"> • EXL-14, "DAYTIME RUNNING LIGHT SYSTEM : System Diagram" (Xenon type headlamp) • EXL-126, "DAYTIME RUNNING LIGHT SYSTEM : System Diagram" (Halogen type headlamp)
Interior room lamp control system	INL-6, "INTERIOR ROOM LAMP CONTROL SYSTEM : System Diagram"
Interior room lamp battery saver system	INL-8, "INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : System Diagram"
Illumination control system	INL-9, "ILLUMINATION CONTROL SYSTEM : System Diagram"

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[WITH INTELLIGENT KEY SYSTEM]

System	Reference
Front wiper and washer system	WW-7, "FRONT WIPER AND WASHER SYSTEM : System Diagram"
Rear wiper and washer system	WW-10, "REAR WIPER AND WASHER SYSTEM : System Diagram"
Warning chime system	WCS-7, "WARNING CHIME SYSTEM : System Diagram"
Power door lock system	DLK-11, "System Diagram"
Nissan Vehicle Immobilizer System (NVIS) - NATS	SEC-13, "NISSAN VEHICLE IMMOBILIZER SYSTEM-NATS : System Diagram"
Vehicle security system	Theft warning alarm
	Panic alarm
	SEC-16, "VEHICLE SECURITY SYSTEM : System Diagram"
Rear window defogger system	<ul style="list-style-type: none"> • DEF-7, "WITH AUTO A/C : System Diagram" (With automatic A/C) • DEF-7, "WITHOUT AUTO A/C : System Diagram" (Without automatic A/C)
Intelligent Key system/engine start system	DLK-13, "INTELLIGENT KEY SYSTEM : System Diagram"
Back door opener system	DLK-24, "System Diagram"
Air conditioning control system	Automatic A/C
	Manual A/C
	HAC-12, "System Diagram"
	HAC-108, "System Diagram"
Power window system	PWC-9, "POWER WINDOW SYSTEM : System Diagram"
Retained accessory power (Retain power operation)	PWC-9, "POWER WINDOW SYSTEM : System Description"
Tire pressure monitoring system (TPMS)	WT-8, "System Description"

BODY CONTROL SYSTEM : Fail-safe

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FAIL-SAFE CONTROL BY DTC

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

Display contents of CONSULT	Fail-safe	Cancellation
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2196: DONGLE NG	Inhibit engine cranking	Erase DTC
B2198: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
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)
B260F: ENG STATE SIG LOST	Inhibit engine cranking	When any of the following conditions are fulfilled <ul style="list-style-type: none"> • Power position changes to ACC • Receives engine status signal (CAN)
B26F1: IGN RELAY OFF	Inhibit engine cranking	When the following conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch ON signal (CAN: Transmitted from BCM): ON • Ignition switch ON signal (CAN: Transmitted from IPDM E/R): ON
B26F2: IGN RELAY ON	Inhibit engine cranking	When the following conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch ON signal (CAN: Transmitted from BCM): OFF • Ignition switch ON signal (CAN: Transmitted from IPDM E/R): OFF
B26F3: START CONT RLY ON	Inhibit engine cranking	When the following conditions are fulfilled <ul style="list-style-type: none"> • Starter control relay signal (CAN: Transmitted from BCM): OFF • Starter control relay signal (CAN: Transmitted from IPDM E/R): OFF

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[WITH INTELLIGENT KEY SYSTEM]

Display contents of CONSULT	Fail-safe	Cancellation
B26F4: START CONT RLY OFF	Inhibit engine cranking	When the following conditions are fulfilled <ul style="list-style-type: none"> • Starter control relay signal (CAN: Transmitted from BCM): ON • Starter control relay signal (CAN: Transmitted from IPDM E/R): ON
B26F7: BCM	Inhibit engine cranking by Intelligent Key system	When room antenna and luggage room antenna functions normally

REAR WIPER MOTOR PROTECTION

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

Condition of cancellation

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

FAIL-SAFE CONTROL OF COMBINATION SWITCH READING FUNCTION CAUSED BY LOW POWER SUPPLY VOLTAGE

If voltage of battery power supply lower, BCM maintains combination switch reading to the status when input voltage is less than approximately 9 V.

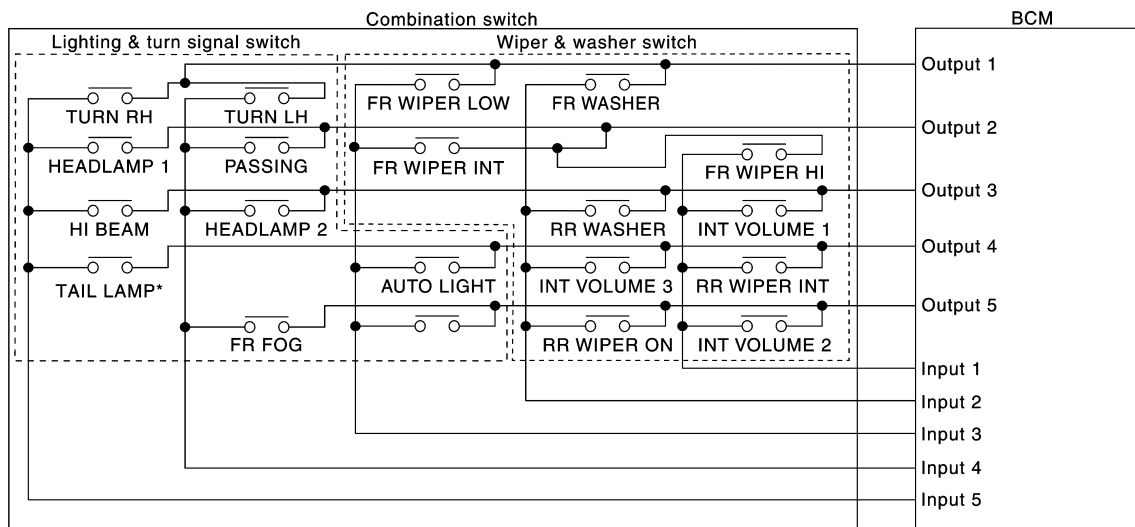
NOTE:

When voltage of battery power supply is approximately 9 V or more, combination switch reading function returns to normal operation.

COMBINATION SWITCH READING SYSTEM

COMBINATION SWITCH READING SYSTEM : System Diagram

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NOTE:

*: TAIL LAMP switch links lighting switch 1ST and 2ND positions.

COMBINATION SWITCH READING SYSTEM : 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 has a combination of 5 output terminals (OUTPUT 1 - 5) and 5 input terminals (INPUT 1 - 5). It reads a maximum of 20 switch status.

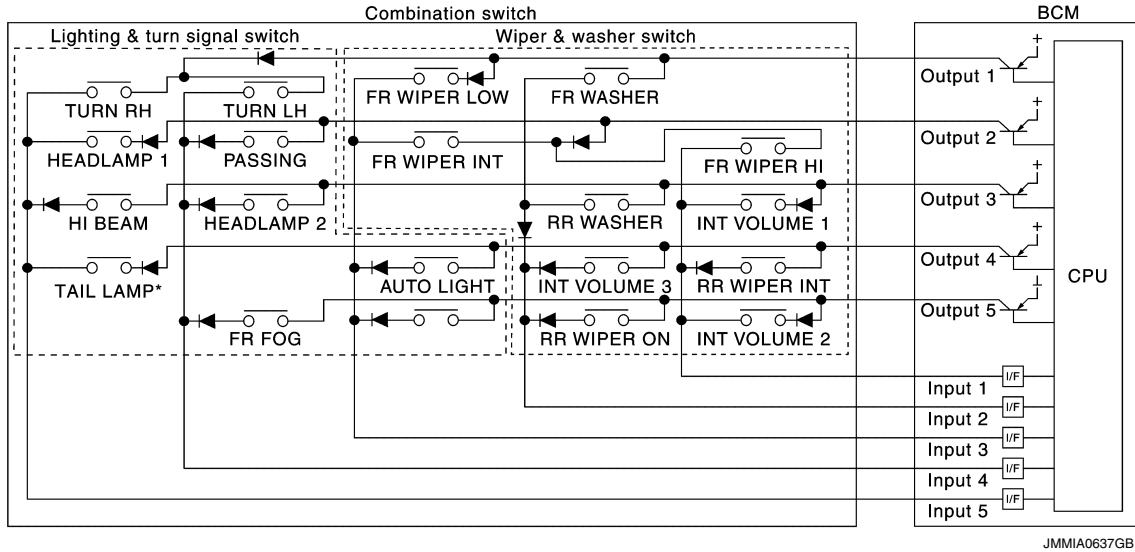
COMBINATION SWITCH MATRIX

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[WITH INTELLIGENT KEY SYSTEM]

Combination switch circuit



NOTE:

*: TAIL LAMP switch links lighting switch 1ST and 2ND positions.

Combination switch INPUT-OUTPUT system list

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

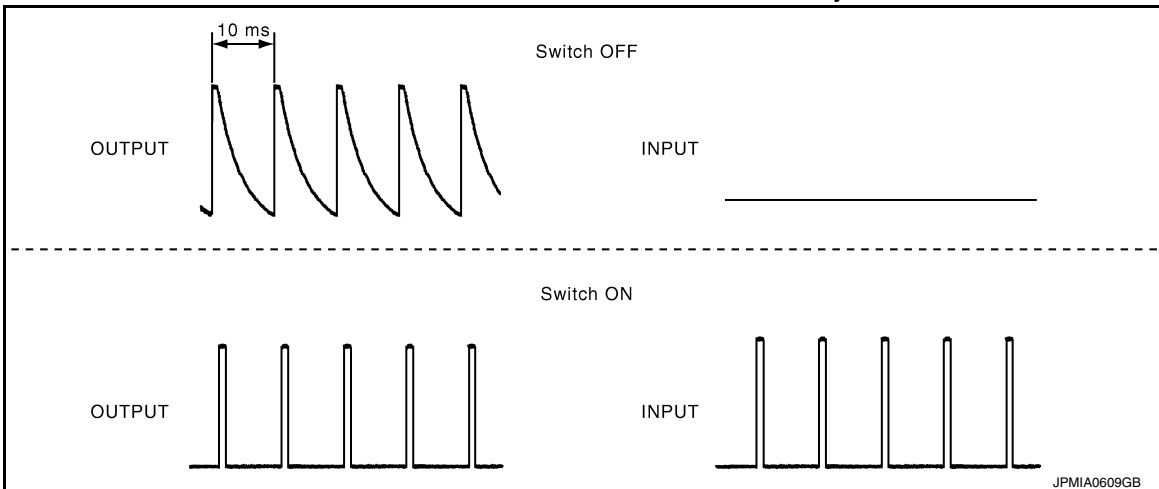
NOTE:

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 control mode.

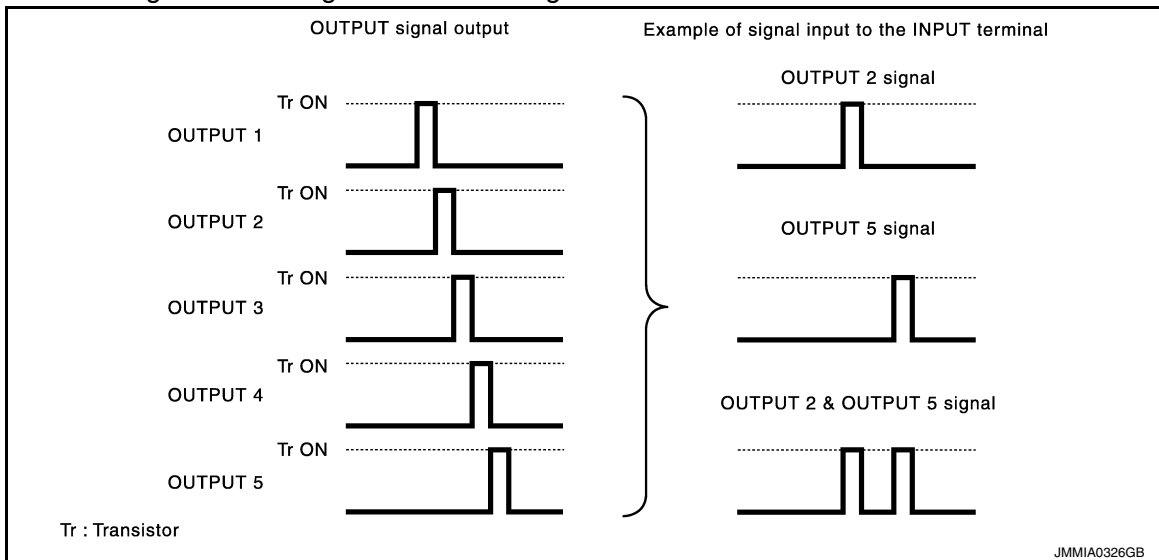
- BCM operates as follows and judges the status of the combination switch.
- It operates the transistor on OUTPUT side in the following order: OUTPUT 1 → 2 → 3 → 4 → 5, and outputs voltage waveform.

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[WITH INTELLIGENT KEY SYSTEM]

- The voltage waveform of OUTPUT corresponding to the formed circuit is input into the interface on INPUT side if any (1 or more) switches are ON.
- It reads this change of the voltage as the status signal of the combination switch.

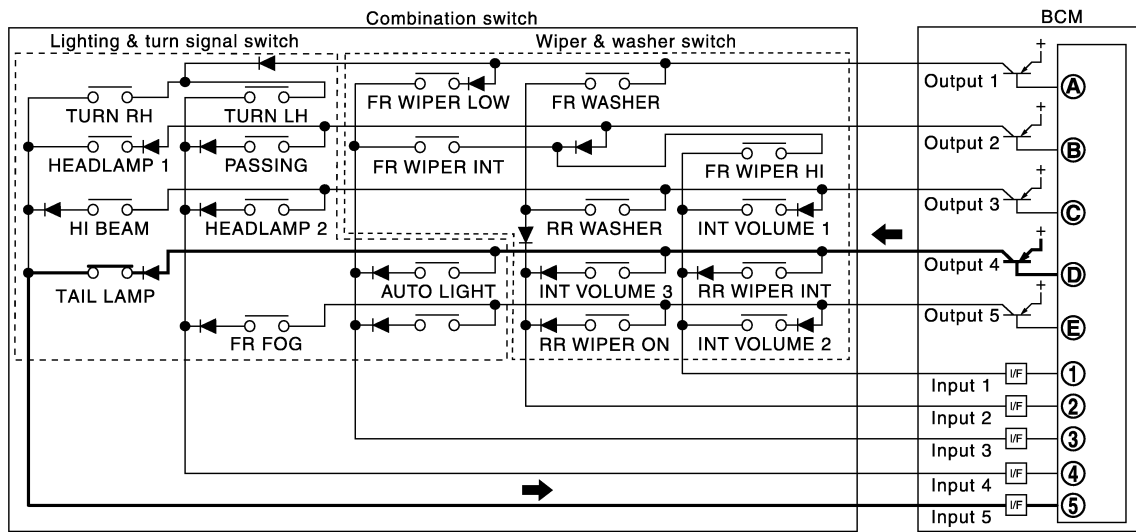


Operation Example

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 (TAIL LAMP switch) is turned ON

- The circuit between OUTPUT 4 and INPUT 5 is formed when the TAIL LAMP switch is turned ON.



- BCM detects the combination switch status signal "5D" when the signal of OUTPUT 4 is input to INPUT 5.
- BCM judges that the TAIL LAMP switch is ON when the signal "5D" is detected.

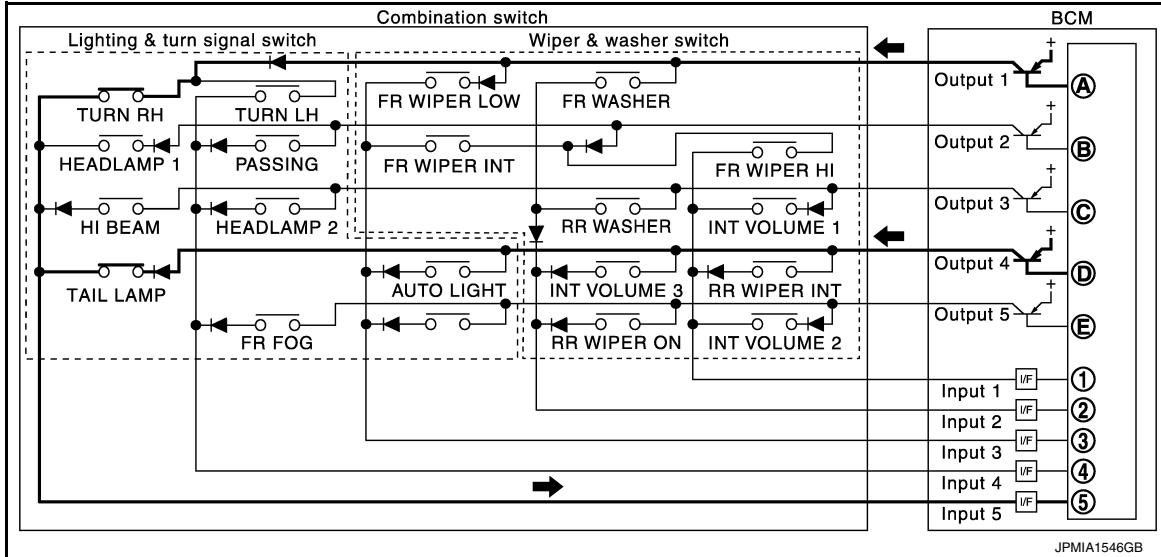
Example 2: When some switches (TURN RH switch, TAIL LAMP switch) are turned ON

SYSTEM

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[WITH INTELLIGENT KEY SYSTEM]

- The circuits between OUTPUT 1 and INPUT 5 and between OUTPUT 4 and INPUT 5 are formed when the TURN RH switch and TAIL LAMP switch are turned ON.



- BCM detects the combination switch status signal "5AD" when the signals of OUTPUT 1 and OUTPUT 4 are input to INPUT 5.
- BCM judges that the TURN RH switch and TAIL LAMP switch are ON when the signal "5AD" is detected.

WIPER INTERMITTENT DIAL POSITION

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

Wiper intermittent dial position	Switch status		
	INT VOLUME 1	INT VOLUME 2	INT VOLUME 3
1	ON	ON	ON
2	ON	ON	OFF
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 intermittent dial position, refer to [WW-7, "FRONT WIPER AND WASHER SYSTEM : System Description"](#).

SIGNAL BUFFER SYSTEM

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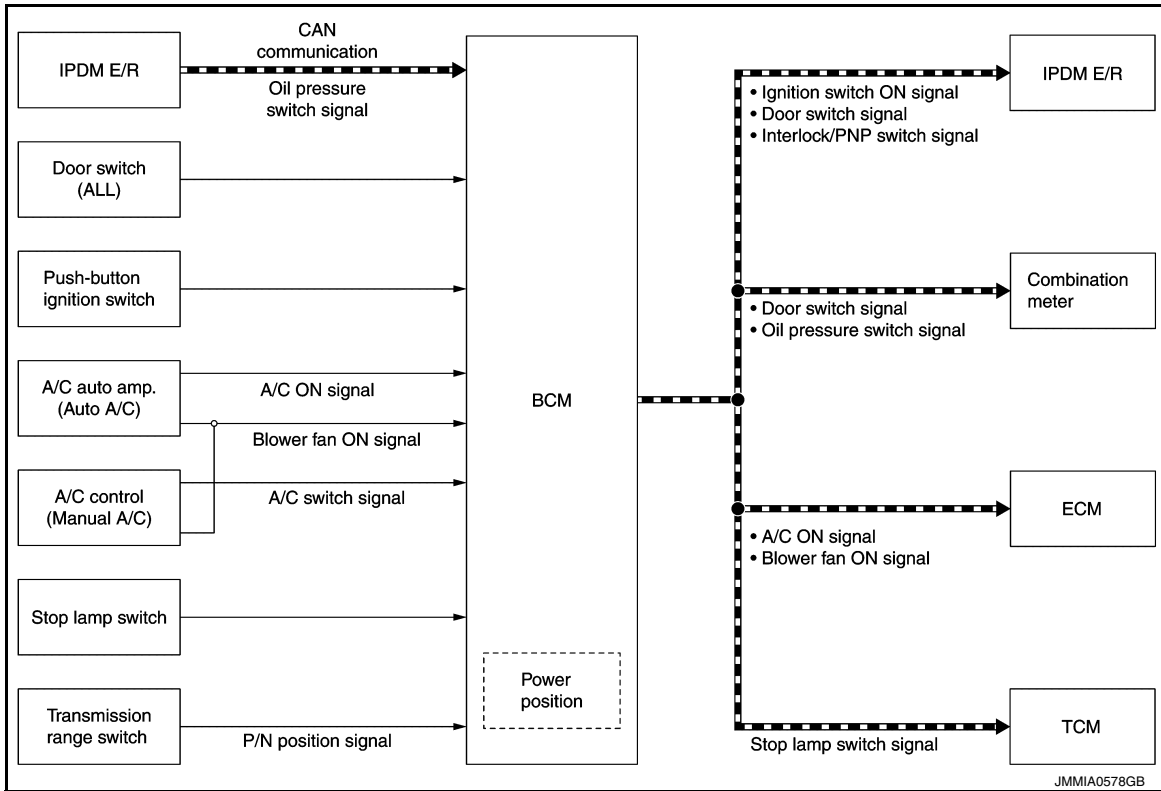
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[WITH INTELLIGENT KEY SYSTEM]

SIGNAL BUFFER SYSTEM : System Diagram

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NOTE:

If vehicle models is gasoline engine models, oil pressure switch is not applied.

SIGNAL BUFFER SYSTEM : System Description

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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
Ignition switch ON signal	Push-button ignition switch (Push switch)	IPDM E/R (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 (CAN) IPDM E/R (CAN) 	Inputs the door switch signal and transmits it via CAN communication.
Blower fan ON signal	<ul style="list-style-type: none"> A/C auto amp. (Auto A/C) A/C control (Manual A/C) 	ECM (CAN)	Input blower fan switch signal, and transmit the blower fan ON signal via CAN communication.
A/C ON signal	<ul style="list-style-type: none"> A/C auto amp. (Auto A/C) A/C control (Manual A/C) 	ECM (CAN)	Input A/C ON signal (automatic A/C) or A/C switch signal (manual A/C), and transmit the A/C ON signal via CAN communication.

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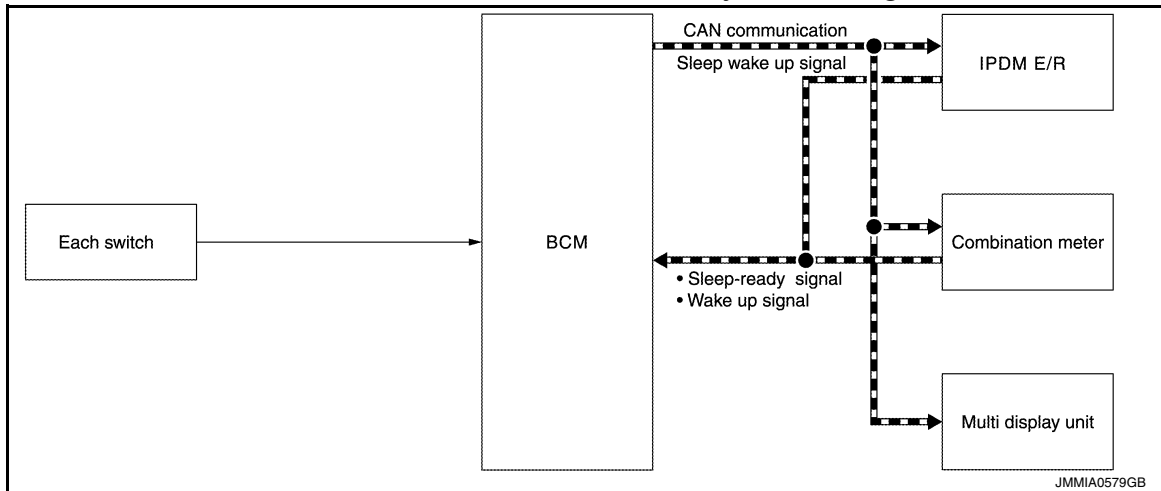
[WITH INTELLIGENT KEY SYSTEM]

Signal name	Input	Output	Description
Stop lamp switch signal	Stop lamp switch	TCM (CAN)	Inputs the stop lamp switch 1 signal and stop lamp switch 2 signal, and transmits it via CAN communication.
Interlock/PNP switch signal	Transmission range switch	IPDM E/R (CAN)	Inputs the P/N position signal, and transmits the interlock/PNP switch signal via CAN communication.

POWER CONSUMPTION CONTROL SYSTEM

POWER CONSUMPTION CONTROL SYSTEM : System Diagram

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POWER CONSUMPTION CONTROL SYSTEM : System Description

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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 and multi display 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 combination meter 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.

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- 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.

Sleep condition

CAN sleep condition	BCM sleep condition
<ul style="list-style-type: none"> • Receiving the sleep-ready signal (ready) from all units • 1 minute after turning ignition switch OFF • Theft warning alarm and panic alarm: Not operation • Warning chime: Not operation • Intelligent Key system buzzer: Not operation • Stop lamp switch: OFF • Turn signal indicator lamp: Not operation • Exterior lamp: OFF • Door lock status: No change • CONSULT communication status: Not communication • Meter display signal: Non-transmission • Door switch status: No change 	<ul style="list-style-type: none"> • Interior room lamp battery saver: Time out* • RAP system: No communication • Nissan Vehicle Immobilizer System (NVIS) - NATS: Not operation • Remote keyless entry receiver communication status: No communication • Tire pressure monitoring system (TPMS): Stop • ACC/ON indicator lamp: Not operation

NOTE:

*: Refer to [INL-8, "INTERIOR ROOM LAMP BATTERY SAVER SYSTEM : System Description"](#) for details of the interior room lamp battery saver time.

Wake-up operation

- BCM transmits sleep wake up signal (wake up) to each unit when any condition listed below is established, and then goes into normal mode from low power consumption mode.
- Each unit starts transmissions with CAN communication by receiving sleep wake up signals. Each unit transmit wake up signals to BCM with CAN communication to convey the start of CAN communication.

Wake-up condition

BCM wake-up condition	CAN wake-up condition
<p>Back door opener switch: OFF → ON</p>	<ul style="list-style-type: none"> • Receiving the sleep-ready signal (Not-ready) from any units • Push-button ignition switch (push switch): OFF → ON • Hazard switch: ON • HI BEAM switch: OFF → ON, ON → OFF • PASSING switch: OFF → ON, ON → OFF • HEADLAMP 1 switch: OFF → ON, ON → OFF • HEADLAMP 2 switch: OFF → ON, ON → OFF • TAIL LAMP switch: OFF → ON • FR FOG switch: OFF → ON, ON → OFF • TURN RH: OFF → ON, ON → OFF • TURN LH: OFF → ON, ON → OFF • Driver door switch: OFF → ON, ON → OFF • Passenger door switch: OFF → ON, ON → OFF • Rear RH door switch: OFF → ON, ON → OFF • Rear LH door switch: OFF → ON, ON → OFF • Back door switch: OFF → ON, ON → OFF • Driver door request switch: OFF → ON • Passenger door request switch: OFF → ON • Back door request switch: OFF → ON • Stop lamp switch: ON • Door lock and unlock switch: NEUTRAL → LOCK, NEUTRAL → UNLOCK • Front door lock assembly (driver side) (door key cylinder switch): NEUTRAL → LOCK, NEUTRAL → UNLOCK • Remote keyless entry receiver communication: Receiving • Front door lock assembly (driver side) (unlock sensor): OFF → ON, ON → OFF

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000012200696

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

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

NOTE:

*: For models with automatic A/C, this diagnosis mode is not used.

FREEZE FRAME DATA (FFD)

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

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

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

NOTE:

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

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

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

DOOR LOCK

DOOR LOCK : CONSULT Function (BCM - DOOR LOCK)

INFOID:000000012965014

BCM CONSULT FUNCTION

CONSULT performs the following functions via CAN communication with BCM.

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Monitor item	Description	A
DOOR LOCK-UNLOCK SET	Anti-hijack function mode can be changed to operation with this mode <ul style="list-style-type: none"> • On: Operate • Off: Non-operation 	B
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 	C
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 • MODE 5: This item is displayed, but cannot be monitored • MODE 6: This item is displayed, but cannot be monitored 	D E
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 and unlock operation 	F G

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

DATA MONITOR

NOTE:

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

Monitor Item	Contents	H
REQ SW-DR	Indicated [On/Off] condition of door request switch (driver side)	I
REQ SW-AS	Indicated [On/Off] condition of door request switch (passenger side)	J
REQ SW-BD/TR	Indicated [On/Off] condition of back door request switch	K
DOOR SW-DR	Indicated [On/Off] condition of front door switch (driver side)	L
DOOR SW-AS	Indicated [On/Off] condition of front door switch (passenger side)	L
DOOR SW-RR	Indicated [On/Off] condition of rear door switch RH	L
DOOR SW-RL	Indicated [On/Off] condition of rear door switch LH	L
DOOR SW-BK	Indicated [On/Off] condition of back door switch	L
CDL LOCK SW	Indicated [On/Off] condition of lock signal from door lock unlock switch	L
CDL UNLOCK SW	Indicated [On/Off] condition of unlock signal from door lock unlock switch	L
KEY CYL LK-SW	Indicated [On/Off] condition of lock signal from door key cylinder	L
KEY CYL UN-SW	Indicated [On/Off] condition of unlock signal from door key cylinder	L

ACTIVE TEST

Test item	Description	O
DOOR LOCK	This test is able to check door lock/unlock operation <ul style="list-style-type: none"> • The all door lock actuators are locked when "ALL LOCK" on CONSULT screen is touched • The all door lock actuators are unlocked when "ALL UNLK" on CONSULT screen is touched • The door lock actuator (driver side) is unlocked when "DR UNLK" on CONSULT screen is touched • The door lock actuator (passenger side) is unlocked when "AS UNLK" on CONSULT screen is touched • The door lock actuator (other) is unlocked when "OTR ULK" on CONSULT screen is touched 	P

REAR WINDOW DEFOGGER

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

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

INFOID:0000000012965044

DATA MONITOR

NOTE:

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

Monitor Item	Description
REAR DEF SW	Displays "Press (ON)/other (OFF)" status determined with the rear window defogger switch.
PUSH SW	Indicates [ON/OFF] condition of push switch.

ACTIVE TEST

Test Item	Description
REAR DEFOGGER	Rear window defogger operates when "ON" on CONSULT screen is touched.

BUZZER

BUZZER : CONSULT Function (BCM - BUZZER)

INFOID:0000000012965034

CONSULT 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

NOTE:

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

Display item [Unit]	Description
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.
VEH SPEED 1 [km/h]	Value of vehicle speed signal received from combination meter with CAN communication line.
TAIL LAMP SW [On/Off]	Status of lighting switch judged by BCM using the combination switch readout function.
FR FOG SW [On/Off]	Status of front fog lamp switch judged by BCM using the combination switch readout function.
DOOR SW-DR [On/Off]	Status of driver side door switch judged by BCM.
CDL LOCK SW [On/Off]	Status of door lock unlock switch judged by BCM.

ACTIVE TEST

Display item [Unit]	Description
SEAT BELT WARN TEST	The seat belt warning chime operation can be checked by operating the relevant function (On/Off).
KEY REMINDER WARN	The key 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).

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

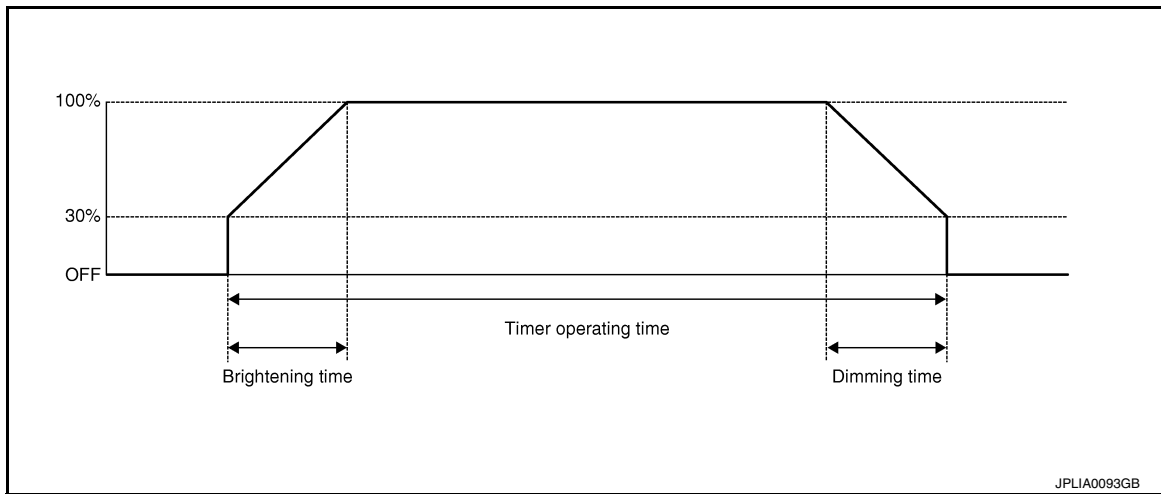
< SYSTEM DESCRIPTION >

INT LAMP

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:000000012965031

WORK SUPPORT



Service item	Setting item	Setting
ROOM LAMP TIMER SET	MODE 2	7.5 sec.
	MODE 3*	15 sec.
	MODE 4	30 sec.
Sets the interior room lamp ON time. (Timer operating time)		
SET I/L D-UNLCK INTCON	On*	With the interior room lamp timer function
	Off	Without the interior room lamp timer function
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.
Sets the interior room lamp gradual brightening time.		
ROOM LAMP OFF TIME SET	MODE 1	0.5 sec.
	MODE 2*	1 sec.
	MODE 3	2 sec.
	MODE 4	3 sec.
	MODE 5	0 sec.
Sets the interior room lamp gradual dimming time.		
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.
FOG LAMP OVERRIDE	On	With front fog override function
	Off*	Without front fog override function

*: Factory setting

DATA MONITOR

NOTE:

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

A
B
C
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N
O
P

BCS

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	Indicated [On/Off] condition of door request switch (driver side)
REQ SW-AS [On/Off]	Indicated [On/Off] condition of door request switch (passenger side)
REQ SW-RR [On/Off]	NOTE: This item is displayed, but cannot be monitored
REQ SW-RL [On/Off]	NOTE: This item is displayed, but cannot be monitored
PUSH SW [On/Off]	Indicates [On/Off] condition of push-button ignition switch
UNLK SEN -DR [On/Off]	Indicates [On/Off] condition of driver door UNLOCK status
DOOR SW-DR [On/Off]	Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS [On/Off]	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR [On/Off]	Indicated [On/Off] condition of rear door switch RH
DOOR SW- RL [On/Off]	Indicated [On/Off] condition of rear door switch LH
DOOR SW- BK [On/Off]	Indicated [On/Off] condition of back door switch
CDL LOCK SW [On/Off]	Indicated [On/Off] condition of lock signal from door lock unlock switch
CDL UNLOCK SW [On/Off]	Indicated [On/Off] condition of unlock signal from door lock unlock switch
TRNK/HAT MNTR [On/Off]	NOTE: This item is displayed, but cannot be monitored
KEY CYL LK-SW [On/Off]	Indicated [On/Off] condition of lock signal from door key cylinder
KEY CYL UN-SW [On/Off]	Indicated [On/Off] condition of unlock signal from door key cylinder
RKE-LOCK [On/Off]	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK [On/Off]	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key

ACTIVE TEST

Test item	Operation	Description
INT LAMP	On	Outputs the interior room lamp control signal.
	Off	Stops the interior room lamp control signal.
STEP LAMP TEST	On	NOTE:
	Off	This item is indicated, but can not tested

HEADLAMP

HEADLAMP : CONSULT Function (BCM - HEAD LAMP) (XENON TYPE)

INFOID:000000012965020

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Service item	Setting item	Setting
CUSTOM A/LIGHT SETTING*1	MODE1*2	Normal
	MODE2	More sensitive setting than normal setting (Turns ON earlier than normal operation)
	MODE3	More sensitive setting than MODE2 (Turns ON earlier than MODE2)
	MODE4	Less sensitive setting than normal setting (Turns ON later than normal operation)
BATTERY SAVER SET	On*2	With the exterior lamp battery saver function
	Off	Without the exterior lamp battery saver function
ILL DELAY SET*1	MODE1*2	45 sec.
	MODE2	Without the function
	MODE3	30 sec.
	MODE4	60 sec.
	MODE5	90 sec.
	MODE6	120 sec.
	MODE7	150 sec.
	MODE8	180 sec.
HEAD LIGHT TIMER	MODE1	10 sec.
	MODE2*2	30 sec.
AUTO LIGHT LOGIC SET*1	MODE1*2	With twilight ON custom & with wiper INT, LO and HI
	MODE2	With twilight ON custom & with wiper LO and HI
	MODE3	With twilight ON custom & without
	MODE4	Without twilight ON custom & with wiper INT, LO and HI
	MODE5	Without twilight ON custom & with wiper LO and HI
	MODE6	Without twilight ON custom & without

*1: For models without auto light system, this item cannot be used.

*2: Factory setting

DATA MONITOR

NOTE:

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

Monitor item [Unit]	Description
PUSH SW [On/Off]	Indicates [On/Off] condition of push-button ignition switch
ENGINE STATE [STOP/STALL/CRANK/RUN]	Indicates [STOP/STALL/CRANK/RUN] condition of engine states
VEH SPEED 1 [km/h]	Display the vehicle speed signal received from combination meter by numerical value [km/h]

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
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 SW 1 [On/Off]	
HEAD LAMP SW 2 [On/Off]	
PASSING SW [On/Off]	
AUTO LIGHT SW* ¹ [On/Off]	
FR FOG SW* ² [On/Off]	
DOOR SW-DR [On/Off]	Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS [On/Off]	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR [On/Off]	Indicated [On/Off] condition of rear door switch RH
DOOR SW-RL [On/Off]	Indicated [On/Off] condition of rear door switch LH
DOOR SW-BK [On/Off]	Indicated [On/Off] condition of back door switch
OPTI SEN (DTCT) [V]	The value of outside brightness voltage input from the optical sensor
OPTI SEN (FILT) [V]	The value of outside brightness voltage filtered by BCM
OPTICAL SENSOR [On/Off/NG]	NOTE: This item cannot be monitored

*¹: For models without auto light system, this item cannot be monitored.

*²: For models without front fog lamp, this item cannot be monitored.

ACTIVE TEST

Test item	Operation	Description
TAIL LAMP	On	<ul style="list-style-type: none"> • Transmits the position light request signal to IPDM E/R via CAN communication to turn the parking, license plate and tail lamps ON • Transmits the position light request signal to combination meter via CAN communication to turn the position lamp indicator lamp ON
	Off	Stops the position light request signal transmission
HEAD LAMP	HI	<ul style="list-style-type: none"> • Transmits the high beam request signal to IPDM E/R via CAN communication to turn the headlamp (HI) ON • Transmits the high beam request signal to combination meter via CAN communication to turn the high beam indicator lamp ON
	Low	Transmits the low beam request signal to IPDM E/R via CAN communication to turn the headlamp (LO) ON
	Off	Stops the high beam request signal and low beam request signal transmission

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Test item	Operation	Description
FR FOG LAMP*1	On	<ul style="list-style-type: none"> Transmits the front fog light request signal to IPDM E/R via CAN communication to turn the front fog lamp ON (With front fog lamp) Transmits the daytime running light request signal to IPDM E/R via CAN communication to turn the daytime running light ON (NISMO models with daytime running light system)
	Off	<ul style="list-style-type: none"> Stops the front fog light request signal transmission (With front fog lamp) Stops the front fog light request signal transmission (NISMO models with daytime running light system)
DAYTIME RUNNING LIGHT*2	On	Transmits the daytime running light request signal to IPDM E/R via CAN communication to turn the headlamp (HI) ON [Headlamp (HI) at approximately half illumination]
	Off	Stops the daytime running light request signal transmission
ILL DIM SIGNAL	On	NOTE: This item cannot be tested
	Off	

*1: For models without front fog lamp and except for NISMO models with daytime running light system, this item cannot be tested.

*2: For models without daytime running light system and NISMO models with daytime running light system, this item cannot be tested.

HEADLAMP : CONSULT Function (BCM - HEAD LAMP) (HALOGEN TYPE)

INFOID:000000012965021

WORK SUPPORT

Service item	Setting item	Setting
CUSTOM A/LIGHT SETTING*1	MODE1*2	Normal
	MODE2	More sensitive setting than normal setting (Turns ON earlier than normal operation)
	MODE3	More sensitive setting than MODE2 (Turns ON earlier than MODE2)
	MODE4	Less sensitive setting than normal setting (Turns ON later than normal operation)
BATTERY SAVER SET	On*2	With the exterior lamp battery saver function
	Off	Without the exterior lamp battery saver function
ILL DELAY SET*1	MODE1*2	45 sec.
	MODE2	Without the function
	MODE3	30 sec.
	MODE4	60 sec.
	MODE5	90 sec.
	MODE6	120 sec.
	MODE7	150 sec.
	MODE8	180 sec.
HEAD LIGHT TIMER	MODE1	10 sec.
	MODE2*2	30 sec.
AUTO LIGHT LOGIC SET*1	MODE1*2	With twilight ON custom & with wiper INT, LO and HI
	MODE2	With twilight ON custom & with wiper LO and HI
	MODE3	With twilight ON custom & without
	MODE4	Without twilight ON custom & with wiper INT, LO and HI
	MODE5	Without twilight ON custom & with wiper LO and HI
	MODE6	Without twilight ON custom & without

*1: For models without auto light system, this item cannot be used.

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

*2: Factory setting

DATA MONITOR

NOTE:

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

Monitor item [Unit]	Description	
PUSH SW [On/Off]	Indicates [On/Off] condition of push-button ignition switch	
ENGINE STATE [STOP/STALL/CRANK/RUN]	Indicates [STOP/STALL/CRANK/RUN] condition of engine states	
VEH SPEED 1 [km/h]	Display the vehicle speed signal received from combination meter by numerical value [km/h]	
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 SW 1 [On/Off]		
HEAD LAMP SW 2 [On/Off]		
PASSING SW [On/Off]		
AUTO LIGHT SW*1 [On/Off]		
FR FOG SW*2 [On/Off]		
DOOR SW-DR [On/Off]		Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS [On/Off]		Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR [On/Off]	Indicated [On/Off] condition of rear door switch RH	
DOOR SW-RL [On/Off]	Indicated [On/Off] condition of rear door switch LH	
DOOR SW-BK [On/Off]	Indicated [On/Off] condition of back door switch	
OPTI SEN (DTCT) [V]	The value of outside brightness voltage input from the optical sensor	
OPTI SEN (FILT) [V]	The value of outside brightness voltage filtered by BCM	
OPTICAL SENSOR [On/Off/NG]	NOTE: This item cannot be monitored	

*1: For models without auto light system, this item cannot be monitored.

*2: For models without front fog lamp, this item cannot be monitored.

ACTIVE TEST

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

Test item	Operation	Description
TAIL LAMP	On	<ul style="list-style-type: none"> Transmits the position light request signal to IPDM E/R via CAN communication to turn the parking, license plate and tail lamps ON Transmits the position light request signal to combination meter via CAN communication to turn the position lamp indicator lamp ON
	Off	Stops the position light request signal transmission
HEAD LAMP	HI	<ul style="list-style-type: none"> Transmits the high beam request signal to IPDM E/R via CAN communication to turn the headlamp (HI) ON Transmits the high beam request signal to combination meter via CAN communication to turn the high beam indicator lamp ON
	Low	Transmits the low beam request signal to IPDM E/R via CAN communication to turn the headlamp (LO) ON
	Off	Stops the high beam request signal and low beam request signal transmission
FR FOG LAMP*1	On	<ul style="list-style-type: none"> Transmits the front fog light request signal to IPDM E/R via CAN communication to turn the front fog lamp ON (With front fog lamp) Transmits the daytime running light request signal to IPDM E/R via CAN communication to turn the daytime running light ON (NISMO models with daytime running light system)
	Off	<ul style="list-style-type: none"> Stops the front fog light request signal transmission (With front fog lamp) Stops the front fog light request signal transmission (NISMO models with daytime running light system)
DAYTIME RUNNING LIGHT*2	On	Transmits the daytime running light request signal to IPDM E/R via CAN communication to turn the headlamp (HI) ON [Headlamp (HI) at approximately half illumination]
	Off	Stops the daytime running light request signal transmission
ILL DIM SIGNAL	On	NOTE: This item cannot be tested
	Off	

*1: For models without front fog lamp and except for NISMO models with daytime running light system, this item cannot be tested.

*2: For models without daytime running light system and NISMO models with daytime running light system, this item cannot be tested.

WIPER

WIPER : CONSULT Function - WIPER

INFOID:000000012965033

WORK SUPPORT

Service item	Setting item	Description
WIPERSPEED 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)

*:Factory setting

DATA MONITOR

NOTE:

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

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Monitor Item [Unit]	Description
PUSH SW [Off/On]	The switch status input from push-button ignition switch
VEH SPEED 1 [km/h]	Displays the value of the vehicle speed signal received from combination meter via CAN communication
FR WIPER HI [Off/On]	Status of each switch judged by BCM using the combination switch reading function
FR WIPER LOW [Off/On]	
FR WASHER SW [Off/On]	
FR WIPER INT [Off/On]	
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]	Status of each switch judged by BCM using the combination switch reading function
RR WIPER ON [Off/On]	Status of each switch judged by BCM using the combination switch reading function
RR WIPER INT [Off/On]	
RR WASHER SW [Off/On]	
RR WIPER STOP [Off/On]	Rear wiper motor (stop position) status input from the rear wiper motor
RAIN SENSOR [Off/LOW/HIGH/SPLASH/NG]	NOTE: This item is displayed, but cannot be monitored.

ACTIVE TEST

Test item	Operation	Description
FR WIPER	Hi	Transmits the front wiper request signal (HI) to IPDM E/R via CAN communication to operate the front wiper HI operation.
	Lo	Transmits the front wiper request signal (LO) to IPDM E/R via CAN communication to operate the front wiper LO operation.
	INT	Transmits the front wiper request signal (INT) to IPDM E/R via CAN communication to operate the front wiper INT operation.
	Off	Stops transmitting the front wiper request signal to stop the front wiper operation.
RR WIPER	On	Output the voltage to operate the rear wiper motor.
	Off	Stops the voltage to stop the rear wiper motor.

FLASHER

FLASHER : CONSULT Function (BCM - FLASHER) (XENON TYPE)

INFOID:000000012965029

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

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 door request switch and Intelligent Key
	Unlock Only	With unlocking only	
	Lock/Unlock*	With locking/unlocking	
	Off	Without the function	

*: Factory setting

DATA MONITOR

NOTE:

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

Monitor item [Unit]	Description
REQ SW -DR [On/Off]	Indicates [On/Off] condition of door request switch (driver side)
REQ SW -AS [On/Off]	Indicates [On/Off] condition of door request switch (passenger side)
PUSH SW [On/Off]	Indicates [On/Off] condition of push-button ignition switch
TURN SIGNAL R [On/Off]	Each switch status that BCM detects from the combination switch reading function
TURN SIGNAL L [On/Off]	
HAZARD SW [On/Off]	The switch status input from the hazard switch
RKE-LOCK [On/Off]	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK [On/Off]	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key
RKE-PANIC* [On/Off]	Indicates [On/Off] condition of PANIC button of Intelligent Key

*: For models without panic alarm function, this item cannot be used.

ACTIVE TEST

Test item	Operation	Description
FLASHER	RH	<ul style="list-style-type: none"> • Outputs voltage to turn the right side turn signal lamps ON • Transmits the turn indicator signal to combination meter via CAN communication to turn the turn signal indicator lamp (RH) ON
	LH	<ul style="list-style-type: none"> • Outputs voltage to turn the left side turn signal lamps ON • Transmits the turn indicator signal to combination meter via CAN communication to turn the turn signal indicator lamp (LH) ON
	Off	<ul style="list-style-type: none"> • Stops the voltage to turn the turn signal lamps OFF • Stops the turn indicator signal transmission

FLASHER : CONSULT Function (BCM - FLASHER) (HALOGEN TYPE)

INFOID:000000012965030

WORK SUPPORT

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

[WITH INTELLIGENT KEY SYSTEM]

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 door request switch and Intelligent Key
	Unlock Only	With unlocking only	
	Lock/Unlock*	With locking/unlocking	
	Off	Without the function	

*: Factory setting

DATA MONITOR

NOTE:

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

Monitor item [Unit]	Description
REQ SW -DR [On/Off]	Indicates [On/Off] condition of door request switch (driver side)
REQ SW -AS [On/Off]	Indicates [On/Off] condition of door request switch (passenger side)
PUSH SW [On/Off]	Indicates [On/Off] condition of push-button ignition switch
TURN SIGNAL R [On/Off]	Each switch status that BCM detects from the combination switch reading function
TURN SIGNAL L [On/Off]	
HAZARD SW [On/Off]	The switch status input from the hazard switch
RKE-LOCK [On/Off]	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK [On/Off]	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key
RKE-PANIC* [On/Off]	Indicates [On/Off] condition of PANIC button of Intelligent Key

*: For models without panic alarm function, this item cannot be used.

ACTIVE TEST

Test item	Operation	Description
FLASHER	RH	<ul style="list-style-type: none"> Outputs voltage to turn the right side turn signal lamps ON Transmits the turn indicator signal to combination meter via CAN communication to turn the turn signal indicator lamp (RH) ON
	LH	<ul style="list-style-type: none"> Outputs voltage to turn the left side turn signal lamps ON Transmits the turn indicator signal to combination meter via CAN communication to turn the turn signal indicator lamp (LH) ON
	Off	<ul style="list-style-type: none"> Stops the voltage to turn the turn signal lamps OFF Stops the turn indicator signal transmission

AIR CONDITIONER

AIR CONDITIONER : CONSULT Function (BCM - AIR CONDITIONER) (Automatic A/C)

INFOID:000000012965035

DATA MONITOR

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Display Item List

NOTE:

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

Monitor Item [Unit]	Contents
FAN ON SIG [On/Off]	Displays the blower fan status as judged from the A/C auto amp.
AIR COND SW [On/Off]	Displays [COMP (On)/COMP (Off)] status as judged from the A/C auto amp.

AIR CONDITIONER : CONSULT Function (BCM - AIR CONDITIONER) (Manual A/C)

INFOID:000000012965036

DATA MONITOR

NOTE:

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

Display item list

Monitor Item [Unit]	Contents
FAN ON SIG [On/Off]	Displays blower motor status as judged from blower fan ON signal.
AIR COND SW [On/Off]	Displays A/C switch status as judged from A/C switch signal.
THERMO AMP [On/Off]	Displays thermo control amp. status as judged from thermo control amp. signal.
IGN SW [On/Off]	Displays ignition switch position status as judged from ignition switch signal.
FR DEF SW [On/Off]	Displays the D/F or DEF status as judged from defroster position signal.

ACTIVE TEST

Test item	Operation	Description
A/C INDICATOR	On	A/C indicator is turned ON.
	Off	A/C indicator is turned OFF.

INTELLIGENT KEY

INTELLIGENT KEY : CONSULT Function (BCM - INTELLIGENT KEY)

INFOID:000000012965015

WORK SUPPORT

Monitor item	Description
INSIDE ANT DIAGNOSIS	This function allows inside key antenna self-diagnosis
LOCK/UNLOCK BY I-KEY	Door lock/unlock function by door request switch mode can be changed to operation in this mode <ul style="list-style-type: none"> On: Operate Off: Non-operation
ENGINE START BY I-KEY	Engine start function mode can be changed to operation with this mode <ul style="list-style-type: none"> On: Operate Off: Non-operation
TRUNK/GLASS HATCH OPEN	NOTE: This item is displayed, but cannot be monitored
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 <ul style="list-style-type: none"> On: Operate Off: Non-operation
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

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DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Monitor item	Description
TRUNK OPEN DELAY	NOTE: This item is displayed, but cannot be monitored
LO- BATT OF KEY FOB WARN	Intelligent Key low battery warning mode can be changed to operation with this mode <ul style="list-style-type: none"> • On: Operate • Off: Non-operation
ANTI KEY LOCK IN FUNCTI	Key reminder function mode can be changed to operation with this mode <ul style="list-style-type: none"> • On: Operate • Off: Non-operation
HAZARD ANSWER BACK	Hazard reminder function mode by door request switch and Intelligent Key button 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 and unlock operation • Off: Non-operation
ANS BACK I-KEY LOCK	Buzzer reminder function (lock operation) mode by door request switch 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 operation with this mode <ul style="list-style-type: none"> • On: Operate • Off: Non-operation
SHORT CRANKING OUTPUT	Starter motor can operate during the times below <ul style="list-style-type: none"> • 70 msec • 100 msec • 200 msec
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 operation time can be changed in this mode <ul style="list-style-type: none"> • MODE 1: OFF • MODE 2: 30 sec • MODE 3: 1 minute • MODE 4: 2 minutes • MODE 5: 3 minutes • MODE 6: 4 minutes • MODE 7: 5 minutes

SELF-DIAG RESULT

Refer to [BCS-62, "DTC Index"](#).

DATA MONITOR

NOTE:

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

Monitor Item	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 back door request switch
PUSH SW	Indicates [On/Off] condition of push-button ignition switch
CLUTCH SW* ¹	Indicates [On/Off] condition of clutch interlock switch
BRAKE SW 1	Indicates [On/Off]* ² condition of stop lamp switch power supply
BRAKE SW 2	Indicates [On/Off] condition of stop lamp switch
DETE/CANCL SW	Indicates [On/Off] condition of P position
SFT PN/N SW	Indicates [On/Off] condition of P or N position

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Monitor Item	Condition
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	Indicates [On/Off] condition of P position
SFT PN -IPDM	Indicates [On/Off] condition of P or N position
SFT P -MET	Indicates [On/Off] condition of P position
SFT N -MET	Indicates [On/Off] condition of N position
ENGINE STATE	Indicates [Stop/Stall/Crank/Run] condition of engine states
S/L LOCK-IPDM	NOTE: This item is displayed, but cannot be monitored
S/L UNLK-IPDM	NOTE: This item is displayed, but cannot be monitored
S/L RELAY-REQ	NOTE: This item is displayed, but cannot be monitored
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]
DOOR STAT-DR	Indicates [LOCK/READY/UNLK] condition of driver side door status
DOOR STAT-AS	Indicates [LOCK/READY/UNLK] condition of passenger side door status
ID OK FLAG	Indicates [Set/Reset] condition of key ID
PRMT ENG STRT	Indicates [Set/Reset] condition of engine start possibility
PRMT RKE STRT	NOTE: This item is displayed, but cannot be monitored
TRNK/HAT MNTR	NOTE: This item is displayed, but cannot be monitored
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	NOTE: This item is displayed, but cannot be monitored
RKE-PANIC	Indicates [On/Off] condition of PANIC button of Intelligent Key
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
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored

*1: It is displayed but does not operate on CVT models.

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

ACTIVE TEST

Test item	Description
OUTSIDE BUZZER	This test is able to check Intelligent Key warning buzzer operation <ul style="list-style-type: none"> • On: Operate • Off: Non-operation
INSIDE BUZZER	This test is able to check warning chime in combination meter operation <ul style="list-style-type: none"> • Take Out: Take away warning chime sounds when CONSULT screen is touched • Key: Key warning chime sounds when CONSULT screen is touched • Knob: OFF position warning chime sounds when CONSULT screen is touched • Off: Non-operation

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Test item	Description
INDICATOR	This test is able to check warning lamp operation <ul style="list-style-type: none"> • KEY ON: "KEY" Warning lamp illuminates when CONSULT screen is touched • KEY IND: "KEY" Warning lamp blinks when CONSULT screen is touched • Off: Non-operation
INT LAMP	This test is able to check interior room lamp operation <ul style="list-style-type: none"> • On: Operate • Off: Non-operation
LCD	This test is able to check meter display information <ul style="list-style-type: none"> • BP N: Engine start operation indicator lamp indicate when CONSULT screen is touched • BP I: Engine start operation indicator lamp indicate when CONSULT screen is touched • ID NG: This item is displayed, but cannot be monitored • ROTAT: This item is displayed, but cannot be monitored • SFT P: Shift P warning lamp indicate when CONSULT screen is touched • INSRT: This item is displayed, but cannot be monitored • BATT: Key warning lamp indicator when CONSULT screen is touched • NO KY: Key warning lamp indicator when CONSULT screen is touched • OUTKEY: Engine start operation indicator lamp indicate when CONSULT screen is touched • LK WN: Engine start operation indicator lamp indicate when CONSULT screen is touched
FLASHER	This test is able to check security hazard lamp operation The hazard lamps are activated after "LH/RH/Off" on CONSULT screen is touched
HORN	This test is able to check horn operation The horn is activated after "ON" on CONSULT screen is touched
P RANGE	This test is able to check CVT shift selector power supply <ul style="list-style-type: none"> • On: Operate • Off: Non-operation
ENGINE SW ILLUMI	This test is able to check push-ignition switch illumination operation Push-ignition switch illumination illuminates when "ON" on CONSULT screen is touched
PUSH SWITCH INDICATOR	This test is able to check LOCK indicator in push-ignition switch operation LOCK indicator in push-ignition switch illuminates when "ON" on CONSULT screen is touched
BATTERY SAVER	This test is able to check interior room lamp operation. The interior room lamp will be activated after "ON" on CONSULT screen is touched.
TRUNK/BACK DOOR	This test is able to check back door opener actuator open operation. This actuator opens when "Open" on CONSULT screen is touched.

COMB SW

COMB SW : CONSULT Function (BCM - COMB SW)

INFOID:000000012200709

DATA MONITOR

NOTE:

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

Monitor item [UNIT]	Description
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 switch in combination switch judged by BCM with the combination switch reading function.
INT VOLUME [1 - 7]	Displays the status of wiper volume dial position judged by BCM with the combination switch reading function.
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.

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Monitor item [UNIT]	Description
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.

BCM

BCM : CONSULT Function (BCM - BCM)

INFOID:0000000012200710

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 Function (BCM - IMMU)

INFOID:0000000012965018

WORK SUPPORT

Service item	Description
CONFIRM DONGLE ID	It is possible to check that dongle unit is applied to the vehicle.

DATA MONITOR

NOTE:

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

Monitor item	Content
CONFIRM ID ALL	Indicates [YET] at all time. Switches to [DONE] when a registered Intelligent Key backside is contacted to push-button ignition switch.
CONFIRM ID4	
CONFIRM ID3	
CONFIRM ID2	
CONFIRM ID1	
NOT REGISTERED	Indicates [ID OK] when key ID that is registered is received or is not yet received. Indicates [ID NG] when key ID that is not registered is received.
TP 4	Indicates the number of IDs that are registered.
TP 3	
TP 2	
TP 1	
PUSH SW	Indicates [ON/OFF] condition of push-button ignition switch.

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DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

ACTIVE TEST

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

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:0000000012965032

WORK SUPPORT

Service item	Setting item	Setting	
ROOM LAMP TIMER SET	MODE 1	30 min.	Sets the interior room lamp battery saver timer operating time. NOTE: The factor setting is 10 minutes. The setting cannot be returned to the factory setting, when the setting is changed once.
	MODE 2	60 min.	
	MODE 3	15 min.	
BATTERY SAVER SET	On*	With the exterior lamp battery saver function	
	Off	Without the exterior lamp battery saver function	
IGN BATTERY SAVER SET	MODE 1	Without	Sets the ignition battery saver timer operating time.
	MODE 2	30 min.	
	MODE 3*	10 min.	
	MODE 4	5 min.	
	MODE 5	60 min.	
ACC BATTERY SAVER SET	MODE 1	Without	Sets the accessory battery saver timer operating time.
	MODE 2*	30 min.	
	MODE 3	10 min.	
	MODE 4	5 min.	
	MODE 5	60 min.	

*:Factory setting

DATA MONITOR

NOTE:

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

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	Indicated [On/Off] condition of door request switch (driver side)
REQ SW-AS [On/Off]	Indicated [On/Off] condition of door request switch (passenger side)
REQ SW-RR [On/Off]	NOTE: This item is displayed, but cannot be monitored
REQ SW-RL [On/Off]	NOTE: This item is displayed, but cannot be monitored
PUSH SW [On/Off]	Indicates [On/Off] condition of push-button ignition switch
UNLK SEN -DR [On/Off]	Indicates [On/Off] condition of driver door UNLOCK status
DOOR SW-DR [On/Off]	Indicated [On/Off] condition of front door switch (driver side)

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
DOOR SW-AS [On/Off]	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR [On/Off]	Indicated [On/Off] condition of rear door switch RH
DOOR SW- RL [On/Off]	Indicated [On/Off] condition of rear door switch LH
DOOR SW- BK [On/Off]	Indicated [On/Off] condition of back door switch
CDL LOCK SW [On/Off]	Indicated [On/Off] condition of lock signal from door lock unlock switch
CDL UNLOCK SW [On/Off]	Indicated [On/Off] condition of unlock signal from door lock unlock switch
TRNK/HAT MNTR [On/Off]	NOTE: This item is displayed, but cannot be monitored
KEY CYL LK-SW [On/Off]	Indicated [On/Off] condition of lock signal from door key cylinder
KEY CYL UN-SW [On/Off]	Indicated [On/Off] condition of unlock signal from door key cylinder
RKE-LOCK [On/Off]	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK [On/Off]	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key

ACTIVE TEST

Test item	Operation	Description
BATTERY SAVER	Off	Cuts the interior room lamp power supply.
	On	Outputs the interior room lamp power supply.

TRUNK

TRUNK : CONSULT Function (BCM - TRUNK)

INFOID:0000000012965016

DATA MONITOR

NOTE:

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

Monitor Item	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
TR/BD OPEN SW	Indicates [ON/OFF] condition of back door opener switch.
TRNK/HAT MNTR	NOTE: This item is displayed, but cannot be monitored
RKE-TR/BD	NOTE: This item is displayed, but cannot be monitored

THEFT ALM

THEFT ALM : CONSULT Function (BCM - THEFT)

INFOID:0000000012965017

WORK SUPPORT

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DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Service 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 screen.

DATA MONITOR

NOTE:

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

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 -RR	NOTE: This is displayed even when it is not equipped.
REQ SW -RL	NOTE: This is displayed even when it is not equipped.
REQ SW -BD/TR	Indicates [ON/OFF] condition of back door 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.
DOOR SW-DR	Indicates [ON/OFF] condition of front door switch (driver side).
DOOR SW-AS	Indicates [ON/OFF] condition of front door switch (passenger side).
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	Indicates [ON/OFF] condition of back door switch.
CDL LOCK SW	Indicates [ON/OFF] condition of lock signal from door lock/unlock switch.
CDL UNLOCK SW	Indicates [ON/OFF] condition of unlock signal from door lock/unlock switch.
KEY CYL LK-SW	Indicates [ON/OFF] condition of lock signal from door key cylinder.
KEY CYL UN-SW	Indicates [ON/OFF] condition of unlock signal from door key cylinder.
TR/BD OPEN SW	Indicates [ON/OFF] condition of back door opener switch.
TRNK/HAT MNTR	NOTE: This is displayed even when it is not equipped.
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	NOTE: This is displayed even when it is not equipped.

ACTIVE TEST

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

RETAINED PWR

DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

RETAINED PWR : CONSULT Function (BCM - RETAINED PWR)

INFOID:000000012965019

DATA MONITOR

NOTE:

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

Monitor Item	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 Function (BCM - SIGNAL BUFFER)

INFOID:000000012200716

DATA MONITOR

NOTE:

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

Monitor item [UNIT]	Description
PUSH SW [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	NOTE: This item is indicated, but not tested.
	On	

AIR PRESSURE MONITOR

AIR PRESSURE MONITOR : CONSULT Function (BCM - AIR PRESSURE MONITOR)

INFOID:000000012965037

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
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	Components can be quickly and accurately adjusted.

SELF DIAGNOSTIC RESULT

Refer to [BCS-62, "DTC Index"](#).

DATA MONITOR MODE

NOTE:

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

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DIAGNOSIS SYSTEM (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< SYSTEM DESCRIPTION >

Monitor item (Unit)	Remarks
AIR PRESS FL (kPa, kg/cm2 or Psi)	Tire pressure
AIR PRESS FR (kPa, kg/cm2 or Psi)	
AIR PRESS RR (kPa, kg/cm2 or Psi)	
AIR PRESS RL (kPa, kg/cm2 or Psi)	
ID REGST FL1 (Yet, Done)	Registration ID
ID REGST FR1 (Yet, Done)	
ID REGST RR1 (Yet, Done)	
ID REGST RL1 (Yet, Done)	
WARNING LAMP (On/Off)	Low tire pressure warning lamp
BUZZER (On/Off)	NOTE: This item is displayed, but cannot be use this item.

ACTIVE TEST MODE

NOTE:

After completing the work below, perform an active test.

1. Check ID registration state and perform self-diagnosis.
2. Erase the self-diagnosis result history.

Item	Description
WARNING LAMP	Low tire pressure warning lamp can be turned ON arbitrarily.
ID REGIST WARNING	NOTE: Displayed but not used in TPMS.
RUN FLAT TIRE W/L	NOTE: Displayed but not used in TPMS.
RUN FLAT/T WARN BUZZER	NOTE: Displayed but not used in TPMS.
FLASHER	Turn signal lamps can be turned ON arbitrarily.
HORN	This test is able to check to check that the horn sounds.

WORK SUPPORT

Item	Description
ID READ	Registered tire pressure sensor ID can be displayed.
ID REGIST	Tire pressure sensor ID can be registered.

ECU DIAGNOSIS INFORMATION

BCM

Reference Value

INFOID:0000000012200718

VALUES ON THE DIAGNOSIS TOOL

NOTE:

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

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
RR WIPER ON	Other than rear wiper switch ON	Off
	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
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

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
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	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
HAZARD SW	Hazard switch is OFF	Off
	Hazard switch is ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
TR/BD OPEN SW	Back door opener switch OFF	Off
	While the back door opener switch is turned ON	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
FAN ON SIG	Blower fan OFF	Off
	Blower fan ON	On
AIR COND SW	Air conditioner OFF (A/C switch indicator OFF)	Off
	Air conditioner ON (A/C switch indicator ON)	On
RKE-LOCK	LOCK button of the key is not pressed	Off
	LOCK button of the key is pressed	On
RKE-UNLOCK	UNLOCK button of the key is not pressed	Off
	UNLOCK button of the key is pressed	On
RKE-TR/BD	NOTE: The item is indicated, but not monitored.	Off
RKE-PANIC	PANIC button of the key is not pressed	Off
	PANIC button of the key is pressed	On
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On
OPTI SEN (DTCT)	Bright outside of the vehicle	Close to 5 V
	Dark outside of the vehicle	Close to 0 V

BCM

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status		
OPTI SEN (FILT)	Bright outside of the vehicle (Lighting switch AUTO)	Close to 5 V	A	
	Dark outside of the vehicle (Lighting switch AUTO)	Close to 1.50 V		
OPTICAL SENSOR	NOTE: The item is indicated, but not monitored.	Off	B	
RAIN SENSOR	NOTE: The item is indicated, but not monitored.	Off	C	
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	D	
	Passenger door request switch is pressed	On		
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	E	
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off		
REQ SW -BD/TR	Back door request switch is not pressed	Off	F	
	Back door request switch is pressed	On		
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off	G	
	Push-button ignition switch (push switch) is pressed	On		
CLUCH SW	The clutch pedal is not depressed.	Off		
	The clutch pedal is depressed	On	H	
BRAKE SW 1	The brake pedal is not depressed	Off		
	The brake pedal is depressed	On		
BRAKE SW 2	The brake pedal is depressed when No. 38 fuse is blown	Off	I	
	The brake pedal is not depressed when No. 38 fuse is blown, or No. 38 fuse is normal	On		
DETE/CANCL SW NOTE: For M/T models this item is not used.	Selector lever in P position	Release selector button	Off	
		Push selector button	On	J
	Selector lever in any position other than P		On	K
SFT PN/N SW	<ul style="list-style-type: none"> • Selector lever in any position other than P and N (CVT models) • Control lever in any position other than neutral (M/T models) 	Off		
	<ul style="list-style-type: none"> • Selector lever in P or N position (CVT models) • Control lever in neutral position (M/T models) 	On	L	
S/L -LOCK	NOTE: The item is indicated, but not monitored.	Off	BCS	
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off		
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off	N	
UNLK SEN -DR	Driver door is locked	Off		
	Driver door is unlocked	On	O	
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off		
	Push-button ignition switch (push-switch) is pressed	On	P	
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off		
	Ignition switch in ON position	On		
DETE SW -IPDM NOTE: For M/T models this item is not used.	Selector lever in any position other than P		Off	
	Selector lever in P position	Push selector button		
		Release selector button	On	

BCM

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Monitor Item	Condition	Value/Status
SFT PN -IPDM NOTE: For M/T models this item is not used.	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
SFT P -MET NOTE: For M/T models this item is not used.	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET NOTE: For M/T models this item is not used.	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective unlock operation (60 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective unlock operation (60 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Shift position is in the P position)	Reset
	Ignition switch ON	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—
CONFIRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done

BCM

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

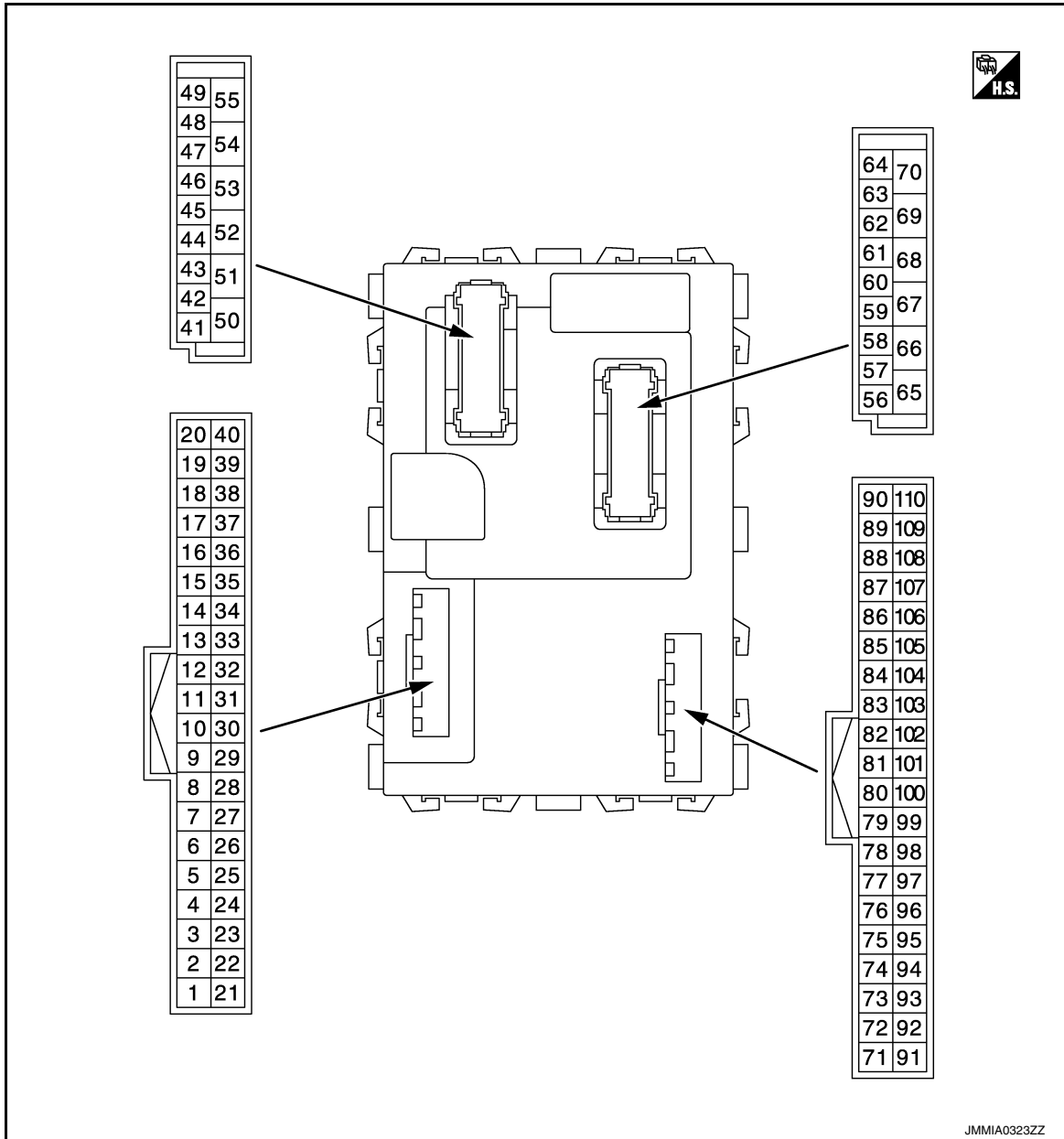
Monitor Item	Condition	Value/Status	
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet	A
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done	B
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet	C
	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	D
	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done	
NOT REGISTERED	BCM detects registered key ID, or BCM does not detect key ID.	ID OK	E
	BCM detects non-registration key ID.	ID NG	
TP 4	The ID of fourth key is not registered to BCM	Yet	F
	The ID of fourth key is registered to BCM	Done	
TP 3	The ID of third key is not registered to BCM	Yet	G
	The ID of third key is registered to BCM	Done	
TP 2	The ID of second key is not registered to BCM	Yet	H
	The ID of second key is registered to BCM	Done	
TP 1	The ID of first key is not registered to BCM	Yet	I
	The ID of first key is registered to BCM	Done	
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire	J
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire	K
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire	L
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	M
	ID of front LH tire transmitter is not registered	Yet	
ID REGST FR1	ID of front RH tire transmitter is registered	Done	N
	ID of front RH tire transmitter is not registered	Yet	
ID REGST RR1	ID of rear RH tire transmitter is registered	Done	O
	ID of rear RH tire transmitter is not registered	Yet	
ID REGST RL1	ID of rear LH tire transmitter is registered	Done	P
	ID of rear LH tire transmitter is not registered	Yet	
WARNING LAMP	Tire pressure indicator OFF	Off	Q
	Tire pressure indicator ON	On	
BUZZER	Tire pressure warning alarm is not sounding	Off	R
	Tire pressure warning alarm is sounding	On	

BCM

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

TERMINAL LAYOUT

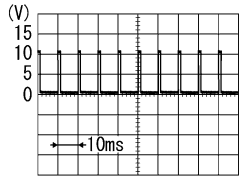
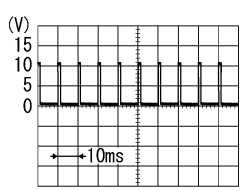
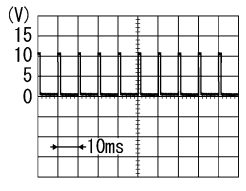


PHYSICAL VALUES

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
						Signal name
+	-					
2 (L)	Ground	Combination switch INPUT 5	Input	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Turn signal switch RH	
					Lighting switch HI	
					Lighting switch 1ST	
					Lighting switch 2ND	
3 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Turn signal switch LH	
					Lighting switch PASS	
					Lighting switch 2ND	
					Front fog lamp switch ON	
4 (BR)	Ground	Combination switch INPUT 3	Input	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	0 V
					Front wiper switch LO	
					Front wiper switch MIST	
					Front wiper switch INT	
					Lighting switch AUTO	

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< ECU DIAGNOSIS INFORMATION >

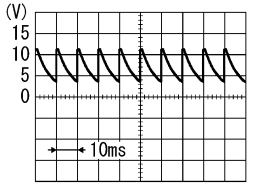
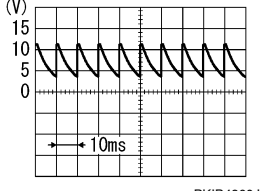
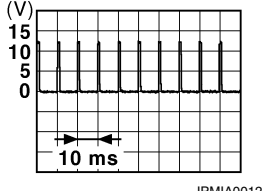
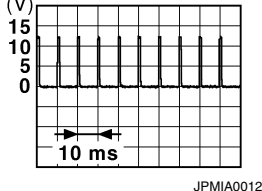
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
5 (G)	Ground	Combination switch INPUT 2	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front washer switch ON (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the condition below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 	
						0.8 V
6 (W)	Ground	Combination switch INPUT 1	Input	Combination switch	All switches OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Wiper intermittent dial 3 (All switches OFF)	
						1.9 V
						0.8 V

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

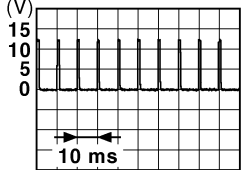
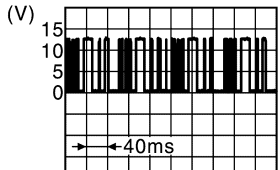
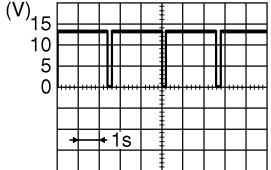
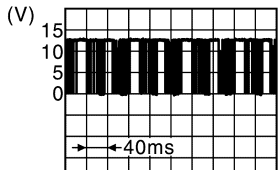
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
7 (L)	Ground	Door key cylinder switch UNLOCK	Input	Door key cylin- der switch	NEUTRAL position	 7.0 - 8.0 V
				Door key cylin- der switch	UNLOCK position	0 V
8 (R)	Ground	Door key cylinder switch LOCK	Input	Door key cylin- der switch	NEUTRAL position	 7.0 - 8.0 V
				Door key cylin- der switch	LOCK position	0 V
9 (R)	Ground	Stop lamp switch 1	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is de- pressed)	Battery voltage
10*1 (W)	—	—	—	—	—	
12 (GR)	Ground	Door lock and unlock switch LOCK	Input	Door lock and unlock switch	NEUTRAL position	 1.0 - 1.5 V
				Door lock and unlock switch	LOCK position	0 V
13 (BR)	Ground	Door lock and unlock switch UNLOCK	Input	Door lock and unlock switch	NEUTRAL position	 1.0 - 1.5 V
				Door lock and unlock switch	UNLOCK position	0 V
14 (SB)	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

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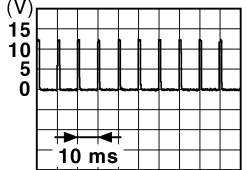
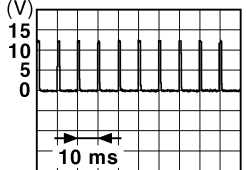
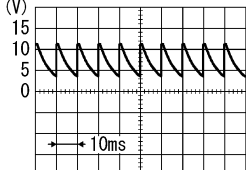
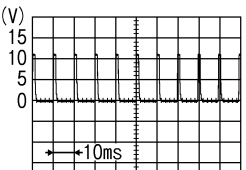
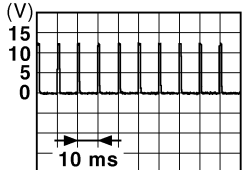
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
15 (W)	Ground	Rear window defogger switch	Input	Rear window defogger switch	Not pressed  1.0 - 1.5 V
				Pressed	0 V
17 (Y)	Ground	Sensor power supply	Output	Ignition switch	OFF, ACC 0 V ON 5 V
18 (V)	Ground	Receiver ground	Input	Ignition switch ON	0 V
21 (P)	Ground	NATS antenna amp.	Input/ Output	Intelligent Key: Intelligent Key battery is removed	Brake pedal: Depressed NOTE: Waveform varies each time when brake pedal is depressed  JMKIA6232JP
				Brake pedal: Not depressed	12 V
23 (R)	Ground	Security indicator lamp	Output	Security indicator lamp	ON 0 V
					Blinking (Ignition switch OFF)  JPMIA0590GB 12.0 V
					OFF Battery voltage
24*2 (SB)	Ground	Dongle link	Input/ Output	Ignition switch OFF	5 V
25 (LG)	Ground	NATS antenna amp.	Input/ Output	During waiting	Brake pedal: Depressed NOTE: Waveform varies each time when brake pedal is depressed  JMKIA6233JP
				Brake pedal: Not depressed	12 V
26*3 (BR)	Ground	Thermo control amp.	Input	Ignition switch ON	0 V
				Evaporator is extremely low temperature	12 V

BCM

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
27 (Y)	Ground	A/C ON (Automatic A/C)	Input	A/C	OFF (A/C switch indicator: OFF)	 <small>JPMIA0012GB</small> 1.0 - 1.5 V
					ON (A/C switch indicator: ON)	0 V
		A/C switch (Manual A/C)		A/C switch	OFF	 <small>JPMIA0012GB</small> 1.0 - 1.5 V
					ON	0 V
28 (LG)	Ground	Blower fan switch (Automatic A/C)	Input	Fan switch	Blower fan switch OFF	0 V
					Blower fan switch ON	 <small>PKIB4960J</small> 7.0 - 8.0 V
		Blower fan switch (Manual A/C)		Fan switch	Blower fan switch OFF	 <small>PIIB7730J</small> 1.5 - 2.0 V
					Blower fan switch ON	0 V
29 (SB)	Ground	Hazard switch	Input	Hazard switch	OFF	12 V
					ON	0 V
30 (L)	Ground	Back door opener switch	Input	Back door opener switch	Pressed	0 V
					Not pressed	 <small>JPMIA0012GB</small> 1.0 - 1.5 V

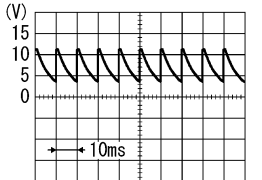
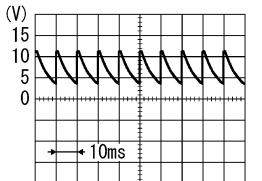
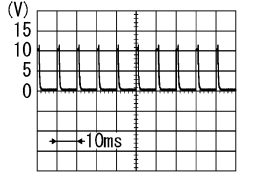
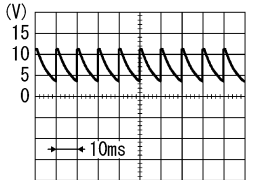
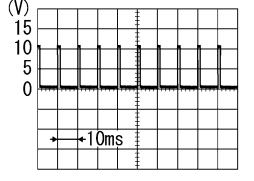
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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
31 (GR)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)  <p style="text-align: right; font-size: small;">PKIB4960J</p> <p style="text-align: center;">7.0 - 8.0 V</p>	
					UNLOCK status (Unlock sensor switch ON) <p style="text-align: center;">0 V</p>	
32 (LG)	Ground	Combination switch OUTPUT 5	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)  <p style="text-align: right; font-size: small;">PKIB4960J</p> <p style="text-align: center;">7.0 - 8.0 V</p>	
				Front fog lamp switch ON (Wiper intermittent dial 4)	Any of the condition below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7 	 <p style="text-align: right; font-size: small;">PKIB4956J</p> <p style="text-align: center;">1.0 V</p>
				Rear wiper switch ON (Wiper intermittent dial 4)		
33 (Y)	Ground	Combination switch OUTPUT 4	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)  <p style="text-align: right; font-size: small;">PKIB4960J</p> <p style="text-align: center;">7.0 - 8.0 V</p>	
				Lighting switch 1ST (Wiper intermittent dial 4)	Any of the condition below with all switches OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 	 <p style="text-align: right; font-size: small;">PKIB4958J</p> <p style="text-align: center;">1.2 V</p>
				Lighting switch AUTO (Wiper intermittent dial 4)		
				Rear wiper switch INT (Wiper intermittent dial 4)		

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[WITH INTELLIGENT KEY SYSTEM]

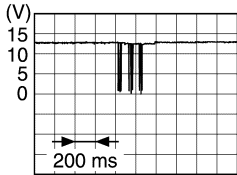
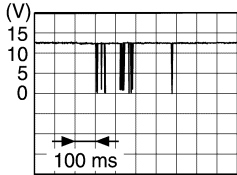
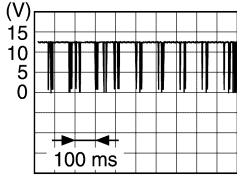
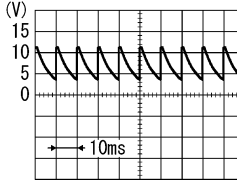
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
34 (V)	Ground	Combination switch OUTPUT 3	Output	Combination switch	All switches OFF (Wiper intermittent dial 4)	<p style="text-align: right;">PKIB4960J</p> <p style="text-align: center;">7.0 - 8.0 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	<p style="text-align: right;">PKIB4958J</p> <p style="text-align: center;">1.2 V</p>
					Lighting switch HI (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
Any of the condition below with all switches OFF						
<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 						
35 (R)	Ground	Combination switch OUTPUT 2	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	<p style="text-align: right;">PKIB4960J</p> <p style="text-align: center;">7.0 - 8.0 V</p>
					Lighting switch 2ND	<p style="text-align: right;">PKIB4958J</p> <p style="text-align: center;">1.2 V</p>
					Lighting switch PASS	
					Front wiper switch INT	
Front wiper switch HI						
36 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF	<p style="text-align: right;">PKIB4960J</p> <p style="text-align: center;">7.0 - 8.0 V</p>
					Turn signal switch RH	<p style="text-align: right;">PKIB4958J</p> <p style="text-align: center;">1.2 V</p>
					Turn signal switch LH	
					Front wiper switch LO	
Front wiper switch MIST						
Front washer switch ON						

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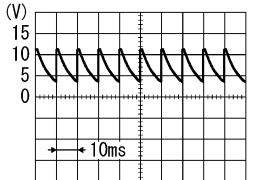
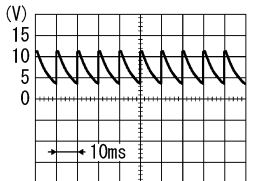
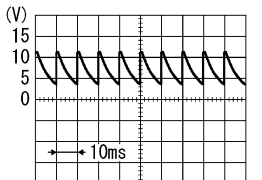
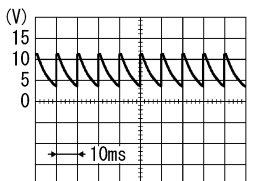
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)		
+	-	Signal name	Input/ Output				
37 (G)	Ground	Detention switch	Input	Selector lever	P position (Release selector button)	0 V	
					P position (Push selector button)	12 V	
					Any position other than P		
38 (SB)	Ground	Receiver communication	Input/ Output	Ignition switch OFF (Remote keyless entry communication)	Waiting	≈ 12 V	
					When operating either button on Intelligent Key		JMMIA0572GB
				Ignition switch ON (TPMS communication)	Waiting		JMMIA0573GB
					When receiving signal from tire pressure sensor		JMMIA0574GB
39 (L)	Ground	CAN-H	Input/ Output	—	—		
40 (P)	Ground	CAN-L	Input/ Output	—	—		
43 (P)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)		PKIB4960J
					ON (When back door opened)	0 V	
44 (LG)	Ground	Rear wiper stop position	Input	Ignition switch ON	Rear wiper stop position	12 V	
					Any position other than rear wiper stop position	0 V	

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
45 (R)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	 PKIB4960J 7.0 - 8.0 V
					ON (When passenger door opened)	0 V
46 (LG)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closed)	 PKIB4960J 7.0 - 8.0 V
					ON (When rear RH door opened)	0 V
47 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	 PKIB4960J 7.0 - 8.0 V
					ON (When driver door opened)	0 V
48 (BR)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closed)	 PKIB4960J 7.0 - 8.0 V
					ON (When rear door LH opened)	0 V
49 (L)	Ground	Luggage room lamp	Output	Luggage room lamp	OFF	12 V
					ON	0 V
51 (Y)	Ground	Back door request switch	Input	Back door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	12 V
53 (GR)	Ground	Back door open	Output	Back door	OFF (Actuator is not activated)	0 V
					OPEN (Actuator is activated)	12 V

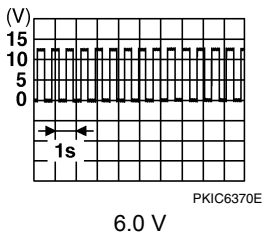
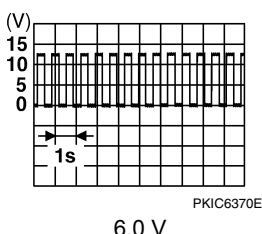
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[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
54 (P)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
					ON (Activated)	12 V
55 (G)	Ground	Rear door UNLOCK	Output	Rear door	UNLOCK (Actuator is activated)	12 V
					Other than UNLOCK (Actuator is not activated)	0 V
56 (P)	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
57 (P)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
59 (SB)	Ground	Passenger door UNLOCK	Output	Passenger door	UNLOCK (Actuator is activated)	12 V
					Other than UNLOCK (Actuator is not activated)	0 V
60 (V)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	
61 (W)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	
63 (BR)	Ground	Interior room lamp control	Output	Interior room lamp	OFF	12 V
					ON	0 V
64*4 (R)	Ground	Cranking request	input	Ignition switch ON	Ignition switch OFF	3.6 V
					Engine stopped (Selector lever is in P position)	0 V
					Engine stopped (Selector lever is not in P position)	12 V
					Engine running	12 V
65 (V)	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	12 V
					Other than LOCK (Actuator is not activated)	0 V

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	-					
66 (SB)	Ground	Driver door UN- LOCK	Output	Driver door	UNLOCK (Actuator is acti- vated)	12 V
					Other than UNLOCK (Ac- tuator is not activated)	0 V
67 (B)	Ground	Ground	Output	Ignition switch ON		0 V
68 (L)	Ground	P/W power supply (IGN)	Output	Ignition switch ON		12 V
69 (P)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		12 V
70 (Y)	Ground	Battery power sup- ply	Input	Ignition switch OFF		Battery voltage
72*3 (SB)	Ground	A/C indicator	Output	A/C indicator	OFF	12 V
				ON	0 V	
75 (LG)	Ground	Driver door request switch	Input	Driver door re- quest switch	ON (Pressed)	0 V
				OFF (Not pressed)	12 V	
76 (LG)	Ground	Push-button ignition switch (push switch)	Input	Push-button ig- nition switch (push switch)	Pressed	0 V
				Not pressed	12 V	
78 (P)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operat- ed with ignition switch ON	When Intelligent Key is not in the antenna detec- tion area (The distance between In- telligent Key and antenna: Approx. 2 m)	<p style="text-align: right; font-size: small;">JMKIA5954GB</p>
					When Intelligent Key is in the antenna detection area (The distance between In- telligent Key and antenna: 80 cm or less)	<p style="text-align: right; font-size: small;">JMKIA5955GB</p>

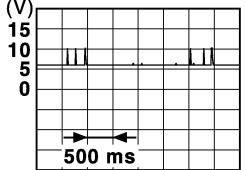
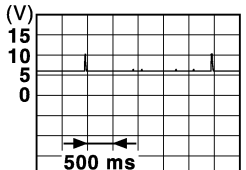
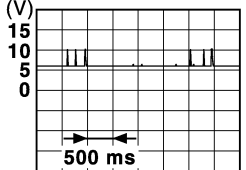
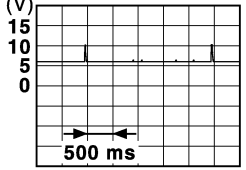
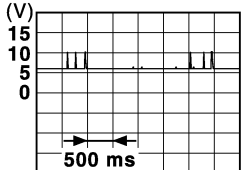
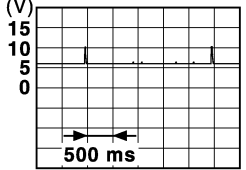
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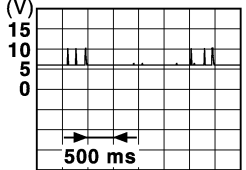
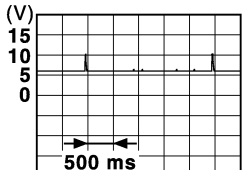
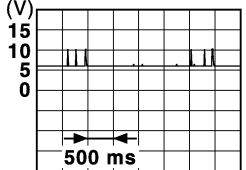
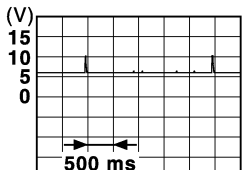
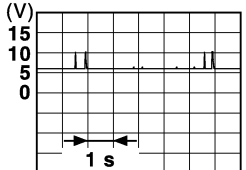
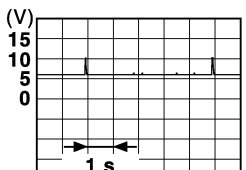
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
79 (V)	Ground	Driver door antenna (-)	Output	When the driver door request switch is operated with ignition switch ON	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)  <small>JMKIA5954GB</small>
				When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 <small>JMKIA5955GB</small>
80 (BR)	Ground	Passenger door antenna (+)	Output	When the passenger door request switch is operated with ignition switch ON	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)  <small>JMKIA5954GB</small>
				When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 <small>JMKIA5955GB</small>
81 (G)	Ground	Passenger door antenna (-)	Output	When the passenger door request switch is operated with ignition switch ON	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)  <small>JMKIA5954GB</small>
				When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	 <small>JMKIA5955GB</small>

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
82 (W)	Ground	Rear bumper antenna (+)	Output	When the back door request switch is operated with ignition switch ON	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m) 
				When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	
83 (B)	Ground	Rear bumper antenna (-)	Output	When the back door request switch is operated with ignition switch ON	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m) 
				When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	
84 (BR)	Ground	Room antenna 1 (+) (Instrument center)	Output	Ignition switch ON	When Intelligent Key is not in the antenna detection area 
				When Intelligent Key is in the antenna detection area	

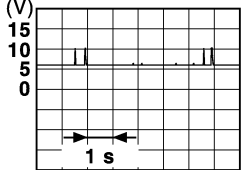
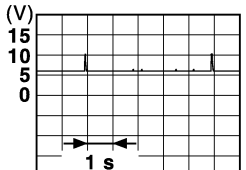
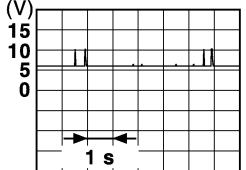
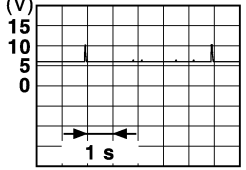
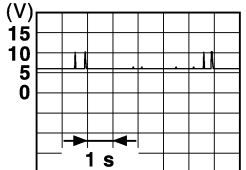
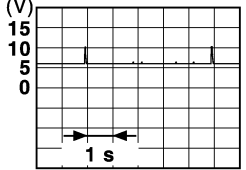
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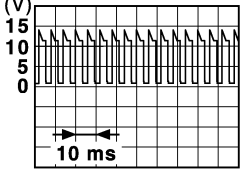
[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
85 (GR)	Ground	Room antenna 1 (-) (Instrument center)	Output	Ignition switch ON	When Intelligent Key is not in the antenna detec- tion area  <small>JMKIA5951GB</small>
				Ignition switch ON	When Intelligent Key is in the antenna detection area  <small>JMKIA3839GB</small>
86 (V)	Ground	Luggage room an- tenna (+)	Output	Ignition switch ON	When Intelligent Key is not in the antenna detec- tion area  <small>JMKIA5951GB</small>
				Ignition switch ON	When Intelligent Key is in the antenna detection area  <small>JMKIA3839GB</small>
87 (LG)	Ground	Luggage room an- tenna (-)	Output	Ignition switch ON	When Intelligent Key is not in the antenna detec- tion area  <small>JMKIA5951GB</small>
				Ignition switch ON	When Intelligent Key is in the antenna detection area  <small>JMKIA3839GB</small>

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[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	-					
90 (W)	Ground	Push-button ignition switch illumination power supply	Output	Push-button ignition switch illumination	ON	12 V
					OFF	0 V
91 (V)	Ground	ACC/ON indicator lamp	Output	Ignition switch	OFF	Battery voltage
					ACC or ON	0 V
92 (R)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	NOTE: When the illumination brightening/dimming level is in the neutral position  6.0 - 7.0 V
93 (GR)	Ground	Intelligent Key warning buzzer	Output	Intelligent Key warning buzzer	Sounding	0 V
					Not sounding	12 V
96 (BR)	Ground	Accessory relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	12 V
97 (SB)	Ground	Starter relay control (CVT models)	Output	Ignition switch ON	When selector lever is in P or N position	12 V
					When selector lever is not in P or N position	0 V
		Starter relay control (M/T models)	Output	Ignition switch ON	Clutch pedal is depressed	12 V
					Clutch pedal is not depressed	0 V
98 (P)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	12 V
					ON	0 V
99 (R)	Ground	Ignition relay (F/B) control	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
100 (P)	Ground	Passenger door request switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	12 V
101 (Y)	Ground	Clutch interlock switch (M/T models)	Input	Clutch interlock switch	OFF (Clutch pedal is not depressed)	0 V
					ON (Clutch pedal is depressed)	Battery voltage
		Ignition power supply No.2 (Except M/T models)	Output	Ignition switch	OFF	0 V
					ON	12 V
102 (L)	Ground	P/N position (Except M/T models)	Input	Selector lever	P or N position	12 V
					Except P and N positions	0 V
		Neutral switch (M/T models)	Input	Ignition switch ON	Control lever NEUTRAL position	Battery voltage
					Control lever except NEUTRAL position	0 V

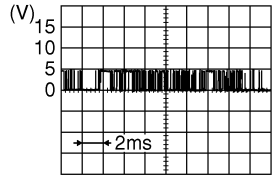
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[WITH INTELLIGENT KEY SYSTEM]

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
103 (G)	Ground	Front defroster switch	Input	Ignition switch ON	A/C mode defroster ON position	0 V
				Ignition switch ON	Other than A/C mode de- froster ON position	 <p style="text-align: right; font-size: small;">JPMIA0589GB</p> <p style="text-align: center;">8.0 - 9.0 V</p>
104 (SB)	Ground	CVT shift selector (detention switch) power supply	Output	Ignition switch ON		12 V
105 (V)	Ground	Stop lamp switch 2	Input	Ignition switch OFF		Battery voltage
106 (Y)	Ground	Blower relay control	Output	Ignition switch	OFF or ACC	0 V
				Ignition switch	ON	12 V

- *1: This terminal is not used.
- *2: For Canada
- *3: Manual A/C models
- *4: CVT models

Fail-safe

INFOID:000000012200719

FAIL-SAFE CONTROL BY DTC

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

Display contents of CONSULT	Fail-safe	Cancellation
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2196: DONGLE NG	Inhibit engine cranking	Erase DTC
B2198: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
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)
B260F: ENG STATE SIG LOST	Inhibit engine cranking	When any of the following conditions are fulfilled <ul style="list-style-type: none"> Power position changes to ACC Receives engine status signal (CAN)
B26F1: IGN RELAY OFF	Inhibit engine cranking	When the following conditions are fulfilled <ul style="list-style-type: none"> Ignition switch ON signal (CAN: Transmitted from BCM): ON Ignition switch ON signal (CAN: Transmitted from IPDM E/R): ON
B26F2: IGN RELAY ON	Inhibit engine cranking	When the following conditions are fulfilled <ul style="list-style-type: none"> Ignition switch ON signal (CAN: Transmitted from BCM): OFF Ignition switch ON signal (CAN: Transmitted from IPDM E/R): OFF
B26F3: START CONT RLY ON	Inhibit engine cranking	When the following conditions are fulfilled <ul style="list-style-type: none"> Starter control relay signal (CAN: Transmitted from BCM): OFF Starter control relay signal (CAN: Transmitted from IPDM E/R): OFF

BCM

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

Display contents of CONSULT	Fail-safe	Cancellation
B26F4: START CONT RLY OFF	Inhibit engine cranking	When the following conditions are fulfilled <ul style="list-style-type: none"> • Starter control relay signal (CAN: Transmitted from BCM): ON • Starter control relay signal (CAN: Transmitted from IPDM E/R): ON
B26F7: BCM	Inhibit engine cranking by Intelligent Key system	When room antenna and luggage room antenna functions normally

REAR WIPER MOTOR PROTECTION

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

Condition of cancellation

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

FAIL-SAFE CONTROL OF COMBINATION SWITCH READING FUNCTION CAUSED BY LOW POWER SUPPLY VOLTAGE

If voltage of battery power supply lower, BCM maintains combination switch reading to the status when input voltage is less than approximately 9 V.

NOTE:

When voltage of battery power supply is approximately 9 V or more, combination switch reading function returns to normal operation.

DTC Inspection Priority Chart

INFOID:000000012200720

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"> • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI-SCANNING • B2196: DONGLE NG • B2198: NATS ANTENNA AMP

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Priority	DTC
4	<ul style="list-style-type: none"> • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP/CLUTCH SW • B2605: PNP/CLUTCH SW • B2608: STARTER RELAY • B260F: ENG STATE SIG LOST • B2614: BCM • B2615: BCM • B2616: BCM • B2618: BCM • B261A: PUSH-BTN IGN SW • B261F: ASCD CNCL/CLTCH SW • B2620: NEUTRAL SW • B26E8: CLUTCH SW • B26F1: IGN RELAY OFF • B26F2: IGN RELAY ON • B26F3: START CONT RLY ON • B26F4: START CONT RLY OFF • B26F6: BCM • B26F7: BCM • B26F8: BCM • B26F9: CRANK REQ CIR SHORT • B26FA: CRANK REQ CIR OPEN • B26FB: CLUTCH SWITCH • B26FC: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED
5	<ul style="list-style-type: none"> • C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL
6	<ul style="list-style-type: none"> • B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA
7	<ul style="list-style-type: none"> • B2626: OUTSIDE ANTENNA • B2627: OUTSIDE ANTENNA • B2628: OUTSIDE ANTENNA

DTC Index

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NOTE:

The details of time display are as follows.

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

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to [BCS-15. "COMMON ITEM : CONSULT Function \(BCM - COMMON ITEM\)"](#).

BCM

< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
No DTC is detected. further testing may be required.	—	—	—	—	—
U1000: CAN COMM	—	—	—	—	BCS-83
U1010: CONTROL UNIT (CAN)	—	—	—	—	BCS-84
U0415: VEHICLE SPEED	—	—	x	—	BCS-85
B2192: ID DISCORD BCM-ECM	x	—	—	—	SEC-53
B2193: CHAIN OF BCM-ECM	x	—	—	—	SEC-54
B2195: ANTI-SCANNING	x	—	—	—	SEC-55
B2196: DONGLE NG	x	—	—	—	SEC-56
B2198: NATS ANTENNA AMP	x	—	—	—	SEC-58
B2555: STOP LAMP	—	x	x	—	SEC-61
B2556: PUSH-BTN IGN SW	—	x	x	—	SEC-63
B2557: VEHICLE SPEED	—	x	x	—	SEC-65
B2562: LOW VOLTAGE	—	x	—	—	BCS-86
B2601: SHIFT POSITION	—	x	x	—	SEC-66
B2602: SHIFT POSITION	—	x	x	—	SEC-68
B2603: SHIFT POSI STATUS	—	x	x	—	SEC-71
B2604: PNP/CLUTCH SW	—	x	x	—	SEC-75
B2605: PNP/CLUTCH SW	—	x	x	—	SEC-77
B2608: STARTER RELAY	x	x	x	—	SEC-78
B260F: ENG STATE SIG LOST	x	x	x	—	SEC-80
B2614: BCM	—	x	x	—	PCS-63
B2615: BCM	—	x	x	—	PCS-66
B2616: BCM	—	x	x	—	PCS-68
B2618: BCM	—	x	x	—	PCS-70
B261A: PUSH-BTN IGN SW	—	x	x	—	PCS-71
B261F: ASCD CNCL/CLTCH SW	—	x	x	—	SEC-83
B2620: NEUTRAL SW	—	x	x	—	SEC-85
B2621: INSIDE ANTENNA	—	x	—	—	DLK-49
B2622: INSIDE ANTENNA	—	x	—	—	DLK-51
B2626: OUTSIDE ANTENNA	—	x	—	—	DLK-55
B2627: OUTSIDE ANTENNA	—	x	—	—	DLK-53
B2628: OUTSIDE ANTENNA	—	x	—	—	DLK-57
B26E8: CLUTCH W	—	x	x	—	SEC-88
B26F1: IGN RELAY OFF	x	x	x	—	PCS-73
B26F2: IGN RELAY ON	x	x	x	—	PCS-75
B26F3: START CONT RLY ON	x	x	x	—	SEC-91
B26F4: START CONT RLY OFF	x	x	x	—	SEC-92
B26F6: BCM	—	x	x	—	PCS-77
B26F7: BCM	x	x	x	—	SEC-93
B26F8: BCM	—	x	x	—	SEC-94

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< ECU DIAGNOSIS INFORMATION >

[WITH INTELLIGENT KEY SYSTEM]

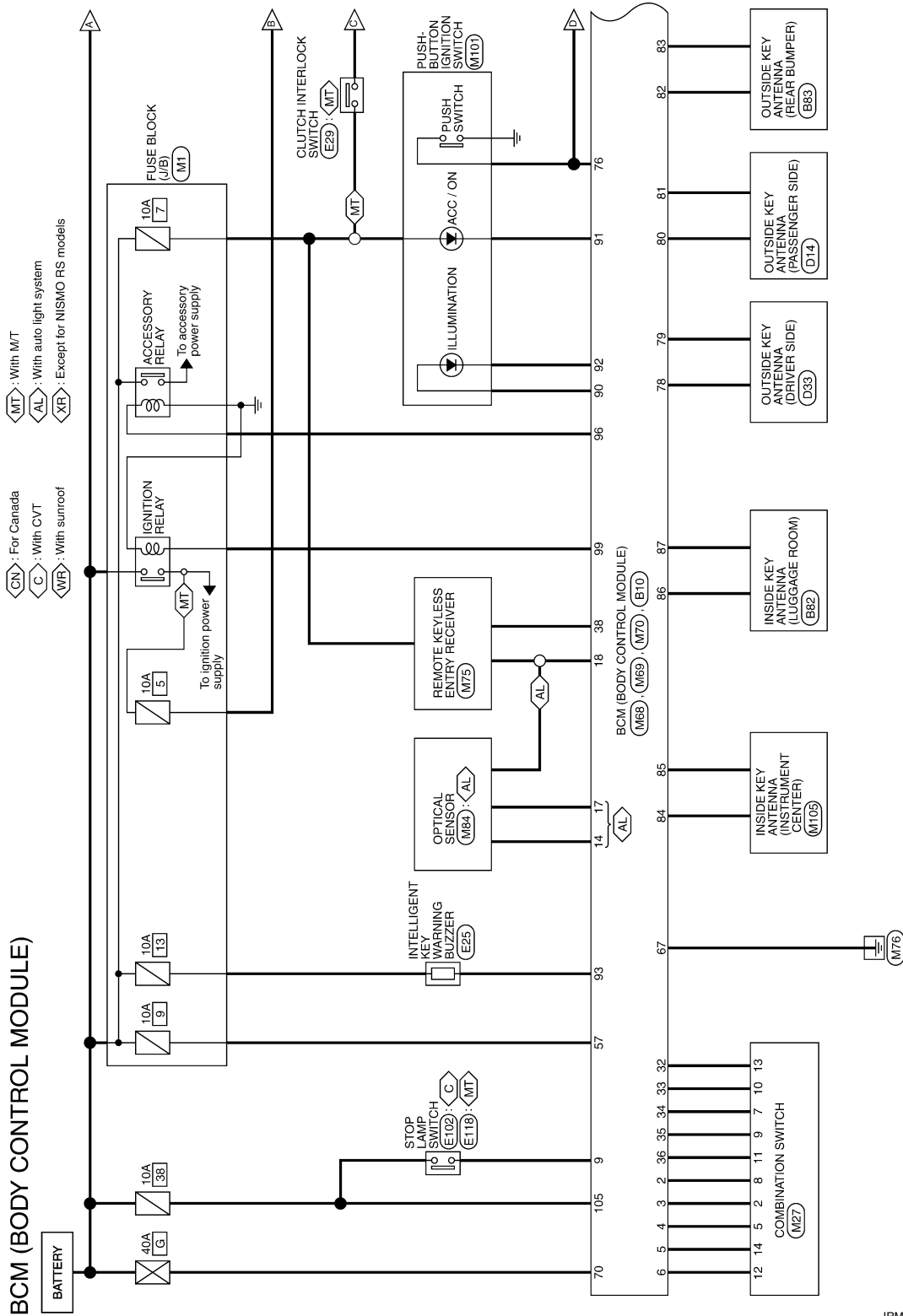
CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference
B26F9: CRANK REQ CIR SHORT	—	×	×	—	SEC-95
B26FA: CRANK REQ CIR OPEN	—	×	×	—	SEC-97
B26FB: CLUTCH SWITCH	—	×	×	—	SEC-99
B26FC: KEY REGISTRATION	—	×	×	—	SEC-100
C1704: LOW PRESSURE FL	—	—	—	×	WT-22
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	
C1708: [NO DATA] FL	—	—	—	×	WT-24
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-26
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-28

WIRING DIAGRAM

BCM

Wiring Diagram

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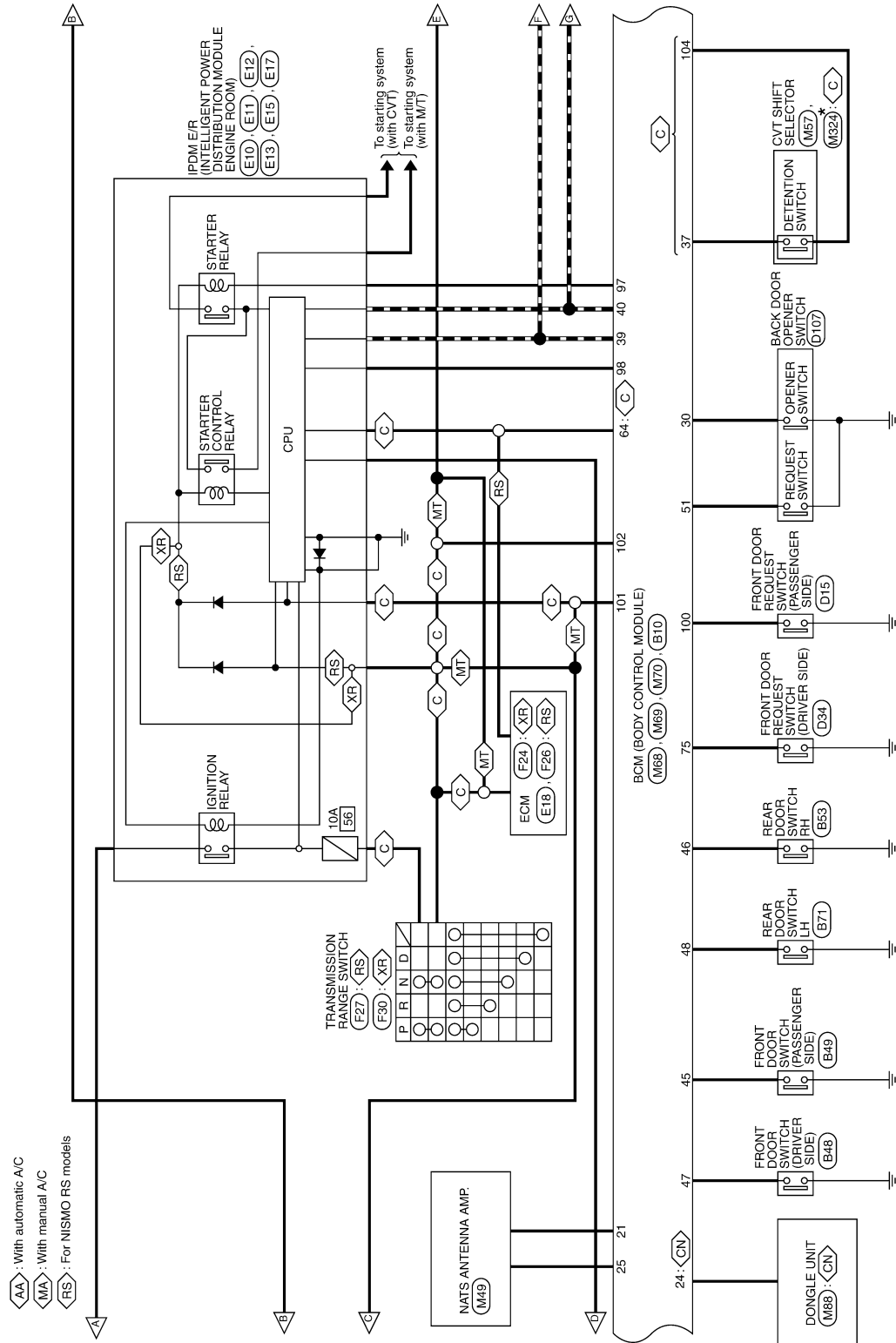
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[WITH INTELLIGENT KEY SYSTEM]

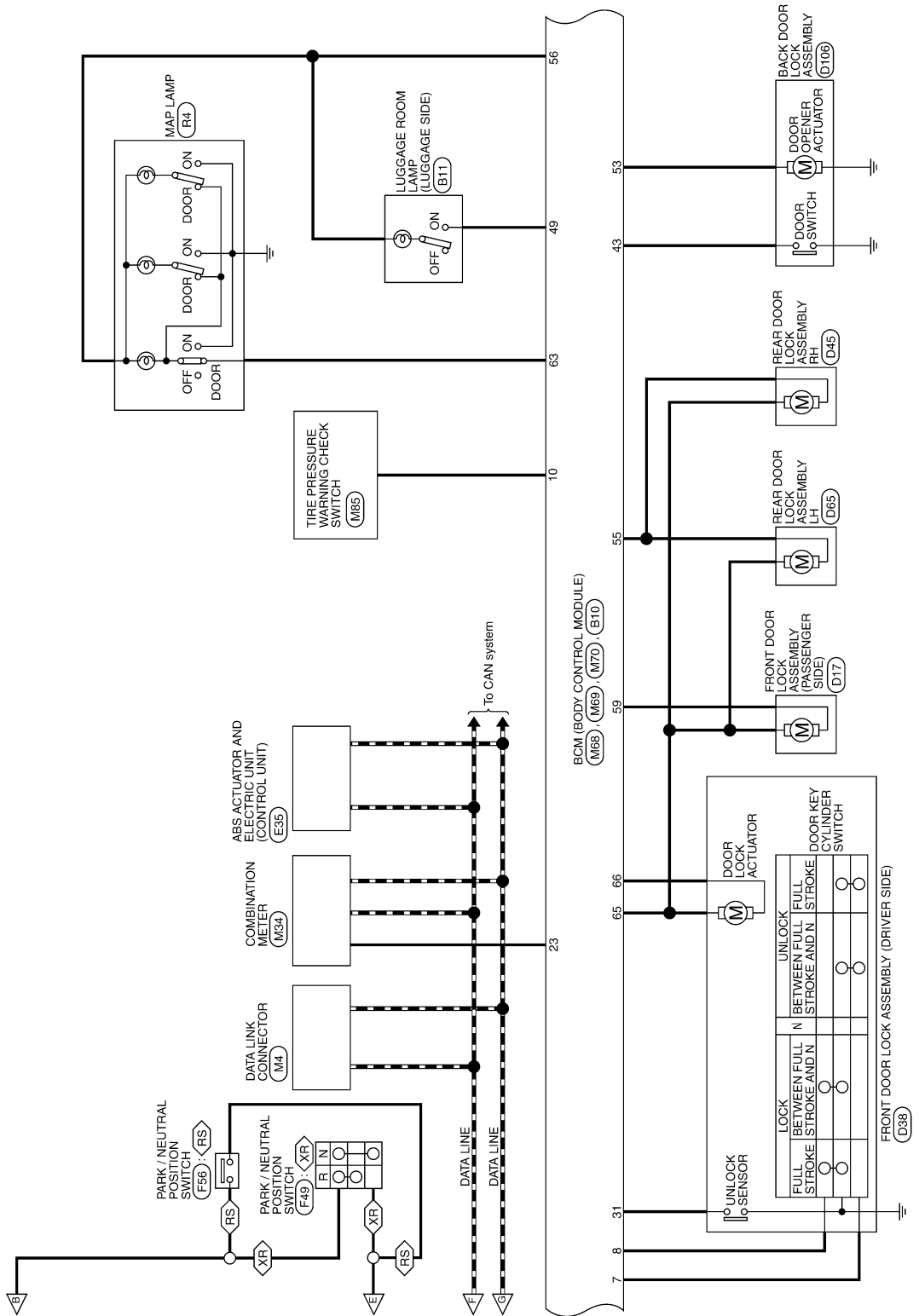


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[WITH INTELLIGENT KEY SYSTEM]



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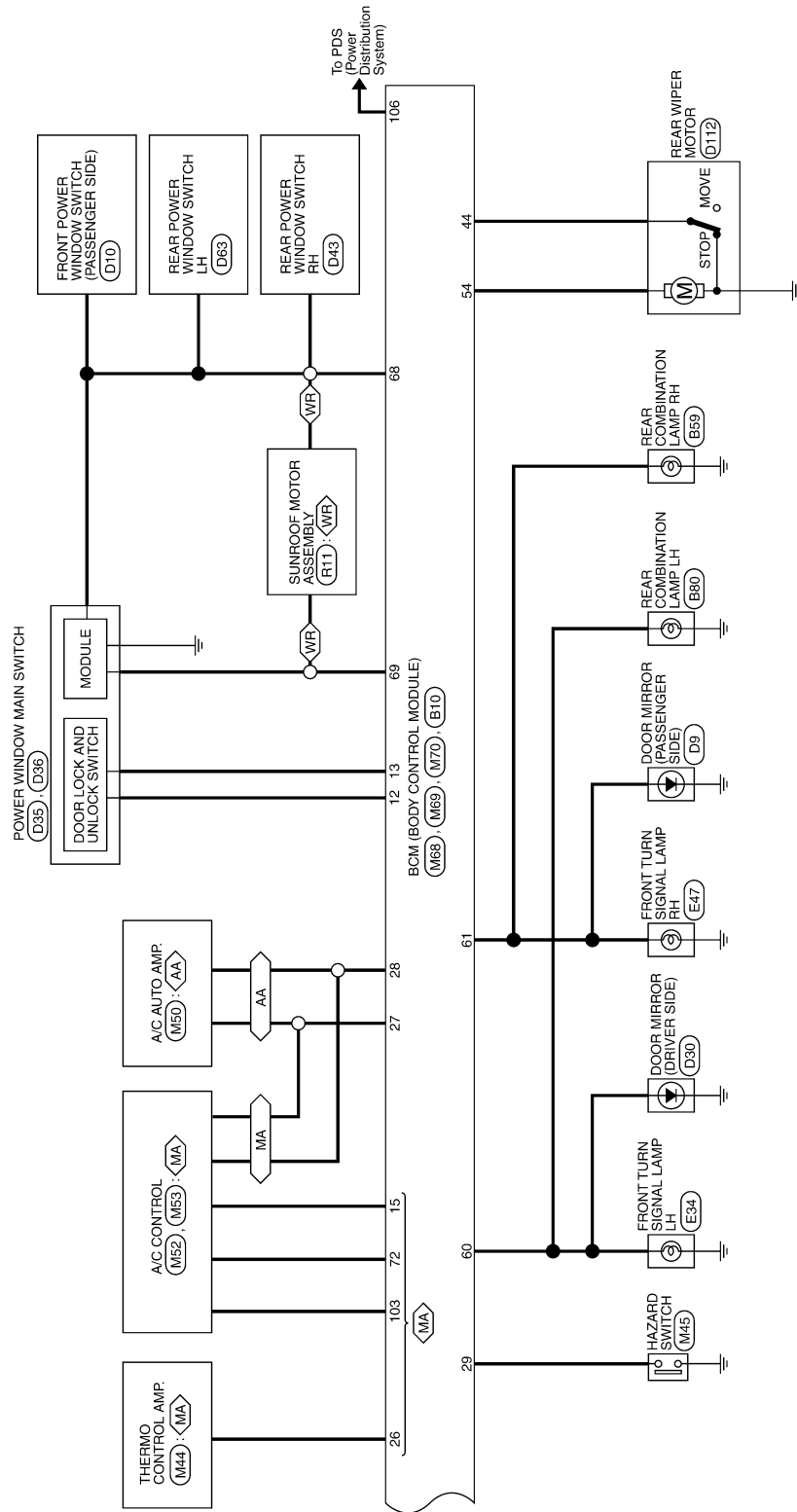
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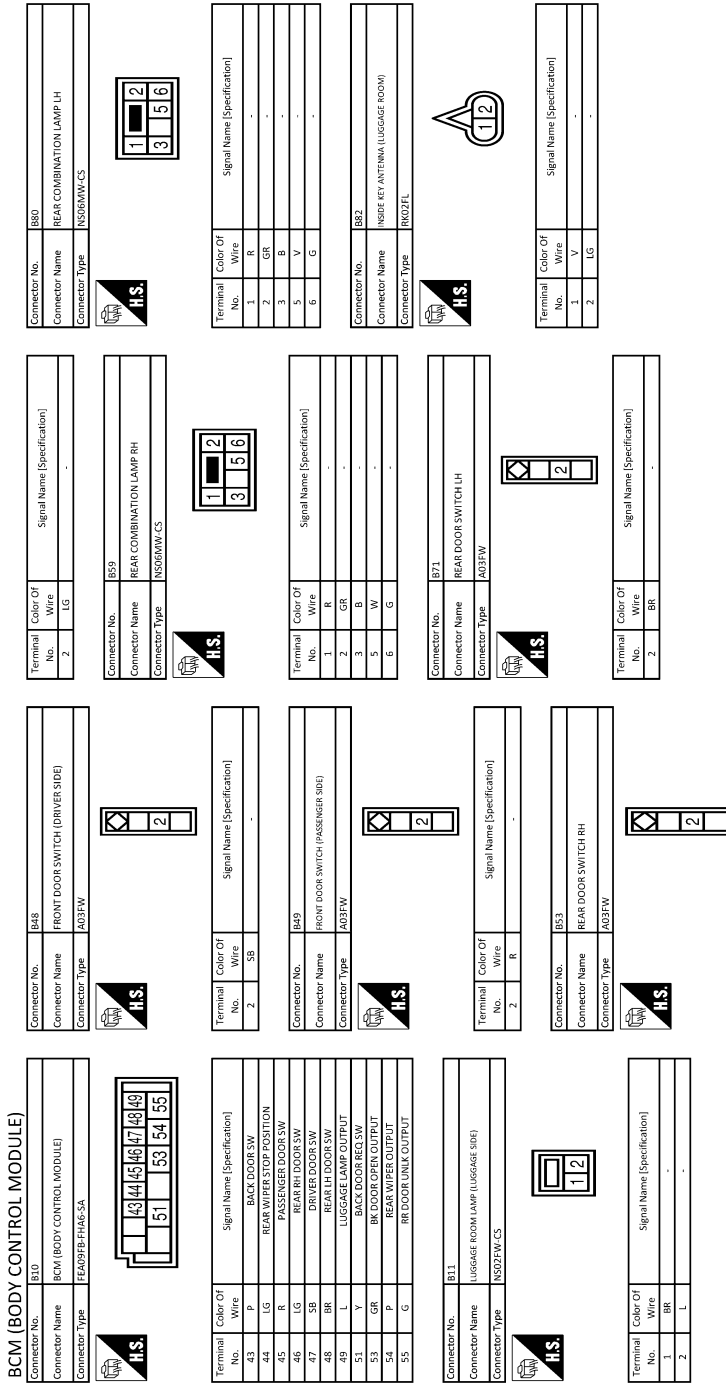
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[WITH INTELLIGENT KEY SYSTEM]



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BCM (BODY CONTROL MODULE)

Connector No.	D83
Connector Name	OUTSIDE KEY ANTENNA (REAR BUMPER)
Connector Type	MOZDEL



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

Connector No.	D9
Connector Name	DOOR MIRROR (PASSENGER SIDE)
Connector Type	THELEMMW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	-
2	B	-
3	P	-
4	B	-
6	W	-
7	GR	-
11	BG	-
12	W	-
13	G	-
14	R	-
15	Y	-

Connector No.	D10
Connector Name	FRONT POWER WINDOW SWITCH (PASSENGER SIDE)
Connector Type	MSBEMPCS



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

Connector No.	D14
Connector Name	OUTSIDE KEY ANTENNA (PASSENGER SIDE)
Connector Type	MOZMAGY



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

Connector No.	D15
Connector Name	FRONT DOOR RELEASE SWITCH (PASSENGER SIDE)
Connector Type	MOZDEGY



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

Connector No.	D17
Connector Name	FRONT DOOR LOCK ASSEMBLY (PASSENGER SIDE)
Connector Type	EDBGFGRHS



Terminal No.	Color Of Wire	Signal Name [Specification]
5	V	-
6	Y	-

Connector No.	D30
Connector Name	DOOR MIRROR (DRIVER SIDE)
Connector Type	THELEMMW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	B	-
3	GR	-
4	B	-
6	P	-
7	LG	-
11	BG	-
12	Y	-
13	G	-
14	V	-
15	BR	-

Connector No.	D33
Connector Name	OUTSIDE KEY ANTENNA (DRIVER SIDE)
Connector Type	MOZDEGY



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

JRMW15116GB

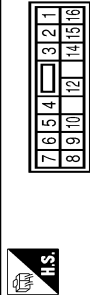
BCM (BODY CONTROL MODULE)

Connector No.	D34
Connector Name	FRONT DOOR REQUEST SWITCH (DRIVER SIDE)
Connector Type	INS16FV-CS



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

Connector No.	D35
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	INS16FV-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GROUND
2	SB	FRONT POWER WINDOW MOTOR (DRIVER SIDE) DOWN SIGNAL
3	R	-
4	P	ENCODER SIGNAL 2
5	W	ENCODER SIGNAL 1
6	Y	REAR POWER WINDOW MOTOR RH DOWN SIGNAL
7	LG	REAR POWER WINDOW MOTOR RH UP SIGNAL
8	BG	REAR POWER WINDOW MOTOR LH DOWN SIGNAL
9	G	REAR POWER WINDOW MOTOR LH UP SIGNAL
10	L	IGNITION POWER SUPPLY
11	G	ENCODER GROUND
12	G	ENCODER POWER SUPPLY
13	BR	-
14	W	FRONT POWER WINDOW MOTOR (PASSENGER SIDE) UP SIGNAL

Connector No.	D36
Connector Name	POWER WINDOW MAIN SWITCH
Connector Type	INS33PW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
17	R	FRONT POWER WINDOW MOTOR (DRIVER SIDE) UP SIGNAL
18	P	BATTERY POWER SUPPLY
19	GR	FRONT POWER WINDOW MOTOR (DRIVER SIDE) DOWN SIGNAL

Connector No.	D38
Connector Name	FRONT DOOR LOCK ASSEMBLY (DRIVER SIDE)
Connector Type	ED6FCV-RS



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

Connector No.	D43
Connector Name	REAR POWER WINDOW SWITCH RH
Connector Type	INS88PW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	BR	-
3	Y	-
4	G	-
5	R	-

Connector No.	D45
Connector Name	REAR DOOR LOCK ASSEMBLY RH
Connector Type	ED6FCV-RS



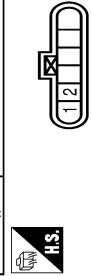
Terminal No.	Color Of Wire	Signal Name [Specification]
5	V	-
6	G	-

Connector No.	D43
Connector Name	REAR POWER WINDOW SWITCH LH
Connector Type	INS88PW-CS



Terminal No.	Color Of Wire	Signal Name [Specification]
1	L	-
2	BR	-
3	Y	-
4	G	-
5	R	-

Connector No.	D45
Connector Name	REAR DOOR LOCK ASSEMBLY LH
Connector Type	ED6FCV-RS



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

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BCM (BODY CONTROL MODULE)

Connector No.	D106
Connector Name	BACK DOOR LOCK ASSEMBLY
Connector Type	NS04FWCS



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

Connector No.	D107
Connector Name	BACK DOOR OPENER SWITCH
Connector Type	T108MW1V



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

Connector No.	D112
Connector Name	REAR WIPER MOTOR
Connector Type	CE03FW



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

Connector No.	E10
Connector Name	IP04DL INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	IP05FW-LC



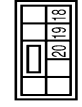
Terminal No.	Color Of Wire	Signal Name [Specification]
3	R	-
4	P	-
5	LG	-
7	V	-
8	W/R	-

Connector No.	E11
Connector Name	IP04DL INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	IP05FB-LC



Terminal No.	Color Of Wire	Signal Name [Specification]
9	B/Y	-
10	L	-
14	R	-

Connector No.	E12
Connector Name	IP04DL INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	IP05FB-CS



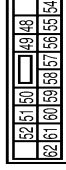
Terminal No.	Color Of Wire	Signal Name [Specification]
18	GR	-
19	R	- [Without front fog lamp] - [With front fog lamp]
20	G	- [Without front fog lamp] - [With front fog lamp]

Connector No.	E13
Connector Name	IP04DL INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	T112FW-MH



Terminal No.	Color Of Wire	Signal Name [Specification]
23	SB	-
25	BR	-
26	P	-
27	L	-
28	Y	-
30	V	-
31	Y	-
32	R	-
33	G	-
34	L	-

Connector No.	E15
Connector Name	IP04DL INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Type	IP05LFW-CS

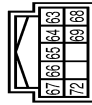


Terminal No.	Color Of Wire	Signal Name [Specification]
48	BR	-
49	Y	-
50	G	-
51	L	-
52	P	-
54	P	-
55	G	-
56	SB	-
57	O	-
58	LG	-

BCM (BODY CONTROL MODULE)

50	V	-
60	SB	-
61	SG	-
62	BE	-

Connector No.	E17
Connector Name	POWER (FOR INTELLIGENT POWER DISTRIBUTION MODULE ENGINE ROOM)
Connector Type	TH110FB-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
63	P	-
64	Y	-
65	W	-
66	G	-
67	L	-
68	BE	-
69	BR	-
72	W	-

Connector No.	E18
Connector Name	ECM
Connector Type	RM24FG-R2B-R-BH



Terminal No.	Color Of Wire	Signal Name [Specification]
99	P	CAN COMMUNICATION LINE (CAN-L)
100	L	CAN COMMUNICATION LINE (CAN-H)
101	V	SENSOR POWER SUPPLY
102	R	ACCELERATOR PEDAL POSITION SENSOR 1
103	BR	PNP SIGNAL
104	R	DATA LINK CONNECTOR

Terminal No.	Color Of Wire	Signal Name [Specification]
105	GR	SENSOR GROUND
106	V	POWER SUPPLY FOR ECM (BACCUP)
108	GR	CLUTCH PEDAL POSITION SWITCH
109	O	STOP LAMP SWITCH
110	P	ASCD STEERING SWITCH
111	B	SENSOR GROUND
112	BR	ECM RELAY (SEE SHAT-06F)
115	R	STOP LAMP SWITCH
116	G	BRAKE PEDAL POSITION SWITCH
117	Y	FUEL PUMP RELAY
118	O	SENSOR POWER SUPPLY
119	W	ACCELERATOR PEDAL POSITION SENSOR 2
120	Y	SENSOR GROUND
121	G	POWER SUPPLY FOR ECM
122	G	THROTTLE CONTROL MOTOR POWER SUPPLY
123	GR	ECM GROUND
124	GR	ECM GROUND
125	L	A/F SENSOR 1 HEATER
126	W	HEATED OXYGEN SENSOR 2 HEATER
127	GR	ECM GROUND

Connector No.	E25
Connector Name	INTELLIGENT KEY WARNING BUZZER
Connector Type	RM03PBR



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

Connector No.	E29
Connector Name	CLUTCH INTERLOCK SWITCH
Connector Type	MM04FW-LC



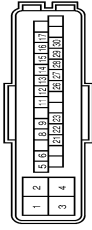
Terminal No.	Color Of Wire	Signal Name [Specification]
3	LG	-
4	BR	-

Connector No.	E34
Connector Name	FRONT TURN SIGNAL LAMP LH
Connector Type	HS02FG-VV



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

Connector No.	E35
Connector Name	INTELLIGENT KEY ELECTRIC UNIT (CONTROL UNIT)
Connector Type	RM23FB-NH4-UH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	BAT (MTR)
2	L	BAT (SOL)
3	B	GRND (SOL)
4	B	GRND (MTR)
5	R	VDC_OFF_SW
6	G	ASCD_CANCEL_SW
8	R	STOP_LAMP_SW
9	P	CANL
11	BR	DP-RR
12	W	DF-RR
13	G	VCC
14	R	SERIAL+
15	Y	DS-RR
16	V	IGN
17	W	REVERSE SIGNAL
21	L	DP-PR
22	L	DP-PR
23	LG	DP-PR
26	G	RR_LH_SENS_VIB
27	BR	DS-FL
28	B	GRND
29	W	SERIAL-
30	BE	RR_LH_SENS_SIG

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BCS

BCM (BODY CONTROL MODULE)

Connector No.	E47
Connector Name	FRONT TURN SIGNAL LAMP RH
Connector Type	MS23FG-1V



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

Connector No.	E102
Connector Name	STOP LAMP SWITCH
Connector Type	MS4FW-LC



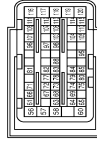
Terminal No.	Color Of Wire	Signal Name [Specification]
1	W	-
2	R	-
3	BE	-
4	P	-

Connector No.	E118
Connector Name	STOP LAMP SWITCH
Connector Type	MS23BC



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

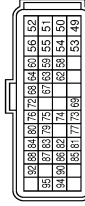
Connector No.	F24
Connector Name	ECM
Connector Type	MS45FE-ME1D-LH



Terminal No.	Color Of Wire	Signal Name [Specification]
56	R	EGR VOLUME CONTROL VALVE POWER SUPPLY
57	W	EGR VOLUME CONTROL VALVE MOTOR (+)
58	B	EGR VOLUME CONTROL VALVE MOTOR (-)
60	B	ECM GROUND
61	W	SENSOR POWER SUPPLY
63	L	SENSOR GROUND
64	SHIELD	SHIELD
65	R	WASTEGATE CONTROL VALVE POSITION SENSOR
66	G	SENSOR POWER SUPPLY
67	BR	CAKSHAFT POSITION SENSOR
68	GR	EGR VOLUME CONTROL VALVE POSITION SENSOR
69	LG	EXHAUST VALVE TIMING CONTROL POSITION SENSOR
71	L	SENSOR GROUND
72	B	SENSOR GROUND
73	GR	SENSOR POWER SUPPLY
74	B	A/F SENSOR 1
75	L	MULTI-WAY CONTROL VALVE POSITION SENSOR
77	V	INTAKE AIR TEMPERATURE SENSOR 2

Terminal No.	Color Of Wire	Signal Name [Specification]
78	B	SENSOR GROUND
79	W	SENSOR POWER SUPPLY
80	W	THROTTLE POSITION SENSOR 2
81	BR	ECM RELAY SELF SHUT-OFF
82	Y	FUEL PUMP RELAY
83	B	SENSOR POWER SUPPLY
84	W	HEATED OXYGEN SENSOR 2
85	R	SENSOR GROUND
88	G	THROTTLE POSITION SENSOR 1
95	LG	IGNITION SIGNAL NO.2
96	R	IGNITION SIGNAL NO.1
97	Y	THROTTLE CONTROL MOTOR RELAY
98	R	ENGINE OIL PRESSURE CONTROL SOLENOID VALVE
101	SB	IGNITION SIGNAL NO.4
103	BR	PNP SIGNAL
104	P	IGNITION SIGNAL NO.3
105	BR	TURBOCHARGER BYPASS CONTROL VALVE
106	R	ELECTRIC WASTEGATE CONTROL ACTUATOR POWER SUPPLY
107	L/Y	ELECTRIC WASTEGATE CONTROL ACTUATOR MOTOR (+)
108	P/L	ELECTRIC WASTEGATE CONTROL ACTUATOR MOTOR (-)
110	B	ECM GROUND
111	W	INTAKE VALVE TIMING CONTROL SOLENOID VALVE
112	G	EXHAUST VALVE TIMING CONTROL SOLENOID VALVE
113	L	POWER SUPPLY FOR ECM (ENGINE OFF TIMER)
114	L	INTAKE VALVE TIMING INTERMEDIATE LOCK CONTROL SOLENOID VALVE
115	L	TURBOCHARGER Bypass Volume Control Solenoid Valve
116	G	A/F SENSOR 1 HEATER
117	G	HEATED OXYGEN SENSOR 2 HEATER
118	GR	THROTTLE CONTROL MOTOR POWER SUPPLY
119	GR	THROTTLE CONTROL MOTOR GROUND
120	BR	THROTTLE CONTROL MOTOR (CLOSE)

Connector No.	F26
Connector Name	ECM
Connector Type	RH40R-42R-L-RH

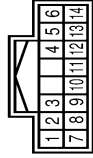


Terminal No.	Color Of Wire	Signal Name [Specification]
49	G	FUEL INJECTOR DRIVER POWER SUPPLY 1
50	B	ECM GROUND (HIGH PRESSURE FUEL PUMP)
51	GR	THROTTLE CONTROL MOTOR (OPEN)

Terminal No.	Color Of Wire	Signal Name [Specification]
52	BR	THROTTLE CONTROL MOTOR (CLOSE)
53	BR	ELECTRIC WASTEGATE CONTROL ACTUATOR MOTOR (+)
54	R	EXHAUST VALVE TIMING CONTROL SOLENOID VALVE
55	BR	HIGH PRESSURE FUEL PUMP POWER SUPPLY
56	Y	HIGH PRESSURE FUEL PUMP (PH)
57	Y	HIGH PRESSURE FUEL PUMP (LO)
58	G	SENSOR POWER SUPPLY
59	L	SENSOR GROUND
60	W	SENSOR GROUND
62	B	SENSOR POWER SUPPLY
63	BR	CAKSHAFT POSITION SENSOR (PHASE)
64	R	CAKSHAFT POSITION SENSOR (POS)
67	LG	EXHAUST VALVE TIMING CONTROL POSITION SENSOR
68	Y	SENSOR POWER SUPPLY
69	L	EVAP CANISTER VENT CONTROL VALVE
71	GR	SENSOR POWER SUPPLY
73	BR	TURBOCHARGER BOOST CONTROL SOLENOID VALVE
74	R	SENSOR GROUND
75	G	THROTTLE POSITION SENSOR 2
76	W	THROTTLE POSITION SENSOR 1
77	Y	THROTTLE CONTROL RELAY
79	BG	BATTERY TEMPERATURE SENSOR
80	G	BATTERY CURRENT SENSOR
81	W	INTAKE VALVE TIMING CONTROL SOLENOID VALVE
82	R	IGNITION SIGNAL NO.1
83	G	G SENSOR
84	P	FUEL TANK TEMPERATURE SENSOR
85	G	EXHAUST VALVE TIMING CONTROL SOLENOID VALVE
86	LG	IGNITION SIGNAL NO.2
87	BR	SENSOR GROUND
88	P	INTAKE AIR TEMPERATURE SENSOR 2
89	P	IGNITION SIGNAL NO.3
92	R	CRANKING ENABLE SIGNAL
94	SB	IGNITION SIGNAL NO.4
95	L	FUEL INJECTOR DRIVER POWER SUPPLY 2

BCM (BODY CONTROL MODULE)

Connector No.	M27
Connector Name	COMBINATION SWITCH
Connector Type	TH408V-MH



Connector No.	M1
Connector Name	FUSE BLOCK (J/B)
Connector Type	UD131V-PC



Connector No.	F49
Connector Name	PAIR / NEUTRAL POSITION SWITCH
Connector Type	FEA03FG-LC



Connector No.	F27
Connector Name	TRANSMISSION RANGE SWITCH
Connector Type	FR08FG



Terminal No.	Color Of Wire	Signal Name [Specification]
1	LG	WASHER (RR)
2	GR	OUTPUT 4
3	R	WASHER (LF)
4	W	IGN
5	BR	OUTPUT 3
6	B	GND
7	V	OUTPUT 3
8	L	OUTPUT 5
9	R	INPUT 2
10	Y	INPUT 4
11	P	INPUT 1
12	W	OUTPUT 1
13	LG	INPUT 5
14	G	OUTPUT 2

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

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH408V-MH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	SB	-
3	BR	-

Connector No.	F56
Connector Name	PAIR / NEUTRAL POSITION SWITCH
Connector Type	FR02FB



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

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



Connector No.	F30
Connector Name	TRANSMISSION RANGE SWITCH
Connector Type	YDX06B-HS4

Terminal No.	Color Of Wire	Signal Name [Specification]
1	GR	-
2	BR	-
3	LG	-
4	SB	-
5	G	-
6	LG	-
7	W	-
8	BR	-

JRMW15121GB

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BCM (BODY CONTROL MODULE)

8	P	SEAT BELT BUCKLE SWITCH SIGNAL DRIVER SIDE
9	W	SEAT BELT BUCKLE SWITCH SIGNAL DRIVER SIDE
10	SB	PARKING BRAKE SWITCH SIGNAL
11	CB	BRAKE FLUID LEVEL SWITCH SIGNAL
13	GR	ILLUMINATION CONTROL SIGNAL
14	R	MANUAL MODE SHIFT UP SIGNAL
15	L	ACC POWER SUPPLY
16	W	MANUAL MODE SHIFT DOWN SIGNAL
17	G	WASHER LEVEL SWITCH SIGNAL
18	R	SECURITY SIGNAL
19	GR	AMBIENT SENSOR SIGNAL
20	R	AMBIENT SENSOR GROUND
21	B	GROUND
22	B	GROUND
23	B	GROUND
24	L	FUEL LEVEL SENSOR GROUND
25	B	VDC GROUND
26	V	PADDLE SHIFT DOWN SWITCH SIGNAL
27	LG	BATTERY POWER SUPPLY
28	GR	IGNITION SIGNAL
29	GR	PASSENGER SEAT BELT WARNING SIGNAL
31	P	A/C AUTO AMP CONNECTION RECOGNITION SIGNAL
36	Y	MANUAL MODE SIGNAL
37	G	NON-MANUAL MODE SIGNAL
38	P	ALTERNATOR SIGNAL

Connector No.	M44
Connector Name	THERMO CONTROL AMP.
Connector Type	SDBFW



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	-
2	BR	-
3	B	-
4	R	-
5	L	-

Connector No.	M45
Connector Name	HAZARD SWITCH
Connector Type	TG04FW



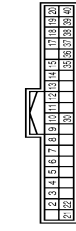
Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	-
2	SB	-
3	V	-
4	GR	-

Connector No.	M49
Connector Name	NATS ANTENNA AMP.
Connector Type	TG04FW-NH



Terminal No.	Color Of Wire	Signal Name [Specification]
1	V	BAT
2	P	CLK
3	LG	DATA
4	B	GND

Connector No.	M50
Connector Name	A/C AUTO AMP.
Connector Type	TG04FW-NH



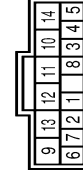
Terminal No.	Color Of Wire	Signal Name [Specification]
2	LG	IN-VEHICLE SENSOR SIGNAL
3	V	INTAKE SENSOR SIGNAL
4	GR	AMBIENT SENSOR SIGNAL
5	P	SUNLOAD SENSOR SIGNAL
6	L	CAN-H
7	P	CAN-L
8	W	INTAKE DOOR MOTOR FBR POWER SUPPLY
9	P	A/C AUTO AMP CONNECTION RECOGNITION SIGNAL
10	R	SENSOR GROUND
11	LG	IGNITION POWER SUPPLY
12	Y	BATTERY POWER SUPPLY
13	GR	POWER TRANSISTOR CONTROL SIGNAL
14	LG	BLOWER FAN COIL SIGNAL
15	GR	A/C ON SIGNAL
16	GR	MAN DRIVE SIGNAL 1
17	GR	MAN DRIVE SIGNAL 2
18	GR	MAN DRIVE SIGNAL 3
19	W	MAN DRIVE SIGNAL 4
20	L	MAN DRIVE SIGNAL 1
21	G	IGNITION POWER SUPPLY
22	SR	INTAKE DOOR MOTOR PRE FBS SIGNAL
30	B	GROUND
35	G	REC DRIVE SIGNAL
36	V	FRE DRIVE SIGNAL
37	R	MODE DRIVE SIGNAL 4
38	P	MODE DRIVE SIGNAL 3
39	Y	MODE DRIVE SIGNAL 2
40	V	MODE DRIVE SIGNAL 1

Connector No.	M52
Connector Name	A/C CONTROL
Connector Type	GD4FW



Terminal No.	Color Of Wire	Signal Name [Specification]
16	L	-
17	R	-
18	G	-
19	B	-

Connector No.	M53
Connector Name	A/C CONTROL
Connector Type	YSA09FB-SHAG

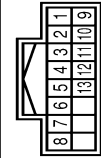


Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	SR	-
3	W	-
4	R	-
5	V	-
6	GR	-
7	G	-
8	B	-
9	B	-
10	W	-
11	R	-
12	Y	-
13	L	-
14	LG	-

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BCM (BODY CONTROL MODULE)

Connector No.	M57
Connector Name	CVT SHIFT SELECTOR
Connector Type	TH40F9-9H



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

Connector No.	M68
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40F9-9H



Terminal No.	Color Of Wire	Signal Name [Specification]
2	L	COMBI SW INPUT 5
3	GR	COMBI SW INPUT 4
4	BR	COMBI SW INPUT 3
5	G	COMBI SW INPUT 2
6	W	COMBI SW INPUT 1
7	L	KEY CYL UNLOCK SW
8	R	KEY CYL LOCK SW

Terminal No.	Color Of Wire	Signal Name [Specification]
9	R	STOP LAMP SW 1
10	W	DOOR LK & LINK SW LOCK
11	BR	DOOR LK & LINK SW UNLOCK
12	GR	DOOR LK & LINK SW LOCK
13	SB	DOOR LK & LINK SW UNLOCK
14	SB	OPTICAL SENS
15	W	REAR WINDOW DEE SW
17	Y	OPTICAL SENS PWR SPLY
18	V	REVERSE GND
21	P	MATS ANT AMP
23	R	SECURITY IND LAMP CONT
24	SB	DONGLE LINK
25	LG	MATS ANT AMP
26	BR	THERMO AMP
27	Y	A/C SW
28	LG	BLOWER FAN SW
29	SB	HAZARD SW
30	L	BK DOOR OPENER SW
31	GR	DR DOOR LINK SENS
32	LG	COMBI SW OUTPUT 5
33	Y	COMBI SW OUTPUT 4
34	V	COMBI SW OUTPUT 3
35	R	COMBI SW OUTPUT 2
36	P	COMBI SW OUTPUT 1
37	G	DEFENT SW
38	SB	RECEIVER COMM
39	L	CANH
40	P	CANL

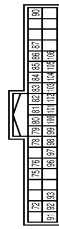
Connector No.	M69
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40F9W-FH46-5A



Terminal No.	Color Of Wire	Signal Name [Specification]
56	P	INT ROOM LAMP PWR SPLY
57	P	BATT(L)SE
58	SB	PASS DOOR LINK OUTPUT
60	V	TURN SIG LH OUTPUT
61	W	TURN SIG RH OUTPUT
63	BR	INT ROOM LAMP CONT
64	R	REVERSE SW

Terminal No.	Color Of Wire	Signal Name [Specification]
65	V	ALL DOOR LOCK OUTPUT
66	SB	DR DOOR LINK OUTPUT
67	B	DR DOOR LINK OUTPUT
68	P	PWR PWR SPLY (IGN)
69	P	PWR PWR SPLY (BAT)
70	Y	BAT(L)Z

Connector No.	M70
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40F9-9H



Terminal No.	Color Of Wire	Signal Name [Specification]
72	SB	A/C IND OUTPUT
75	LG	DR DOOR REQ SW
76	LG	PUSH SW
78	P	DRIVER DOOR ANT+
79	V	DRIVER DOOR ANT-
80	BR	PASS DOOR ANT+
81	G	PASS DOOR ANT-
82	W	REAR BUMP ANT+
83	W	REAR BUMP ANT-
84	GR	BCM ANT+
85	GR	BCM ANT-
86	V	BCM ANT+
87	LG	BCM ANT-
90	W	PUSH-BTN IGN SW LLL PWR
91	V	ACC/ CON IND
92	R	PUSH-BTN IGN SW LLL GND
93	GR	I-KEY VAIN BUIZZER
96	BR	ACC RELAY CONT
97	SB	STARTER RELAY CONT
98	P	IGN RELAY (UPDM/E/R) CONT
99	R	IGN RELAY (F/B) CONT
100	P	PASS DOOR REQ SW
101	Y	CLUTCH INTERLOCK SW [FOR M/T MODELS]
101	Y	IGN SPLY IND2. [EXCEPT FOR M/T MODELS]
102	L	NEUTRAL SW [FOR M/T MODELS]
102	L	PAN POSITION [EXCEPT FOR M/T MODELS]
103	G	FR DEFROST SW
104	SB	CVT SHIFT SELECT PWR SPLY

Terminal No.	105	V	STOP LAMP SW 2
Terminal No.	106	Y	BLWR RELAY CONT

Connector No.	M75
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Type	TH40F9-9H



Terminal No.	Color Of Wire	Signal Name [Specification]
1	G	POWER
2	SB	SIGNAL
4	V	GND

Connector No.	M84
Connector Name	OPTICAL SENSOR
Connector Type	TR40F9W



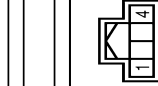
Terminal No.	Color Of Wire	Signal Name [Specification]
1	Y	-
2	SB	-
3	V	-

BCM (BODY CONTROL MODULE)

Connector No.	M85
Connector Name	TIRE PRESSURE WARNING CHECK SWITCH
Connector Type	TR02FW



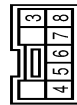
Terminal No.	Wire	Signal Name [Specification]
1	W	-



Connector No.	M88
Connector Name	DONGLE UNIT
Connector Type	TH04FV-NH

Terminal No.	Color Of Wire	Signal Name [Specification]
1	SB	-
4	B	-

Connector No.	M101
Connector Name	PUSH-BUTTON IGNITION SWITCH
Connector Type	TK08FBR



Terminal No.	Color Of Wire	Signal Name [Specification]
4	B	-
5	W	-
6	R	-
7	V	-
8	LG	-

Connector No.	M105
Connector Name	INSIDE KEY ANTENNA (INSTRUMENT CENTER)
Connector Type	RK02FL



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

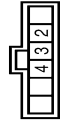
Connector No.	M234
Connector Name	CVT SHIFT SELECTOR
Connector Type	TH15BMM-NH



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

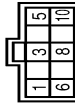
Terminal No.	Color Of Wire	Signal Name [Specification]
9	GR	-
10	-	-
11	LV	-
12	O	-
13	LG	-

Connector No.	R8
Connector Name	MAP LAMP
Connector Type	GA006FW



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

Connector No.	R11
Connector Name	SUNROOF MOTOR ASSEMBLY
Connector Type	YEA1DFGF



Terminal No.	Color Of Wire	Signal Name [Specification]
1	B	GND
3	L	IGN
5	Y	SW-BIT 0
6	P	BAT
8	V	SPEED SENSOR (BP)
10	G	SW-BIT 1

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

< BASIC INSPECTION >

[WITH INTELLIGENT KEY SYSTEM]

BASIC INSPECTION

ADDITIONAL SERVICE WHEN REPLACING CONTROL UNIT

Description

INFOID:0000000012200723

Perform the following operations when replacing BCM. (For details, refer to [BCS-79, "Work Procedure"](#).)

BEFORE REPLACEMENT

When replacing BCM, save or print current vehicle specification with CONSULT configuration before replacement.

NOTE:

If "Before Replace ECU" of "Read / Write Configuration" cannot be used, use the "Manual Configuration" after replacing BCM.

AFTER REPLACEMENT

CAUTION:

When replacing BCM, always perform "Read / Write Configuration" or "Manual Configuration" with CONSULT. Or not doing so, BCM control function does not operate normally.

- Complete the procedure of "Read / Write Configuration" in order.
- Configuration is different for each vehicle model. Confirm configuration of each vehicle model.
- If you set incorrect "Read / Write Configuration" or "Manual Configuration", incidents might occur.

NOTE:

When replacing BCM, perform the system initialization (NVIS) (if equipped).

Work Procedure

INFOID:0000000012200724

1. SAVING VEHICLE SPECIFICATION

CONSULT Configuration

Perform "Before Replace ECU" of "Read / Write Configuration" to save or print current vehicle specification. Refer to [BCS-80, "Description"](#).

NOTE:

If "Before Replace ECU" of "Read / Write Configuration" cannot be used, use the "Manual Configuration" after replacing BCM.

>> GO TO 2.

2. REPLACE BCM

Replace BCM. Refer to [BCS-94, "Removal and Installation"](#).

>> GO TO 3.

3. WRITING VEHICLE SPECIFICATION

CONSULT Configuration

Perform "After Replace ECU" of "Read / Write Configuration" or "Manual Configuration" to write vehicle specification. Refer to [BCS-80, "Work Procedure"](#).

>> GO TO 4.

4. INITIALIZE BCM (NVIS) (IF EQUIPPED)

Perform BCM initialization. (NVIS)

>> WORK END

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BCS

CONFIGURATION (BCM)

Description

INFOID:0000000012200725

Vehicle specification needs to be written with CONSULT because it is not written after replacing BCM. Configuration has three functions as follows. (For details, refer to [BCS-80. "Work Procedure"](#).)

Function		Description
Read / Write Configuration	Before Replace ECU	<ul style="list-style-type: none"> • Reads the vehicle configuration of current BCM. • Saves the read vehicle configuration.
	After Replace ECU	Writes the vehicle configuration with saved data.
Manual Configuration		Writes the vehicle configuration with manual selection.

NOTE:

Manual setting item: Items which need selection by vehicle specifications

Automatic setting item: Items which are written in automatically (Setting cannot be changed)

For some models and specifications, the automatic setting item may not be displayed.

CAUTION:

When replacing BCM, always perform "Re/programming, Configuration" with CONSULT. Or not doing so, BCM control function does not operate normally.

- Complete the procedure of "Read / Write Configuration" in order.
- Configuration is different for each vehicle model. Confirm configuration of each vehicle model.
- Never perform "Read / Write Configuration" except for new BCM.
- If you set incorrect "Read / Write Configuration", incidents might occur.

Work Procedure

INFOID:0000000012200726

1. WRITING MODE SELECTION

ⓅCONSULT Configuration

Select "Re/programming, Configuration" of BCM.

When writing saved data>>GO TO 2.

When writing manually>>GO TO 3.

2. PERFORM "AFTER REPLACE ECU" OF "READ / WRITE CONFIGURATION"

ⓅCONSULT Configuration

Perform "After Replace ECU" of "Read / Write Configuration".

>> WORK END

3. PERFORM "MANUAL CONFIGURATION"

ⓅCONSULT Configuration

1. Select "Manual Configuration".
2. Identify the correct model and configuration list. Refer to [BCS-81. "Configuration list"](#).
3. Confirm and/or change setting value for each item.

CAUTION:

Thoroughly read and understand the vehicle specification. ECU control may not operate normally if the setting is not correct.

NOTE:

If items are not displayed, touch "Next". Refer to [BCS-81. "Configuration list"](#) for written items and setting value.

4. Touch "Next".
5. Touch "OK".

CAUTION:

Make sure to select "OK" even if the indicated configuration of brand new BCM is same as the desirable configuration. If not, configuration which is set automatically by selecting vehicle model cannot be memorized.

6. Check that the configuration has been successfully written and touch "End".

CONFIGURATION (BCM)

[WITH INTELLIGENT KEY SYSTEM]

< BASIC INSPECTION >

>> GO TO 4.

4. OPERATION CHECK

Confirm that each function controlled by BCM operates normally.

>> WORK END

Configuration list

INFOID:0000000012200727

CAUTION:

- Thoroughly read and understand the vehicle specification. ECU control may not operate normally if the setting is not correct.
- The “setting value” of this vehicle is as follows: Never select any other value than the setting value shown below. (If there is only 1 item in “setting value” that means that item is the only choice for this certain vehicle.)

SETTING ITEM		NOTE
Items	Setting value	
AUTO LIGHT	WITH ⇔ WITHOUT	<ul style="list-style-type: none"> • WITH: With auto light system • WITHOUT: Without auto light system
DTRL	WITHOUT ⇔ MODE1 ⇔ MODE2	<ul style="list-style-type: none"> • WITHOUT: Without daytime running light system • MODE1: With daytime running light system (For NISMO models) • MODE2: With daytime running light system (Except for NISMO models)
TRANSMISSION	AT with ABS ⇔ MT with ABS	<ul style="list-style-type: none"> • AT with ABS: Except M/T models • MT with ABS: M/T models
BCM AC CONTROL	MODE2 ⇔ MODE4	<ul style="list-style-type: none"> • MODE2: Manual air conditioning system • MODE4: Automatic air conditioning system
DONGLE	WITH ⇔ WITHOUT	<ul style="list-style-type: none"> • WITH: For Canada models • WITHOUT: Except for Canada models
TIRE PRESSURE	230kPa ⇔ 240kPa ⇔ 250kPa	<ul style="list-style-type: none"> • 230kPa: 2WD M/T models • 240kPa: AWD models • 250kPa: 2WD except M/T models

⇔: Items which confirm vehicle specifications

BCS

SHIPPING MODE CANCEL OPERATION

< BASIC INSPECTION >

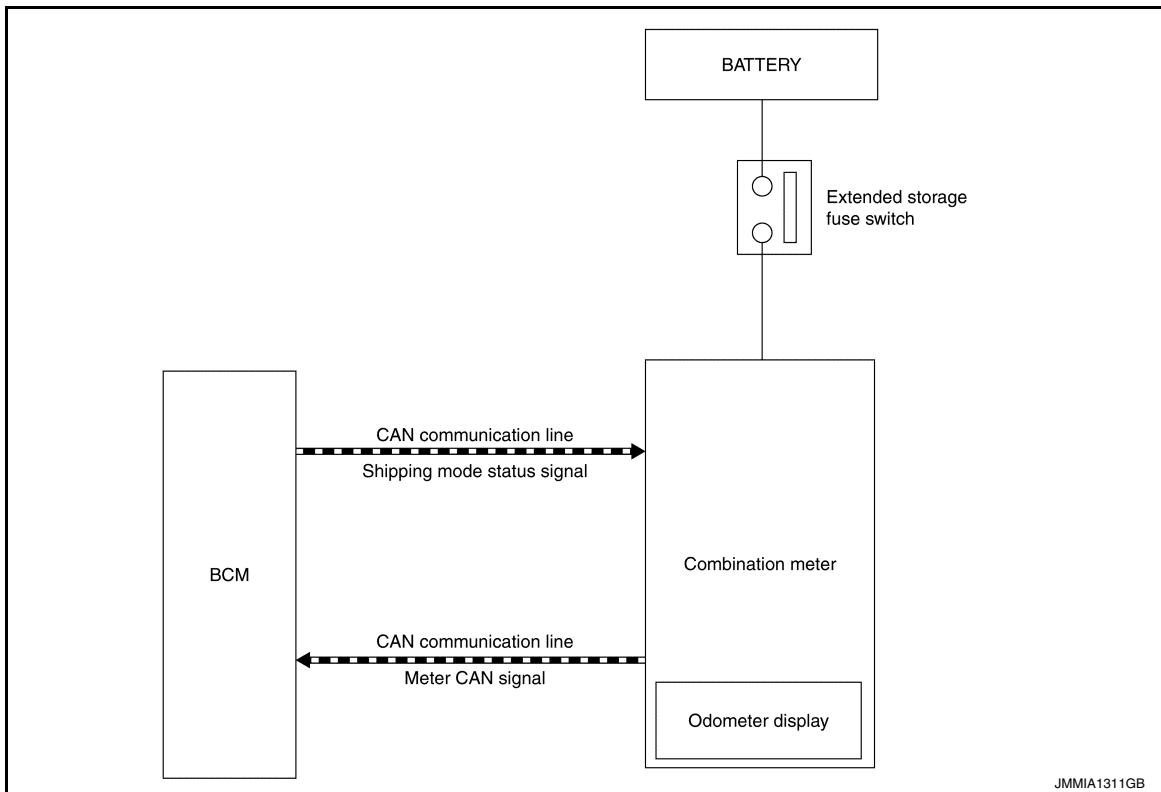
[WITH INTELLIGENT KEY SYSTEM]

SHIPPING MODE CANCEL OPERATION

Description

INFOID:000000012200728

SYSTEM DIAGRAM



DESCRIPTION

- The combination meter transmits meter CAN signal*¹ to BCM via CAN communication, when the extended storage fuse switch is ON.
- BCM switches the status (shipping mode or normal mode) by itself according to the meter CAN signal*¹ from combination meter, and transmits shipping mode status signal to combination meter via CAN communication.
- The combination meter displays extended storage fuse warning message*² on the odometer display, when BCM is in shipping mode.
- BCM control functions are limited in shipping mode. Refer to [BCS-93. "Description"](#).

*1: Odometer signal, wake up signal and each signal.

*2: When shipping mode function operates, "SHIP→PHASE→On→PUSH→FUSE In" is displayed.

Work Procedure

INFOID:000000012200729

1. SHIPPING MODE CANCEL OPERATION

1. Turn ignition switch OFF.
2. Push in (switch on) the extended storage fuse switch. Refer to [PG-100. "How To Check"](#).
3. Turn ignition switch ON.
4. Turn ignition switch OFF and wait at least 2 seconds.

>> GO TO 2.

2. SHIPPING MODE CANCEL CHECK

1. Turn ignition switch ON.
2. Check that extended storage fuse warning message is not displayed on odometer display.

>> WORK END

DTC/CIRCUIT DIAGNOSIS

U1000 CAN COMM

Description

INFOID:0000000012200730

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-30, "CAN COMMUNICATION SYSTEM : CAN Communication Signal Chart"](#).

DTC Logic

INFOID:0000000012200731

DTC DETECTION LOGIC

DTC	CONSULT 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:0000000012200732

1. PERFORM SELF DIAGNOSTIC

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

Is DTC "U1000" displayed?

- YES >> Refer to [LAN-17, "Trouble Diagnosis Flow Chart"](#).
- NO >> Refer to [GI-45, "Intermittent Incident"](#).

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U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

U1010 CONTROL UNIT (CAN)

DTC Logic

INFOID:0000000012200733

DTC DETECTION LOGIC

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

Diagnosis Procedure

INFOID:0000000012200734

1. REPLACE BCM

When DTC "U1010" is detected, replace BCM.

>> Replace BCM. Refer to [BCS-94. "Removal and Installation"](#).

U0415 VEHICLE SPEED

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

U0415 VEHICLE SPEED

Description

INFOID:0000000012200735

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:0000000012200736

DTC DETECTION LOGIC

DTC	CONSULT 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 BCM with CONSULT, when passed 2 seconds or more after the ignition switch is turned ON.

Is any DTC detected?

- YES >> Refer to [BCS-85, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000012200737

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. Refer to [BRC-39, "CONSULT Function"](#) (without EPS), [BRC-39, "CONSULT Function"](#) (with EPS).

Is any DTC detected?

- YES >> Repair or replace the malfunctioning part.
NO >> Replace BCM. Refer to [BCS-94, "Removal and Installation"](#).

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B2562 LOW VOLTAGE

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

B2562 LOW VOLTAGE

DTC Logic

INFOID:000000012200738

DTC DETECTION LOGIC

DTC	CONSULT 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 BCM with CONSULT, when passed 120 seconds or more after the ignition switch is turned ON.

Is any DTC detected?

- YES >> Refer to [BCS-86, "Diagnosis Procedure"](#).
NO >> INSPECTION END

Diagnosis Procedure

INFOID:000000012200739

1. CHECK POWER SUPPLY CIRCUIT

Check BCM power supply circuit. Refer to [BCS-87, "Diagnosis Procedure"](#).

Is the circuit normal?

- YES >> Replace BCM. Refer to [BCS-94, "Removal and Installation"](#).
NO >> Repair the malfunctioning part.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000012200740

1.CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.
Battery power supply	G (40 A)
	9 (10 A)

Is the fuse or fusible link blown (open)?

- YES >> Replace the blown (open) fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown (open).
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	
M69	70	
	57	

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		
M69	67		Existed

Does continuity exist?

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

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BCS

COMBINATION SWITCH OUTPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

COMBINATION SWITCH OUTPUT CIRCUIT

Diagnosis Procedure

INFOID:000000012200741

1. CHECK OUTPUT 1 - 5 CIRCUIT FOR OPEN

1. Turn ignition switch OFF.
2. Disconnect 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	
OUTPUT 1	M68	36	M27	11	Existed
OUTPUT 2		35		9	
OUTPUT 3		34		7	
OUTPUT 4		33		10	
OUTPUT 5		32		13	

Does continuity exist?

YES >> GO TO 2.

NO >> Repair harnesses or connectors.

2. CHECK OUTPUT 1 - 5 CIRCUIT FOR SHORT

Check for continuity between BCM harness connector and ground.

System	BCM		Continuity
	Connector	Terminal	
OUTPUT 1	M68	36	Ground
OUTPUT 2		35	
OUTPUT 3		34	
OUTPUT 4		33	
OUTPUT 5		32	

Does continuity exist?

YES >> Repair harnesses or connectors.

NO >> GO TO 3.

3. CHECK BCM OUTPUT VOLTAGE

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

System	Terminals		Voltage (Approx.)
	(+)	(-)	
	BCM		
	Connector	Terminal	
OUTPUT 1	M68	36	Ground
OUTPUT 2		35	
OUTPUT 3		34	
OUTPUT 4		33	
OUTPUT 5		32	

7.0 - 8.0 V

Is the measurement value normal?

COMBINATION SWITCH OUTPUT CIRCUIT

[WITH INTELLIGENT KEY SYSTEM]

< DTC/CIRCUIT DIAGNOSIS >

- YES >> Replace combination switch.
- NO >> Replace BCM. Refer to [BCS-94, "Removal and Installation"](#).

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BCS

COMBINATION SWITCH INPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

COMBINATION SWITCH INPUT CIRCUIT

Diagnosis Procedure

INFOID:000000012200742

1. CHECK INPUT 1 - 5 CIRCUIT FOR OPEN

1. Turn ignition switch OFF.
2. Disconnect 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	M68	6	M27	12	Existed
INPUT 2		5		14	
INPUT 3		4		5	
INPUT 4		3		2	
INPUT 5		2		8	

Does continuity exist?

YES >> GO TO 2.

NO >> Repair harnesses or connectors.

2. CHECK INPUT 1 - 5 CIRCUIT FOR SHORT

Check for continuity between BCM harness connector and ground.

System	BCM		Ground	Continuity
	Connector	Terminal		
INPUT 1	M68	6	Ground	Not existed
INPUT 2		5		
INPUT 3		4		
INPUT 4		3		
INPUT 5		2		

Does continuity exist?

YES >> Repair harnesses or connectors.

NO >> GO TO 3.

3. CHECK BCM INPUT SIGNAL

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

System	Terminals		Voltage (Approx.)
	(+)	(-)	
	BCM		
Connector	Terminal	Ground	Refer to BCS-39. "Reference Value" .
INPUT 1	6		
INPUT 2	5		
INPUT 3	4		
INPUT 4	3		
INPUT 5	2		

Is the measurement value normal?

Yes >> Replace BCM. Refer to [BCS-94. "Removal and Installation"](#).

COMBINATION SWITCH INPUT CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

No >> Replace combination switch.

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COMBINATION SWITCH SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

SYMPTOM DIAGNOSIS

COMBINATION SWITCH SYSTEM SYMPTOMS

Symptom Table

INFOID:000000012200743

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

Malfunction item: ×

Data monitor item																	Malfunction combination
FR WIPER HI	FR WIPER LOW	FR WASHER SW	FR WIPER INT	RR WIPER ON	RR WIPER INT	RR WASHER SW	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
×			×									×		×			B
						×	×				×		×				C
					×		×			×					×		D
				×			×									×	E
×					×		×										F
		×		×		×	×										G
	×		×												×		H
									×				×	×		×	I
								×		×	×	×					J
All Items																	K
If only one item is detected or the item is not applicable to the combinations A to K																	L

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 OUTPUT 1 circuit	Inspect the combination switch output circuit applicable to the malfunctioning part. Refer to BCS-88, "Diagnosis Procedure" .
B	Combination switch OUTPUT 2 circuit	
C	Combination switch OUTPUT 3 circuit	
D	Combination switch OUTPUT 4 circuit	
E	Combination switch OUTPUT 5 circuit	
F	Combination switch INPUT 1 circuit	Inspect the combination switch input circuit applicable to the malfunctioning part. Refer to BCS-90, "Diagnosis Procedure" .
G	Combination switch INPUT 2 circuit	
H	Combination switch INPUT 3 circuit	
I	Combination switch INPUT 4 circuit	
J	Combination switch INPUT 5 circuit	
K	BCM	Replace BCM. Refer to BCS-94, "Removal and Installation" .
L	Combination switch	Replace combination switch.

NORMAL OPERATING CONDITION

< SYMPTOM DIAGNOSIS >

[WITH INTELLIGENT KEY SYSTEM]

NORMAL OPERATING CONDITION

Description

INFOID:000000012200744

SHIPPING MODE

- Shipping mode inhibits battery power consumption during transportation or storage of the vehicle. Vehicle is set to shipping mode before being shipped from the factory.
- When ignition switch is OFF, BCM operates shipping mode.
- BCM control functions are limited in shipping mode. The limited items that are not operated during the shipping mode are as follows.
 - Door lock and unlock switch function
 - Remote keyless entry function
 - Theft warning alarm function
 - Lighting & turn signal switch function
 - Interior room lamp timer control function
- For shipping mode cancel operation, refer to [BCS-82, "Description"](#).

NOTE:

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

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BCS

REMOVAL AND INSTALLATION

BCM

Removal and Installation

INFOID:0000000012200745

CAUTION:

Before replacing BCM, perform “Before Replace ECU” of “Read / Write Configuration” to save or print current vehicle specification. Refer to [BCS-79, "Description"](#).

REMOVAL

1. Remove instrument lower panel. Refer to [IP-13, "Removal and Installation"](#).
2. Remove harness clip.
3. Remove BCM mounting screws.
4. Remove BCM and disconnect the connectors.
5. Remove relays and relay mounting bracket from BCM.

INSTALLATION

Install in the reverse order of removal.

CAUTION:

Be sure to perform “Manual Configuration” or “After Replace ECU” of “Read / Write Configuration” when replacing BCM. Refer to [BCS-79, "Description"](#).

NOTE:

Be sure to perform the system initialization (NVIS) when replacing BCM. Refer to [BCS-79, "Work Procedure"](#).

COMBINATION SWITCH

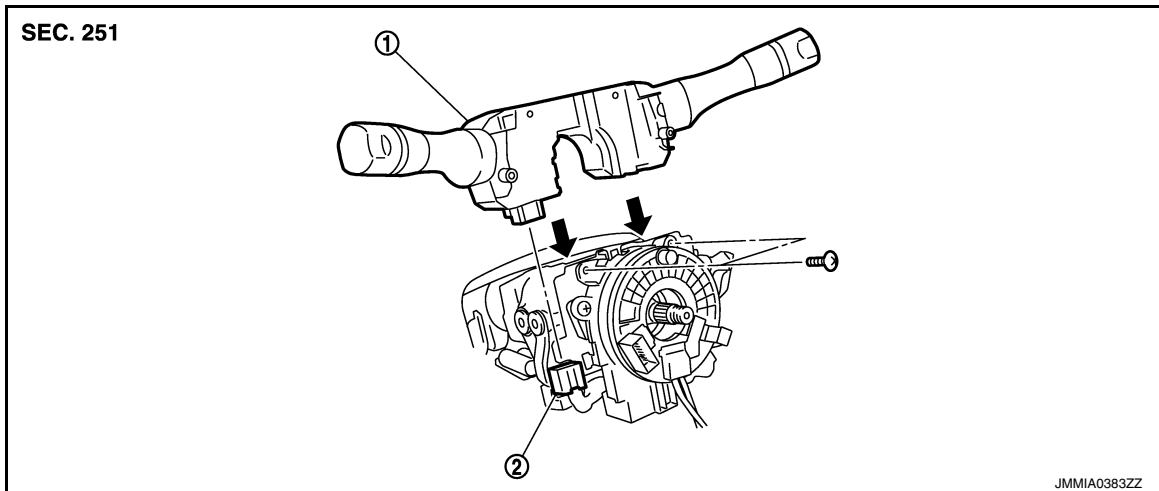
< REMOVAL AND INSTALLATION >

[WITH INTELLIGENT KEY SYSTEM]

COMBINATION SWITCH

Exploded View

INFOID:000000012200746



1. Combination switch

2. Combination switch connector

Removal and Installation

INFOID:000000012200747

REMOVAL

1. Remove steering column cover. Refer to [IP-13. "Removal and Installation"](#).
2. Remove screws.
3. Disconnect the connector.
4. Pull up the combination switch to remove it.

INSTALLATION

Install in the reverse order of removal.

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