

SECTION WCS

WARNING CHIME SYSTEM

CONTENTS

BASIC INSPECTION	3	
DIAGNOSIS AND REPAIR WORKFLOW	3	
Work Flow	3	
SYSTEM DESCRIPTION	5	
WARNING CHIME SYSTEM	5	
WARNING CHIME SYSTEM	5	
WARNING CHIME SYSTEM : System Diagram	5	
WARNING CHIME SYSTEM : System Description	5	
WARNING CHIME SYSTEM : Component Parts Location	6	
WARNING CHIME SYSTEM : Component Description	6	
LIGHT REMINDER WARNING CHIME	7	
LIGHT REMINDER WARNING CHIME : System Diagram	7	
LIGHT REMINDER WARNING CHIME : System Description	7	
LIGHT REMINDER WARNING CHIME : Component Parts Location	8	
LIGHT REMINDER WARNING CHIME : Component Description	8	
SEAT BELT REMINDER WARNING CHIME	8	
SEAT BELT REMINDER WARNING CHIME : System Diagram	9	
SEAT BELT REMINDER WARNING CHIME : System Description	9	
SEAT BELT REMINDER WARNING CHIME : Component Parts Location	10	
SEAT BELT REMINDER WARNING CHIME : Component Description	10	
PARKING BRAKE RELEASE WARNING CHIME	10	
PARKING BRAKE RELEASE WARNING CHIME : System Diagram	11	
PARKING BRAKE RELEASE WARNING CHIME : System Description	11	
PARKING BRAKE RELEASE WARNING CHIME : Component Parts Location	11	
PARKING BRAKE RELEASE WARNING CHIME : Component Description	12	
KEY WARNING CHIME	12	
KEY WARNING CHIME : System Diagram	12	
KEY WARNING CHIME : System Description	12	
KEY WARNING CHIME : Component Parts Location	13	
KEY WARNING CHIME : Component Description	13	
DIAGNOSIS SYSTEM (METER)	14	
CONSULT-III Function	14	
DIAGNOSIS SYSTEM (BCM)	19	
COMMON ITEM	19	
COMMON ITEM : CONSULT-III Function (BCM - COMMON ITEM)	19	
BUZZER	20	
BUZZER : CONSULT-III Function (BCM - BUZZER)	20	
DTC/CIRCUIT DIAGNOSIS	21	
POWER SUPPLY AND GROUND CIRCUIT	21	
COMBINATION METER	21	
COMBINATION METER : Diagnosis Procedure	21	
BCM (BODY CONTROL MODULE)	21	
BCM (BODY CONTROL MODULE) : Diagnosis Procedure	21	
METER BUZZER CIRCUIT	23	
Description	23	
Component Function Check	23	
Diagnosis Procedure	23	

A

B

C

D

E

F

G

H

I

J

K

L

M

WCS

O

P

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT	24	THE LIGHT REMINDER WARNING DOES NOT SOUND	72
Description	24	Description	72
Component Function Check	24	Diagnosis Procedure	72
Diagnosis Procedure	24		
Component Inspection	25	THE SEAT BELT REMINDER WARNING DOES NOT SOUND	73
PARKING BRAKE SWITCH SIGNAL CIRCUIT	26	Description	73
Description	26	Trouble diagnosis procedure	73
Diagnosis Procedure	26		
Component Inspection	26	THE PARKING BRAKE RELEASE WARNING DOES NOT SOUND	74
WARNING CHIME SYSTEM	27	Description	74
Wiring Diagram - WARNING CHIME -	27	Diagnosis Procedure	74
ECU DIAGNOSIS INFORMATION	32	THE KEY WARNING DOES NOT SOUND	75
COMBINATION METER	32	Description	75
Reference Value	32	Diagnosis Procedure	75
Wiring Diagram	39	PRECAUTION	76
Fail-safe	48	PRECAUTIONS	76
DTC Index	49	FOR USA AND CANADA	76
BCM (BODY CONTROL MODULE)	51	FOR USA AND CANADA : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	76
Reference Value	51	FOR MEXICO	76
Wiring Diagram - BCM -	66	FOR MEXICO : Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	76
Fail-safe	70		
DTC Inspection Priority Chart	71		
DTC Index	71		
SYMPTOM DIAGNOSIS	72		

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

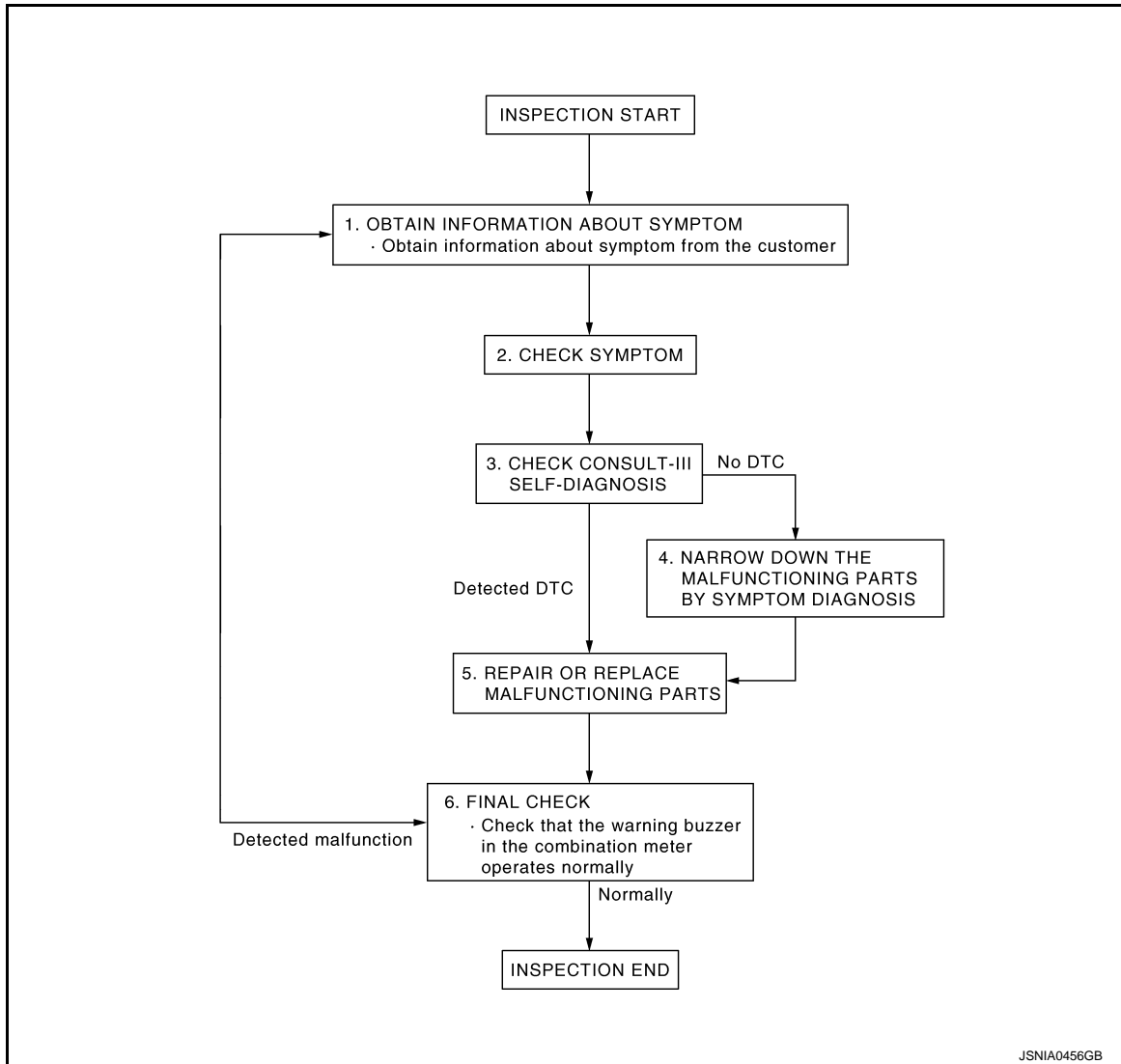
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow

INFOID:0000000006202627

OVERALL SEQUENCE



DETAILED FLOW

1.OBTAIN INFORMATION ABOUT SYMPTOM

Interview the customer to obtain as much information as possible about the conditions and environment under which the malfunction occurred.

>> GO TO 2.

2.CHECK SYMPTOM

- Check the symptom based on the information obtained from the customer.
- Check if any other malfunctions are present.

>> GO TO 3.

3.CHECK CONSULT-III SELF-DIAGNOSIS RESULTS

WCS

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

1. Connect CONSULT-III and perform "Self Diagnostic Result" of "METER/M&A". Refer to [MWI-27. "CONSULT-III Function"](#).
2. Check if DTC is detected. Refer to [MWI-40. "DTC Index"](#).

NOTE:

If "CAN COMM CIRCUIT [U1000]" is displayed, start with the diagnosis for the CAN communication system. Refer to [MWI-58. "Diagnosis Procedure"](#).

If any DTC detected?

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

4. NARROW DOWN THE MALFUNCTIONING PARTS BY SYMPTOM DIAGNOSIS

Perform symptom diagnosis and narrow down the malfunctioning parts.

>> GO TO 5.

5. REPAIR OR REPLACE MALFUNCTIONING PARTS

Repair or replace malfunctioning parts.

NOTE:

If DTC is displayed, erase DTC after repair or replace malfunctioning parts.

>> GO TO 6.

6. FINAL CHECK

Check that the warning buzzer in the combination meter operates normally.

Does it operate normally?

- YES >> INSPECTION END
NO >> GO TO 1.

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

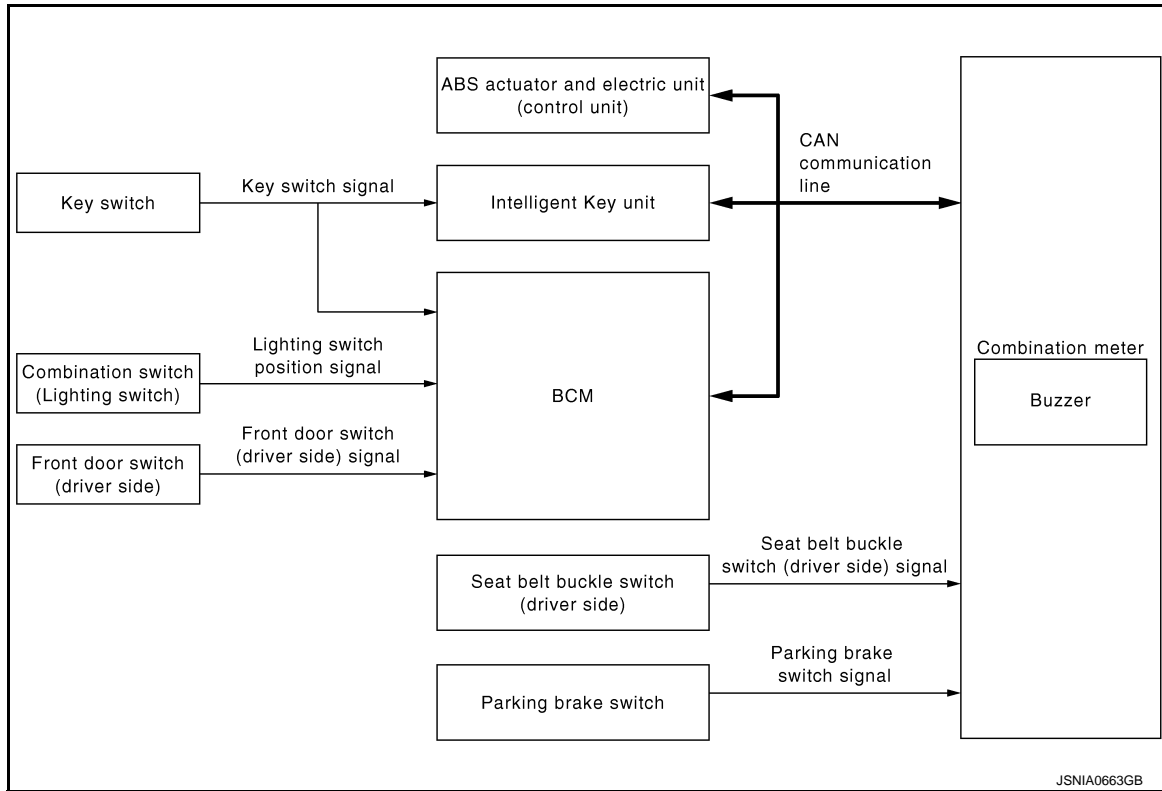
SYSTEM DESCRIPTION

WARNING CHIME SYSTEM

WARNING CHIME SYSTEM

WARNING CHIME SYSTEM : System Diagram

INFOID:0000000006202628



WARNING CHIME SYSTEM : System Description

INFOID:0000000006202629

The buzzer for the warning chime system is integrated in the combination meter. Combination meter sounds warning buzzer in the following conditions.

- When receiving the buzzer output signal (light reminder warning chime, key warning chime, seat belt reminder warning chime) from BCM.
- When it judges the necessity of buzzer output according to vehicle speed signal received from ABS actuator and electric unit (control unit) with CAN communication and parking brake switch signal received from parking brake switch.
- When receiving the buzzer output signal (Intelligent Key warning chime) from Intelligent Key unit. For the further details, refer to [DLK-32, "KEY REMINDER FUNCTION : System Description"](#).

WARNING CHIME FUNCTION LIST

WCS

Warning functions	Signal name	Warning chime judge unit
Light reminder warning chime	<ul style="list-style-type: none">• Ignition switch signal• Lighting switch position signal• Front door switch signal (driver side)	BCM
Key warning chime	<ul style="list-style-type: none">• Ignition switch signal• Key switch signal• Front door switch signal (driver side)	
Seat belt reminder warning chime	<ul style="list-style-type: none">• Seat belt buckle switch (driver side) signal• Ignition switch signal	

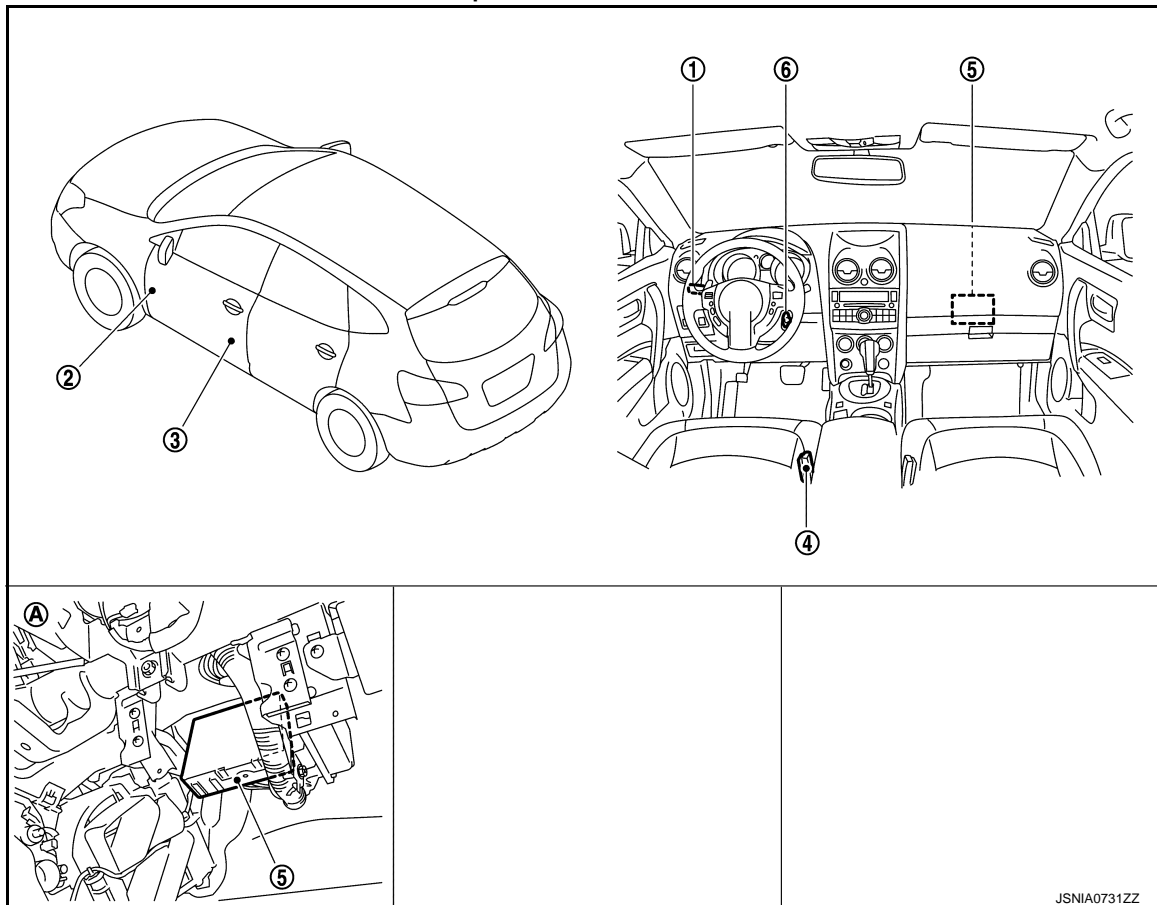
WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

Warning functions	Signal name	Warning chime judge unit
Parking brake release warning chime	<ul style="list-style-type: none"> Vehicle speed signal Parking brake switch signal 	Combination meter
Intelligent Key warning chime	Refer to DLK-32, "KEY REMINDER FUNCTION : System Description" .	Intelligent Key unit

WARNING CHIME SYSTEM : Component Parts Location

INFOID:000000006202630



- | | | |
|---|-------------------------|------------------------------------|
| 1. Combination switch
(Lighting switch) | 2. Parking brake switch | 3. Front door switch (driver side) |
| 4. Seat belt buckle switch
(driver side) | 5. BCM | 6. Key switch |
| A. Over the glove box | | |

WARNING CHIME SYSTEM : Component Description

INFOID:000000006202631

Unit	Description
Combination meter	<ul style="list-style-type: none"> Receives the buzzer output signal from BCM and Intelligent Key unit with the CAN communication line and sounds the buzzer. Judges the parking brake release warning according to the vehicle speed signal received from the ABS actuator and electric unit (control unit) via CAN communication and the parking brake switch signal from parking brake switch and sounds the warning buzzer.
BCM	Transmits signals received from each unit to the combination meter with the CAN communication line.
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to combination meter with the CAN communication line.
Seat belt buckle switch (driver side)	Transmits the seat belt buckle switch (driver side) signal to the combination meter.

WARNING CHIME SYSTEM

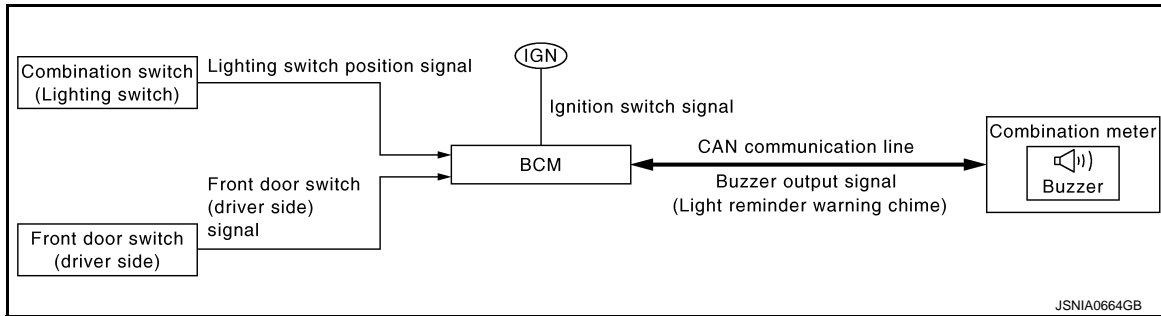
< SYSTEM DESCRIPTION >

Unit	Description
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.
Front door switch (driver side)	Transmits the front door switch (driver side) signal to BCM.
Key switch	Transmits the key switch signal to BCM and Intelligent Key unit.
Parking brake switch	Refer to WCS-26. "Description" .

LIGHT REMINDER WARNING CHIME

LIGHT REMINDER WARNING CHIME : System Diagram

INFOID:0000000006202632



LIGHT REMINDER WARNING CHIME : System Description

INFOID:0000000006202633

DESCRIPTION

With ignition switch except in ON or START position, driver door open, and lighting switch in 1ST or 2ND position, the light reminder warning chime will sound.

- BCM detects ignition switch except in ON or START position, front door switch (driver side) ON, and lighting switch in 1ST or 2ND position. And then transmits buzzer output signal (light reminder warning chime) to combination meter with CAN communication line.
- When combination meter receives buzzer output signal (light reminder warning chime), it sounds the buzzer.

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Lighting switch at 1ST or 2ND position
- Ignition switch except at ON or START
- Front door switch (driver side) ON

WARNING CANCEL CONDITIONS

Warning is canceled if any of the following conditions is fulfilled.

- Lighting switch OFF
- Ignition switch ON
- Front door switch (driver side) OFF

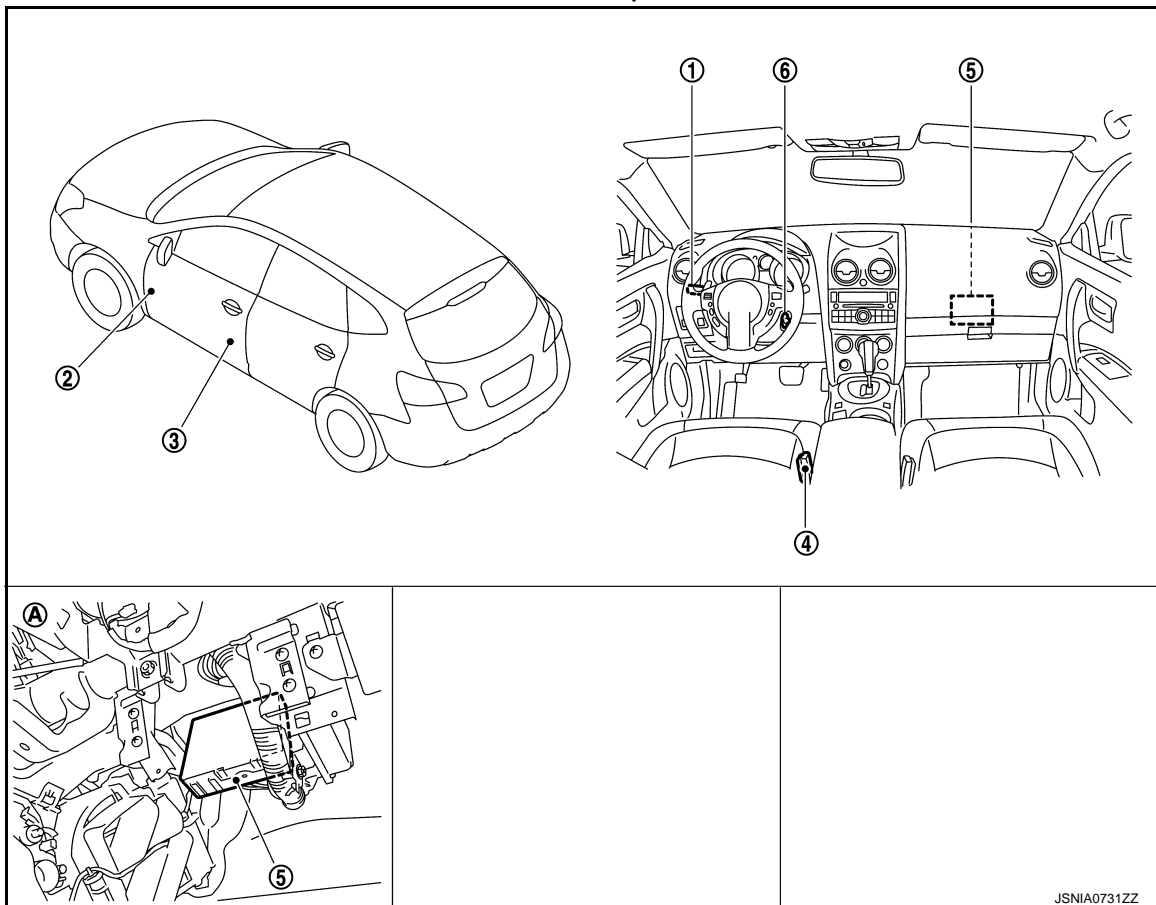
WCS

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

LIGHT REMINDER WARNING CHIME : Component Parts Location

INFOID:000000006202634



- | | | |
|--|-------------------------|------------------------------------|
| 1. Combination switch (Lighting switch) | 2. Parking brake switch | 3. Front door switch (driver side) |
| 4. Seat belt buckle switch (driver side) | 5. BCM | 6. Key switch |
| A. Over the glove box | | |

LIGHT REMINDER WARNING CHIME : Component Description

INFOID:000000006202635

Unit	Description
Combination meter	Receives a buzzer output signal from the BCM and sounds the buzzer.
BCM	Judges light reminder warning according to the front door switch (driver side) signal from the front door switch (driver side) and the lighting position signal from the combination switch (lighting switch) and transmits the buzzer output signal to the combination meter via CAN communication.
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.
Front door switch (driver side)	Transmits the front door switch (driver side) signal to BCM.

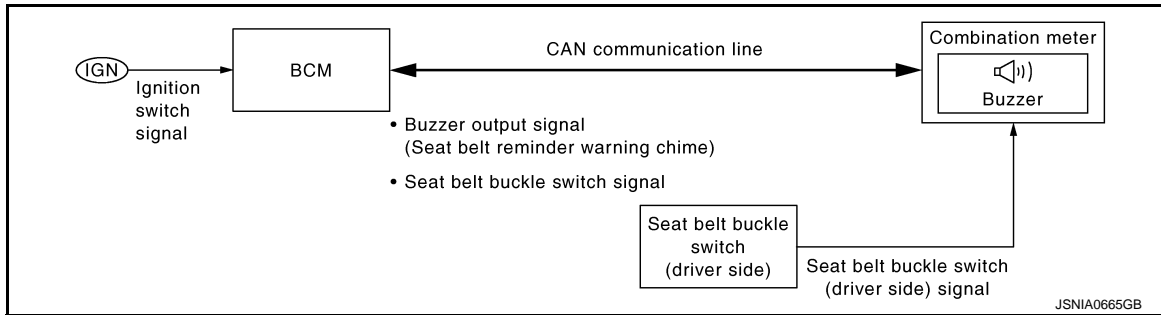
SEAT BELT REMINDER WARNING CHIME

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

SEAT BELT REMINDER WARNING CHIME : System Diagram

INFOID:000000006202636



SEAT BELT REMINDER WARNING CHIME : System Description

INFOID:000000006202637

DESCRIPTION

With ignition switch turned ON and driver seat belt unfastened, seat belt warning chime will sound for approximately 6 seconds.

- BCM receives seat belt buckle switch signal from combination meter with CAN communication line.
- BCM detects ignition switch turned ON and seat belt buckle switch (driver side) ON. And then transmits buzzer output signal (seat belt warning chime) to combination meter with CAN communication line.
- When combination meter receives buzzer output signal (seat belt warning chime), it sounds the buzzer.

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Ignition switch OFF→ON
- Seat belt buckle switch (driver side) is ON (driver seat belt not fastened)

WARNING CANCEL CONDITIONS

Warning is canceled if any of the following conditions is fulfilled.

- Ignition switch OFF
- Seat belt buckle switch (driver side) is OFF (driver seat belt fastened)

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

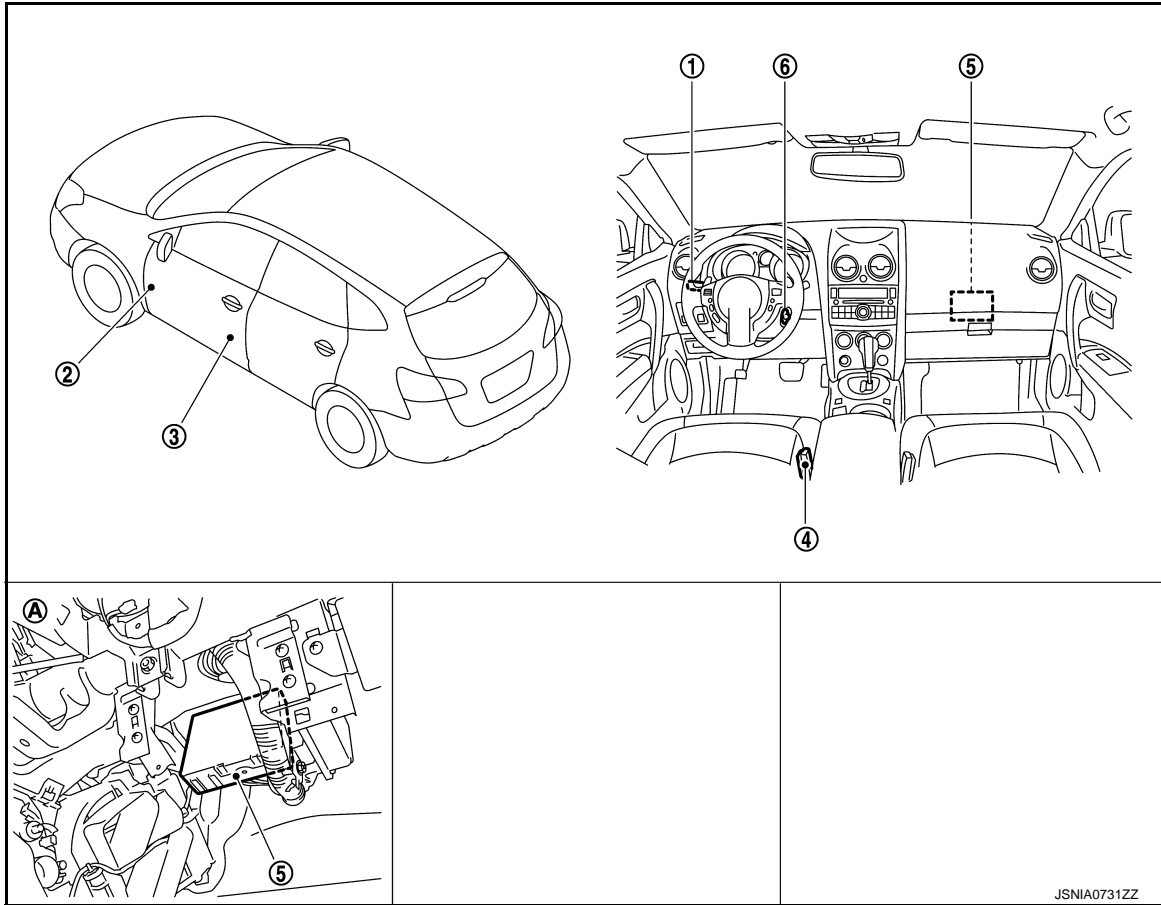
WCS

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

SEAT BELT REMINDER WARNING CHIME : Component Parts Location

INFOID:000000006202638



- | | | |
|--|-------------------------|------------------------------------|
| 1. Combination switch (Lighting switch) | 2. Parking brake switch | 3. Front door switch (driver side) |
| 4. Seat belt buckle switch (driver side) | 5. BCM | 6. Key switch |
| A. Over the glove box | | |

SEAT BELT REMINDER WARNING CHIME : Component Description

INFOID:000000006202639

Unit	Description
Combination meter	Receives a buzzer output signal from the BCM and sounds the buzzer.
BCM	Judges the seat belt warning condition from the seat belt buckle switch (driver side) signal received from the combination meter and transmits a buzzer output signal to the combination meter via CAN communication line if necessary.
Seat belt buckle switch (driver side)	Refer to WCS-24, "Description" .

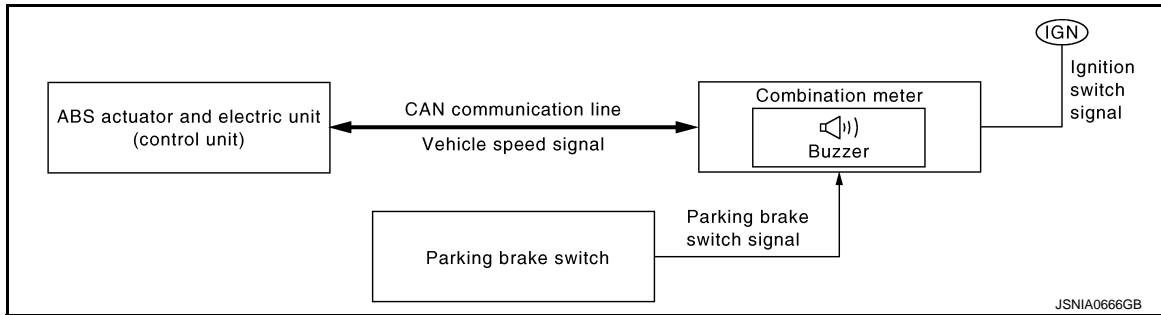
PARKING BRAKE RELEASE WARNING CHIME

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

PARKING BRAKE RELEASE WARNING CHIME : System Diagram

INFOID:000000006202640



PARKING BRAKE RELEASE WARNING CHIME : System Description

INFOID:000000006202641

DESCRIPTION

Parking brake release warning chime judges the remaining parking brake according to the vehicle speed signal received from the ABS actuator and electric unit (control unit) via CAN communication and the parking brake switch signal from parking brake switch to sound the warning buzzer.

WARNING OPERATION CONDITIONS

IF all of the following conditions are fulfilled.

- Vehicle speed is 7 km/h (4.3 MPH) or more
- Parking brake switch ON

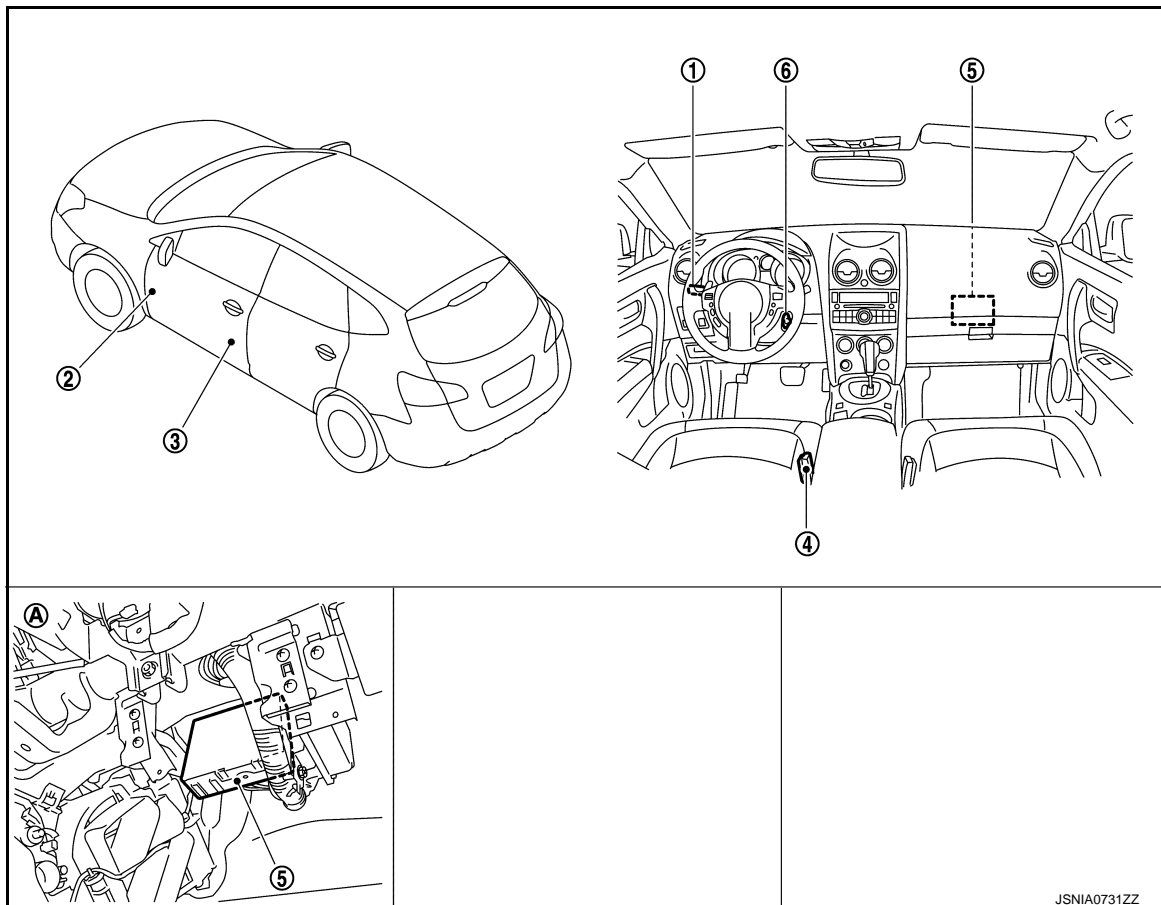
WARNING CANCEL CONDITIONS

Warning is canceled if any of the following conditions is fulfilled.

- Vehicle speed is approximately 3 km/h (1.9 MPH) or less
- Parking brake switch OFF

PARKING BRAKE RELEASE WARNING CHIME : Component Parts Location

INFOID:000000006202642



WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

1. Combination switch (Lighting switch)
 2. Parking brake switch
 3. Front door switch (driver side)
 4. Seat belt buckle switch (driver side)
 5. BCM
 6. Key switch
- A. Over the glove box

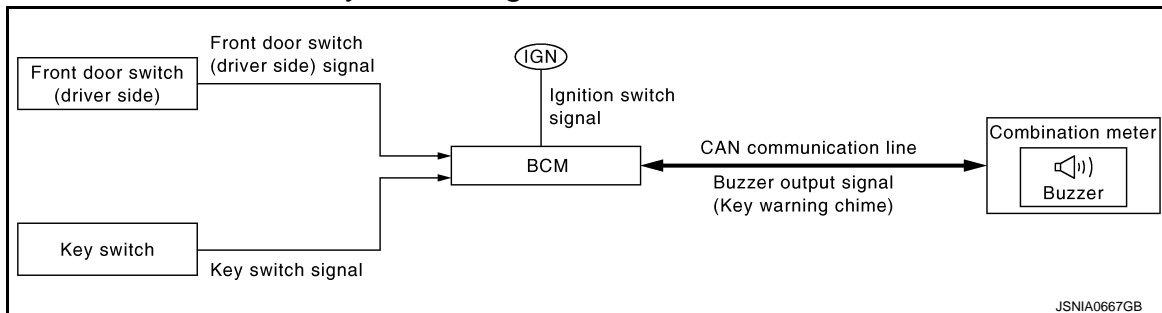
PARKING BRAKE RELEASE WARNING CHIME : Component Description INFOID:000000006202643

Unit	Description
Combination meter	Judges the remaining parking brake according to the vehicle speed signal received from the ABS actuator and electric unit (control unit) via CAN communication and the parking brake switch signal from parking brake switch and sounds the warning buzzer.
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to the combination meter via CAN communication.
Parking brake switch	Refer to WCS-26, "Description" .

KEY WARNING CHIME

KEY WARNING CHIME : System Diagram

INFOID:000000006202644



KEY WARNING CHIME : System Description

INFOID:000000006202645

DESCRIPTION

With the key inserted into the ignition key cylinder, and the ignition switch except in ON or START position, when driver door open, the key warning chime will sound.

- BCM detects key inserted into the ignition key cylinder, ignition switch except in ON or START position, front door switch (driver side) ON. And then transmits buzzer output signal (Key warning chime) to combination meter with CAN communication line.
- When combination meter receives buzzer output signal (Key warning chime), it sounds the buzzer.

NOTE:

With Intelligent Key system: refer to [DLK-32, "KEY REMINDER FUNCTION : System Description"](#).

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Key inserted into the ignition key cylinder (Key switch signal ON)
- Ignition switch except in ON or START (Ignition switch signal OFF)
- Front door switch (driver side) open [Front door switch (driver side) signal ON]

WARNING CANCEL CONDITIONS

Warning is canceled if any of the following conditions is fulfilled.

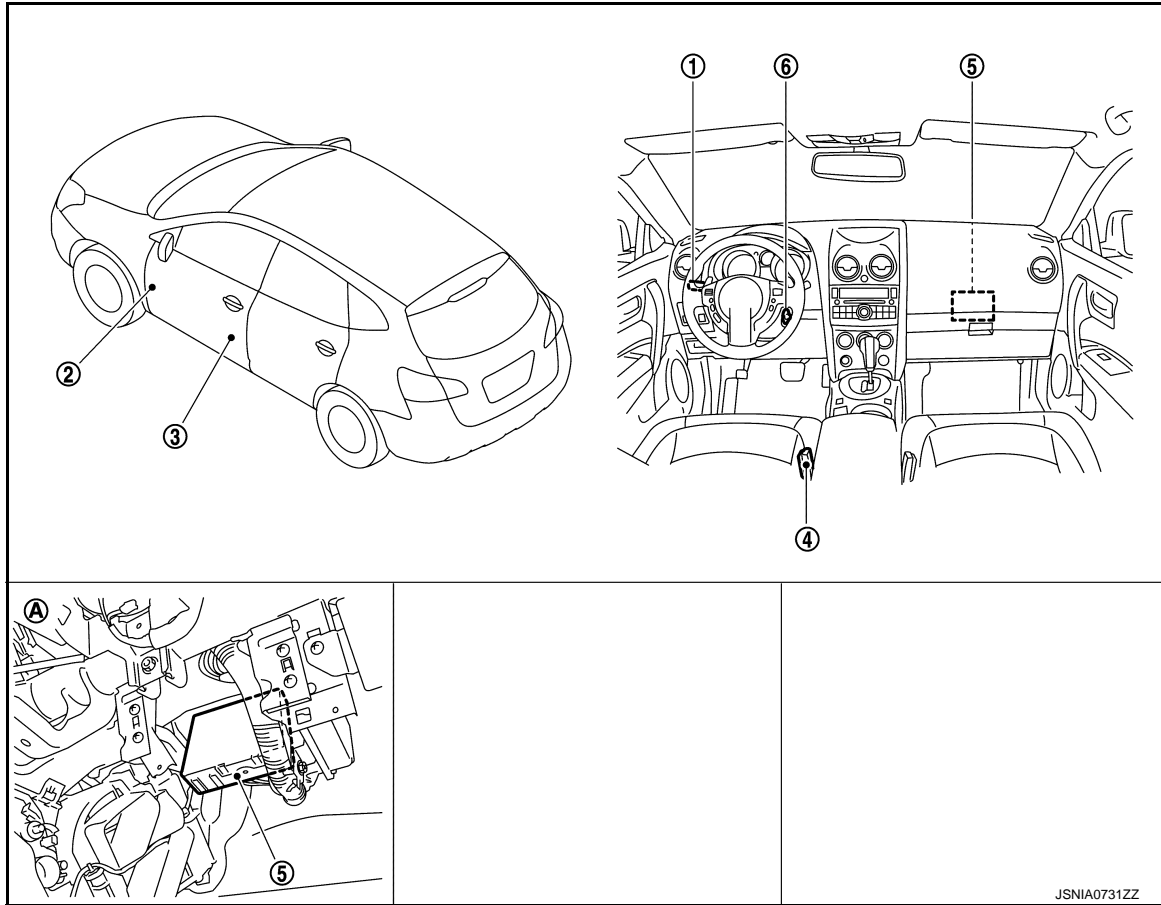
- Key removed from key cylinder (Key switch signal OFF)
- Ignition switch in ON or START (Ignition switch signal ON)
- Front door switch (driver side) close [Front door switch (driver side) signal OFF]

WARNING CHIME SYSTEM

< SYSTEM DESCRIPTION >

KEY WARNING CHIME : Component Parts Location

INFOID:000000006202646



- | | | |
|--|-------------------------|------------------------------------|
| 1. Combination switch (Lighting switch) | 2. Parking brake switch | 3. Front door switch (driver side) |
| 4. Seat belt buckle switch (driver side) | 5. BCM | 6. Key switch |
| A. Over the glove box | | |

KEY WARNING CHIME : Component Description

INFOID:000000006202647

Unit	Description
Combination meter	Received a buzzer output signal from the BCM and sounds the buzzer.
BCM	Judges key warning according to the door switch signal from the front door switch (driver side) and the key switch signal from the key switch and transmits the buzzer output signal to the combination meter via CAN communication.
Front door switch (driver side)	Transmits the door switch signal to BCM.
Key switch	Transmits the key switch signal to BCM and Intelligent Key unit.

DIAGNOSIS SYSTEM (METER)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (METER)

CONSULT-III Function

INFOID:000000006607519

CONSULT-III APPLICATION ITEMS

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

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

SELF DIAG RESULT

Refer to [MWI-40, "DTC Index"](#).

DATA MONITOR

Display Item List

X: Applicable

Display item [Unit]	MAIN SIGNALS	Description
SPEED METER [km/h]	X	Value of vehicle speed signal received from ABS actuator and electric unit (control unit) via CAN communication. NOTE: 655.35 is displayed when the malfunction signal is received.
SPEED OUTPUT [km/h]	X	Vehicle speed signal value transmitted to other units via CAN communication. NOTE: 655.35 is displayed when the malfunction signal is received.
ODO OUTPUT [km/h or mph]		Odometer signal value transmitted to other units via CAN communication.
TACHO METER [rpm]	X	Value of the engine speed signal received from ECM via CAN communication. NOTE: 8191.875 is displayed when the malfunction signal is received.
FUEL METER [L]	X	Fuel level indicated on combination meter.
W TEMP METER [°C]	X	Value of engine coolant temperature signal is received from ECM via CAN communication. NOTE: 215 is displayed when the malfunction signal is input.
ABS W/L [On/Off]		Status of ABS warning lamp detected from ABS warning lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.
VDC/TCS IND [On/Off]		Status of VDC OFF indicator lamp detected from VDC OFF indicator lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication.
SLIP IND [On/Off]		Status of SLIP indicator lamp detected from SLIP indicator lamp signal received from ABS actuator and electric unit (control unit) via CAN communication.
BRAKE W/L [On/Off]		Status of brake warning lamp detected from brake warning lamp signal is received from ABS actuator and electric unit (control unit) via CAN communication. NOTE: Displays "Off" if the brake warning lamp is illuminated when the valve check starts, the parking brake switch is turned ON or the brake fluid level switch is turned ON.
DOOR W/L [On/Off]		Status of door open warning detected from door switch signal received from BCM via CAN communication.
TRUNK/GLAS-H [Off]		This item is displayed, but cannot be monitored.
HI-BEAM IND [On/Off]		Status of high beam indicator lamp detected from high beam request signal is received from BCM via CAN communication.

DIAGNOSIS SYSTEM (METER)

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description	
TURN IND [On/Off]		Status of turn indicator lamp detected from turn indicator signal is received from BCM via CAN communication.	A
FR FOG IND [On/Off]		This item is displayed, but cannot be monitored.	B
RR FOG IND [Off]		This item is displayed, but cannot be monitored.	C
LIGHT IND [On/Off]		Status of light indicator lamp detected from position light request signal is received from BCM via CAN communication.	
OIL W/L [On/Off]		Status of oil pressure warning lamp detected from oil pressure switch signal is received from BCM via CAN communication.	D
MIL [On/Off]		Status of malfunction indicator (Yellow) detected from malfunctioning indicator signal is received from ECM via CAN communication.	E
GLOW IND [Off]		This item is displayed, but cannot be monitored.	
C-ENG2 W/L [Off]		This item is displayed, but cannot be monitored.	F
CRUISE IND [On/Off]		Status of CRUISE indicator detected from ASCD status signal is received from ECM via CAN communication.	G
SET IND [On/Off]		Status of SET indicator detected from ASCD status signal is received from ECM via CAN communication.	
O/D OFF IND [On/Off]		Status of O/D OFF indicator detected from O/D OFF indicator signal is received from TCM.	H
ATC/T-AMT W/L [Off]		This item is displayed, but cannot be monitored.	I
ATF TEMP W/L [Off]		This item is displayed, but cannot be monitored.	
CVT IND [Off]		This item is displayed, but cannot be monitored.	J
SPORT IND [Off]		This item is displayed, but cannot be monitored.	K
4WD W/L [On/Off]		Status of AWD warning lamp judged from AWD warning lamp signal received from AWD control unit with CAN communication line.	
4WD LOCK IND [On/Off]		Status of AWD lock indicator lamp judged from mode lamp signal received from AWD control unit with CAN communication line.	L
FUEL W/L [On/Off]		Low fuel warning status detected by the identified fuel level.	
WASHER W/L [On/Off]		Status of low washer fluid warning judged from washer level switch input to combination meter.	M
AIR PRES W/L [On/Off]		Status of low tire pressure warning judged from low tire pressure warning lamp signal received from BCM with CAN communication line.	WCS
KEY G/Y W/L [On/Off]		Status of Intelligent Key system malfunction detected from KEY/LOCK warning request signal is received from BCM via CAN communication.	
KEY R W/L [Off]		This item is displayed, but cannot be monitored.	O
KEY KNOB W/L [Off]		This item is displayed, but cannot be monitored.	P
EPS W/L [On/Off]		Status of EPS warning lamp detected from EPS warning lamp signal is received from EPS control unit via CAN communication.	
DDS W/L * [Off]		This item is displayed, but cannot be monitored.	
DPF W/L [Off]		This item is displayed, but cannot be monitored.	

DIAGNOSIS SYSTEM (METER)

< SYSTEM DESCRIPTION >

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

*: DDS (hill descent control)

NOTE:

Some items are not available according to vehicle specification.

DIAGNOSIS SYSTEM (METER)

< SYSTEM DESCRIPTION >

SPECIAL FUNCTION

Special menu

Display item	Description
W/L ON HISTORY	Lighting history of warning lamp and indicator lamp can be checked.

W/L ON HISTORY

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

NOTE:

- W/L ON HISTORY is not stored for approximately 30 seconds after the engine starts.
- Brake warning lamp does not store any history when the parking brake is applied or the brake fluid level gets low.

Display Item

Display item	Description
ABS W/L	Lighting history of ABS warning lamp.
VDC/TCS IND	Lighting history of VDC OFF indicator lamp.
SLIP IND	Lighting history of SLIP indicator lamp.
BRAKE W/L	Lighting history of brake warning lamp.
DOOR W/L	Lighting history of door open warning.
TRUNK/GLAS-H	This item is displayed, but cannot be monitored.
OIL W/L	Lighting history of oil pressure warning lamp.
C-ENG W/L	Lighting history of malfunction indicator lamp.
C-ENG2 W/L	This item is displayed, but cannot be monitored.
CRUISE IND	Lighting history of CRUISE indicator.
SET IND	Lighting history of SET indicator.
O/D OFF IND	This item is displayed, but cannot be monitored.
ATC/T-AMT W/L	This item is displayed, but cannot be monitored.
ATF TEMP W/L	This item is displayed, but cannot be monitored.
CVT IND	This item is displayed, but cannot be monitored.
SPORT IND	This item is displayed, but cannot be monitored.
4WD W/L	Lighting history of AWD warning lamp.
FUEL W/L	Lighting history of low fuel level warning.
WASHER W/L	Lighting history of low washer fluid warning.
AIR PRES W/L	Lighting history of low tire pressure warning lamp.
KEY G/Y W/L	Lighting history of Intelligent Key system malfunction.
KEY R W/L	This item is displayed, but cannot be monitored.
KEY KNOB W/L	This item is displayed, but cannot be monitored.
EPS W/L	Lighting history of EPS warning lamp.
DDS W/L *	This item is displayed, but cannot be monitored.
OIL LEV LOW	This item is displayed, but cannot be monitored.
DPF W/L	This item is displayed, but cannot be monitored.

DIAGNOSIS SYSTEM (METER)

< SYSTEM DESCRIPTION >

Display item	Description
TRAILER IND	This item is displayed, but cannot be monitored.
RUN FLAT W/L	This item is displayed, but cannot be monitored.

*: DDS (hill descent control)

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:000000000607520

APPLICATION ITEM

CONSULT-III can display each diagnostic item using the diagnostic test modes shown following.

Diagnosis mode	Function description
ECU Identification	BCM part number is displayed.
Self-Diagnostic Result	Displays the diagnosis results judged by BCM. Refer to BCS-62, "DTC Index" .
Data Monitor	BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Work Support	Changes the setting for each system function.
Configuration	<ul style="list-style-type: none"> Read and save the vehicle specification. Write the vehicle specification when replacing BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from 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	CONSULT-III 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 control	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
<ul style="list-style-type: none"> Auto air conditioning system Manual air conditioning system 	AIR CONDITONER		×	
Intelligent Key system	INTELLIGENT KEY		×	
Combination switch	COMB SW		×	
Body control system	BCM	×		
Immobilizer	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door open	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR	×	×	×
Signal buffer system	SIGNAL BUFFER		×	×
—	FUEL LID*			
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×
Panic alarm system	PANIC ALARM			×

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

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

BUZZER

BUZZER : CONSULT-III Function (BCM - BUZZER)

INFOID:000000006202650

CONSULT-III FUNCTION (BCM – BUZZER)

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

DATA MONITOR

Display item [Unit]	Description
IGN ON SW [On/Off]	Ignition switch (ON) status judged by ignition power supply input.
KEY ON SW [On/Off]	Key switch status.
DOOR SW -DR [On/Off]	Front door switch (driver side) status judged by BCM.
LIGHT SW 1ST [On/Off]	Lighting switch status judged by the lighting switch signal read with combination switch reading function.
BUCKLE SW [On/Off]	Seat belt buckle switch (driver side) status judged by BCM.

ACTIVE TEST

Display item	Description
LIGHT WARN ALM	The light reminder warning chime operation can be checked by operating the relevant function (On/Off).
IGN KEY WARN ALM	The key warning chime operation can be checked by operating the relevant function (On/Off).
SEAT BELT WARN TEST	The seat belt warning chime operation can be checked by operating the relevant function (On/Off).

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

COMBINATION METER : Diagnosis Procedure

INFOID:0000000006607522

1.CHECK FUSE

Check for blown fuses.

Terminal No.	Signal name	Fuses No.
1	Battery power supply	9
2	Ignition signal	3

Is the inspection result normal?

YES >> GO TO 2.

NO >> Be sure to eliminate cause of malfunction before installing new fuse.

2.CHECK POWER SUPPLY CIRCUIT

Check voltage between combination meter harness connector and ground.

Terminals		Ignition switch position	
(+)	(-)		
Combination meter		OFF	ON
Connector		Terminal	
M34	1	Battery voltage	Battery voltage
	2	Approx. 0 V	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.

NO >> Check harness between combination meter and fuse.

3.CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter connector.
3. Check continuity between combination meter harness connector and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M34	3		Existed
	4		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE) : Diagnosis Procedure

INFOID:0000000006607521

1.CHECK FUSES AND FUSIBLE LINK

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

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

WCS

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Signal name	Fuses and fusible link No.
Battery power supply	10
	J
ACC power supply	20
Ignition power supply	1

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

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

Terminals			Ignition switch position		
(+) BCM		(-)			
Connector	Terminal			OFF	ACC
M67	70	Ground	Battery voltage	Battery voltage	Battery voltage
	57				
M65	11		Approx. 0 V	Battery voltage	Battery voltage
	38		Approx. 0 V	Approx. 0 V	Battery voltage

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair the harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and the ground.

BCM		Ground	Continuity
Connector	Terminal		
M67	67		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair the harness or connector.

METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

METER BUZZER CIRCUIT

Description

INFOID:000000006202653

- The buzzer for warning chime system is installed in the combination meter.
- The combination meter sounds the alarm buzzer based on the signals transmitted from various units.

Component Function Check

INFOID:000000006202654

1.CHECK OPERATION OF METER BUZZER

1. Connect the CONSULT-III
2. Perform "LIGHT WARN ALM", "IGN KEY WARN ALM" or "SEAT BELT WARN TEST" in "ACTIVE TEST" of "BCM (BUZZER)".

Does meter buzzer beep?

YES >> INSPECTION END
NO >> GO TO 2.

2.CHECK COMBINATION METER INPUT SIGNAL

Select the "Data Monitor" of "METER/M&A" and check the "BUZZER" monitor value.

"BUZZER"

Under the condition of buzzer input : On

Except above : Off

Is the inspection result normal?

YES >> Replace combination meter. Refer to [MWI-78, "Removal and Installation"](#).
NO >> Replace BCM. Refer to [BCS-66, "Removal and Installation"](#).

Diagnosis Procedure

INFOID:000000006202655

1.CHECK POWER SUPPLY AND GROUND CIRCUIT OF COMBINATION METER

Check power supply and ground circuit of combination meter. Refer to [WCS-21, "COMBINATION METER : Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> INSPECTION END
NO >> Repair or replace malfunctioning parts.

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

WCS

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

Description

INFOID:000000006202656

Transmits a seat belt buckle switch signal to the combination meter.

Component Function Check

INFOID:000000006202657

1.CHECK COMBINATION METER INPUT SIGNAL

1. Connect the CONSULT-III
2. Select the "Data Monitor" of "METER/M&A" and check the "BUCKLE SW" monitor value.

"BUCKLE SW"

When driver seat belt is fastened : Off

When driver seat belt is unfastened : On

>> INSPECTION END

Diagnosis Procedure

INFOID:000000006202658

1.CHECK COMBINATION METER INPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between combination meter harness connector terminal and ground.

Terminal		(-)	Condition	Voltage (Approx.)
(+)				
Combination meter				
Connector	Terminal			
M34	35	Ground	When driver seat belt is fastened	12 V
			When driver seat belt is unfastened	0 V

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE) SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter connector and seat belt buckle switch (driver side) connector.
3. Check continuity between combination meter harness connector terminal and front seat belt buckle switch (driver side) harness connector terminal.

Combination meter		Seat belt buckle switch (driver side)		Continuity
Connector	Terminal	Connector	Terminal	
M34	35	B409	1	Existed

4. Check harness continuity between combination meter harness connector terminal and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M34	35		Not existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE) GROUND CIRCUIT

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Check harness continuity between seat belt buckle switch (driver side) harness connector terminal and ground.

Seat belt buckle switch (driver side)		Ground	Continuity
Connector	Terminal		
B409	2		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

Component Inspection

INFOID:000000006202659

1.CHECK SEAT BELT BUCKLE SWITCH

1. Turn ignition switch OFF.
2. Disconnect the seat belt buckle switch connector.
3. Check continuity between terminals 1 and 2.

Terminals		Condition	Continuity
1	2	When driver seat belt is fastened	Not existed
		When driver seat belt is unfastened	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace the seat belt buckle. Refer to [SB-9. "SEAT BELT BUCKLE : Removal and Installation"](#).

WCS

PARKING BRAKE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

PARKING BRAKE SWITCH SIGNAL CIRCUIT

Description

INFOID:000000006202660

Transmits the parking brake switch signal to the combination meter.

Diagnosis Procedure

INFOID:000000006202661

1. CHECK COMBINATION METER INPUT SIGNAL

1. Turn ignition switch ON.
2. Check voltage between combination meter harness connector terminal and ground.

Terminal			Condition	Voltage (Approx.)
(+)		(-)		
Combination meter				
Connector	Terminal			
M34	26	Ground	Parking brake ON	0 V
			Parking brake OFF	5 V

Is the inspection result normal?

YES >> INSPECTION END
NO >> GO TO 2.

2. CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect combination meter connector and parking brake switch connector.
3. Check continuity between combination meter harness connector terminal and parking brake switch harness connector terminal.

Combination meter		Parking brake switch		Continuity
Connector	Terminal	Connector	Terminal	
M34	26	E103	1	Existed

4. Check continuity between combination meter harness connector terminal and ground.

Combination meter		Ground	Continuity
Connector	Terminal		
M34	26		Not existed

Is the inspection result normal?

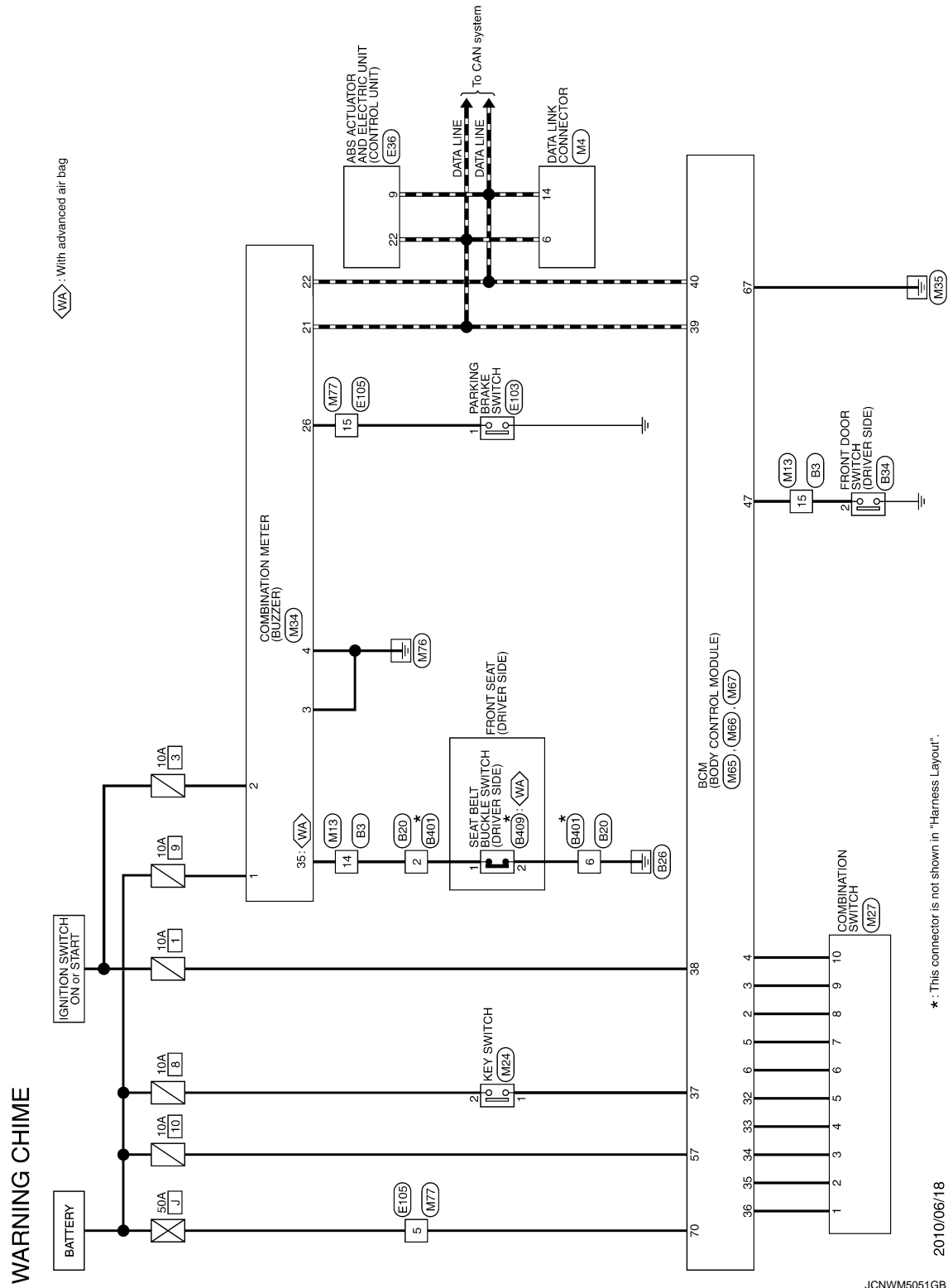
YES >> INSPECTION END
NO >> Repair harness or connector.

Component Inspection

INFOID:000000006202662

Refer to [BRC-45, "Component Inspection"](#) (ABS) or [BRC-143, "Component Inspection"](#) (VDC/TCS/ABS).

INFOID:0000000006202663



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

2010/06/18

JCNWM5051GB

WARNING CHIME SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

WARNING CHIME

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH2MW-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
3	R	-
4	R	-
5	W	-
6	G	-
10	G	-
13	Y	-
14	BR	-
15	P	-
16	W	-
17	LG	-
18	R	-
19	SB	-
20	B	-
21	SHIELD	-
26	P	-
29	L	-
30	O	-
31	GR	-
32	LG	-

Connector No.	B20
Connector Name	WIRE TO WIRE
Connector Type	NS96FW-CS



1	2	3	4	5	6
---	---	---	---	---	---

Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	BR	-

3	O	-
4	W	-
5	B	-
6	B	-

Connector No.	B34
Connector Name	FRONT DOOR SWITCH (DRIVER SIDE)
Connector Type	IA03FW



1	2	3
---	---	---

Terminal No.	Color of Wire	Signal Name [Specification]
2	P	-

Connector No.	B401
Connector Name	WIRE TO WIRE
Connector Type	NS06MW-CS



2	6	5	4	3	1
---	---	---	---	---	---

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W/G	-
3	L/B	-
4	L/R	-
5	B	-
6	GR	-

Connector No.	B409
Connector Name	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
Connector Type	TK03FW



3	2	1
---	---	---

Terminal No.	Color of Wire	Signal Name [Specification]
1	W/G	-
2	GR	-

Connector No.	E30
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	RP28FB-NU4-DH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	MOTOR
2	BR	ACTR
3	B	GND A
4	B	GND M
5	BR	VDC OFF SW
8	GR	ASCD CANCEL SW
9	P	STOP LAMP SW
11	O	CAN L
12	R	RR SENSOR VB
13	B	FR SENSOR SIG
14	L	G CHECK
15	SB	G SW 1
16	BR	RR SENSOR SIG
18	IGN	IGN
20	Y	AWD COMM
21	G	FR SENSOR VB
22	L	CAN H
23	W	FL SENSOR VB
24	GR	DIAG K
26	BR	RL SENSOR VB

27	P	FL SENSOR SIG
28	Y	G GND
29	R	G SW 2
30	G	RL SENSOR SIG

Connector No.	E103
Connector Name	PARKING BRAKE SWITCH
Connector Type	P01FB-A



1

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

JCNWM5052GB

WARNING CHIME SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

WARNING CHIME

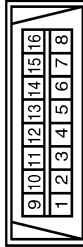
Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	O	-
3	LG	-
4	V	-
5	Y	-
6	G	-
7	R	-
8	GR	-
9	BR	-
10	L	-
11	GR	-
12	P	-
14	L	-
15	V	-
19	R	-
20	P	-
21	L	-
22	L	-
24	LG	-
25	SB	-
30	L	-
31	BR	-
42	Y	-
43	SHIELD	-
51	L	-
52	W	-
53	BR	-
54	Y	-
60	O	-
61	BR	-
62	R	-
63	P	-
69	G	-
70	B	-
71	O	-
72	LG	-
78	L	-
79	V	-

80	Y	-
81	W	-
82	R	-
83	L	-
88	BR	-
89	R	-
90	GR	-
91	R	-
92	O	-
93	BR	-
94	W	-
96	BR	-
97	G	-
99	SB	-
100	L	-

Connector No.	IM4
Connector Name	DATA LINK CONNECTOR
Connector Type	BD16FW



Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-
7	O	-
8	W	-
14	P	-
16	V	-

Connector No.	IM13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	Y	-
4	R	-
5	W	-
6	G	-
10	W	-
13	Y	-
14	O	-
15	W	-
16	V	-
17	LG	-
18	BR	-
19	SB	-
20	B	-
21	SHIELD	-
26	W	-
29	L	-
30	B	-
31	GR	-
32	G	-

Connector No.	IM24
Connector Name	KEY SWITCH
Connector Type	TK02MBF-P



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	-
2	GR	-

Connector No.	IM27
Connector Name	COMBINATION SWITCH
Connector Type	TK16FW



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

JCNWM5053GB

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

WARNING CHIME SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

WARNING CHIME

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40PW-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	BATTERY POWER SUPPLY
2	O	IGNITION SIGNAL
3	B	GROUND
4	B	GROUND
5	BR	A/C AUTO AMP CONNECTION RECOGNITION SIGNAL
7	GR	OVERDRIVE CONTROL SWITCH SIGNAL
8	L	PADDLE SHIFTER SHIFT UP SIGNAL
10	G	PADDLE SHIFTER SHIFT DOWN SIGNAL
13	Y	ILLUMINATION CONTROL SIGNAL
15	LG	AIR BAG SIGNAL
16	O	ENGINE COOLANT TEMPERATURE SIGNAL
19	BR	AMBIENT SENSOR SIGNAL
20	SB	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	CAN-L
24	B	FUEL LEVEL SENSOR SIGNAL GROUND
25	SB	ALTERNATOR SIGNAL
26	V	PARKING BRAKE SWITCH SIGNAL
27	BR	BRAKE FLUID LEVEL SWITCH SIGNAL
28	B	SECURITY SIGNAL
29	W	WASHER LEVEL SWITCH SIGNAL
30	Y	VEHICLE SPEED SIGNAL (2-PULSE)
31	L	VEHICLE SPEED SIGNAL (8-PULSE)
34	G	FUEL LEVEL SENSOR SIGNAL
35	O	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
36	G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
37	P	NON-MANUAL MODE SIGNAL
38	O	MANUAL MODE SHIFT DOWN SIGNAL
39	V	MANUAL MODE SHIFT UP SIGNAL
40	LG	MANUAL MODE SIGNAL

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FW-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name [Specification]
1	V	KEY RING OUTPUT
2	G	INPUT 5
3	Y	INPUT 4
4	W	INPUT 3
5	R	INPUT 2
6	P	INPUT 1
7	L	KEY CYC UNLOCK
8	R	KEY CYC LOCK SW
9	R	BRAKE SW
10	SB	RR DEF SW
11	SB	ACC
12	P	DR SW AS
13	LG	DR SW RR
14	G	AUTO LIGHT SENS INPUT
17	W	SENS POWER SUPPLY
18	O	KEYLESS TUNER SENS GND
19	V	KEYLESS TUNER POWER
20	GR	KEYLESS TUNER SIGNAL
21	G	IMMOBILANT (GLOCK)
23	B	SECURITY IND OUT PUT
25	BR	IMMOBILANT (RX TX)
27	Y	AIRCON SW
28	LG	BLOWER FAN SW
29	W	HAZARD SW
30	G	BACK DOOR OPEN SW
32	BR	OUTPUT 5
33	GR	OUTPUT 4
34	L	OUTPUT 3
35	B	OUTPUT 2
36	V	OUTPUT 1
37	LG	KEY SW
38	G	IGN
39	L	CAN-H
40	P	CAN-L

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FW-FHAG-SA



41	42	43	44	45	46	47	48	49
50	51	52	53	54	55			

Terminal No.	Color of Wire	Signal Name [Specification]
43	V	BACK DOOR SW
44	B	RR WIP AUTO STOP
45	P	CD LOCK SW
46	BR	CD UNLOCK SW
47	W	DR SW DR
48	GR	DR SW RL
49	L	LUGGAGE LAMP OUTPUT
53	V	BACK DOOR OPENER OUTPUT
55	SB	RR WIP MTR OUT

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FB-FHAG-SA



56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			



Terminal No.	Color of Wire	Signal Name [Specification]
56	Y	BATTERY SAVER OUTPUT
57	G	BAT FUSE
59	L	D/L UNLOCK DR
60	BR	FLASHER OUT PUT (LEFT)
61	GR	FLASHER OUT PUT (RIGHT)
63	R	ROOM LAMP OUTPUT
65	V	D/L LOCK ALL
66	G	D/L UNLOCK OTHER
67	B	GND
68	L	POWER WDW OUTPUT (RAP)
69	P	POWER WDW OUTPUT (BAT)
70	Y	BAT FL

JCNWM5054GB

WARNING CHIME SYSTEM

< DTC/CIRCUIT DIAGNOSIS >

WARNING CHIME		
Connector No.	M77	
Connector Name	WIRE TO WIRE	
Connector Type	TH80MW-CS16-TM4	

Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	LG	-
4	Y	-
5	Y	-
6	G	-
7	R	-
8	GR	-
9	BR	-
10	L	-
11	GR	-
12	P	-
14	SB	-
15	V	-
19	R	-
20	P	-
21	O	-
22	L	-
24	BR	-
25	W	-
30	L	-
31	W	-
42	O	-
43	SHIELD	-
51	W	-
52	SB	-
53	L	-
54	Y	-
60	O	-
61	BR	-
62	G	-
63	P	-
69	W	-
70	B	-
71	P	-
72	O	-
78	SB	-
79	V	-

80	L	-
81	W	-
82	B	-
83	LG	-
88	BR	-
89	G	-
90	GR	-
91	R	-
92	L	-
93	P	-
94	W	-
96	BR	-
97	G	-
99	SB	-
100	Y	-

JCNWM5055GB

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

COMBINATION METER

Reference Value

INFOID:000000006607523

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition		Value/Status
SPEED METER [km/h]	Ignition switch ON	While driving	Input value of vehicle speed signal (CAN communication signal) NOTE: 655.35 is displayed when the malfunction signal is received
SPEED OUTPUT [km/h]	Ignition switch ON	While driving	Output value of vehicle speed signal (CAN communication signal) NOTE: 655.35 is displayed when the malfunction signal is received
ODO OUTPUT	Ignition switch ON	—	Output value of odometer signal (CAN communication signal)
TACHO METER [rpm]	Ignition switch ON	While driving	Input value of engine speed signal (CAN communication signal) NOTE: 8191.875 is displayed when the malfunction signal is received
FUEL METER [lit]	Ignition switch ON	—	Input value of fuel level sensor signal
W TEMP METER [°C]	Ignition switch ON	—	Input value of engine coolant temperature signal (CAN communication signal) NOTE: 215 is displayed when the malfunction signal is input
ABS W/L	Ignition switch ON	ABS warning lamp ON	On
		ABS warning lamp OFF	Off
VDC/TCS IND	Ignition switch ON	VDC OFF indicator lamp ON	On
		VDC OFF indicator lamp OFF	Off
SLIP IND	Ignition switch ON	SLIP indicator lamp ON	On
		SLIP indicator lamp OFF	Off
BRAKE W/L	Ignition switch ON	Brake warning lamp ON	On
		Brake warning lamp OFF	Off
DOOR W/L	Ignition switch ON	During door open warning indication	On
		Other than the above	Off
TRUNK/GLAS-H	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
HI-BEAM IND	Ignition switch ON	High beam indicator lamp ON	On
		High beam indicator lamp OFF	Off
TURN IND	Ignition switch ON	Turn signal indicator lamp ON	On
		Turn signal indicator lamp OFF	Off
FR FOG IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status	
RR FOG IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	A
LIGHT IND	Ignition switch ON	Light indicator lamp ON	On	B
		Light indicator lamp OFF	Off	
OIL W/L	Ignition switch ON	Oil pressure warning lamp ON	On	C
		Oil pressure warning lamp OFF	Off	
MIL	Ignition switch ON	Malfunction indicator (Yellow) ON	On	D
		Malfunction indicator (Yellow) OFF	Off	
GLOW IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	E
C-ENG2 W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	F
CRUISE IND	Ignition switch ON	Cruise indicator ON	On	G
		Cruise indicator OFF	Off	
SET IND	Ignition switch ON	SET indicator ON	On	H
		SET indicator OFF	Off	
O/D OFF IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	I
ATC/T-AMT W/L	Ignition switch ON	A/T CHECK indicator lamp ON	On	J
		A/T CHECK indicator lamp OFF	Off	
ATF TEMP W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	K
CVT IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	L
SPORT IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	M
4WD W/L	Ignition switch ON	AWD warning lamp ON	On	WCS
		AWD warning lamp OFF	Off	
4WD LOCK IND	Ignition switch ON	AWD LOCK indicator lamp ON	On	O
		AWD LOCK indicator lamp OFF	Off	
FUEL W/L	Ignition switch ON	During low fuel warning indication	On	P
		Other than the above	Off	
WASHER W/L	Ignition switch ON	During low washer fluid warning indication	On	
		Other than the above	Off	
AIR PRES W/L	Ignition switch ON	Low tire pressure warning lamp ON	On	
		Other than the above	Off	
KEY G/Y W/L	Ignition switch ON	Intelligent Key system malfunction ON	On	
		Intelligent Key system malfunction OFF	Off	
KEY R W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition		Value/Status
KEY KNOB W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
EPS W/L	Ignition switch ON	EPS warning lamp ON	On
		EPS warning lamp OFF	Off
DDS W/L *	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
DPF W/L	Engine running	NOTE: This item is displayed, but cannot be monitored.	Off
TRAILER IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
SHIFT IND	Ignition switch ON	During the indication of "P" by shift position indicator	P
		During the indication of "R" by shift position indicator	R
		During the indication of "N" by shift position indicator	N
		During the indication of "D" by shift position indicator	D
		During the indication of "L" by shift position indicator	L
		During the indication of "M1" by shift position indicator	M1
		During the indication of "M2" by shift position indicator	M2
		During the indication of "M3" by shift position indicator	M3
		During the indication of "M4" by shift position indicator	M4
		During the indication of "M5" by shift position indicator	M5
		During the indication of "M6" by shift position indicator	M6
O/D OFF SW	Ignition switch ON	O/D OFF indicator lamp ON	On
		O/D OFF indicator lamp OFF	Off
M RANGE SW	Ignition switch ON	Selector lever in manual mode position	On
		Other than the above	Off
NM RANGE SW	Ignition switch ON	Selector lever in manual mode position	Off
		Other than the above	On
AT SFT UP SW	Ignition switch ON	Selector lever in + position	On
		Other than the above	Off
AT SFT DWN SW	Ignition switch ON	Selector lever in – position	On
		Other than the above	Off
ST SFT UP SW	Ignition switch ON	Paddle shifter in + position	On
		Other than the above	Off
ST SFT DOWN SW	Ignition switch ON	Paddle shifter in – position	On
		Other than the above	Off

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

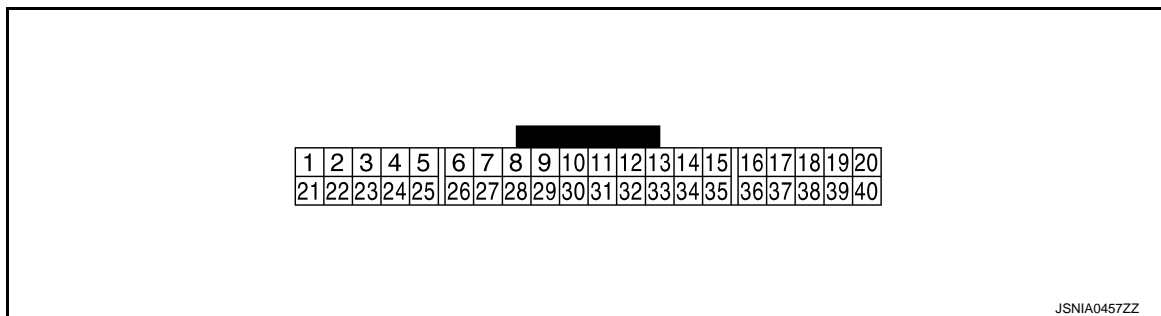
Monitor Item	Condition		Value/Status
A/C LOW TEMP	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
COMP F/B SIG	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
PKB SW	Ignition switch ON	Parking brake switch ON	On
		Parking brake switch OFF	Off
BUCKLE SW	Ignition switch ON	Driver seat belt not fastened	On
		Driver seat belt fastened	Off
BRAKE OIL SW	Ignition switch ON	Brake fluid level switch ON	On
		Brake fluid level switch OFF	Off
A/C AMP CONN	Ignition switch ON	Other than the following	On
		Receives A/C auto amp. connection recognition signal	Off
DISTANCE [km]	Ignition switch ON	—	Distance to empty calculated by combination meter
OUTSIDE TEMP [°C or °F]	Ignition switch ON	—	Input value of ambient sensor signal (CAN communication signal) NOTE: This may not match the indicated value on the information display.
FUEL LOW SIG	Ignition switch ON	Low fuel warning displayed	On
		Low fuel warning not displayed	Off
BUZZER	Ignition switch ON	Buzzer ON	On
		Buzzer OFF	Off
ASCD SPD BLNK	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
ASCD STATUS	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
ASCD REQ SPD [km/h or Off]	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off

*: DDS (hill descent control)

NOTE:

Some items are not available according to vehicle specification.

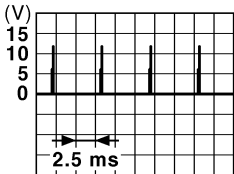
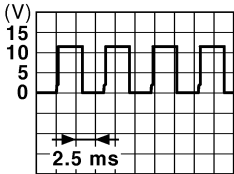
TERMINAL LAYOUT



PHYSICAL VALUES

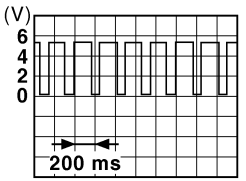
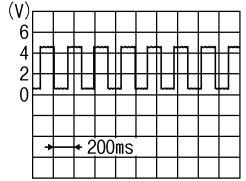
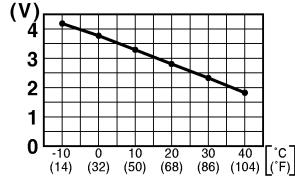
COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (LG)	Ground	Battery power supply	Input	Ignition switch OFF	—	Battery voltage
2 (O)	Ground	Ignition signal	Input	Ignition switch ON	—	Battery voltage
3 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
4 (B)	Ground	Ground	—	Ignition switch ON	—	0 V
5 (BR)	Ground	A/C auto amp. connection recognition signal	Input	Ignition switch ON	When auto amp. is con- nected	5 V
					Other than the above	0 V
7 (GR)	Ground	Overdrive control switch signal	Input	Ignition switch ON	Overdrive control switch pressed	0 V
					Overdrive control switch not pressed	12 V
9 (L)	Ground	Paddle shifter shift up sig- nal	Input	Ignition switch ON	Paddle shifter shift up oper- ation	0 V
					Other than the above	12 V
10 (G)	Ground	Paddle shifter shift down signal	Input	Ignition switch ON	Paddle shifter shift down operation	0 V
					Other than the above	12 V
13 (Y)	Ground	Illumination control signal	Output	Ignition switch ON	<ul style="list-style-type: none"> Lighting switch 1ST posi- tion When meter illumination is maximum 	 JPNIA1687GB
					<ul style="list-style-type: none"> Lighting switch 1ST posi- tion When meter illumination is step 11 	 JPNIA1686GB
					<ul style="list-style-type: none"> Lighting switch 1ST posi- tion When meter illumination is minimum 	12 V
15 (LG)	Ground	Air bag signal	Input	Ignition switch ON	Air bag warning lamp ON	4 V
					Air bag warning lamp OFF	0 V

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	—	Signal name	Input/ Output			
16 (O)	Ground	Engine coolant temperature signal	Output	Ignition switch ON	Engine idling [Approximately 20°C (68°F)]	 PKID0590E
				Ignition switch ON	Engine idling [Approximately 80°C (176°F)]	 SKIB3651J
19 (BR)	Ground	Ambient sensor signal	Input	Ignition switch ON	—	 JSNIA0014GB
20 (SB)	Ground	Ambient sensor ground	—	Ignition switch ON	—	0 V
21 (L)	—	CAN-H	—	—	—	—
22 (P)	—	CAN-L	—	—	—	—
24 (B)	Ground	Fuel level sensor signal ground	—	Ignition switch ON	—	0 V
25 (SB)	Ground	Alternator signal	Input	Ignition switch ON	Charge warning lamp ON	0 V
					Charge warning lamp OFF	12 V
26 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake ON	0 V
					Parking brake OFF	5 V
27 (BR)	Ground	Brake fluid level switch signal	Input	Ignition switch ON	Brake fluid level is normal	5 V
					Brake fluid level is less than low level	0 V
28 (B)	Ground	Security signal	Input	Ignition switch OFF	Security warning lamp ON	0 V
					Security warning lamp OFF	12 V
29 (W)	Ground	Washer level switch signal	Input	Ignition switch OFF	Washer level switch ON	0 V
					Washer level switch OFF	12 V

A

B

C

D

E

F

G

H

I

J

K

L

M

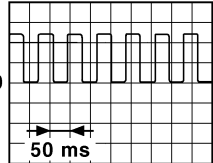
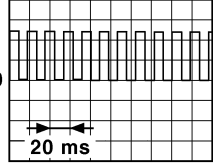
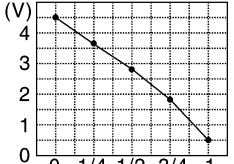
WCS

O

P

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

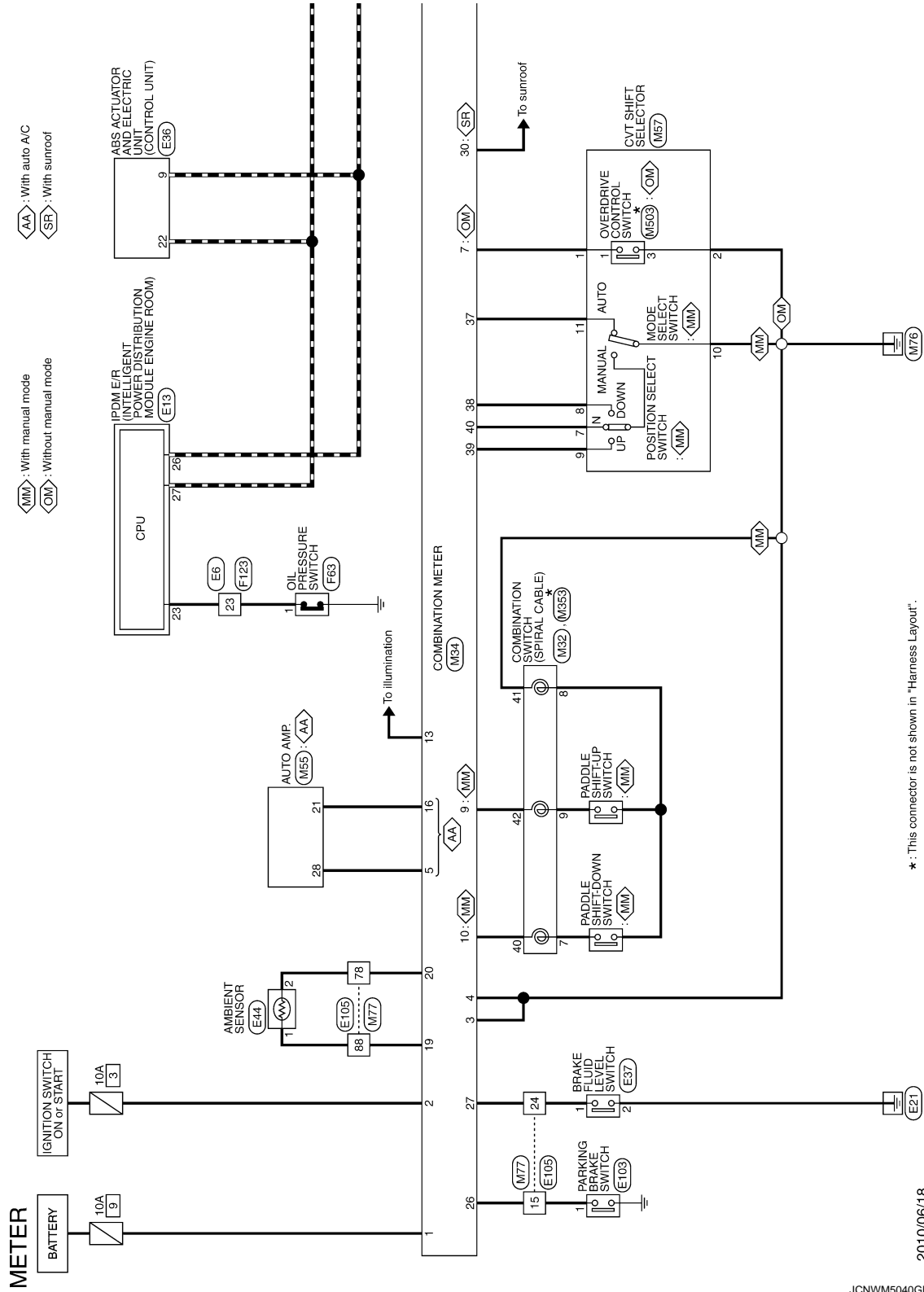
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	–	Signal name	Input/ Output			
30 (Y)	Ground	Vehicle speed signal (2-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	NOTE: The maximum voltage varies de- pending on the specification (destination unit).  JSNIA0015GB
31 (L)	Ground	Vehicle speed signal (8 pulse)	Output	Ignition switch ON	Vehicle speed is approxi- mately 40 km/h (25 MPH)	NOTE: The maximum voltage varies de- pending on the specification (destination unit).  JSNIA0012GB
34 (G)	Ground	Fuel level sensor signal	Input	Ignition switch ON	—	 JSNIA3463ZZ
35 (O)	Ground	Seat belt buckle switch sig- nal (driver side)	Input	Ignition switch ON	When seat belt is fastened	12 V
					When seat belt is not fas- tened	0 V
36 (G)	Ground	Seat belt buckle switch sig- nal (passenger side)	Input	Ignition switch ON	<ul style="list-style-type: none"> When getting in the pas- senger seat When passenger seat belt is fastened 	12 V
					<ul style="list-style-type: none"> When getting in the pas- senger seat When passenger seat belt is not fastened 	0 V
37 (P)	Ground	Non-manual mode signal	Input	Ignition switch ON	Manual mode	12 V
					Other than the above	0 V
38 (O)	Ground	Manual mode shift down signal	Input	Ignition switch ON	Selector lever (–) position	0 V
					Other than the above	12 V
39 (V)	Ground	Manual mode shift up sig- nal	Input	Ignition switch ON	Selector lever (+) position	0 V
					Other than the above	12 V
40 (LG)	Ground	Manual mode signal	Input	Ignition switch ON	Manual mode	0 V
					Other than the above	12 V

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram

INFOID:000000006607526



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

2010/06/18

JCNWM5040GB

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

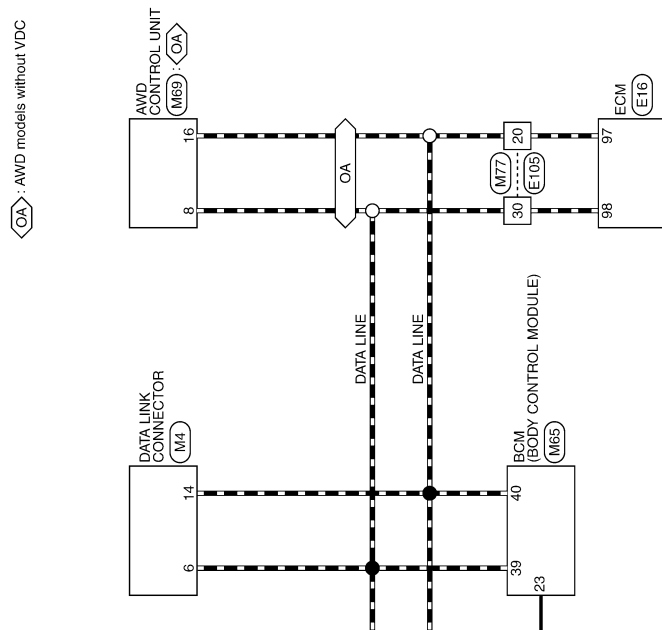
WCS

< ECU DIAGNOSIS INFORMATION >



COMBINATION METER

< ECU DIAGNOSIS INFORMATION >



JCNWM5042GB

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

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

METER

Connector No.	B1
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TIM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	BR	-
3	G	-
4	L	-
6	BR	-
7	Y	-
8	LG	-
9	BR	-
10	BR	-
21	R	-
35	SHIELD	-
36	R	-
37	LG	-
38	SHIELD	-
39	O	-
40	G	-
41	R	-
45	L	-
46	W	-
47	SHIELD	-
48	V	-
49	W	-
50	SHIELD	-
52	L	-
53	G	- [With display audio] - [With base audio or EOSE system]
54	O	-
55	Y	-
56	LG	-
57	SB	-
58	W	-
59	B	-
60	SB	-
62	GR	-
63	W	-
65	SHIELD	-
66	BR	-
67	LG	-

68	SB	-
69	SHIELD	-
70	W	-
71	W	-
72	Y	-
77	L	-
80	R	-
81	W	-
82	GR	-
86	Y	-
87	P	-
91	GR	-
92	R	-
93	W	-
94	G	-
95	O	-
96	Y	-
97	SB	-
98	Y	-
99	V	-
100	L	-

Connector No.	B3
Connector Name	WIRE TO WIRE
Connector Type	TH32MW-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

Terminal No.	Color of Wire	Signal Name [Specification]
1	L	-
2	G	-
4	R	-
5	W	-
6	G	-
10	G	-
13	Y	-
14	BR	-
15	P	-
16	W	-
17	LG	-
18	R	-
19	SB	-
20	B	-
21	SHIELD	-

26	P	-
29	L	-
30	O	-
31	GR	-
32	LG	-

Connector No.	B20
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS



1	2
3	4
5	6

Terminal No.	Color of Wire	Signal Name [Specification]
1	P	-
2	BR	-
3	O	-
4	W	-
5	B	-
6	B	-

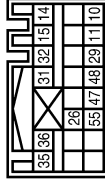
Connector No.	B21
Connector Name	WIRE TO WIRE
Connector Type	NS06FW-CS



1	2
3	4
5	6

Terminal No.	Color of Wire	Signal Name [Specification]
2	LG	-
3	Y	-
4	SB	-
5	B	-
6	B	-

Connector No.	B24
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	NH22FY-IV-EX



Terminal No.	Color of Wire	Signal Name [Specification]
10	O	ELR RH+
11	V	ELR RH+
14	P	ELR 2 RH+
15	GR	ELR 2 RH+
26	V	ODS INPUT
29	LG	BUCKLE SW RH
31	W	SIDE INF RH+
32	L	SIDE INF RH+
35	R	INF CURTAIN RH RH+
36	W	INF CURTAIN RH RH+
47	BR	SIDE SENS RH+
48	Y	SIDE SENS RH+
55	SHIELD	GND

Connector No.	B40
Connector Name	FUEL LEVEL SENSOR UNIT AND FUEL PUMP
Connector Type	EG0FGY-RS



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

JCNWM5043GB

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

METER

Connector No.	B301
Connector Name	FUEL LEVEL SENSOR UNIT AND FUEL PUMP
Connector Type	-



Terminal No.	Color of Wire	Signal Name [Specification]
6	-	-
7	-	-

Connector No.	B401
Connector Name	WIRE TO WIRE
Connector Type	NS08MW-CS



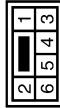
Terminal No.	Color of Wire	Signal Name [Specification]
1	R	-
2	W/G	-
3	L/B	-
4	L/R	-
5	B	-
6	GR	-

Connector No.	B409
Connector Name	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)
Connector Type	TK03FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	W/G	-
2	GR	-

Connector No.	B410
Connector Name	WIRE TO WIRE
Connector Type	NS00MW-CS



Terminal No.	Color of Wire	Signal Name [Specification]
2	W/G	-
3	L/B	-
4	L/R	-
5	L/Y	-
6	GR	-

Connector No.	B416
Connector Name	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)
Connector Type	TK03FW



Terminal No.	Color of Wire	Signal Name [Specification]
1	W/G	-
2	GR	-

Connector No.	E6
Connector Name	WIRE TO WIRE
Connector Type	TK24MW-1V



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	SB	-
3	G	-
4	LG	-
5	L	-
8	BR	-
10	LG	-
11	Y	-
12	P	-
13	L	-
15	LG	-
16	R	-
18	L	-
19	Y	-
20	W	-
21	GR	-
23	W	-
24	L	-

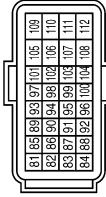
Connector No.	E13
Connector Name	ENGINE INTELLIGENT POWER DISTRIBUTION MODULE (ENGINE ROOM)
Connector Type	TH12FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
23	W	-
24	Y	-
25	B	-

26	P	-
27	L	-
31	LG	-
32	V	-
33	GR	-
34	W	-

Connector No.	E16
Connector Name	ECM
Connector Type	RH24FB-R28-L-LH



Terminal No.	Color of Wire	Signal Name [Specification]
81	SB	APS 1
82	G	APS 2
83	R	AVCC 1-APS 1
84	Y	GND-APS 1
85	R	ASCD SW
86	BR	FTPRES
87	V	AVCC 2-APS 2
88	L	KLINE
91	Y	AVCC 2-FTPRES
92	W	GND-ASCD SW
93	O	IGN SW
95	O	TF
96	P	GND-FTPRES
97	P	VEHCAN-L
98	L	VEHCAN-H
100	W	GND-APS 2
102	LG	NEUT-H
104	B	GND-TF
105	R	YBR
106	Y	BRAKE
107	B	GND
108	B	GND
109	W	CDCV
110	GR	BNC SW
111	B	GND
112	B	GND

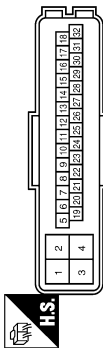
JCNWM5044GB

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

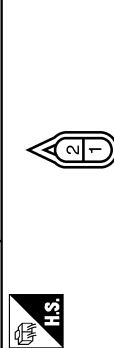
METER

Connector No.	E36
Connector Name	ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)
Connector Type	RH28FB-NU4-DH



Terminal No.	Color of Wire	Signal Name [Specification]
1	Y	MOTOR
2	BR	ACTR
3	B	GND A
4	B	GND M
5	BR	VDC OFF SW
6	GR	ASCD CANCEL SW
8	SB	STOP LAMP SW
9	P	CAN L
11	O	RR SENSOR VB
12	R	FR SENSOR SIG
13	B	G CHECK
14	L	G SW 1
15	SB	RR SENSOR SIG
16	BR	TGN
20	Y	AWD COMM
21	G	FR SENSOR VB
22	L	CAN H
23	W	FL SENSOR VB
24	GR	DIAG K
26	BR	RL SENSOR VB
27	P	FL SENSOR SIG
28	Y	G GND
29	R	G SW 2
30	G	RL SENSOR SIG

Connector No.	E37
Connector Name	BRAKE FLUID LEVEL SWITCH
Connector Type	YY02FGY



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

Connector No.	E44
Connector Name	AMBIENT SENSOR
Connector Type	RS02FB



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	L	-

Connector No.	E52
Connector Name	WASHER LEVEL SWITCH
Connector Type	Z02FBR



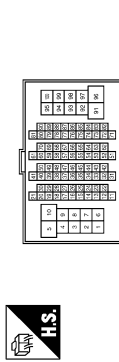
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	B	-

Connector No.	E103
Connector Name	PARKING BRAKE SWITCH
Connector Type	P01FB-A



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	-

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Type	TH8DFW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	O	-
3	LG	-
4	V	-
5	Y	-
6	G	-
7	R	-
8	GR	-
9	BR	-
10	L	-
11	GR	-
12	P	-
14	L	-
15	V	-
19	R	-
20	P	-
21	L	-
22	L	-
24	LG	-
25	SB	-
30	L	-

31	BR	-
42	Y	-
43	SHIELD	-
51	L	-
52	W	-
53	BR	-
54	Y	-
60	O	-
61	BR	-
62	R	-
63	P	-
69	G	-
70	B	-
71	O	-
72	LG	-
78	L	-
79	V	-
80	Y	-
81	W	-
82	R	-
83	L	-
88	BR	-
89	R	-
90	GR	-
91	R	-
92	O	-
93	BR	-
94	W	-
96	BR	-
97	G	-
99	SB	-
100	L	-

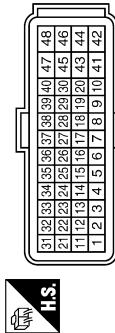
JCNWM5045GB

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

METER

Connector No.	F25
Connector Name	TCM (TRANSMISSION CONTROL MODULE)
Connector Type	RH40FB-R28-L-RH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	R RANGE SW
2	Y	N RANGE SW
3	W	D RANGE SW
4	V	L RANGE SW
5	B	GND
7	Y	SENSOR GND
8	L	CLOCK (SEL 2)
9	G	CHIP SELECT (SEL 1)
10	W	DATA I/O (SEL 3)
11	L	P RANGE SW
13	SB	CVT FLUID TEMP SENSOR
14	BR	PRIMARY PRESSURE SENSOR
15	P	SECONDARY PRESSURE SENSOR
25	Y	SENSOR GND
26	LG	SENSOR POWER SOURCE (5V)
27	GR	STEP MOTOR D
28	V	STEP MOTOR C
29	O	STEP MOTOR B
30	R	STEP MOTOR A
31	P	CAN-L
32	L	CAN-H
33	O	PRIMARY SPEED SENSOR
34	R	SECONDARY SPEED SENSOR
37	L	L/U SELECT SOLENOID VALVE
38	G	TORQUE CONVERTER CLUTCH SOLENOID VALVE
39	W	SECONDARY PRESSURE SOLENOID VALVE
40	Y	LINE PRESSURE SOLENOID VALVE
42	B	GND
46	LG	V/GN
47	O	BATT
48	Y	V/GN

Connector No.	F42
Connector Name	ALTERNATOR
Connector Type	-



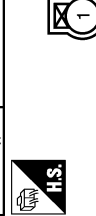
Terminal No.	Color of Wire	Signal Name [Specification]
2	-	-

Connector No.	F60
Connector Name	ALTERNATOR
Connector Type	HS03FB



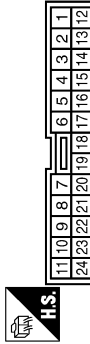
Terminal No.	Color of Wire	Signal Name [Specification]
3	L	-
4	P	-

Connector No.	F63
Connector Name	OIL PRESSURE SWITCH
Connector Type	FEUFGY-RS-AR



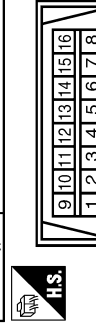
Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-

Connector No.	F123
Connector Name	WIRE TO WIRE
Connector Type	TK24FW-1V



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	SB	-
3	G	-
4	Y	-
5	L	-
8	BR	-
10	O	-
11	R	-
12	P	-
13	L	-
15	LG	-
16	R	-
18	L	-
19	Y	-
20	W	-
21	GR	-
23	W	-
24	L	-

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



Terminal No.	Color of Wire	Signal Name [Specification]
4	B	-
5	B	-
6	L	-

JCNWM5046GB

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

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

METER

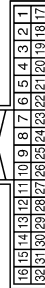
Connector No.	M11
Connector Name	WIRE TO WIRE
Connector Type	TH80FW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	W	-
2	BR	-
3	G	-
4	LG	-
6	P	-
7	Y	-
8	LG	-
9	P	-
10	Y	-
21	R	-
35	SHIELD	-
36	P	-
37	LG	-
38	SHIELD	-
39	O	-
40	G	-
41	R	-
45	BR	-
46	L	-
47	SHIELD	-
48	V	-
49	W	-
50	SHIELD	-
52	O	-
53	L	-
54	V	-
55	Y	-
56	LG	-
57	SB	-
58	W	-
59	B	-
60	SB	-
62	GR	-
63	BR	-
65	SHIELD	-
66	BR	-
67	LG	-
68	SB	-

69	SHIELD	-
70	LG	-
71	O	-
72	BR	-
77	L	-
80	R	-
81	W	-
82	GR	-
86	Y	-
87	P	-
91	L	-
92	B	-
93	GR	-
94	G	-
95	O	-
96	P	-
97	SB	-
98	GR	-
99	R	-
100	L	-

Connector No.	M13
Connector Name	WIRE TO WIRE
Connector Type	TH32FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	G	-
2	Y	-
4	R	-
5	W	-
6	G	-
10	W	-
13	Y	-
14	O	-
15	W	-
16	V	-
17	LG	-
18	BR	-
19	SB	-
20	B	-
21	SHIELD	-
26	W	-

29	L	-
30	B	-
31	GR	-
32	G	-

Connector No.	M32
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK06FY-EX-IV



Terminal No.	Color of Wire	Signal Name [Specification]
23	Y/R	-
28	Y/G	-
30	Y	-
40	G	-
41	B	-
42	L	-

Connector No.	M34
Connector Name	COMBINATION METER
Connector Type	TH40FW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	BATTERY POWER SUPPLY
2	O	IGNITION SIGNAL
3	B	GROUND
4	B	GROUND
5	BR	A/C AUTO AMP. CONNECTION RECOGNITION SIGNAL
7	GR	OVERDRIVE CONTROL SWITCH SIGNAL
9	L	PADDLE SHIFTER SHIFT UP SIGNAL
10	G	PADDLE SHIFTER SHIFT DOWN SIGNAL
13	Y	ILLUMINATION CONTROL SIGNAL
15	LG	AIR BAG SIGNAL

16	O	ENGINE COOLANT TEMPERATURE SIGNAL
19	BR	AMBIENT SENSOR SIGNAL
20	SB	AMBIENT SENSOR GROUND
21	L	CAN-H
22	P	CAN-L
24	B	FUEL LEVEL SENSOR SIGNAL GROUND
25	SB	ALTERNATOR SIGNAL
26	V	PARKING BRAKE SWITCH SIGNAL
27	BR	BRAKE FLUID LEVEL SWITCH SIGNAL
28	B	SECURITY SIGNAL
29	W	WASHER LEVEL SWITCH SIGNAL
30	Y	VEHICLE SPEED SIGNAL (2-PULSE)
31	L	VEHICLE SPEED SIGNAL (8-PULSE)
34	G	FUEL LEVEL SENSOR SIGNAL
35	O	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)
36	G	SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE)
37	P	NON-MANUAL MODE SIGNAL
38	O	MANUAL MODE SHIFT DOWN SIGNAL
39	V	MANUAL MODE SHIFT UP SIGNAL
40	LG	MANUAL MODE SIGNAL

Connector No.	M37
Connector Name	EPS CONTROL UNIT
Connector Type	MAA08FB



Terminal No.	Color of Wire	Signal Name [Specification]
3	W	IGN
5	L	CAN-H
7	P	CAN-L

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

METER

Connector No.	M40
Connector Name	INTELLIGENT KEY UNIT
Connector Type	TH40PW-NH



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	STRG LOCK UNIT 5V O/P
2	L	CAN-H
3	P	CAN-L
4	O	Buzzer
5	Y	REQUEST SW (DR)
6	W	IGN SW
7	LG	KEY SW
10	SB	P RANGE INPUT SW
11	R	BATT+
12	B	GND
13	Y	REAR SEAT (+)
14	BR	REAR SEAT (-)
15	R	CONSOLE (+)
16	G	CONSOLE (-)
17	W	BACK DOOR (+)
18	R	BACK DOOR (-)
19	BR	DRIVER DOOR (+)
20	O	DRIVER DOOR (-)
25	BR	REQUEST SW (AS)
26	B	STOP LAMP SW
27	G	KNOB SW
28	W	DR LOCK STATE SW
29	SB	REQUEST SW (BD)
31	L	STRG LOCK UNIT GND
32	P	STRG LOCK UNIT SIG
37	P	PASSENGER DOOR (+)
38	P	PASSENGER DOOR (-)
40	V	AS ANTI HJACK

Connector No.	M65
Connector Name	AUTO AMP.
Connector Type	TK18FGY



21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name [Specification]
21	O	WATER TEMP
22	SB	RR/DEF SW
23	GR	RR/DEF F/B
24	R	SENS GND
25	O	INT SENS
28	BR	OUTSIDE TEMP POWER

Connector No.	M67
Connector Name	CVT SHIFT SELECTOR
Connector Type	TH18FW-NH



8	7	6	5	4	3	2	1	16	15	14	13	12	11	10	9
---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	---

Terminal No.	Color of Wire	Signal Name [Specification]
1	GR	-
2	B	-
3	G	- [With Intelligent Key]
3	LG	- [Without Intelligent Key]
4	B	-
5	R	-
6	Y	-
7	LG	-
8	O	-
9	V	-
10	B	-
11	P	-
16	SB	-

Connector No.	M59
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK28FY-EX



8	9	7	6	2	5	4	3	19	18	23	24	22	18	60	59	25	1
---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	---

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	IGN
2	B	GND
3	Y	INFLATOR DR 1+
4	Y/R	INFLATOR DR 1- & DR 2-
5	Y/G	INFLATOR DR 2+
6	Y/G	INFLATOR AS 1+
7	Y/B	INFLATOR AS 1-
8	Y	INFLATOR AS 2+
9	Y/R	INFLATOR AS 2-
18	W	ECZS+
19	O	ECZS-
22	SHIELD	GND
23	LG	A/B W/L
24	G	SEATBELT W/L
25	GR	A/B CUTOFF TELLTALE
59	L	CAN HI
60	P	CAN LO

Connector No.	M60
Connector Name	AIR BAG DIAGNOSIS SENSOR UNIT
Connector Type	TK28FY-EX-SC



18	17	5	6	11	12	4	3	23	24	2	16	1	19	15	20	22	21
----	----	---	---	----	----	---	---	----	----	---	----	---	----	----	----	----	----

Terminal No.	Color of Wire	Signal Name [Specification]
1	R	IGN
2	B	GND
3	Y	INFLATOR DR+
4	Y/R	INFLATOR DR-
5	Y/G	INFLATOR AS+

6	Y/B	INFLATOR AS-
11	W	ECZS+
12	O	ECZS-
13	LG	A/B W/L
16	SHIELD	GND
22	Y	K-LINE

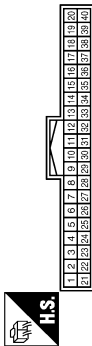
JCNWM5048GB

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

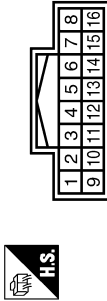
METER

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40PW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	V	KEY RING OUTPUT
2	G	INPUT 5
3	Y	INPUT 4
4	W	INPUT 3
5	R	INPUT 2
6	P	INPUT 1
7	L	KEY CYC UNLOCK
8	R	KEY CTL LOCK SW
9	R	BRAKE SW
10	SB	RR DEF SW
11	SB	ACC
12	P	DR SW AS
13	LG	DR SW RR
14	G	AUTO LIGHT SENS INPUT
17	W	SENS POWER SUPPLY
18	O	KEYLESS TUNER SENS GND
19	V	KEYLESS TUNER POWER
20	GR	KEYLESS TUNER SIGNAL
21	G	IMMOBI ANT (GLOCK)
23	B	SECURITY IND OUT PUT
25	BR	IMMOBI ANT (RX TX)
27	Y	AIRCON SW
28	LG	BLOWER FAN SW
29	W	HAZARD SW
30	G	BACK DOOR OPEN SW
32	BR	OUTPUT 5
33	GR	OUTPUT 4
34	L	OUTPUT 3
35	B	OUTPUT 2
36	V	OUTPUT 1
37	LG	KEY SW
38	G	IGN
39	L	CAN-H
40	P	CAN-L

Connector No.	M69
Connector Name	AWD CONTROL UNIT
Connector Type	TH1EFW-NH



Terminal No.	Color of Wire	Signal Name [Specification]
1	LG	AWD SOL+
2	G	AWD SOL-
5	O	LOCK SW
6	L	LIN
7	GR	IGN
8	L	CAN-H
9	W	SOL BATT
10	B	GND
11	B	GND
14	O	LOCK SW
16	P	CAN-L

Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Type	TH80MW-CS16-TM4



Terminal No.	Color of Wire	Signal Name [Specification]
1	BR	-
2	O	-
3	LG	-
4	Y	-
5	Y	-
6	G	-
7	R	-
8	GR	-
9	BR	-
10	L	-
11	GR	-

Connector No.	M653
Connector Name	COMBINATION SWITCH (SPIRAL CABLE)
Connector Type	TK03FW-X



Terminal No.	Color of Wire	Signal Name [Specification]
7	-	-
8	-	-
9	-	-

Connector No.	M603
Connector Name	OVERDRIVE CONTROL SWITCH
Connector Type	HRP-03-S



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

12	P	-
14	SB	-
15	W	-
19	R	-
20	P	-
21	O	-
22	L	-
24	BR	-
25	W	-
30	L	-
31	W	-
42	O	-
43	SHIELD	-
51	W	-
52	SB	-
53	L	-
54	Y	-
60	O	-
61	BR	-
62	G	-
63	P	-
69	W	-
70	B	-
71	P	-
72	O	-
78	SB	-
79	V	-
80	L	-
81	W	-
82	B	-
83	LG	-
88	BR	-
89	G	-
90	GR	-
91	R	-
92	L	-
93	P	-
94	W	-
96	BR	-
97	G	-
99	SB	-
100	Y	-

JCNWM5049GB

INFOID:000000006607524

Fail-safe

The combination meter activates the fail-safe control if the CAN communication lines between each unit are malfunctioning.

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Function			Specifications	
Speedometer			Reset to zero by suspending communication.	A
Tachometer				B
Engine coolant temperature gauge				C
Meter illumination control			When suspending communication, changes to nighttime mode.	
Buzzer			Turned off by suspending communication.	
Information display	Trip computer	Current fuel consumption	<ul style="list-style-type: none">When reception time of an abnormal signal is 2 seconds or less, the last received datum is used for calculation to indicate the result.When reception time of an abnormal signal is more than 2 seconds, the last result calculated during normal condition is indicated.	D
		Average fuel consumption		E
		Average vehicle speed		
		Range (Distance to empty)		
		Driving distance	An indicated value is maintained at communications blackout.	
	Interrupt indication	Door door open warning	The indicator turns OFF by suspending communication.	F
		Low tire pressure warning		G
		Fuel filler cap warning		
	Odo/trip meter		An indicated value is maintained at communications blackout.	
	Shift position indicator		The indicator turns OFF by suspending communication.	H
Warning lamp/indicator lamp	ABS warning lamp		Turned on by suspending communication.	I
	Brake warning lamp			J
	EPS warning lamp			
	SLIP indicator lamp			
	AWD warning lamp			
	Malfunction indicator lamp			
	VDC OFF indicator lamp		Turned off by suspending communication.	K
	SPORT indicator lamp			L
	AWD LOCK indicator lamp			
	Oil pressure warning lamp			
	High beam indicator lamp			
	Turn signal indicator lamp			M
	Tail lamp indicator lamp			
	A/T CHECK indicator lamp			
	O/D OFF indicator lamp			
	Low tire pressure warning lamp		After blinking for 1 minute, the lamp remains ON.	WCS

DTC Index

INFOID:0000000006607525

Display contents of CONSULT-III	Time	Diagnostic item is detected when ...	Refer to	
CAN COMM CIRCUIT [U1000]	CRNT, 1 - 39	Combination meter is not transmitting or receiving CAN communication signal for 2 seconds or more.	MWI-58	P
CONTROL UNIT (CAN) [U1010]	CRNT, 1 - 39	Detecting error during the initial diagnosis of CAN controller of combination meter.	MWI-59	
VEHICLE SPEED [B2205]	CRNT, 1 - 39	The abnormal vehicle speed signal is input from ABS actuator and electric unit (control unit) for 2 seconds or more.	MWI-60	

COMBINATION METER

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT-III	Time	Diagnostic item is detected when ...	Refer to
ENGINE SPEED [B2267]	CRNT, 1 - 39	ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-61
WATER TEMP [B2268]	CRNT, 1 - 39	ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-62

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:0000000006607527

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
IGN ON SW	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
KEY ON SW	Mechanical key is removed from key cylinder	Off
	Mechanical key is inserted to key cylinder	On
CDL LOCK SW	Door lock/unlock switch does not operate	Off
	Press door lock/unlock switch to the lock side	On
CDL UNLOCK SW	Door lock/unlock switch does not operate	Off
	Press door lock/unlock switch to the unlock side	On
DOOR SW-DR	Driver's door closed	Off
	Driver's 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
BACK DOOR SW	Back door closed	Off
	Back door opened	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
KEYLESS LOCK	"LOCK" button of key fob is not pressed	Off
	"LOCK" button of key fob is pressed	On
KEYLESS UNLOCK	"UNLOCK" button of key fob is not pressed	Off
	"UNLOCK" button of key fob is pressed	On
I-KEY LOCK	"LOCK" button of Intelligent Key or door request switch are not pressed	Off
	"LOCK" button of Intelligent Key or door request switch are pressed	On
I-KEY UNLOCK	"UNLOCK" button of Intelligent Key or door request switch are not pressed	Off
	"UNLOCK" button of Intelligent Key or door request switch are pressed	On
ACC ON SW	Ignition switch OFF	Off
	Ignition switch ACC or ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
LIGHT SW 1ST	Lighting switch OFF	Off
	Lighting switch 1ST	On

A

B

C

D

E

F

G

H

I

J

K

L

M

WCS

O

P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
BUCKLE SW	The seat belt (driver side) is unfastened. [Seat belt switch (driver side) OFF]	Off
	The seat belt (driver side) is fastened. [Seat belt switch (driver side) ON]	On
KEYLESS PANIC	PANIC button of key fob is not pressed	Off
	PANIC button of key fob is pressed	On
KEYLESS TRUNK	NOTE: The item is indicated, but not monitored.	Off
TRNK OPN MNTR	NOTE: The item is indicated, but not monitored.	Off
RKE LCK-UNLCK	LOCK/UNLOCK button of key fob is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of key fob is pressed and held simultaneously	On
RKE KEEP UNLK	UNLOCK button of key fob is not pressed	Off
	UNLOCK button of key fob is pressed and held	On
HI BEAM SW	Lighting switch OFF	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Lighting switch OFF	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Lighting switch OFF	Off
	Lighting switch 2ND	On
AUTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
TURN SIGNAL R	Turn signal switch OFF	Off
	Turn signal switch RH	On
TURN SIGNAL L	Turn signal switch OFF	Off
	Turn signal switch LH	On
ENGINE RUN	Engine stopped	Off
	Engine running	On
PKB SW	Parking brake switch is OFF	Off
	Parking brake switch is ON	On
CARGO LAMP SW	NOTE: The item is indicated, but not monitored.	Off
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V
	Dark outside of the vehicle	Close to 0 V
IGN SW CAN	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
FR WIPER HI	Front wiper switch OFF	Off
	Front wiper switch HI	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
FR WIPER LOW	Front wiper switch OFF	Off	A
	Front wiper switch LO	On	
FR WIPER INT	Front wiper switch OFF	Off	B
	Front wiper switch INT	On	
FR WASHER SW	Front washer switch OFF	Off	C
	Front washer switch ON	On	
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7	
FR WIPER STOP	Any position other than front wiper stop position	Off	D
	Front wiper stop position	On	
VEHICLE SPEED	While driving	Equivalent to speedometer reading	
RR WIPER ON	Rear wiper switch OFF	Off	E
	Rear wiper switch ON	On	
RR WIPER INT	Rear wiper switch OFF	Off	F
	Rear wiper switch INT	On	
RR WASHER SW	Rear washer switch OFF	Off	G
	Rear washer switch ON	On	
RR WIPER STOP	Rear wiper stop position	Off	H
	Other than rear wiper stop position	On	
RR WIPER STP2	NOTE: The item is indicated, but not monitored.	Off	
H/L WASH SW	NOTE: The item is indicated, but not monitored.	Off	I
HAZARD SW	Hazard switch OFF	Off	J
	Hazard switch ON	On	
BRAKE SW	Brake pedal is not depressed	Off	K
	Brake pedal is depressed	On	
FAN ON SIG	Blower fan motor switch OFF	Off	L
	Blower fan motor switch ON (other than OFF)	On	
AIR COND SW	<ul style="list-style-type: none"> A/C conditioner OFF (A/C switch indicator OFF) (Automatic air conditioner) A/C switch OFF (Manual air conditioner) 	Off	M
	<ul style="list-style-type: none"> A/C conditioner ON (A/C switch indicator ON) (Automatic air conditioner) A/C switch ON (Manual air conditioner) 	On	
I-KEY TRUNK	NOTE: The item is indicated, but not monitored.	Off	WCS
I-KEY PW DWN	UNLOCK button of Intelligent Key is not pressed	Off	
	UNLOCK button of Intelligent Key is pressed and held	On	
I-KEY PANIC	PANIC button of Intelligent Key is not pressed	Off	O
	PANIC button of Intelligent Key is pressed	On	
PUSH SW	Return to ignition switch to "LOCK" position	Off	P
	Press ignition switch	On	
TRNK OPNR SW	When back door opener switch is not pressed	Off	
	When back door opener switch is pressed	On	
TRUNK CYL SW	NOTE: The item is indicated, but not monitored.	Off	

BCM (BODY CONTROL MODULE)

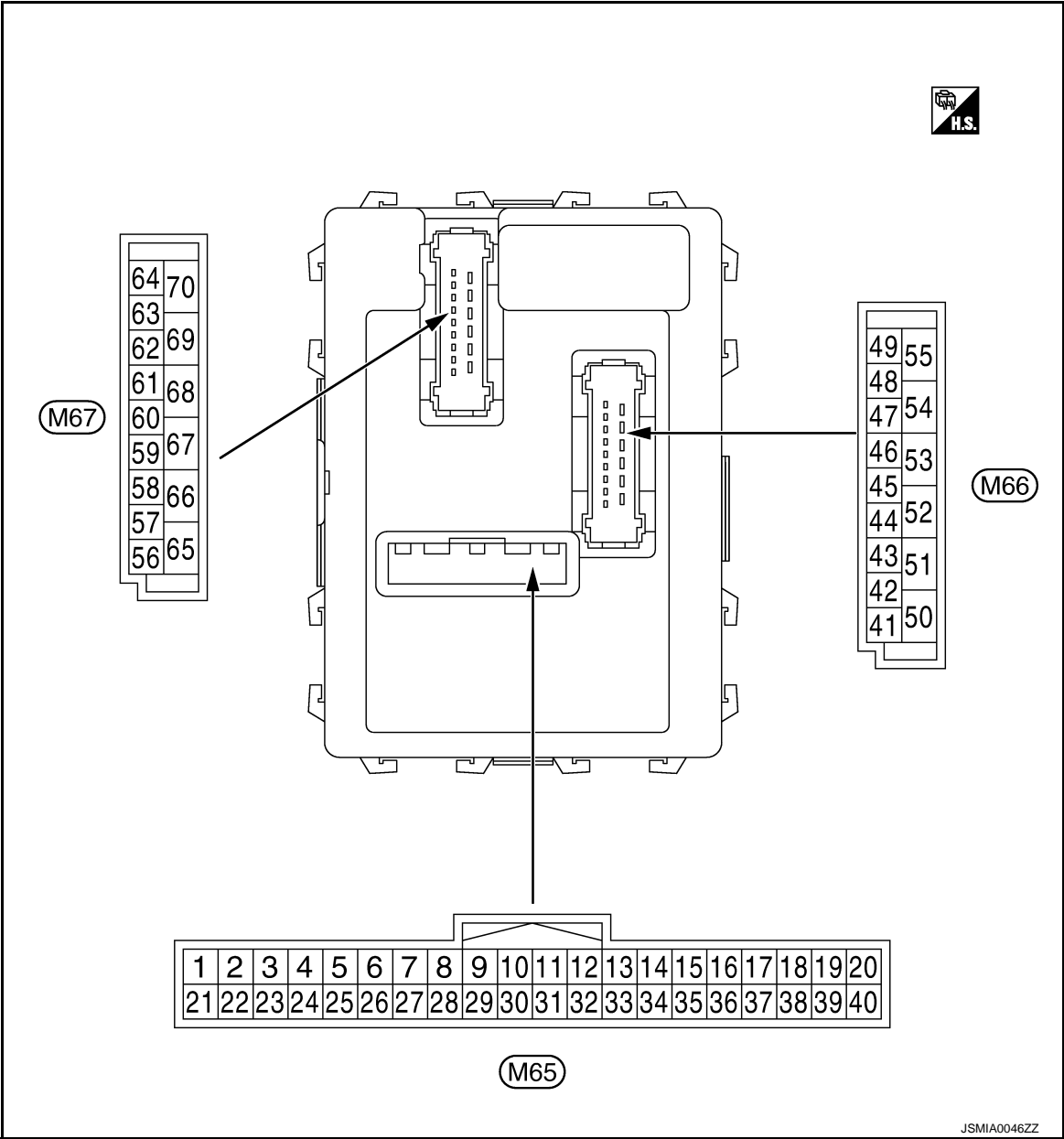
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
HOOD SW	Close the hood NOTE: Vehicles of except for Mexico are OFF-fixed	Off
	Open the hood	On
OIL PRESS SW	<ul style="list-style-type: none"> Ignition switch OFF or ACC Engine running 	Off
	Ignition switch ON	On
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
	ID of front LH tire transmitter is not registered	Yet
ID REGST FR1	ID of front RH tire transmitter is registered	Done
	ID of front RH tire transmitter is not registered	Yet
ID REGST RR1	ID of rear RH tire transmitter is registered	Done
	ID of rear RH tire transmitter is not registered	Yet
ID REGST RL1	ID of rear LH tire transmitter is registered	Done
	ID of rear LH tire transmitter is not registered	Yet
WARNING LAMP	Tire pressure indicator OFF	Off
	Tire pressure indicator ON	On
BUZZER	Tire pressure warning alarm is not sounding	Off
	Tire pressure warning alarm is sounding	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



PHYSICAL VALUES

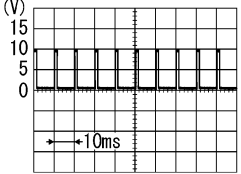
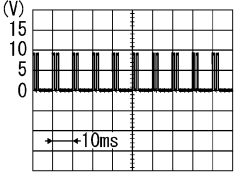
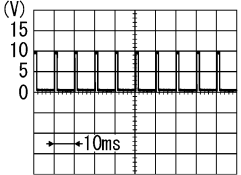
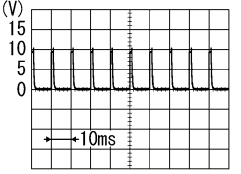
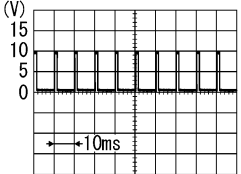
CAUTION:

- Check combination switch system terminal waveform under the loaded condition with lighting switch, turn signal switch and wiper switch OFF is not to be fluctuated by being overloaded.
- Turn wiper intermittent dial position to 4 except when checking waveform or voltage of wiper intermittent dial position. Wiper intermittent dial position can be confirmed on CONSULT-III. Refer to [BCS-27, "COMB SW : CONSULT-III Function \(BCM - COMB SW\)"](#).
- BCM reads the status of the combination switch at 10 ms internal normally. Refer to [BCS-9, "System Diagram"](#).

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
1 (V)	Ground	Ignition key hole illumination control	Output	Ignition key hole illumination	OFF	Battery voltage
					ON	0 V

BCM (BODY CONTROL MODULE)

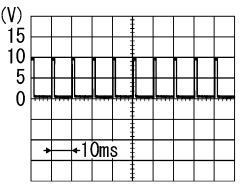
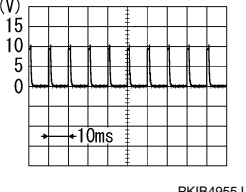
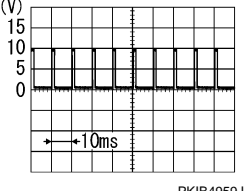
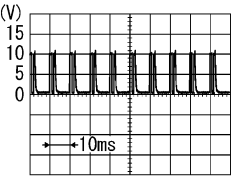
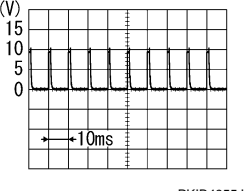
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
2 (G)	Ground	Combination switch INPUT 5	Input	All switch OFF	0 V
				Turn signal switch RH	 <p>PKIB4959J</p>
				Lighting switch HI	
				Lighting switch 1ST	
				Lighting switch 2ND	 <p>PKIB4953J</p>
3 (Y)	Ground	Combination switch INPUT 4	Input	All switch OFF	0 V
				Turn signal switch LH	 <p>PKIB4959J</p>
				Lighting switch PASS	
				Lighting switch 2ND	
				Front fog lamp switch ON	 <p>PKIB4955J</p>
4 (W)	Ground	Combination switch INPUT 3	Input	All switch OFF	0 V
				Lighting switch AUTO	 <p>PKIB4959J</p>
				Front wiper switch LO	
				Front wiper switch MIST	
				Front wiper switch INT	

1.0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
5 (R)	Ground	Combination switch INPUT 2	Input	Combination switch	All switch OFF (Wiper intermittent dial 4) 0 V
					Front washer switch (Wiper intermittent dial 4)
					Rear washer ON (Wiper intermittent dial 4)
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6
					 1.0 V
6 (P)	Ground	Combination switch INPUT 1	Input	Combination switch	Rear wiper switch ON (Wiper intermittent dial 4)  0.8 V
					All switch 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 switch OFF)  1.0 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2  1.7 V
					Any of the condition below with all switch OFF • Wiper intermittent dial 6 • Wiper intermittent dial 7  0.8 V

A

B

C

D

E

F

G

H

I

J

K

L

M

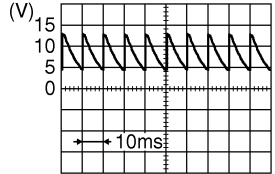
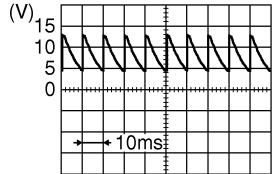
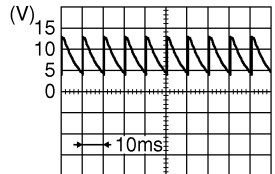
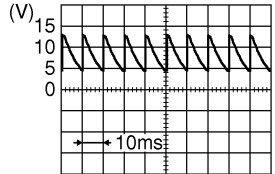
WCS

O

P

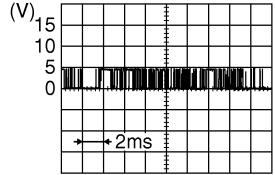
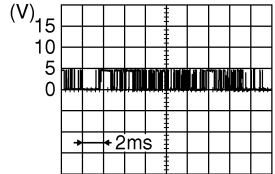
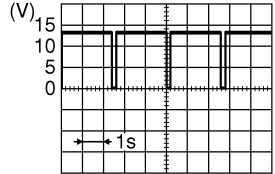
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
7 (L)	Ground	Door key cylinder switch UNLOCK signal	Input	Door key cylinder switch	NEUTRAL position	 <p>JPMIA0587GB</p> <p>8.0 - 8.5 V</p>
				Door key cylinder switch	UNLOCK position	0 V
8 (R)	Ground	Door key cylinder switch LOCK signal	Input	Door key cylinder switch	NEUTRAL position	 <p>JPMIA0587GB</p> <p>8.0 - 8.5 V</p>
				Door key cylinder switch	LOCK position	0 V
9 (R)	Ground	Stop lamp switch	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
				Stop lamp switch	ON (Brake pedal is depressed)	Battery voltage
10 (SB)	Ground	Rear window defogger switch	Input	Rear window defogger switch	Not pressed	Battery voltage
				Rear window defogger switch	Pressed	0 V
11 (SB)	Ground	Ignition switch ACC	Input	Ignition switch OFF		0 V
				Ignition switch ACC or ON		Battery voltage
12 (P)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	 <p>JPMIA0586GB</p> <p>7.5 - 8.0 V</p>
				Passenger door switch	ON (When passenger door opened)	0 V
13 (LG)	Ground	Rear door switch RH	Input	Rear door switch RH	OFF (When rear door RH closed)	 <p>JPMIA0587GB</p> <p>8.0 - 8.5 V</p>
				Rear door switch RH	ON (When rear door RH opened)	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
14 (G)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle	Close to 5 V
					When dark outside of the vehicle	Close to 0 V
17 (W)	Ground	Optical sensor power supply	Output	Ignition switch	OFF, ACC	0 V
					ON	5 V
18* (O)	Ground	Remote keyless entry receiver ground	Input	Ignition switch ON		0 V
19* (V)	Ground	Remote keyless entry receiver power supply	Input	Without Intelligent Key system	At any condition	5 V
				With Intelligent Key system	<ul style="list-style-type: none"> Ignition switch OFF For 3 seconds after ignition switch OFF to ON 	0 V
					3 seconds or later after ignition switch OFF to ON	5 V
20* (GR)	Ground	Remote keyless entry receiver signal	Input	Without Intelligent Key system	At any condition	 <p>JPMIA0589GB</p> <p>NOTE: The wave form changes according to signal-receiving condition.</p>
						0 V
				With Intelligent Key system	<ul style="list-style-type: none"> Ignition switch OFF For 3 seconds after ignition switch OFF to ON 	0 V
					3 seconds or later after ignition switch OFF to ON	 <p>JPMIA0589GB</p> <p>NOTE: The wave form changes according to signal-receiving condition.</p>
21 (G)	Ground	NATS antenna amp.	Input/ Output	Just after inserting ignition key in key cylinder		Pointer of tester should move
23 (B)	Ground	Security indicator signal	Input	Security indicator	ON	0 V
					Blinking (Ignition switch OFF)	 <p>JPMIA0590GB</p> <p>12.0 V</p>
					OFF	Battery voltage

A

B

C

D

E

F

G

H

I

J

K

L

M

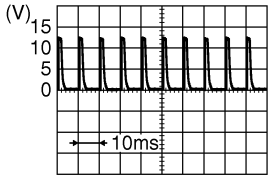
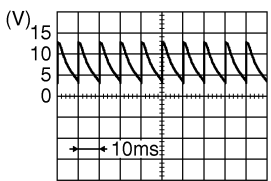
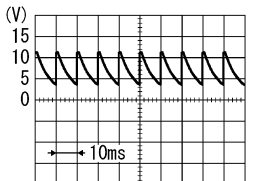
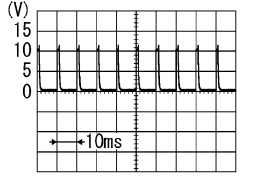
WCS

O

P

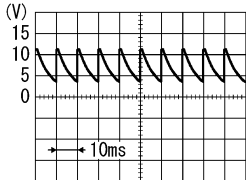
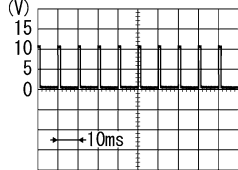
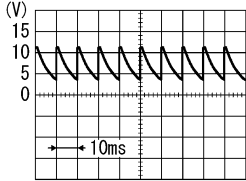
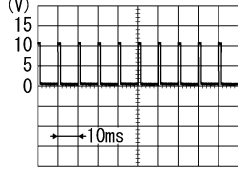
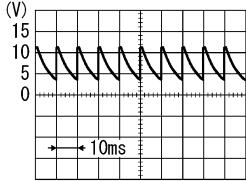
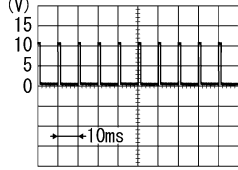
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
25 (BR)	Ground	NATS antenna amp.	Input/ Output	Just after inserting ignition key in key cylinder		Pointer of tester should move
27 (Y)	Ground	A/C switch	Input	Ignition switch OFF		
				Ignition switch ON	A/C switch OFF	
					A/C switch ON	0 V
28 (LG)	Ground	Blower fan switch	Input	Ignition switch OFF		
				Ignition switch ON	Blower fan switch OFF	
					Blower fan switch ON	0 V
29 (W)	Ground	Hazard switch	Input	Hazard switch	OFF	Battery voltage
					ON	0 V
30 (G)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	Battery voltage
					Pressed	0 V
32 (BR)	Ground	Combination switch OUTPUT 5	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	
					Front fog lamp switch ON (Wiper intermittent dial 4)	
					Rear wiper switch ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF <ul style="list-style-type: none"> Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 6 Wiper intermittent dial 7 	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
33 (GR)	Ground	Combination switch OUTPUT 4	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p>PKIB4960J</p> <p>7.2 V</p>
					Lighting switch 1ST (Wiper intermittent dial 4)	 <p>PKIB4958J</p> <p>1.2 V</p>
					Lighting switch AUTO (Wiper intermittent dial 4)	
					Rear wiper switch INT (Wiper intermittent dial 4)	
34 (L)	Ground	Combination switch OUTPUT 3	Output	Combination switch	Any of the condition below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 	 <p>PKIB4960J</p> <p>7.2 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	 <p>PKIB4958J</p> <p>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 switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 	 <p>PKIB4960J</p> <p>7.2 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	 <p>PKIB4958J</p> <p>1.2 V</p>
					Lighting switch HI (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	

A

B

C

D

E

F

G

H

I

J

K

L

M

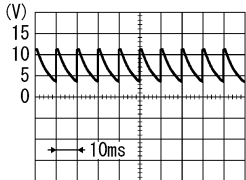
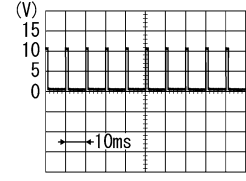
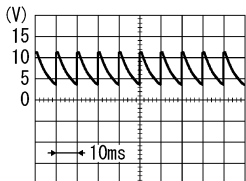
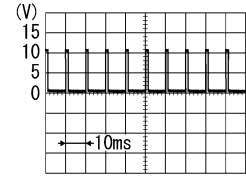
WCS

O

P

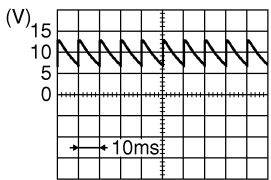
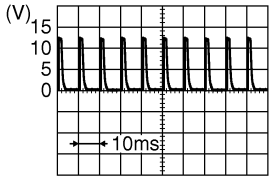
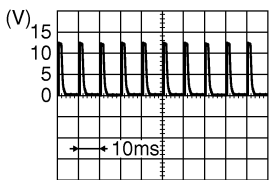
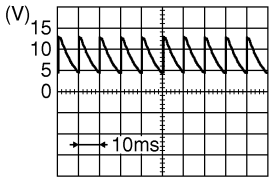
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
35 (B)	Ground	Combination switch OUTPUT 2	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	 <p>PKIB4960J</p> <p>7.2 V</p>
					Lighting switch 2ND	 <p>PKIB4958J</p> <p>1.2 V</p>
					Lighting switch PASS	
					Front wiper switch INT	
					Front wiper switch HI	
36 (V)	Ground	Combination switch OUTPUT 1	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	 <p>PKIB4960J</p> <p>7.2 V</p>
					Turn signal switch RH	 <p>PKIB4958J</p> <p>1.2 V</p>
					Turn signal switch LH	
					Front wiper switch LO (Front wiper switch MIST)	
					Front washer switch ON	
37 (LG)	Ground	Key switch	Input	Insert mechanical key into ignition key cylinder		Battery voltage
				Remove mechanical key from ignition key cylinder		0 V
38 (G)	Ground	Ignition switch ON	Input	Ignition switch OFF or ACC		0 V
				Ignition switch ON or START		Battery voltage
39 (L)	Ground	CAN-H	Input/ Output	—		—
40 (P)	Ground	CAN-L	Input/ Output	—		—

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

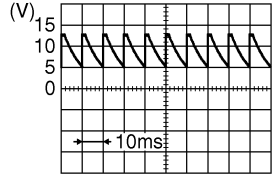
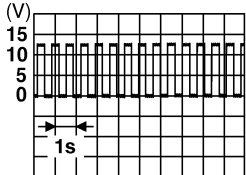
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
43 (V)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	 JPMIA0593GB 9.5 - 10.0 V
				Back door switch	ON (When back door opened)	0 V
44 (B)	Ground	Rear wiper auto stop	Input	Ignition switch	Rear wiper stop position	0 V
				ON	Any position other than rear wiper stop position	Battery voltage
45 (P)	Ground	Door lock and unlock switch LOCK signal	Input	Door lock and unlock switch	NEUTRAL position	 JPMIA0591GB 1.6 V
				Door lock and unlock switch	LOCK position	0 V
46 (BR)	Ground	Door lock and unlock switch UNLOCK signal	Input	Door lock and unlock switch	NEUTRAL position	 JPMIA0591GB 1.6 V
				Door lock and unlock switch	UNLOCK position	0 V
47 (W)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	 JPMIA0587GB 8.0 - 8.5 V
				Driver door switch	ON (When driver door opened)	0 V

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

WCS

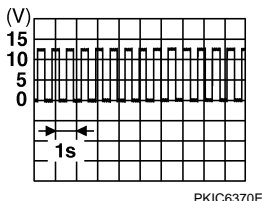
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
48 (GR)	Ground	Rear door switch LH	Input	Rear door switch LH	OFF (When rear door LH closed)	 8.5 - 9.0 V
				Rear door switch LH	ON (When rear door LH opened)	0 V
49 (L)	Ground	Luggage room lamp control	Output	Luggage room lamp switch DOOR position	Back door is closed (Luggage room lamp turns OFF)	Battery voltage
					Back door is opened (Luggage room lamp turns ON)	0 V
53 (V)	Ground	Back door open	Output	Back door opener switch	Not pressed (Back door actuator is activated)	0 V
					Pressed (Back door actuator is activated)	Battery voltage
55 (SB)	Ground	Rear wiper motor	Output	Ignition switch ON	Rear wiper switch OFF	0 V
					Rear wiper switch ON	Battery voltage
56 (Y)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0 V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
57 (G)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
59 (L)	Ground	Driver door UN-LOCK	Output	Driver door	UNLOCK (Actuator is activated)	Battery voltage
					Other then UNLOCK (Actuator is not activated)	0 V
60 (BR)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 6.0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
61 (GR)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 6.0 V
63 (R)	Ground	Interior room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0 V
65 (V)	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	Battery voltage
					Other then LOCK (Actuator is not activated)	0 V
66 (G)	Ground	Passenger door and rear door UNLOCK	Output	Passenger door and rear door	UNLOCK (Actuator is activated)	Battery voltage
					Other then UNLOCK (Actuator is not activated)	0 V
67 (B)	Ground	Ground	Output	Ignition switch ON		0 V
68 (L)	Ground	P/W power supply (RAP)	Output	Ignition switch ON		Battery voltage
69 (P)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		Battery voltage
70 (Y)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage

*: Except for Mexico with Intelligent Key

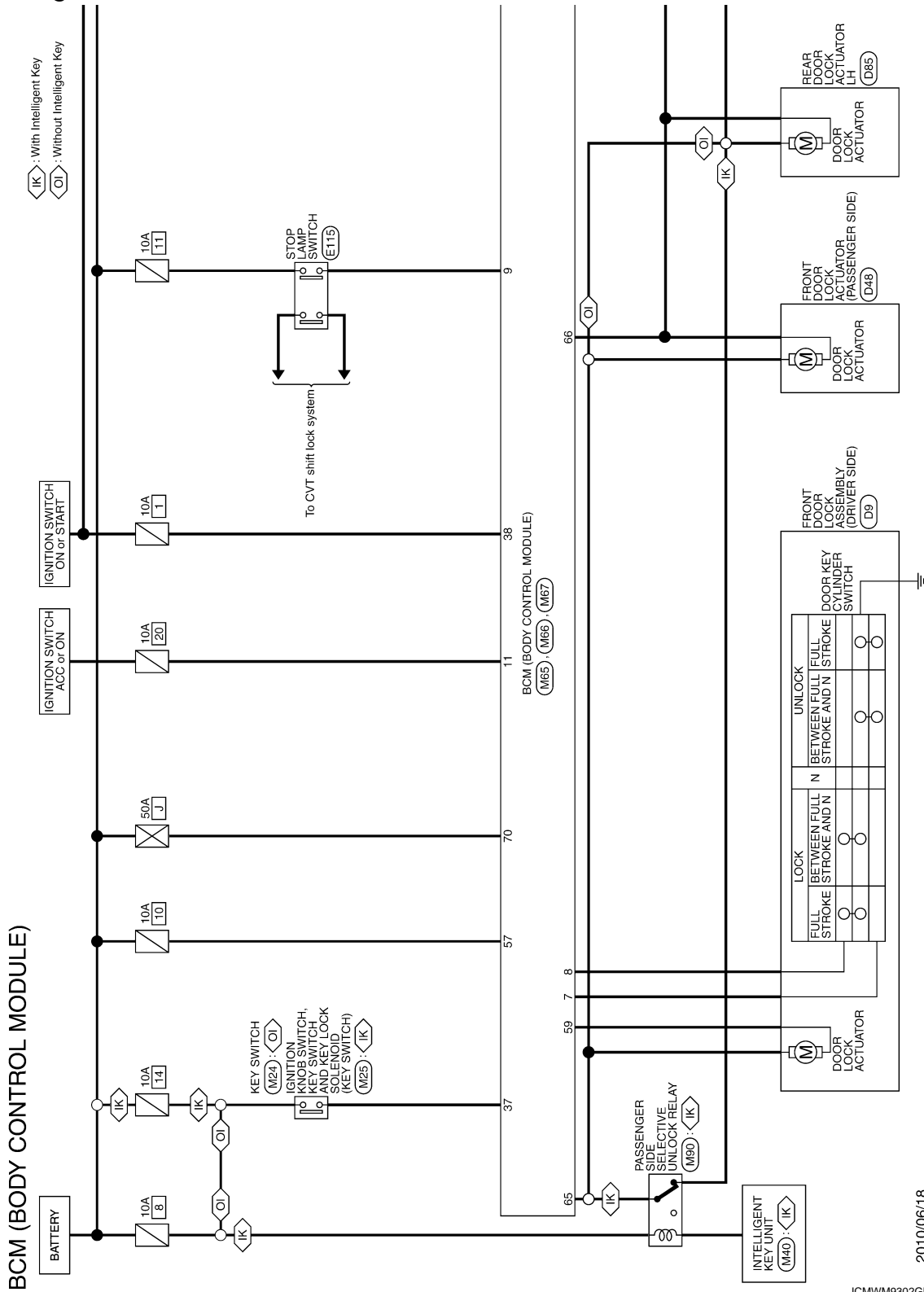
WCS

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Wiring Diagram - BCM -

INFOID:000000006607528



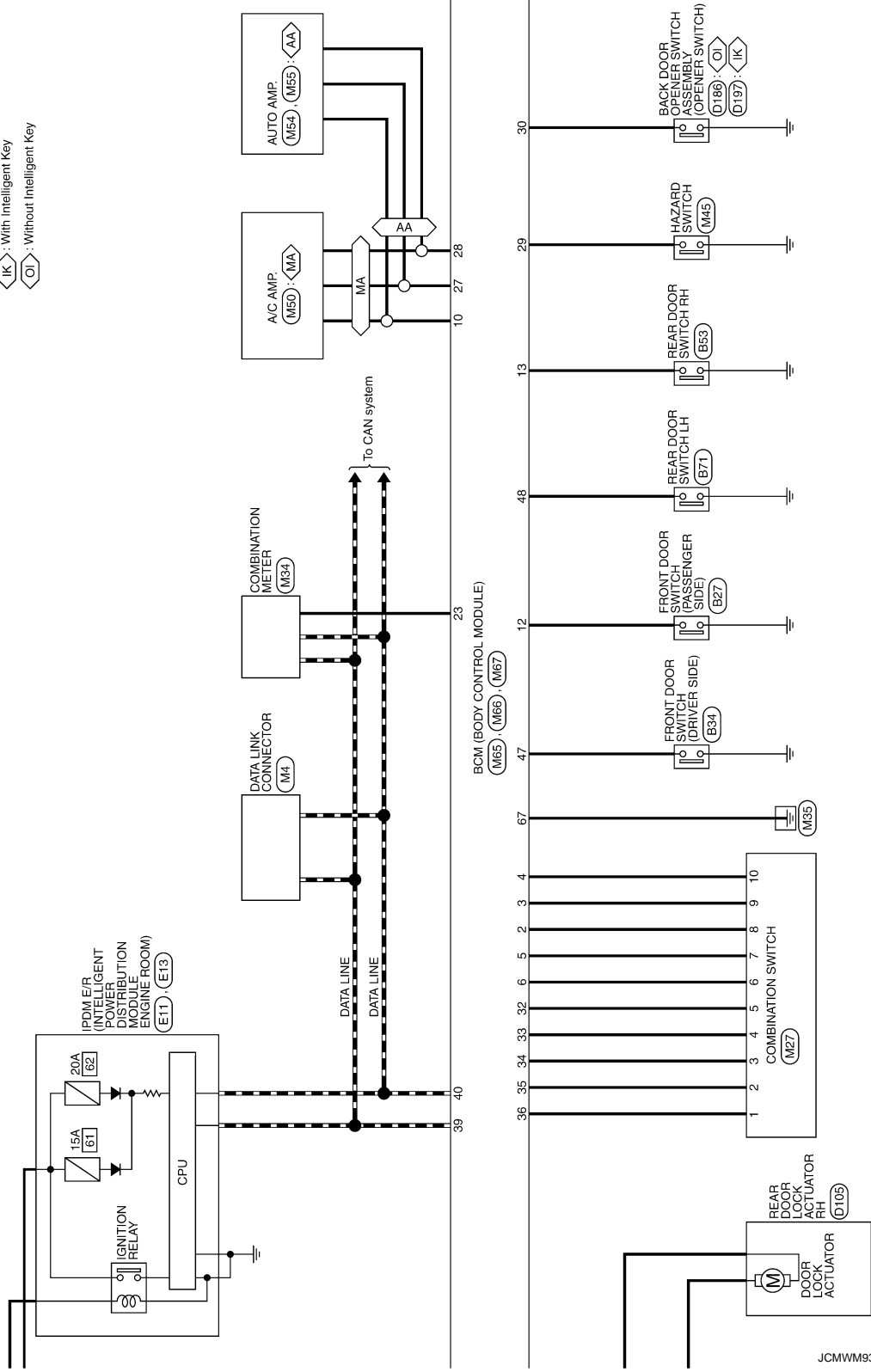
2010/06/18

JCMWM9302GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

- AA : With auto A/C
- MA : With manual A/C
- IK : With Intelligent Key
- OI : Without Intelligent Key

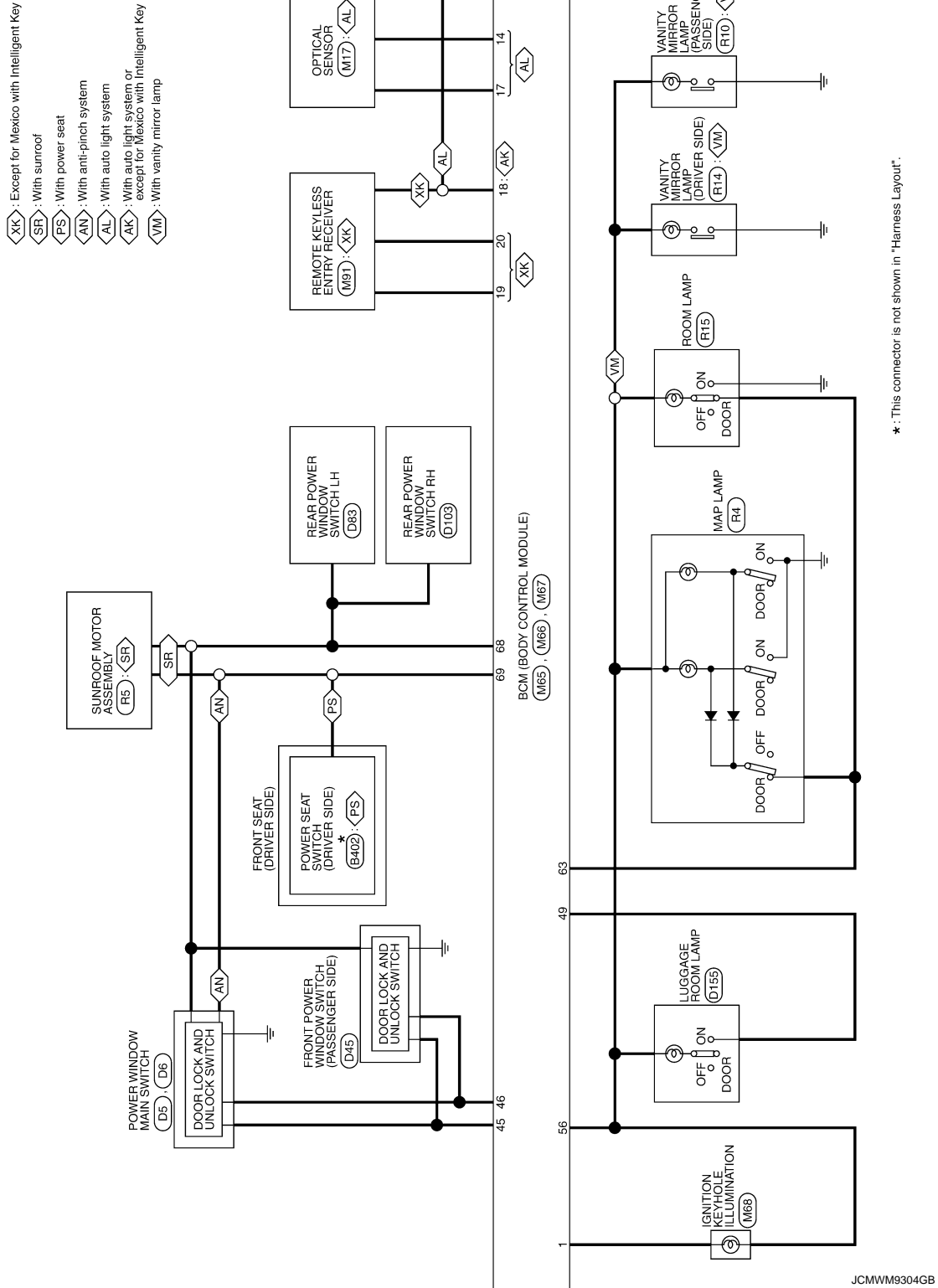


JCMWMM9303GB

WCS

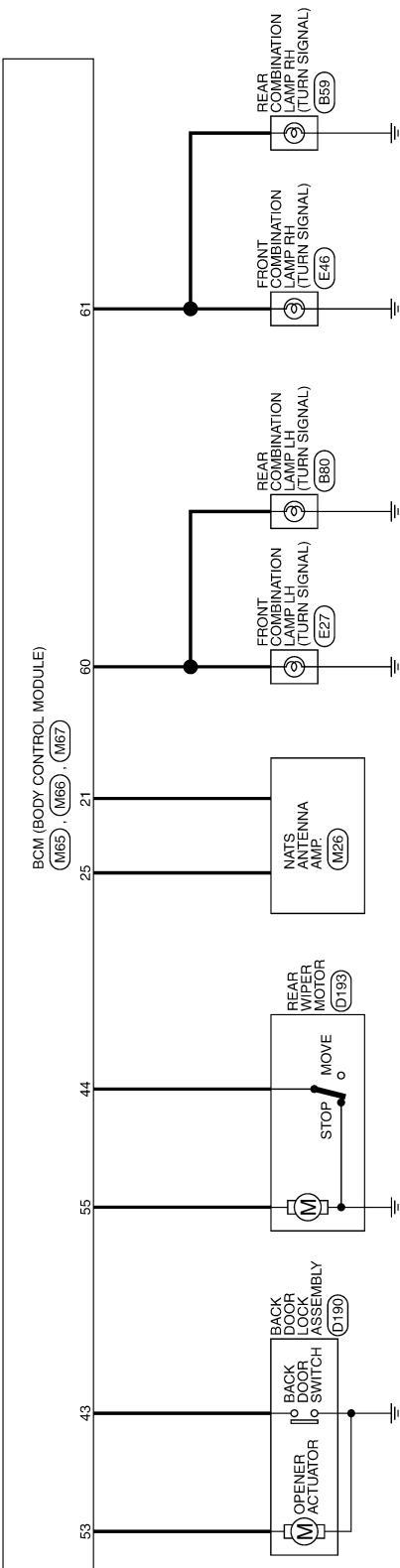
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >



BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >



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

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Connector No.	M27
Connector Name	COMBINATION SWITCH
Connector Type	1K16FW

12	13	10	9	8	7
14	11	1	2	3	4
5	6				

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

Connector No.	M65
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	TH40FW-NH

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal	Color of Wire	Signal Name [Specification]
1	V	KEY RING OUTPUT
2	G	INPUT 5
3	Y	INPUT 4
4	W	INPUT 3
5	R	INPUT 2
6	P	INPUT 1
7	L	KEY CYC UNLOCK

9	R	BRAKE SW
10	SB	RR DEF SW
11	SB	ACC
12	P	DR SW AS
13	LG	DR SW RR
14	G	AUTO LIGHT SENS INPUT
17	W	SENS POWER SUPPLY
18	O	KEYLESS TUNER SENS GND
19	V	KEYLESS TUNER POWER
20	GR	KEYLESS TUNER SIGNAL
21	G	IMMOBI ANT (CLOCK)
23	B	SECURITY IND OUT PUT
25	BR	IMMOBI ANT (RX. TX)
27	Y	AIRCON SW
28	LG	BLOWER FAN SW
29	W	HAZARD SW
30	G	BACK DOOR OPEN SW
32	BR	OUTPUT 5
33	GR	OUTPUT 4
34	L	OUTPUT 3
35	B	OUTPUT 2
36	V	OUTPUT 1
37	LG	KEY SW
38	G	IGN
39	L	CAN-H
40	P	CAN-L

Connector No.	M66
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FW-FHAG-SA

41	42	43	44	45	46	47	48	49
50	51	52	53	54	55			

Terminal	Color of Wire	Signal Name [Specification]
43	V	BACK DOOR SW
44	B	RR WIP AUTO STOP
45	P	CDLOCK SW
46	BR	CDUNLOCK SW
47	W	DR SW DR
48	GR	DR SW RL
49	L	LUGGAGE LAMP OUTPUT
53	V	BACK DOOR OPENER OUTPUT
55	SB	RR WIP MTR OUT

Connector No.	M67
Connector Name	BCM (BODY CONTROL MODULE)
Connector Type	FEA09FB-FHAG-SA

56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Terminal No.	Color of Wire	Signal Name [Specification]
56	Y	BATTERY SAVER OUTPUT
57	G	BAT FUSE
58	L	D/L UNLOCK DR
59	BR	FLASHER OUT PUT (LEFT)
60	GR	FLASHER OUT PUT (RIGHT)
61	GR	ROOM LAMP OUTPUT
63	R	D/L LOCK ALL
65	V	D/L UNLOCK OTHER
66	G	GND
67	B	POWER WDW OUTPUT (RAP)
68	L	POWER WDW OUTPUT (BAT)
69	P	BAT FL
70	Y	

JCMWM9306GB

INFOID:000000000607529

Fail-safe

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 more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

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

DTC Inspection Priority Chart

INFOID:0000000006607530

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

Priority	DTC
1	U1000: CAN COMM CIRCUIT
2	C1735: IGN CIRCUIT OPEN
3	<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: [PRESS DATA ERR] FL • C1717: [PRESS DATA ERR] FR • C1718: [PRESS DATA ERR] RR • C1719: [PRESS DATA ERR] RL • C1729: VHCL SPEED SIG ERR

DTC Index

INFOID:0000000006607531

NOTE:

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

CONSULT display	Tire pressure monitor warning lamp ON	Reference
U1000: CAN COMM CIRCUIT	—	BCS-34
C1704: LOW PRESSURE FL	×	WT-13
C1705: LOW PRESSURE FR	×	
C1706: LOW PRESSURE RR	×	
C1707: LOW PRESSURE RL	×	
C1708: [NO DATA] FL	×	WT-15
C1709: [NO DATA] FR	×	
C1710: [NO DATA] RR	×	
C1711: [NO DATA] RL	×	
C1716: [PRESS DATA ERR] FL	×	WT-18
C1717: [PRESS DATA ERR] FR	×	
C1718: [PRESS DATA ERR] RR	×	
C1719: [PRESS DATA ERR] RL	×	
C1729: VHCL SPEED SIG ERR	×	WT-20
C1735: IGN CIRCUIT OPEN	—	BCS-35

THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

THE LIGHT REMINDER WARNING DOES NOT SOUND

Description

INFOID:000000006202673

The light reminder warning chime does not sound under the following conditions.

- Lighting switch 1ST or 2ND position
- Driver door open
- Ignition switch except ON or START

Diagnosis Procedure

INFOID:000000006202674

1. CHECK COMBINATION SWITCH (LIGHTING SWITCH) OPERATION

Check that the headlamps operate normally by operating the combination switch (lighting switch).

Do they operate normally?

YES >> GO TO 2.

NO >> Refer to [EXL-118. "Symptom Table"](#) (xenon type), [EXL-267. "Symptom Table"](#) (halogen type).

2. CHECK FRONT DOOR SWITCH (DRIVER SIDE) SIGNAL CIRCUIT

Check the front door switch (driver side) signal circuit. Refer to [DLK-56. "Diagnosis Procedure"](#) (with Intelligent Key system), [DLK-301. "Diagnosis Procedure"](#) (without Intelligent Key system).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Check the front door switch (driver side). Refer to [DLK-58. "Component Inspection"](#) (with Intelligent Key system), [DLK-303. "Component Inspection"](#) (without Intelligent Key system).

Is the inspection result normal?

YES >> Replace the BCM. Refer to [BCS-66. "Removal and Installation"](#).

NO >> Replace the front door switch (driver side). Refer to [DLK-265. "Removal and Installation"](#) (with Intelligent Key system), [DLK-453. "Removal and Installation"](#) (without Intelligent Key system).

THE SEAT BELT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE SEAT BELT REMINDER WARNING DOES NOT SOUND

Description

INFOID:000000006202675

Seat belt reminder warning chime does not sound.

Trouble diagnosis procedure

INFOID:000000006202676

1.CHECK COMBINATION METER INPUT SIGNAL

1. Connect the CONSULT-III.
2. Select the "Data Monitor" of "METER/M&A" and check the "BUCKLE SW" monitor value. Refer to [WCS-24. "Component Function Check"](#).

Is the inspection result normal?

- YES >> Replace combination meter.
NO >> GO TO 2.

2.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE) SIGNAL CIRCUIT

Check the seat belt buckle switch (driver side) signal circuit. Refer to [WCS-24. "Diagnosis Procedure"](#).

Is the inspection result normal?

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

3.CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

Check the seat belt buckle switch (driver side). Refer to [WCS-25. "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace combination meter.
NO >> Replace the seat belt buckle switch (driver side). Refer to [SB-9. "SEAT BELT BUCKLE : Removal and Installation"](#).

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

WCS

THE PARKING BRAKE RELEASE WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE PARKING BRAKE RELEASE WARNING DOES NOT SOUND

Description

INFOID:000000006202677

The parking brake warning chime does not sound at all even though driving the vehicle with the parking brake applied.

Diagnosis Procedure

INFOID:000000006202678

1. CHECK PARKING BRAKE WARNING LAMP OPERATION

1. Connect the CONSULT-III.
2. Select the "Data Monitor" of "METER/M&A" and check the "PKB SW" monitor value. Refer to [WCS-24. "Component Function Check"](#).

Is the inspection result normal?

- YES >> Replace combination meter.
NO >> GO TO 2.

2. CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

Check the parking brake switch signal circuit. Refer to [WCS-26. "Diagnosis Procedure"](#).

Is the inspection result normal?

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

3. CHECK PARKING BRAKE SWITCH

Check the parking brake switch. Refer to [WCS-26. "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace combination meter. Refer to [MWI-78. "Removal and Installation"](#).
NO >> Replace parking brake switch.

THE KEY WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE KEY WARNING DOES NOT SOUND

Description

INFOID:000000006202679

The key warning chime does not sound under the following conditions.

- Key inserted into the ignition key cylinder (Key switch signal ON)
- Ignition switch except in ON or START (Ignition switch signal OFF)
- Front door switch (driver side) open. [Front door switch (driver side) signal ON]

Diagnosis Procedure

INFOID:000000006202680

1.CHECK BCM INPUT SIGNAL

1. Connect the CONSULT-III.
2. Select the "Data Monitor" of "BCM (BUZZER)" and check the "KEY ON SW" monitor value. Refer to [BCS-42, "Reference Value"](#).

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-66, "Removal and Installation"](#).
NO >> GO TO 2.

2.CHECK KEY SWITCH SIGNAL CIRCUIT

Check the key switch signal circuit. Refer to [DLK-309, "Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> GO TO 3.
NO >> Check applicable parts, and repair or replace corresponding parts.

3.CHECK FRONT DOOR SWITCH (DRIVER SIDE) SIGNAL CIRCUIT

Check the front door switch (driver side) signal circuit. Refer to [DLK-301, "Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> GO TO 4.
NO >> Repair harness or connector.

4.CHECK FRONT DOOR SWITCH (DRIVER SIDE)

Check the front door switch (driver side). Refer to [DLK-303, "Component Inspection"](#).

Is the inspection result normal?

- YES >> Replace the BCM. Refer to [BCS-66, "Removal and Installation"](#).
NO >> Replace the front door switch (driver side). Refer to [DLK-453, "Removal and Installation"](#).

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

WCS

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

FOR USA AND CANADA

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

INFOID:000000006601110

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

Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

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

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

WARNING:

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

FOR MEXICO

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

INFOID:000000006601111

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

WARNING:

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision which would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "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:

- 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

PRECAUTIONS

< PRECAUTION >

- a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

A

B

C

D

E

F

G

H

I

J

K

L

M

WCS

O

P