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CONTENTS

BASIC INSPECTION3
DIAGNOSIS AND REPAIR WORKFLOW3 Work Flow
SYSTEM DESCRIPTION5
WARNING CHIME SYSTEM5
WARNING CHIME SYSTEM5 WARNING CHIME SYSTEM: System Diagram5 WARNING CHIME SYSTEM: System Description5
WARNING CHIME SYSTEM : Component Parts Location
LIGHT REMINDER WARNING CHIME
SEAT BELT WARNING CHIME8 SEAT BELT WARNING CHIME : System Diagram9
SEAT BELT WARNING CHIME : System Description
PARKING BRAKE RELEASE WARNING CHIME10 PARKING BRAKE RELEASE WARNING CHIME System Diagram

PARKING BRAKE RELEASE WARNING CHIME : System Description
DIAGNOSIS SYSTEM (UNIFIED METER AND A/C AMP.)13
CONSULT-III Function (METER/M&A)13
DIAGNOSIS SYSTEM (BCM)17
COMMON ITEM
BUZZER : CONSULT-III Function (BCM - BUZZ-ER)
DTC/CIRCUIT DIAGNOSIS20
POWER SUPPLY AND GROUND CIRCUIT20
POWER SUPPLY AND GROUND CIRCUIT20 COMBINATION METER20 COMBINATION METER : Diagnosis Procedure20
COMBINATION METER20
COMBINATION METER
COMBINATION METER

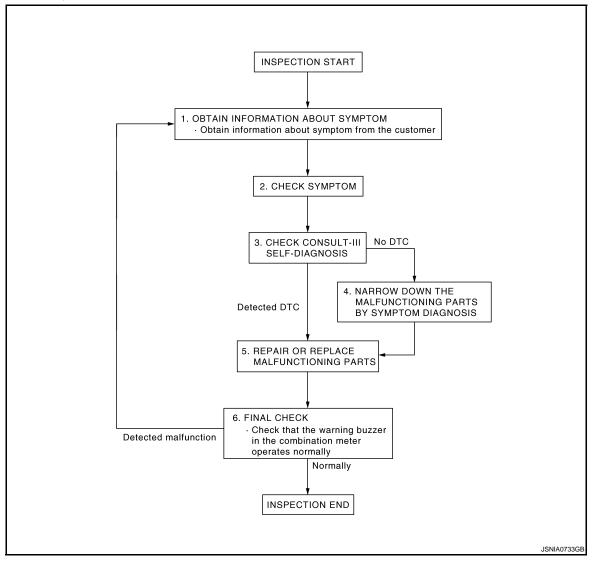
Description24	DTC Index96
Component Function Check24	
Diagnosis Procedure24	SYMPTOM DIAGNOSIS99
Component Inspection	THE PARKING BRAKE RELEASE WARNING
WARNING CHIME SYSTEM26	CONTINUES SOUNDING, OR DOES NOT
Wiring Diagram - WARNING CHIME 26	SOUND99
ECU DIAGNOSIS INFORMATION30	Description 99 Diagnosis Procedure 99
COMBINATION METER30	THE LIGHT REMINDER WARNING DOES
Reference Value 30	NOT SOUND100
Wiring Diagram - METER 33	Description100
Fail-safe42	Diagnosis Procedure100
DTC Index43	•
LINUELED METER AND A/O AMP	THE SEAT BELT WARNING CONTINUES
UNIFIED METER AND A/C AMP44	SOUNDING, OR DOES NOT SOUND101
Reference Value	Description101
Wiring Diagram - METER	Diagnosis Procedure101
Fail-safe	PDECAUTION
DTC Index62	PRECAUTION102
BCM (BODY CONTROL MODULE)63	PRECAUTIONS102
Reference Value	Precaution for Supplemental Restraint System
Wiring Diagram - BCM 87	(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-
Fail-safe92	SIONER"
DTC Inspection Priority Chart94	5.5 <u></u>
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BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Work Flow INFOID:0000000004238389 В

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 that any other malfunctions are present.

>> GO TO 3.

3.check consult-iii self-diagnosis results

Connect CONSULT-III and perform self-diagnosis. Refer to WCS-13, "CONSULT-III Function (METER/M&A)".

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

Are self-diagnosis results normal?

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

4. NARROW DOWN 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.

SYSTEM DESCRIPTION

WARNING CHIME SYSTEM WARNING CHIME SYSTEM

WARNING CHIME SYSTEM: System Diagram

INFOID:0000000004238390

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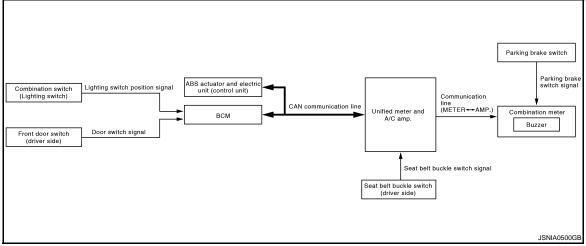
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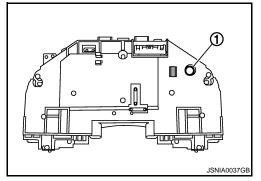


WARNING CHIME SYSTEM: System Description

INFOID:0000000004238391

COMBINATION METER

- The buzzer (1) for warning chime system is installed in the combination meter.
- The buzzer sounds when the combination meter receives buzzer output signal from each unit through unified meter and A/C amp.



UNIFIED METER AND A/C AMP.

The unified meter and A/C amp. transmits the buzzer output signal received from BCM with CAN communication line to the combination meter.

всм

BCM receives signals from various units and transmits a buzzer output signal to the unified meter and A/C amp. with CAN communication line if it judges that the warning buzzer should be activated.

BCM warning function list

Warning functions	Signal name
Light reminder warning chime	Lighting switch position signalDoor switch signal
Seat belt warning chime	Seat belt buckle switch signal

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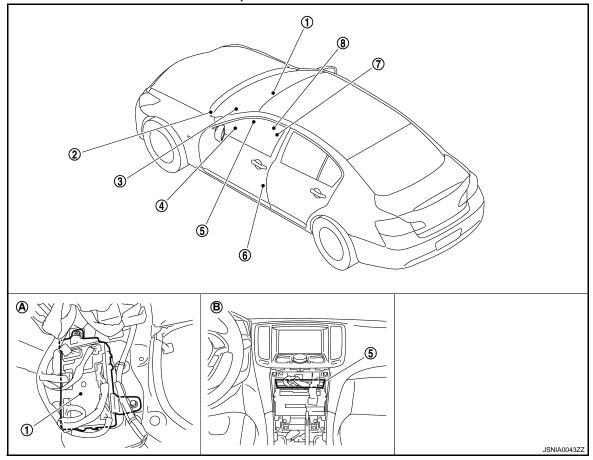
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WARNING CHIME SYSTEM : Component Parts Location

INFOID:0000000004238392



- 1. BCM
- 4. Combination switch (Lighting switch)
- 7. Seat belt buckle switch
- A. Dash side lower (passenger side)
- 2. Parking brake switch (A/T)
- 5. Unified meter and A/C amp.
- 8. Parking brake switch (M/T)
- B. Behind cluster lid C
- 3. Combination meter
- 6. Front door switch (driver side)

WARNING CHIME SYSTEM : Component Description

INFOID:0000000004238393

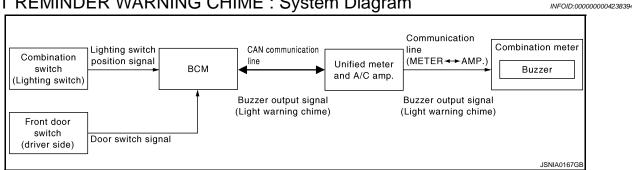
Unit	Description Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer. Judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. with CAN communication line and the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary.		
Combination meter			
Unified meter and A/C amp.	 Receives the seat belt buckle switch signal from the seat belt buckle switch and transmits it to BCM with CAN communication line. Receives a buzzer output signal from BCM with CAN communication line and transmits it to the combination meter by means of communication line. 		
BCM	Transmits signals provided by various units to the unified meter and A/C amp. with CAN communication line.		
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to BCM with CAN communication line.		
Seat belt buckle switch (driver side)	Transmits a seat belt buckle switch signal to the unified meter and A/C amp.		
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.		

< SYSTEM DESCRIPTION >

Unit	Description	
Front door switch (driver side)	Transmits the door switch signal to BCM.	
Parking brake switch	Refer to MWI-61, "Description".	

LIGHT REMINDER WARNING CHIME

LIGHT REMINDER WARNING CHIME: System Diagram



LIGHT REMINDER WARNING CHIME: System Description

INFOID:0000000004238395

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DESCRIPTION

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

- BCM detects ignition switch in OFF or ACC 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 unified meter and A/C amp. with CAN communication line.
- Unified meter and A/C amp. transmits buzzer output signal (light reminder warning chime) to combination meter with 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 is at 1st or 2nd position
- Ignition switch is at OFF or ACC
- · Front door switch (driver side) is 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) is OFF

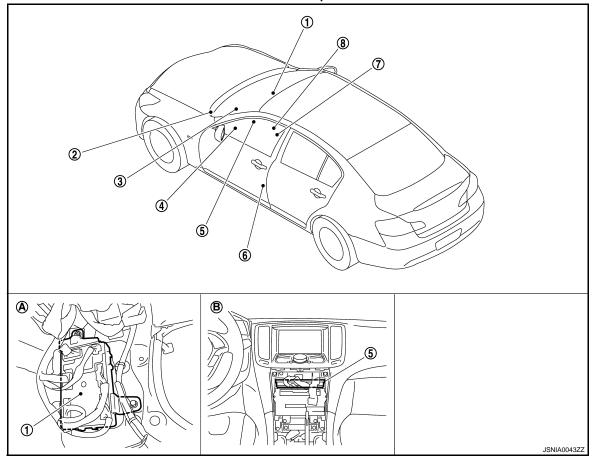
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WCS-7 Revision: 2009 October 2009 G37 Sedan

LIGHT REMINDER WARNING CHIME: Component Parts Location

INFOID:0000000004238396



- 1. BCM
- 4. Combination switch (Lighting switch)
- 7. Seat belt buckle switch
- A. Dash side lower (passenger side)
- 2. Parking brake switch (A/T)
- 5. Unified meter and A/C amp.
- 8. Parking brake switch (M/T)
- B. Behind cluster lid C
- 3. Combination meter
- 6. Front door switch (driver side)

LIGHT REMINDER WARNING CHIME : Component Description

INFOID:0000000004238397

Unit	Description
Combination meter	Receives a buzzer output signal from the unified meter and A/C amp. and sounds the buzzer.
Unified meter and A/C amp.	Receives a buzzer output signal from BCM via CAN communication line and transmits it to the combination meter by means of communication line.
BCM	Judges the light warning conditions from the signals provided by various switches and transmits a buzzer output signal to the unified meter and A/C amp. via CAN communication line if necessary.
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.
Front door switch (driver side)	Transmits the door switch signal to BCM.

SEAT BELT WARNING CHIME

< SYSTEM DESCRIPTION >

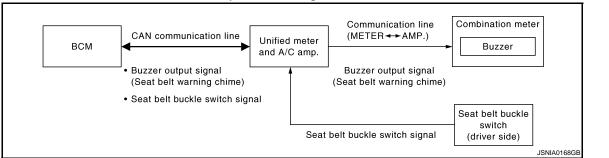
SEAT BELT WARNING CHIME: System Diagram



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SEAT BELT WARNING CHIME: System Description

INFOID:0000000004675513

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 unified meter and A/C amp. 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 unified meter and A/C amp. with CAN communication line.
- Unified meter and A/C amp. transmits buzzer output signal (seat belt warning chime) to combination meter with 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 buckle switch (driver side) is ON (driver seat belt unfastened)

WARNING CANCEL CONDITIONS

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

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

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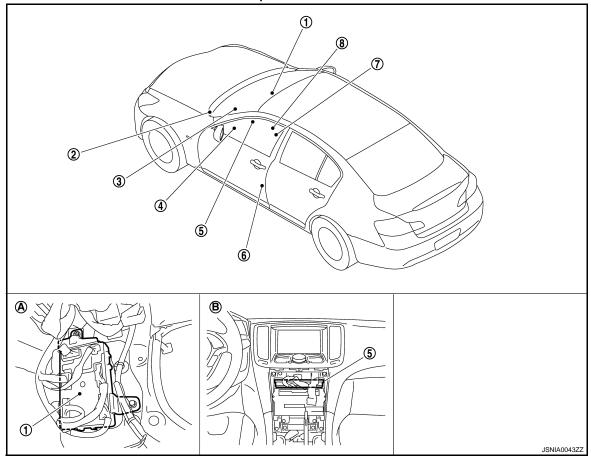
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SEAT BELT WARNING CHIME: Component Parts Location

INFOID:0000000004238400



- 1. BCM
- 4. Combination switch (Lighting switch)
- 7. Seat belt buckle switch
- A. Dash side lower (passenger side)
- 2. Parking brake switch (A/T)
- 5. Unified meter and A/C amp.
- 8. Parking brake switch (M/T)
- B. Behind cluster lid C
- 3. Combination meter
- 6. Front door switch (driver side)

SEAT BELT WARNING CHIME : Component Description

INFOID:0000000004238401

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

PARKING BRAKE RELEASE WARNING CHIME

< SYSTEM DESCRIPTION >

ABS actuator and

electric unit

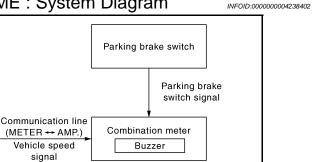
(control unit)

PARKING BRAKE RELEASE WARNING CHIME: System Diagram

CAN communication

line

Vehicle speed signal



PARKING BRAKE RELEASE WARNING CHIME: System Description

Unified meter

and A/C amp.

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DESCRIPTION

- The unified meter and A/C amp. receives the vehicle speed signal from the ABS actuator and electric unit (control unit) via CAN communication line and transmits it to the combination meter by means of communication line.
- The combination meter judges whether the parking brake is released from the vehicle speed signal received
 from the unified meter and A/C amp. and the parking brake switch signal from the parking brake switch, and
 sounds the warning buzzer if necessary.

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled.

- Vehicle speed is 7 km/h (4.3 MPH) or higher
- · 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

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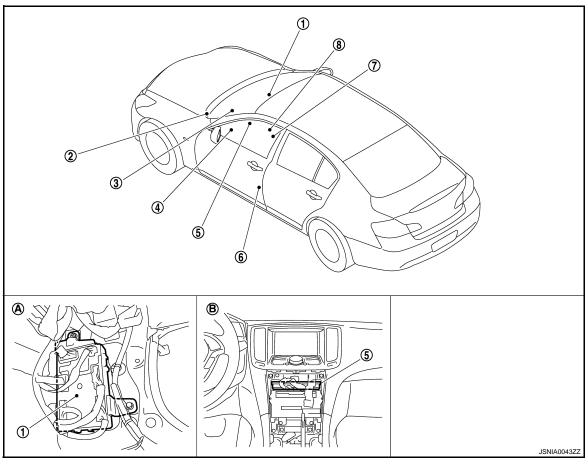
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Revision: 2009 October WCS-11 2009 G37 Sedan

PARKING BRAKE RELEASE WARNING CHIME: Component Parts Location

IFOID:0000000004238404



- 1. BCM
- 4. Combination switch (Lighting switch)
- 7. Seat belt buckle switch
- A. Dash side lower (passenger side)
- 2. Parking brake switch (A/T)
- 5. Unified meter and A/C amp.
- 8. Parking brake switch (M/T)
- B. Behind cluster lid C

- 3. Combination meter
- 6. Front door switch (driver side)

PARKING BRAKE RELEASE WARNING CHIME: Component Description INFOID.000000004238405

Unit	Description		
Combination meter	Judges whether the parking brake is released from the vehicle speed signal received from the unified meter and A/C amp. via CAN communication line and the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary.		
Unified meter and A/C amp.	Receives a vehicle speed signal from ABS actuator and electric unit (control unit) via CAN communication line and transmits it to the combination meter by means of communication line.		
ABS actuator and electric unit (control unit)	Transmits the vehicle speed signal to combination meter via CAN communication line.		
Parking brake switch	Refer to MWI-61, "Description".		

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (UNIFIED METER AND A/C AMP.)

CONSULT-III Function (METER/M&A)

INFOID:0000000004675458

X: Applicable

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CONSULT-III APPLICATION ITEMS

CONSULT-III can perform the following diagnosis modes with CAN communication with the unified meter and A/C amp.

System	Diagnosis mode	Description
METER/M&A	Self Diagnostic Result	Unified meter and A/C amp. checks the conditions and displays memorized error.
METERNINGA	Data Monitor	Displays unified meter and A/C amp. input/output data in real time.

SELF DIAG RESULT

Refer to MWI-101, "DTC Index".

DATA MONITOR

Display Item List

[On/Off]

[On/Off]

TRUNK/GLAS-H

MAIN Display item [Unit] Description **SIGNALS** Value of vehicle speed signal received from ABS actuator and electric unit (control SPEED METER unit) with CAN communication line. Χ [km/h] NOTE: 655.35 is displayed when the malfunction signal is received. Vehicle speed signal value transmitted to other units with CAN communication SPEED OUTPUT line. Χ NOTE: [km/h] 655.35 is displayed when the malfunction signal is received. ODO OUTPUT Odometer signal value transmitted to other units with CAN communication line. [km/h or mph] Value of the engine speed signal received from ECM with CAN communication **TACHO METER** line. Χ [rpm] NOTE: 8191.875 is displayed when the malfunction signal is received. **FUEL METER** Χ Fuel level indicated on combination meter. Value of engine coolant temperature signal received from ECM with CAN commu-W TEMP METER nication line. Χ NOTE: [°C] 215 is displayed when the malfunction signal is input. ABS W/L Status of ABS warning lamp judged from ABS warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line. [On/Off] Status of VDC OFF indicator lamp judged from VDC OFF indicator lamp signal re-VDC/TCS IND WCS ceived from ABS actuator and electric unit (control unit) with CAN communication [On/Off] SLIP IND Status of SLIP indicator lamp judged from slip indicator lamp signal received from [On/Off] ABS actuator and electric unit (control unit) with CAN communication line. Status of brake warning lamp judged from brake warning lamp signal received from ABS actuator and electric unit (control unit) with CAN communication line. BRAKE W/L [On/Off] 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 Status of door warning judged from door switch signal received from BCM with

WCS-13 Revision: 2009 October 2009 G37 Sedan

CAN communication line.

CAN communication line.

Status of trunk warning judged from trunk switch signal received from BCM with

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
HI-BEAM IND [On/Off]		Status of high beam indicator lamp judged from high beam request signal received from BCM with CAN communication line.
TURN IND [On/Off]		Status of turn indicator lamp judged from turn indicator signal received from BCM with CAN communication line.
FR FOG IND [On/Off]		This item is displayed, but cannot be monitored.
RR FOG IND [Off]		This item is displayed, but cannot be monitored.
LIGHT IND [On/Off]		This item is displayed, but cannot be monitored.
OIL W/L [On/Off]		Status of oil pressure warning lamp judged from oil pressure switch signal received from IPDM E/R with CAN communication line.
MIL [On/Off]		Status of malfunction indicator lamp judged from malfunctioning indicator lamp signal received from ECM with CAN communication line.
GLOW IND [On/Off]		This item is displayed, but cannot be monitored.
C-ENG2 W/L [On/Off]		This item is displayed, but cannot be monitored.
CRUISE IND [On/Off]		Status of CRUISE indicator judged from ASCD status signal received from ECM with CAN communication line.
SET IND [On/Off]		Status of set indicator judged from ASCD SET indicator signal received from ECN with CAN communication line.
CRUISE W/L [On/Off]		Status of CRUISE warning lamp judged from ASCD status signal received from ECM with CAN communication line.
BA W/L [Off]		This item is displayed, but cannot be monitored.
ATC/T-AMT W/L [On/Off]		Status of A/T check warning lamp judged from A/T check indicator signal received from TCM with CAN communication line.
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 [Off]		This item is displayed, but cannot be monitored.
FUEL W/L [On/Off]		Low-fuel warning lamp status judged by the identified fuel level.
WASHER W/L [On/Off]		Status of washer warning lamp judged from washer level switch input to combination meter.
AIR PRES W/L [On/Off]		Status of low tire pressure warning lamp judged from tire pressure signal received from BCM with CAN communication line.
KEY G/Y W/L [On/Off]		Status of key warning lamp (G/Y) judged from key warning signal received from BCM with CAN communication line.
AFS OFF IND [On/Off]		Status of AFS OFF indicator lamp judged from AFS OFF indicator lamp signal received from AFS control unit with CAN communication line.
4WAS/RAS W/L [On/Off]		Status of 4WAS warning lamp judged from 4WAS warning lamp signal received from 4WAS main control unit with CAN communication line.
DDS W/L [On/Off]		This item is displayed, but cannot be monitored.
LANE W/L [On/Off]		This item is displayed, but cannot be monitored.
LDP IND [On/Off]		This item is displayed, but cannot be monitored.

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
LCD [B&P N, B&P I, ID NG, ROTAT, SFT P, INSRT, BATT, NO KY,OUTKY, LK WN, C&P N,C&P I]		Displays status of Intelligent Key system warning judged from meter display signal received from BCM with CAN communication line.
ACC TARGET [On/Off]		Status of vehicle ahead detection indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
ACC DISTANCE [Off, SHOR, MID, LONG]		Status of set distance indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
ACC OWN VHL [On/Off]		Status of own vehicle indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
ACC SET SPEED [On/Off]		Status of set vehicle speed indicator judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
ACC UNIT [On/Off]		Status of display unit judged from meter display signal received from ICC sensor integrated unit with CAN communication line.
O/D OFF SW [On/Off]		This item is displayed, but cannot be monitored.
SHIFT IND [P, R, N, D, M1, M2, M3, M4, M5, M6, M7]		Status of shift position indicator judged from shift position signal and manual mode indicator signal received from TCM with CAN communication line.
AT S MODE SW [On/Off]		Status of snow mode switch.
AT P MODE SW [On/Off]		This item is displayed, but cannot be monitored.
M RANGE SW [On/Off]		Status of manual mode switch.
NM RANGE SW [On/Off]		Status of not 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 up switch.
ST SFT DWN SW [On/Off]		Status of paddle shifter down switch.
COMP FB SIG [On/Off]		A/C compressor activation condition that ECM judges according to the water temperature and the acceleration degree.
4WD LOCK SW [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.
BRAKE OIL SW [On/Off]		Status of brake fluid level switch.
DISTANCE [km]		Value of possible driving distance calculated by unified meter and A/C amp.
OUTSIDE TEMP [°C or °F]		Ambient air 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.)

< SYSTEM DESCRIPTION >

Display item [Unit]	MAIN SIGNALS	Description
FUEL LOW SIG [On/Off]		Status of fuel level low warning signal to output to AV control unit with CAN communication line.
BUZZER [On/Off]	Х	Buzzer status (in the combination meter) is judged with the buzzer output signal received from each unit with CAN communication line and the warning output condition of the combination meter.

NOTE:

Some items are not available according to vehicle specification.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:0000000004675372

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APPLICATION ITEM

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

Diagnosis mode	Function Description		
Work Support	Changes the setting for each system function.		
Self Diagnostic Result	Displays the diagnosis results judged by BCM.		
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III operation manual.		
Data Monitor	The BCM input/output signals are displayed.		
Active Test	The signals used to activate each device are forcibly supplied from BCM.		
Ecu Identification	The BCM part number is displayed.		
Configuration	This function is not used even though it is displayed.		

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

x: Applicable item Diagnosis mode System Sub system selection item Work Support **Data Monitor Active Test** Door lock DOOR LOCK X X × REAR DEFOGGER Rear window defogger X \times Warning chime **BUZZER** X × Interior room lamp timer INT LAMP × X X Exterior lamp **HEAD LAMP** × × × **WIPER** Wiper and washer × × **FLASHER** Turn signal and hazard warning lamps AIR CONDITONER* · Intelligent Key system INTELLIGENT KEY × X × · Engine start system Combination switch COMB SW × Body control system **BCM** X **IVIS - NATS IMMU** × × Interior room lamp battery saver **BATTERY SAVER** X × X Trunk lid open TRUNK × X THEFT ALM Vehicle security system × × X RAP system **RETAINED PWR** X Signal buffer system SIGNAL BUFFER X × **TPMS** TPMS (AIR PRESSURE MONITOR) X × X

NOTE:

FREEZE FRAME DATA (FFD)

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

Revision: 2009 October WCS-17 2009 G37 Sedan

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^{*:} This item is displayed, but is not used.

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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

BUZZER

BUZZER: CONSULT-III Function (BCM - BUZZER)

INFOID:0000000004238408

CONSULT-III APPLICATION ITEMS

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

DATA MONITOR

DIAGNOSIS SYSTEM (BCM)

< SYSTEM DESCRIPTION >

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

ACTIVE TEST

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

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

COMBINATION METER: Diagnosis Procedure

INFOID:0000000004675456

1.CHECK FUSE

Check for blown fuses.

Power source	Fuse No.
Battery	11
Ignition switch ON or START	4

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 terminal and ground.

Terminals					
(+)			Ignition switch	Voltage (Approx.)	
Combination meter		(–)	ignition switch		
Connector	Terminals				
M53	1	Ground	OFF	Battery voltage	
IVIOO	21	Giodila	ON	Dattery 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 terminal and ground.

Combination meter			Continuity
Connector	Terminals		Continuity
	5	Ground	
M53	15		Existed
	22		

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

UNIFIED METER AND A/C AMP.

UNIFIED METER AND A/C AMP. : Diagnosis Procedure

INFOID:0000000004675457

1. CHECK FUSE

Check for blown fuses.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Power source	Fuse No.
Battery	11
Ignition switch ACC or ON	19
Ignition switch ON or START	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 unified meter and A/C amp. harness connector terminal and ground.

Terminals				
(+)			Ignition switch	Voltage (Approx.)
Unified meter	Unified meter and A/C amp.		ignition switch	
Connector	Terminals			
	54		OFF	
M67	41	Ground	ACC	Battery voltage
	53		ON	

Is the inspection result normal?

YES >> GO TO 3.

>> Check harness between unified meter and A/C amp. and fuse. NO

3. CHECK GROUND CIRCUIT

- Turn ignition switch OFF.
- Disconnect unified meter and A/C amp. connector. 2.
- Check continuity between unified meter and A/C amp. harness connector terminal and ground.

Unified meter	and A/C amp.	- Ground	Continuity	
Connector	Terminals		Continuity	
M67	55		Existed	
IVIO7	71		Existed	

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE): Diagnosis Procedure

1. CHECK FUSE AND FUSIBLE LINK

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

Signal name Battery power supply	Fuse and fusible link No.
Pottony navyor cupply	К
battery power suppry	10

Is the fuse fusing?

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

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

WCS-21 Revision: 2009 October 2009 G37 Sedan

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INFOID:0000000004675373

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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

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

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M119	13		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

METER BUZZER CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

METER BUZZER CIRCUIT Α Description INFOID:0000000004238413 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:0000000004238414 1. CHECK OPERATION OF METER BUZZER Select "BUZZER" of "BCM" on CONSULT-III. D Perform "LIGHT WARN ALM" of "ACTIVE TEST". Does meter buzzer beep? YES >> INSPECTION END Е NO >> GO TO 2. 2.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL Select the "Data Monitor" for the "METER/M&A" and check the "BUZZER" monitor value. F **BUZZER** Under the condition of buzzer input : ON : OFF Except above Is the inspection result normal? YES >> Replace combination meter. NO >> Replace BCM. Refer to BCS-82, "Removal and Installation". Diagnosis Procedure INFOID:0000000004238415 $oldsymbol{1}$.CHECK POWER SUPPLY OF COMBINATION METER Check power supply of combination meter. Refer to MWI-51, "COMBINATION METER: Diagnosis Procedure". Is the inspection result normal? YES >> GO TO 2. K >> Repair power supply circuit of combination meter. NO 2.CHECK BATTERY POWER SUPPLY OF UNIFIED METER AND A/C AMP. Check battery power supply of unified meter and A/C amp. Refer to MWI-51, "UNIFIED METER AND A/C AMP.: Diagnosis Procedure". Is the inspection result normal? YES M >> INSPECTION END NO >> Repair power supply circuit of unified meter and A/C amp.

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SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

Description INFOID:000000004675214

Transmits a seat belt buckle switch signal to the unified meter and A/C amp.

Component Function Check

INFOID:0000000004675215

1. CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

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

"BUCKLE SW"

When seat belt is fastened : Off
When seat belt is unfastened : On

>> INSPECTION END

Diagnosis Procedure

INFOID:0000000004675216

1. CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL

- 1. Turn ignition switch ON.
- 2. Check voltage between unified meter and A/C amp. harness connector terminal and ground.

	Terminal				
(+)			Condition	Voltage	
Combina	tion meter	(–)	Condition	(Approx.)	
Connector	Terminal	(-)			
M66	9	Ground	When seat belt is fastened	12 V	
IVIOO	9	Giodila	When seat belt is unfastened	0 V	

Is the inspection result normal?

YES >> Replace unified meter and A/C amp.

NO >> GO TO 2.

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

- Turn ignition switch OFF.
- 2. Disconnect unified meter and A/C amp. connector and seat belt buckle switch (driver side) connector.
- 3. Check continuity between unified meter and A/C amp. harness connector terminal and seat belt buckle switch (driver side) harness connector terminal.

Unified meter	and A/C amp.	Seat belt buckle s	switch (driver side)	Continuity
Connector	Terminal	Connector	Terminal	Continuity
M66	9	B13	1	Existed

4. Check harness continuity between unified meter and A/C amp. harness connector terminal and ground.

Unified meter	and A/C amp.		Continuity
Connector	Terminal	Ground	Continuity
M66	9		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 s	switch (driver side)		Continuity
Connector	Terminal	Ground	Continuity
B13	2		Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair harness or connector.

Component Inspection

1. CHECK SEAT BELT BUCKLE SWITCH (DRIVER SIDE)

- 1. Turn ignition switch OFF.
- 2. Disconnect the seat belt buckle switch (driver side) connector.
- 3. Check continuity between terminals 1 and 2.

Terr	ninal	Seat belt buckle switch (driver side)	Continuity
1	2	When seat belt is fastened	Not existed
1	2	When seat belt is unfastened	Existed

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace the seat belt buckle switch (driver side). Refer to <u>SB-8, "SEAT BELT BUCKLE : Removal and Installation".</u>

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INFOID:0000000004675217

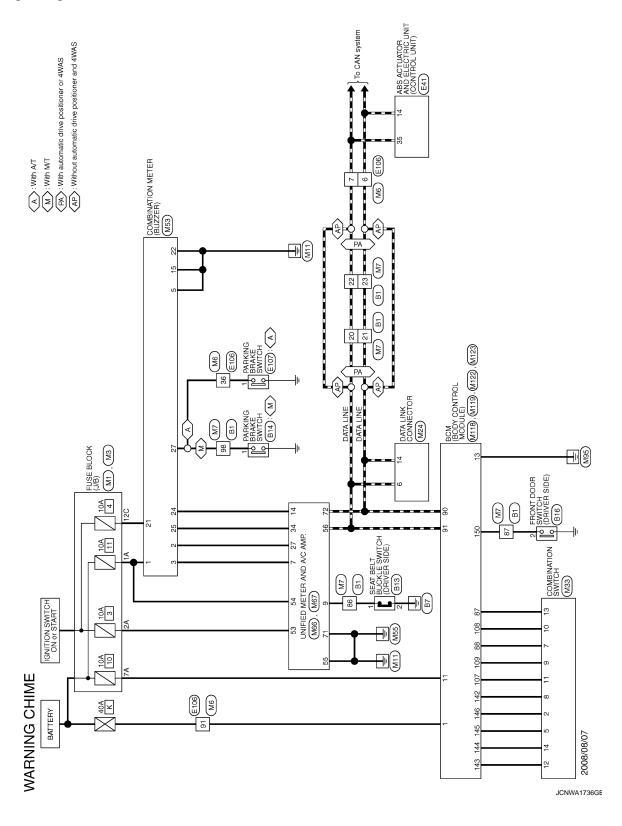
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Revision: 2009 October WCS-25 2009 G37 Sedan

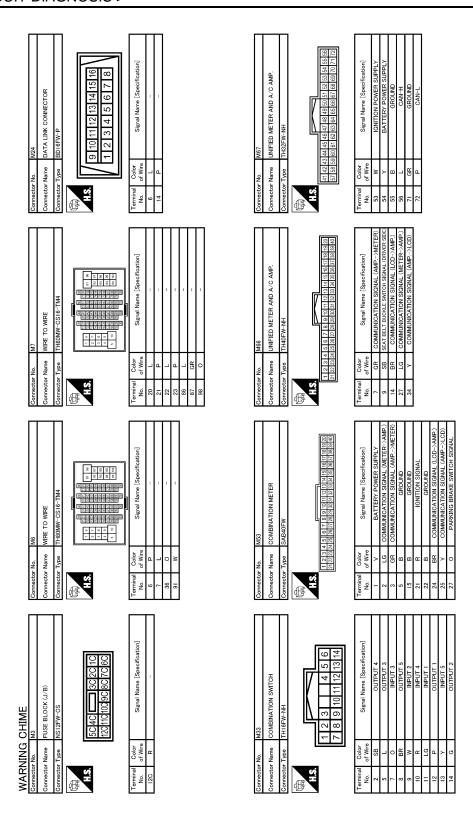
Wiring Diagram - WARNING CHIME -

INFOID:0000000004238420



Connector No. B16 Connector Name FRONT DOOR SWITCH (DRIVER SIDE) Connector Type AOSFW Terminal Color No. of Wire Signal Name [Specification] 2 B	Connector No. MI Connector Name FUSE BLOCK (J/B)		В
Commettor No. Commettor Name Commettor Type Terminal Colo Of W. 2 B Colo Of W. 2 B Colo Of W. Colo	Connector No. Connector Type Connector No. Connector		D
B14 PARKING BRAKE SWITCH (WITH M/T) POIFB-A Signal Name [Specification]	FLOT TBOLFW TBOLFW Signal Name [Specification]		E F
No. Name Type	No. Name Type		G
Connector Na Connector Tyr Connector Na Connector	Connector Nor		Н
BI 3 SEAT BELT BUCKLE SWITCH (DRIVER AGEW AGEW Signal Name [Specification]	WINE TO WIPE THEOFW-CS16-TM4		J
Connector No. B Connector Name SI Connector Type M Connector Type M No. of Wire 1 SB 2 B 2 B	Connector No. El Connector Name W Connector Type TT Terminal Color No. of Wire 6 O O O O O O O O O O O O O O O O O O		K
			L
CHIME BI WIRE TO WIRE THEOFW-CSIG-TMA Signal Name (Specification)	EE1 (CONTROL DMT) BAA42TB-AHZ4-LH BAA42TB-AHZ4-LH GARGER GENERALGER SIGNER SIGN		M WCS
	No. Type Type Color D P L		
MARNING Connector No. Connector Type Connector Type M. Color No. 20 Color No. 21 Color Sign Sign Sign Sign Sign Sign Sign Sign	Connector No. Connector Type Connector Type H.S. 1.3 Terminal Color 1.4 35 L 25 L 26 L 26 L 27 L 26 L 27 L 28 L 2	1011114 17	0
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Revision: 2009 October WCS-27 2009 G37 Sedan



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	M.723 BOM (BODY CONTROL MODULE) THOFG-NH THORGON CONTROL MODULE) CONTROL MODULE) CONTROL MODULE)	Signal Name [Specification] COMBI SW OUTPUT 5 COMBI SW OUTPUT 2 COMBI SW OUTPUT 3 COMBI SW OUTPUT 3 COMBI SW OUTPUT 3 COMBI SW OUTPUT 4 DRIVER DOOR SW		В
	8 8	Oolor		С
	Connector No. Connector Name Connector Type H.S. H.S.	Terminal O of 143 143 145		D
	DOULE) 77 77 78 78 78 78 78 78 78 78 78 78 78 7	offication] PUT 5 PUT 1 PUT 1 PUT 2		Е
	M 122 BOM (BODY CONTROL MODULE) TH40FB-NH TH40FB-NH TH90FB-NH	Signal Name [Specification] COMBI SWI INPUTT 3 COMBI SWI INPUTT 3 CAN-L		F
	or No. or Type or Type or Type or Type or Type	Color Col		G
	Connect	Terminal No. 10 10 10 10 10 10 10 10 10 10 10 10 10		Н
	ol Module)	Signal Name (Specification) BAT (FUSE) GND		I
	MITHER BCM REODY CONTROL MODULE) NS16FW-CS	Signal Nam		J
	Connector No. Connector Name Connector Type H.S. 11	Terminal Color No. of Wire 1 1 1 1 1 1 1 1 1		K
				L
	MIIB BOM (BODY CONTROL MODULE) MOSFEL-LC 13	Signal Name [Specification] BAT (F/1.)	_	M
WARNING CHIME	me BCM (BODY C	Oglor W W With a William	V	VC:
WARNIN	Connector No. Connector Name Connector Type H.S.	Terminal Co. No. of W. o	JCNWA1739GE	0
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Revision: 2009 October WCS-29 2009 G37 Sedan

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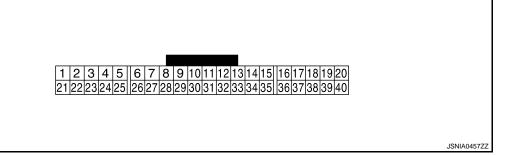
ECU DIAGNOSIS INFORMATION

COMBINATION METER

Reference Value

VALUES ON THE DIAGNOSIS TOOL Refer to WCS-44, "Reference Value".

TERMINAL LAYOUT



PHYSICAL VALUES

	nal No. color)	Description			Condition	Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
1 (V)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage
2 (LG)	Ground	Communication signal (METER→ AMP.)	Output	Ignition switch ON	_	(V) 6 4 2 0 ■ 200 µs JSNIA0027GB
3 (GR)	Ground	Communication signal (AMP.→ METER)	Input	Ignition switch ON	_	(V) 6 4 2 0 200 µs JSNIA0027GB
5 (B)	Ground	Ground	_	Ignition switch ON	_	0 V
6	Ground	Alternator signal	Input	Ignition switch	Charge warning lamp ON	0 V
(W)				ON	Charge warning lamp OFF	12 V
7	Ground	Air bag signal	Input	Ignition switch	Air bag warning lamp ON	4 V
(LG)				ON	Air bag warning lamp OFF	0 V
10	Ground	Security signal	Input	Ignition switch	Security warning lamp ON	0 V
(R)	2.2370			OFF	Security warning lamp OFF	12 V

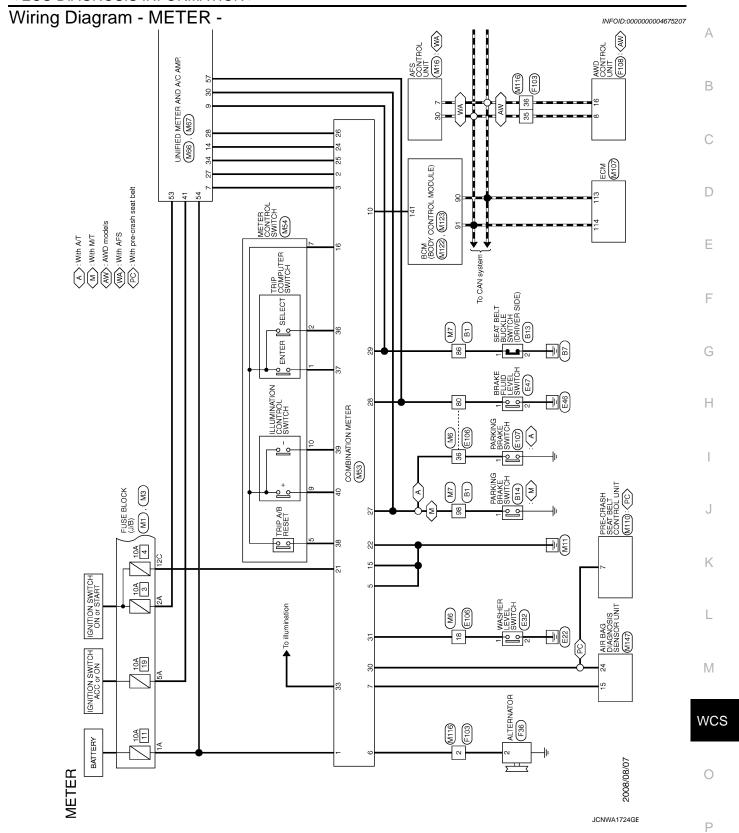
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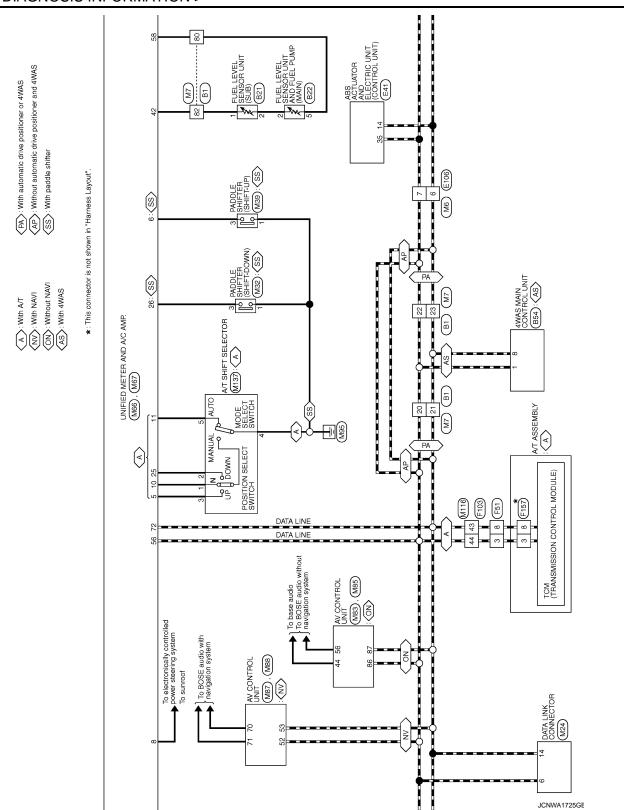
	inal No. e color)	Description			Condition	Value	
+	_	Signal name	Input/ Output		Condition	(Approx.)	
15 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	
16 (BR)	Ground	Meter control switch ground	_	Ignition switch ON	_	0 V	
21 (R)	Ground	Ignition signal	Input	Ignition switch ON	_	12 V	
22 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	
24 (BR)	Ground	Communication signal (LCD→ AMP.)	Output	Ignition switch ON	_	(V) 15 10 5 0 400 µs JSNIA0028GB	
25 (Y)	Ground	Communication signal (AMP.→ LCD)	Input	Ignition switch ON	_	(V) 6 4 2 0 ■ 200 µs JSNIA0027GB	
						NOTE: The maximum voltage varies depending on the specification (destination unit).	
26 (R)	Ground	Vehicle speed signal (8-pulse)	Input	Ignition switch ON	Speedometer operated [When vehicle speed is approx. 40 km/h (25 MPH)]	0	
					Parking brake ON	JSNIA0012GB	
27 (O)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake OFF	(V) 8 4 0 10 ms JSNIA0007GB	\

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value	
+	_	Signal name	Input/ Output	Condition		(Approx.)	
28 (SB)	Ground	Brake fluid level switch signal	Input	Ignition switch ON	Brake fluid level is normal.	(V) 10 0 10 ms JSNIA0008GB	
					The brake fluid level is low- er than the low level	0 V	
29 (L)	Ground	Seat belt buckle switch signal (driver side)	Input	Ignition switch ON	When driver seat belt is fastened	12 V	
					When driver seat belt is un- fastened	0 V	
30 (G)	Ground	Seat belt buckle switch signal (passenger side)	Input	Ignition switch ON	When getting in the passenger seat When passenger seat belt is fastened	12 V	
					When getting in the passenger seat When passenger seat belt is unfastened	0 V	
31 (L)	Ground	Washer level switch signal	Input	Ignition switch	Washer level switch ON	0 V	
33 (R)	Ground	Illumination control signal	Output	Ignition switch ON	Lighting switch ON, then operate the illumination control switch.	NOTE: When brightness level is midway (V) 10 0 2 ms JSNIA0010GB	
36 (LG)	16 (BR)	Select switch signal	Input	Ignition switch	When is pressed	0 V	
37 (SB)	16 (BR)	Enter switch signal	Input	ON Ignition switch ON	Other than the above When is pressed Other than the above	5 V 0 V 5 V	
38 (L)	16 (BR)	Trip A/B reset switch signal	Input	Ignition switch ON	When trip A/B reset switch is pressed Other than the above	0 V 5 V	
39 (P)	16 (BR)	Illumination control switch signal (–)	Input	Ignition switch ON	When S switch is pressed Other than the above	0 V	
40 (O)	16 (BR)	Illumination control switch signal (+)	Input	Ignition switch ON	When 🗗 switch is pressed	0 V	
					Other than the above	5 V	

< ECU DIAGNOSIS INFORMATION >





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В С D Е CIC): With ICC F G FUSE BLOCK (J/B) (M2), (E103) Н BATTERY To brake control system Κ M55 L CPU UNIFIED METER AND A/C AMP. (M66), (M67) \mathbb{N} WCS 0 JCNWA1726GE Ρ

Connector No. 1821	Connector Name	Commettor Type EDZFOY-RS H.S.	Signal Name [Specification] Color Signal Name [Specification] 1	Connector Connec	Signal Name [Specification] Color Signal Name [Specification]
Connector No. 1814		Connector Type PDIFB-A	Signal Name (Specification) Terminal Codor Signal Nam No. of Wire Signal Nam -	Commettor No. Commettor Name Commettor Type	Signal Name [Specification] I erminal Color Signal Nam
Connector No. B13	Connector Name	Signature Angewood An	Terminal Color Signal Name [Specification]	SENSOR UNIT AND FUEL Connector Connector (Connector 1) 4 5	Signal Name [Specification] I erminal Color Signal Na
METER Connector No. B1		TH80FW-CS16-TMA	Terminal Color Sign No. of Wire 21 L 22 L 23 P 80 Y 82 B 82 B 82 B 82 B 82 B 82 B 82 B 82 B	or No.	No of Wire Sign

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< ECU DIAGNOSIS INFORMATION >

		А
LUID LEVEL SWITCH	OCK (J/B) CS 4F	В
BRAKE F	F103 F105 BL NS165W	С
Connector No. Connector Name Connector Type No. Terminal Color No. 1 R R 2	Connector No. Connector Name Connector Type ILS Terminal Color No. of Wre 2F W 8F L	D
ELECTRIC UNIT	ification]	Е
ULUATOR AND OLL UNITY) 3-AHZ4-LH GERTALDERING Signal Name CA	RSOZFB RSOZFB Signal Name [Specification]	F
No. Name Name Color Color P P L L L	No Name Color G	G
Connector Connector Connector No. No. 14	Connector No. Connector Na. Connector Na. Connector Typ. Terminal Co. No. of N. T. C. Of N. T. C.	Н
9-RS8-SHZ8 [13] 14 15 16 [13] 14 15 16 [13] 14 15 16 [14] 15 16 16 16 [15] 18 18 18 18 18 [16] 18 18 18 18 [16] 18 18 18 18 [16] 18 18 18 18 [17] 18 18 18 18 [18] 18 18 18 18 [18] 18 18 18 18 [18] 18 18 18 18 [18] 18 18 18 18 18 [18] 18 18 18 18 18 [18] 18 18 18 18 18 [18] 18 18 18 18 18 [18] 18 18 18 18 18 [18] 18 18 18 18 18 [18] 18 18 18 18 18 [18] 18 18 18 18 [18] 18 18 18 18 [18] 18 18 18 18 [18] 18 18 18 [18] 18 18 18 [18] 18 18 18 [18] 18 18 18 [18] 18 18 [18] 18 18 18 [18] 18 18 [18] 18 18 [18] 18 18 [18] 18 [18] 18 18 [18] 18	EBRSOR INTEGRATED UNIT FB-PR 1 2 3 4 5 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	I
E40 WIRE TO WIRE SAAGMB-RSS-SHZ8 1 2 10 11 12 13 14 15 19 15 15 18 18 18 18 18 18 18 18 18 18 18 18 18	RSOFER-PR RSOFER-PR Signal Name [Speedicati BRANE HOLY DRIVES CANT-H CANT-L	J
Connector No. Connector Name Connector Type Solution Connector Type Solution Color No. SB	Connector No. Connector Name III Connector Type R A.S. H.S. L. 2 SB 2 SB 2 B 3 P L 6 P	К
		L
LEVEL SWITCH Signal Name (Specification)	KE HOLD RELAY MZ 3	М
E32 WASHER	MS0ZFL	WCS
METER Connector No. Connector Type Connector Type Connector Type Color No. I LG I LG I B	Connector No. Connector Name Connector Type Terminal Color No. of Wire 1 B 2 SB 2 SB 2 SB 3 L 5 SB	0
		JCNWA1728GE

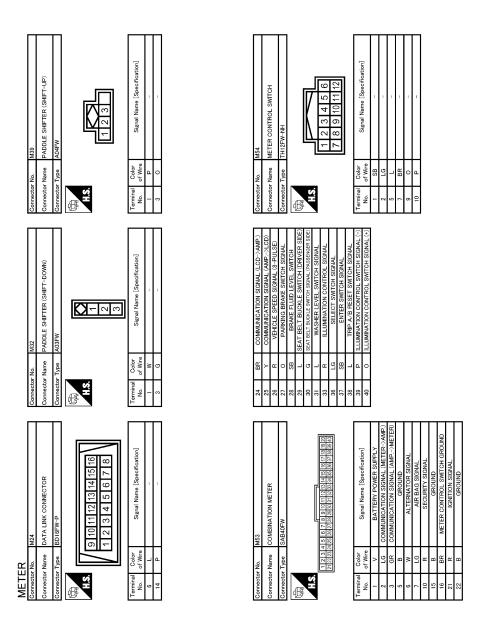
Revision: 2009 October WCS-37 2009 G37 Sedan

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< ECU DIAGNOSIS INFORMATION >

	[ue	(cation)		А
12 USE BLOCK (J/B) ISIOFW-CS 4B 3B TB 6B 5B 108 9B 8B 7B 6B 5B	Signal Name [Specification]	13 14 15 15 15 15 15 15 15 15 15 15 15 15 15		В
2 4 2	Color Sign	M16 TH40FW— TH40FW— TH40FW— TH20FW—		С
Connector No. Connector Type Connector Type	Terminal No. of 38	Connector No. Connector Type Connector Type Towning Color No. 7 P P 30 L		D
	offication]	of featon)		Е
MI NSOBEW-M2 A A A A A A A A A A A A A A A A A A A	Signal Name (Speorfication)	WRE -CS16-TM4 -CS16-TM4		F
e e	of Wie	ASA MIRE THOUSE AS A SA S		G
Connector No. Connector Typ. H.S.	Terminal No. 1 Perminal 1 Permina	Commetter No. Commetter Type		Н
F157 TOM (TRANSMISSION CONTROL MODULE) SPIOFG (1 2 3 4 5) (6 7 8 9 10)	Signal Name (Specification) CAN-H CAN-L	WMFE CSIG-TM4 CSIG-TM4 CSignal Name [Specification]		I
FIE7 TOM (TRANSMISSIC SPIOFG	Signal Nam	MIRE TO WIFE THROMW-CSIG-TM4 Signal Name [S]		J
Connector No.	Terminal Color No. of Wires	Connector No. Connector Name Connector Name Connector Name Connector Type Connector Type Connector No. of Wire Connector No. of No		K
				L
(OL UNIT 4 5 6 7 8 12 13 14 15 16	Signal Name (Specification) CAN-H CAN-L	OOK (J/B) CS (1009C/BC/T/C6C) (1009C/BC/T/C6C) (1009C/BC/T/C6C) (1009C/BC/T/C6C)		M
F108 THIGTW-NH 1 2 3 4 5 1 9 10 11 12 13 3		FUSE BL FUSE BL FOSE BL FOSE BL FOSE BL		wcs
METER Connector No. Connector Name Connector Type H.S.	Color Color No. Of Wire Of Wire Of Wire Of Wire Of Of Of Of Of Of Of O	Connector No. Connector Type Connector Type H.S. H.S. Terminal Color No. of Wire 12C R		0
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Revision: 2009 October WCS-39 2009 G37 Sedan

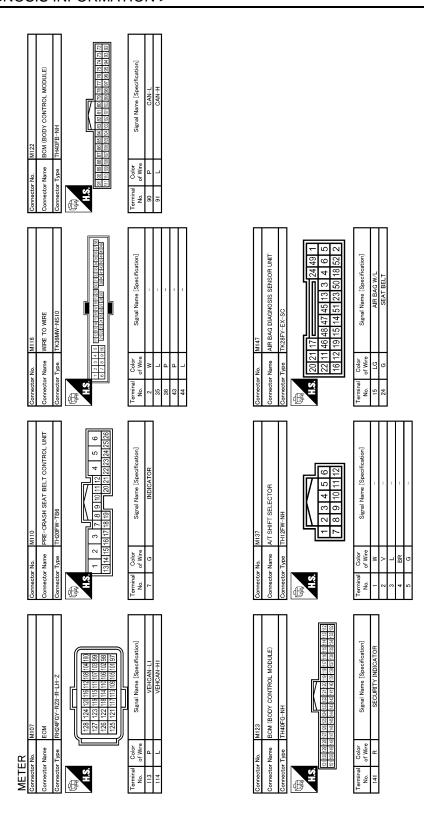


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< ECU DIAGNOSIS INFORMATION >

Connector No. M88 CANH-L	A B C
Connector No. M67	E F G
Cornector No. M85	J K
Connector Name UNIFED METER AND A/C AMP. Connector Name UNIFED METER AND A/C AMP. Connector Name UNIFED METER AND A/C AMP. THATPHY-NH THATPHY-NH THATPHY-NH TO SIGNAL CAPERTER S COMMUNICATION SIGNAL S COMMUNICATION SIGNAL S COMMUNICATION SIGNAL TO R COMMUNICATION SIGNAL S COMMUNICATION SIGNAL TO R COMMUNICATION SIGNAL TO RESPONSE SIGNAL TO REPORT S	M WCS

Revision: 2009 October WCS-41 2009 G37 Sedan



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Fail-safe

FAIL-SAFE

Combination meter performs fail-safe operation when unified meter and A/C amp. communication is malfunction

Solution for communication error between the unified meter and A/C amp. and combination meter.

< ECU DIAGNOSIS INFORMATION >

	Function	Specifications	
Speedometer			
Tachometer		Deset to some his over on diagram and in a	
Fuel gauge		Reset to zero by suspending communication.	
Water temperature gauge			
Illumination control		When suspending communication, change to nighttime mode	
Information display		The display turns off by suspending communication.	
Buzzer		The buzzer turns off by suspending communication.	
	ABS warning lamp		
	VDC OFF indicator lamp		
	SLIP indicator lamp	The lamp turns on by suspending communication.	
	Brake warning lamp		
	CRUISE warning lamp		
	High beam indicator		
	Turn signal indicator lamp		
Warning lamp/indicator	Oil pressure warning lamp		
lamp	Malfunction indicator lamp		
	A/T CHECK warning lamp		
	AWD warning lamp	The lamp turns off by suspending communication.	
	Low tire pressure warning lamp		
	Key warning lamp		
	AFS OFF indicator lamp		
	4WAS warning lamp		
	Master warning lamp		

DTC Index

Refer to WCS-62, "DTC Index".

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< ECU DIAGNOSIS INFORMATION >

UNIFIED METER AND A/C AMP.

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item		Condition	Value/Status	
SPEED METER [km/h]	Ignition switch ON	While driving	Equivalent to speedometer reading NOTE: 655.35 is displayed when the malfunction signal is received	
SPEED OUTPUT [km/h]	Ignition switch ON	While driving	Equivalent to speedometer reading NOTE: 655.35 is displayed when the malfunction signal is received	
ODO OUTPUT [km/h] or [mph]	Ignition switch ON	_	Equivalent to odometer reading in combination meter	
TACHO METER [rpm]	Ignition switch ON	While driving	Equivalent to tachometer reading NOTE: 8191.875 is displayed when the mal- function signal is received	
FUEL METER [lit.]	Ignition switch ON	_	Values according to fuel level	
W TEMP METER [°C]	Ignition switch ON	_	Values according to engine coolant temperature NOTE: 215 is displayed when the malfunction signal is input	
A D Q A A //	Ignition switch ON	ABS warning lamp ON	On	
ABS W/L		ABS warning lamp OFF	Off	
VDC/TCS IND	Ignition switch	VDC OFF indicator lamp ON	On	
	ON	VDC OFF indicator lamp OFF	Off	
SLIP IND	Ignition switch ON	SLIP indicator lamp ON	On	
SLIF IND		SLIP indicator lamp OFF	Off	
BRAKE W/L	Ignition switch ON	Brake warning lamp ON	On	
DIVINE W/E		Brake warning lamp OFF	Off	
DOOR W/L	Ignition switch	Door warning displayed	On	
BOOK W/L	ON	Door warning not displayed	Off	
TRUNK/GLAS-H	Ignition switch	Trunk warning displayed	On	
TROMIT GENOTI	ON	Trunk warning not displayed	Off	
HI-BEAM IND	Ignition switch	Hi-beam indicator lamp ON	On	
TH-DEAM IND	ON	Hi-beam indicator lamp OFF	Off	
TURN IND	Ignition switch	Turn indicator lamp ON	On	
TORN IND	ON	Turn indicator lamp OFF	Off	
FR FOG IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
RR FOG IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
LIGHT IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	

< ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition	Value/Status	
OIL W/I	Ignition switch	Oil pressure warning lamp ON	On	
OIL W/L	ON	Oil pressure warning lamp OFF	Off	
NAIL	Ignition switch	Malfunction warning lamp ON	On	
MIL	ON	Malfunction warning lamp OFF	Off	
GLOW IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
C-ENG2 W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
CRUISE IND	Ignition switch	Cruise indicator displayed	On	
CRUISE IND	ON	Cruise indicator not displayed	Off	
OFT IND	Ignition switch	Set indicator lamp ON	On	
SET IND	ŎN	Set indicator lamp OFF	Off	
CDI IICE M//	Ignition switch	Cruise warning lamp ON	On	
CRUISE W/L	ŎN	Cruise warning lamp OFF	Off	
BA W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
ATC/T-AMT W/L	Ignition switch	A/T check warning lamp ON	On	
	ŎN	A/T check warning lamp OFF Off		
4WD W/L	Ignition switch	AWD warning lamp ON	On	
	ŎN	AWD warning lamp OFF	Off	
4WD LOCK IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
	Ignition switch	Low-fuel warning displayed	On	
FUEL W/L	ŎN	Low-fuel warning not displayed	Off	
	Ignition switch	Washer warning displayed	On	
WASHER W/L	ON	Washer warning not displayed Off		
	Ignition switch	Low tire pressure lamp ON	On	
AIR PRES W/L	ON	Low tire pressure lamp OFF	Off	
	Ignition switch	Key warning lamp ON	On	
KEY G/Y W/L	ON	Key warning lamp OFF	Off	
	Ignition switch	AFS OFF indicator lamp ON	On	
AFS OFF IND	ON	AFS OFF indicator lamp OFF	Off	
	Ignition switch	4WAS warning lamp ON	On	V
4WAS/RAS W/L	ON	4WAS warning lamp OFF	Off	
DDS W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
LANE W/L	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	
LDP IND	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off	

Revision: 2009 October WCS-45 2009 G37 Sedan

Monitor Item		Condition	Value/Status
	Ignition switch	Engine start information display (A/T model)	B&P I
	ON	Engine start information display (M/T model)	C&P I
	Ignition switch	Engine start information display (A/T model)	B&P N
	ACC	Engine start information display (M/T model)	C&P N
	Ignition switch LOCK	Key ID warning display	ID NG
	Ignition switch LOCK	Steering lock information display	ROTAT
LCD	Ignition switch LOCK	P position warning display	SFT P
	Ignition switch LOCK	Intelligent Key insert information display	INSRT
	Ignition switch LOCK	Intelligent Key low battery warning display	BATT
	Ignition switch ON	Take away warning display	NO KY
	Ignition switch LOCK	Key warning display	OUTKY
	Ignition switch ON	ACC warning display	LK WN
ACC TARGET	Ignition switch	Vehicle ahead detection indicator displayed	On
	ON	Vehicle ahead detection indicator not displayed	Off
	Ignition switch ON	When following distance set to "LONG"	LONG
ACC DISTANCE		When following distance set to "MIDDLE"	MID
ACC DISTANCE		When following distance set to "SHORT"	SHORT
		Set distance indicator not displayed	Off
ACC OWN VHL	Ignition switch ON	Own vehicle indicator displayed	On
ACC OWN VIIL		Own vehicle indicator not displayed	Off
ACC SET SPEED	Ignition switch ON	Set vehicle speed indicator not displayed	Off
ACC SET SPEED		Set vehicle speed indicator displayed	On
ACC UNIT	Ignition switch	Set vehicle speed indicator unit display ON	On
ACC UNIT	ON	Set vehicle speed indicator unit display OFF	Off
O/D OFF SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
		Shift position indicator P display	Р
		Shift position indicator R display	R
		Shift position indicator N display	N
		Shift position indicator D display	D
		Shift position indicator M1 display	M1
SHIFT IND	Ignition switch ON	Shift position indicator M2 display	M2
	J.,	Shift position indicator M3 display	M3
		Shift position indicator M4 display	M4
		Shift position indicator M5 display	M5
		Shift position indicator M6 display	M6
		Shift position indicator M7 display	M7

< ECU DIAGNOSIS INFORMATION >

Monitor Item		Condition	Value/Status
AT S MODE SW	Ignition switch	Snow mode switch ON	On
AT 5 MODE 5W	ON	Snow mode switch OFF	Off
AT P MODE SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
M RANGE SW	Ignition switch	Selector lever manual mode position	On
W NAME SW	ON	Other than the above	Off
NM RANGE SW	Ignition switch	Selector lever manual mode position	Off
INIVI RAINGE 3W	ON	Other than the above	On
AT SFT UP SW	Ignition switch	Selector lever + position	On
AI SFI UP SW	ON	Other than the above	Off
AT OFT DIVINI ON	Ignition switch	Selector lever – position	On
AT SFT DWN SW	ON	Other than the above	Off
OT OFT UP OW	Ignition switch	Paddle shifter switch up operation	On
ST SFT UP SW	ŎN	Other than the above	Off
ST SFT DWN SW	Ignition switch	Paddle shifter switch down operation	On
	ŎN	Other than the above	Off
	Ignition switch	A/C compressor activation condition	On
COMP F/B SIG	ŎN	A/C compressor deactivation condition	Off
4WD LOCK SW	Ignition switch ON	NOTE: This item is displayed, but cannot be monitored.	Off
DIAD OW	Ignition switch	Parking brake switch ON	On
PKB SW	ŎN	Parking brake switch OFF	Off
DUOM E OW	Ignition switch	Seat belt not fastened	On
BUCKLE SW	ŎN	Seat belt fastened	Off
	Ignition switch	Brake fluid level switch ON	On
BRAKE OIL SW	ON	Brake fluid level switch OFF	Off
DISTANCE [km]	Ignition switch ON	_	Possible driving distance calculated by unified meter and A/C amp.
OUTSIDE TEMP [°C] or [°F]	Ignition switch ON	_	Equivalent to ambient temperature NOTE: This may not match the indicated value on the information display.
FUEL LOW C:C	Ignition switch	Low-fuel warning displayed	On
FUEL LOW SIG	ON	Low-fuel warning not displayed	Off
DUZZED	Ignition switch	Buzzer ON	On
BUZZER	ON	Buzzer OFF	Off

NOTE

Some items are not available according to vehicle specification.

TERMINAL LAYOUT

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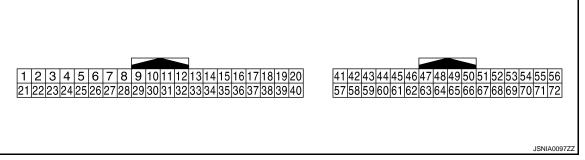
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Revision: 2009 October WCS-47 2009 G37 Sedan



PHYSICAL VALUES

	nal No. color)	Description			Condition	Value				
+	_	Signal name	Input/ Output	Condition		(Approx.)				
4				Ignition	Brake pedal is depressed	12 V				
(G)	Ground	Stop lamp switch signal	Input	switch OFF	Other than the above	0 V				
5	Cround	Manual mode shift up sig-	lnnut	Ignition switch	Selector lever UP operation	0 V				
(L)	Ground	nal	Input	ON	Other than the above	12 V				
6 (O)	Ground	Paddle shifter up signal	Input	Ignition switch ON	Selector lever DS positionPaddle shift up operation	0 V				
				ON	Other than the above	12 V				
7 (GR)	Ground	Communication signal (AMP. → METER)	Output	Ignition switch ON	_	(V) 6 4 2 0 + 1 ms SKIA3362E				
8 (L)	Ground	Vehicle speed signal output (2-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	NOTE: The maximum voltage varies depending on the specification (destination unit).				
9		Seat belt buckle switch sig-		Ignition	When seat belt is fastened	12 V				
(SB)	Ground	nal (driver side)	Input	Input	Input	Input	Input	switch ON	When seat belt is not fastened	0 V
10			Input	Ignition	Selector lever DS position	0 V				
(W)	Ground	Manual mode signal		Input	switch ON	Other than the above	12 V			
11	Cround	Not manual made signal	loout	Ignition switch	Selector lever DS position	12 V				
(G)	Ground	Not manual mode signal	Input	ON	Other than the above	0 V				

	Terminal No. (Wire color) Description			Condition	Value		
+	_	Signal name	Input/ Output	Condition		(Approx.)	
14 (BR)	Ground	Communication signal (LCD → AMP.)	Input	Ignition switch ON	_	(V) 15 10 5 0 400 µs JSNIA0028GB	
23	01	A/T '(.)	1	Ignition	Snow mode switch ON	12 V	
(Y)	Ground	A/T snow switch signal	Input	switch ON	Snow mode switch OFF	0 V	
25 (V)	Ground	Manual mode shift down signal	Input	Ignition switch	Selector lever down operation	0 V	
(v)		Signal		ON	Other than the above	12 V	
26 (G)	Ground	Paddle shifter down signal	Input	Ignition switch ON	Selector lever DS position Paddle shift down operation	0 V	
					Other than the above	12 V	
27 (LG)	Ground	Communication signal (METER → AMP.)	Input	Ignition switch ON	_	(V) 6 4 2 0 *** 1ms SKIA3361E	
28 (R)	Ground	Vehicle speed signal (8-pulse)	Output	Ignition switch ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	NOTE: The maximum voltage varies depending on the specification (destination unit).	
					Parking brake ON	0 V	
30 (V)	Ground	Parking brake switch signal	Input	Ignition switch ON	Parking brake OFF	(V) 8 4 0 10 ms JSNIA0007GB	

	nal No. color)	Description	Description		Condition	Value	
+	_	Signal name	Input/ Output	Condition		(Approx.)	
34 (Y)	Ground	Communication signal (AMP. \rightarrow LCD)	Output	Ignition switch ON	_	(V) 6 4 2 0 200 µs JSNIA0027GB	
41 (L)	Ground	ACC power supply	Input	Ignition switch ACC	_	Battery voltage	
42 (B)*1 (BR)*2	Ground	Fuel level sensor signal	Input	Ignition switch ON	_	(V) 4 3 2 1 0 E 1/4 1/2 3/4 F JSNIA0013GB	
45 (V)	Ground	Ambient sensor signal	Input	_	_	(V) 4 3 2 1 0 -10 0 10 20 30 40 [C] (14) (32) (50) (68) (86) (104) [CF] JSNIA0014GB	
53 (W)	Ground	Ignition signal	Input	Ignition switch ON	_	Battery voltage	
54 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	_	Battery voltage	
55 (B)	Ground	Ground	_	Ignition switch ON	_	0 V	
56 (L)	Ground	CAN-H	_	_	_	_	
57 (LG)	Ground	Brake fluid level switch signal	Input	Ignition switch ON	Brake fluid level is normal.	(V) 10 0 10 ms JSNIA0008GB	
					The brake fluid level is low- er than the low level	0 V	
58 (Y)	Ground	Fuel level sensor ground	_	Ignition switch ON	_	0 V	
61 (R)	Ground	Ambient sensor ground	_	Ignition switch ON	_	0 V	

< ECU DIAGNOSIS INFORMATION >

	nal No. color)	Description		Condition		Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
71 (GR)	Ground	Ground	_	Ignition switch ON	_	0 V
72 (P)	Ground	CAN-L	_	_	_	_

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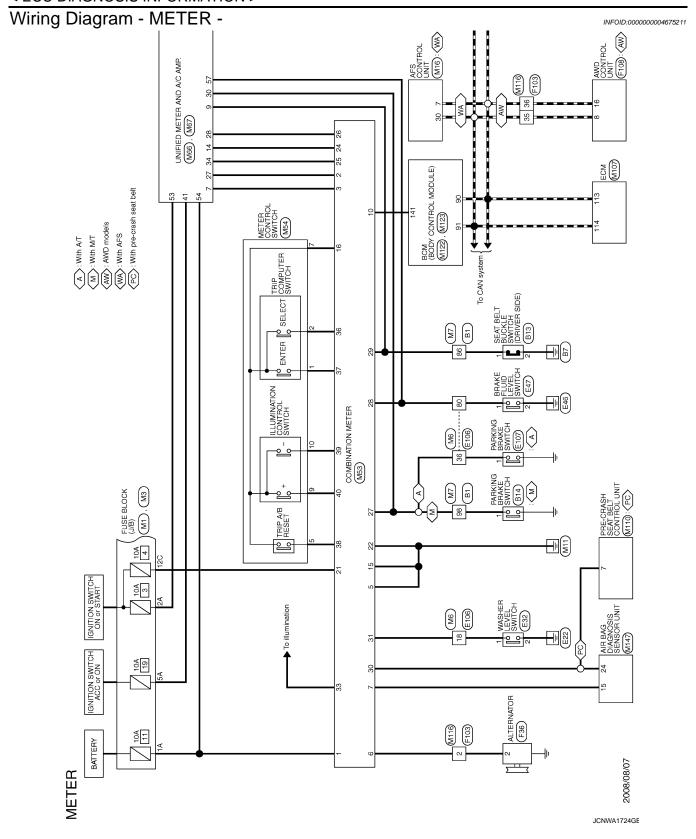
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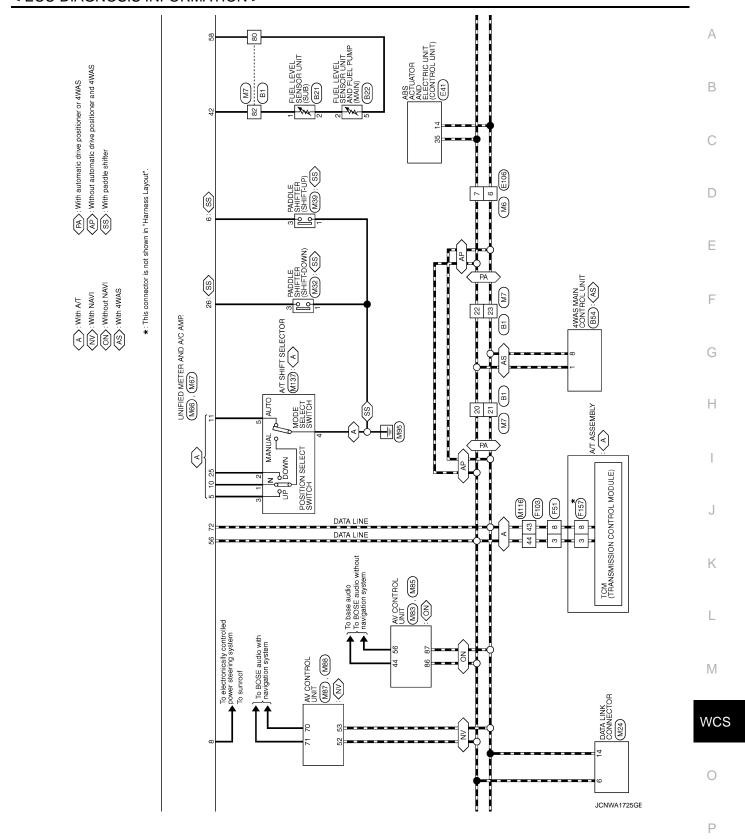
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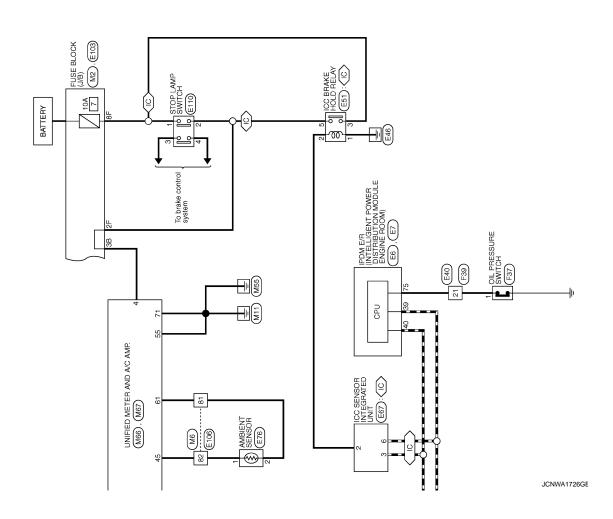
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^{• *2:} A/T models









< ECU DIAGNOSIS INFORMATION >

RS Signal Name [Specification]	E7 DISTRIBUTION MODULE ENGINE ROOM) TH20FW-CS12-M4 GGOTGE GEGETING PRESENTED BY SZ FIGURAL STANDARD BY SZ FIGURAL SZ Signal Name [Specification]	A E	
tor No. 821 FOR Name FUEL LEY FOR Type E02FGY- of Wire B W	No Type 53 54 55 47 48 49 Color of Wire SB		
Commercial Commercial No. 1 No	Connector Connector No. 175	L	J
+ (WITH M/T)	ENGINE ROOM)	E	
PARKING BRAKE SWITCH (WITH M/T) POIFB-A Signal Name [Specification]	E6 IPOM E/R (INTELLIGENT POWER IPOM E/R (INTELLIGENT POWER THOBEN-14H 42 41 40 39 46 45 44 43 Signal Name [Specification]	F	=
2 2	Nire le	G	3
Connector No. Connector Name Connector Type If Terminal Color No. of Wr.	Connector No. Connector Type Connector Type Terminal Color No. of Wir	H	-
SEAT BELT BUCKLE SWITCH (DRIVER SIDE) AGSFW Signal Name [Specification]	No. B54 Num WAS MAIN CONTROL UNIT Type A35FW-M4 A35FW-M4 A3	I	I
SEAT BELT BUCKI SIDE) AGASFW Signal Ma	BS4 AWAS MAIN CONTROL UNIT AS6FW-M4 Signal Name [Special CAN-H CAN-H CAN-H	J	J
Connector No. Connector Name Connector Type II.S. II.S. I SB	Connector No. Connector Name Connector Type 11.5 11.5 11.5 11.5 11.5 11.5 11.5 11	k	<
		L	_
Signal Name [Specification] - [With A/T] - [With A/T]	EDZE LEVEL SENSOR UNIT AND FUEL PUMP (MARN) EDSFGY-RS Signal Name [Specification]	N	Л
MWR TO (19 (19 (19 (19 (19 (19 (19 (19 (19 (19		W	CS
Color Name Col	Connector No. 6 Connector Type 6 Connector Type 6 Connector Type 7 Connect	C)
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Revision: 2009 October WCS-55 2009 G37 Sedan

Connector No. E47	TRIC UNIT Connector Name BRAKE FLUID LEVEL SWITCH Connector Type YV02FGY	HS (1) CANAGE (1) CANA	Terminal Color Signal Name [Specification] No of Wire R	Connector No. E103	П	(15) (15) (15) (15) (15) (15) (15) (15)	Terminal Color Signal Name [Specification] No of Wire Signal Name [Specification] ZF W -
Connector No. E41	Connector Name (CONTROL UNIT) Connector Type BAA42FB-AHZ4-LH	H.S. (Seasonander of the seasonander of the seasona	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] 14 P CAN-L 35 L CAN-H	Connector No. E76	П	HS.	Terminal Color Signal Name [Specification] Color
Connector No. E40	Connector Name WIRE TO WIRE Connector Type SAA36MB-RS8-SHZ8	H.S. 10 10 11 12 10 10 11 12 10 10 11 12 10 10 11 12 10 10 11 12 10 10 11 12 10 10 11 12 10 10 11 12 10 10 11 12 10 10 11 12 10 10 11 12 10 10 11 12 10 10 11 12 10 10 11 12 10 10 11 12 10 11 1	Terminal Color Signal Name [Specification] No. of Wire 21 SB	Connector No. E67	\neg	H.S. H.S. A 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Terminal Golor Signal Name [Specification] No. of Wire Signal Name [Specification] 2 SB BRAKE HOLD RLY DRIVE SIGNAL 3 L CAN+1 6 P CAN+1
METER Connector No. E32	Connector Name WASHER LEVEL SWITCH Connector Type Z02FBR	HS.	Terminal Color Signal Name [Specification]	Connector No. E51	\dashv	HS. 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	No. of Wire Signal Name [Specification] No. of Wire Signal Name [Specification]

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< ECU DIAGNOSIS INFORMATION >

oseification)	[2] [3 4 3 2 1 1 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2	A B
No. F36 Type HS03FB Type HS04FB (A 3 2 2) Color Signal Name [Specification]	r No. F103 r Name WIRE TO WIRE TX36FW-NS10 SECRETARIES CONTROLL SECRETARIES CONTROLL COORT Of Wire Signal Name (Specification)	C
Connector No. Connector Type Connector Type Terminal Colon No. of W. Z. G.		D
tion]	[ion]	Е
STOP LAMP SWITCH MOJEWILC 3 4 Signal Name [Specification]	F51 A.7 ASSEMBLY RK10FG-DGY (10 9 8 7 6) Signal Name (Specification)	F
No. Name Type Color of Wire	No. No. Type	G
Connector No. Connector Type Connector Type Terminal Color No. of Wr. 1 L L 2 W		Н
E107 TBOIFW Signal Name [Specification]	WRE 1-156-5428 1	I
EIO7 TBOIFW Signal Nam	SAA30FB-RS8-SHZ8	J
Connector No. E Connector Name P Connector Type II Connector Type II Color No. of Wire I O	Connector No. Connector Name Connector Type S. H.S. H.S. Terminal Color No. of Wire No. of Wire 2.	K
		L
WRE CSIG-TM4 CS16-TM4	SSURE SWITCH RS-AR Signal Name [Specification]	M
WIRE TO 11480FW	F37 OIL PREG	WCS
Stor No Stor N	81 P 8 9 9 9 9 9 9 9 9 9	0
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Revision: 2009 October WCS-57 2009 G37 Sedan

Connector No. M2 Connector Name FUSE BLOCK (J/B) Connector Type NSIOFW-CS (AB 3B	Terminal Golor No. of Wire 3B PP	Connector No. M16 Connector Type TH40FW-NH M.S. T12121214 5 6 7 8 9 10 01 10 10 10 10 10 10 10 10 10 10 10	Terminal Color Signal Name Specification
Connector No. MI Connector No. MI Connector Type NSOBTW-W2 Connector Type NSOBTW-W2 SA Connector Type SA Co	Terminal Color Signal Name [Specification]	Connector No. M7 Connector Name WIRE TO WIRE Connector Type TH80MW-CS16-TM4 H.S.	Terminal Color
Connector No. F157 Connector No. F157 Connector No. F167 Connector Type SP10FG Connector Type SP10FG F167 F167	Terminal Color Signal Name [Specification] No. of Wire Signal Name [Specification] S	Connector No. M6 Connector Name WIRE TO WIRE Connector Type TH8DMW-CS16-TM4 H.S.	Terminal Color Signal Name [Specification]
METER Connector No. F108 Connector No. THISTWINH Connector Type THISTWINH 1 2 3 4 5 6 7 8 9 10 11 12 3 4 5 6 7 8	Terminal Color Signal Name [Specification] No. of Villes Signal Name [Specification] No. of Villes L. CAN-H CAN-L	Connector No. M3 Connector Name FUSE BLOCK (J./B) Connector Type NS12PW-CS CANNESTOR CAN	Terminal Color No. of Wire Signal Name [Specification]

JCNWA1730GE

Connector No. M39 Connector Name PADDLE SHIFTER (SHIFT-UP) Connector Type A04FW	H.S.	Color	Miles Mile	
Con	E			
Connector No. M32 Connector Name PADDLE SHIFTER (SHIFT-DOWN) Connector Type A03FW	H.S.	Terminal Color	24 ER COMMUNICATION SIGNAL (LCD-)-AMPD 25 T COMMUNICATION SIGNAL (LAD-)-LCD) 26 R VEHICLE SPEED SIGNAL (APP-)-LCD) 27 O PARKING BRACE SIGNAL (SPEED SIGNAL 18-POLISE) 28 L SEAT BELT BUCKLE SWITCH SIGNAL 29 L SEAT BELT BUCKLE SWITCH SIGNAL 25 R ILLUMINATION CONTROL SIGNAL 25 R EILEPS SWITCH SIGNAL 25 R LLC SWITCH SWITCH SIGNAL 25 R LLC SWITCH	
METER Connector No. M24 Connector Name DATA LINK CONNECTOR Connector Type BD16FW-P	HS. (9 10 11 12 13 14 15 16 7 8	Terratival Color Signal Name [Specification] Color Col	Connector Name	NWA1731GE

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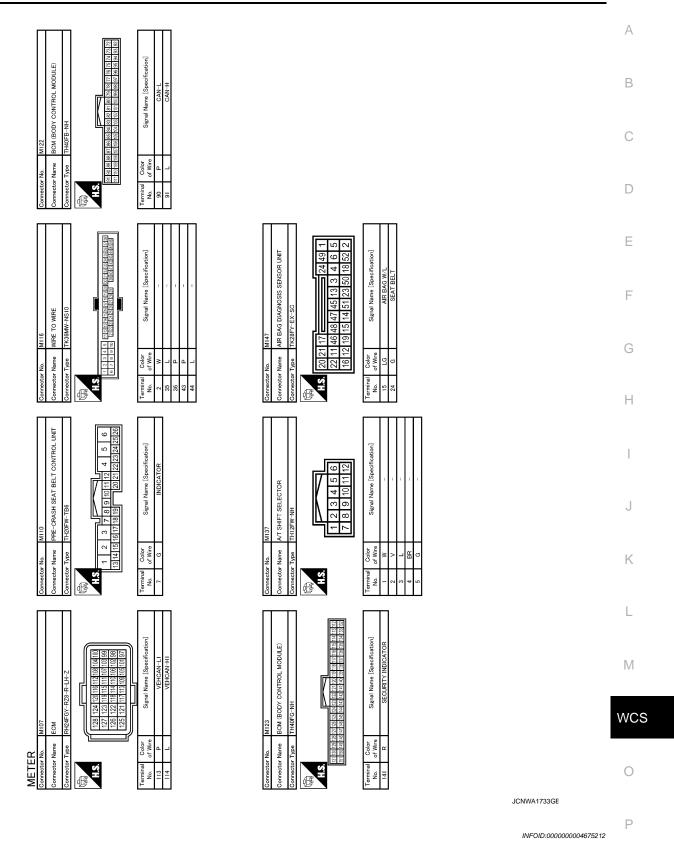
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Connector No. MIDD	CO S	Connector No.	H.S.
Connector Name UNIFIED METER AND A/C AMP.	28 R VEHICLE SPEED SIGNAL (8-PULSE) 30 V PARKING BRAKE SWITCH SIGNAL	Connector Name UNIFIED METER AND A/C AMP.	72 P GAN-L
Connector Type TH40FW-NH	34 Y COMMUNICATION SIGNAL (AMP>LCD)	Connector Type TH32FW-NH	
唇		香	
1 2 3 4 5 6 7 8 9 0 11 12 13 4 8 8 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		H.S. 11.22.43.44.56.46.49.55.55.55.55.55.55.55.55.55.55.55.55.55	
Color Signal Name [Specification] No. of Wire Signal Name [Specification] 4 G STOP LAMP SWITCH SIGNAL 5 L MANUAL, NOTE SHIFT UP SIGNAL		Termina Color Signal Name [Specification] No. of Wire Signal Name [Specification] 41 L. AOC POWER SURPLY 42 BR FUEL LEVEL SENSOR SIGNAL, With A-7 42 43 44 44 44 44 44 44	
6 O PADDLE SHIFTER UP SIGNAL 7 GR COMMUNICATION SIGNAL (AMP>METER)		B FUEL L	
8 L VEHICLE SPEED SIGNAL (2-PULSE) 9 SB SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)		53 W IGNITION POWER SUPPLY 54 Y BATTERY POWER SUPPLY	
П		56 B GROUND	
BR COM		LG BRAKE FLI	
25 V MANUAL MODE SHIFT DOWN SIGNAL 26 G PADDLE SHIFTER DOWN SIGNAL		58 Y FUEL LEVEL SENSOR GROUND 61 R AMBIENT SENSOR GROUND	
Connector No. M83	Connector No. M85	Connector No. M87	Connector No. M88
Connector Name AV CONTROL UNIT (WITHOUT NAVI)	Connector Name AV CONTROL UNIT (WITHOUT NAVI)	Connector Name AV CONTROL UNIT (WITH NAVI)	Connector Name AV CONTROL UNIT (WITH NAVI)
Connector Type TH24FW-NH	Connector Type TH32FW-NH	Connector Type TH40FW-NH	Connector Type TH12FW-NH
H.S. 147 469 451 444 439 421 411 401 391 381 377 361 591 561 561 561 561 561 489 488	14.S 14.S 151 (9) (80) (80) (80) (80) (80) (80) (80) (80	HAS TRUE BY	H.S. 62 64 66 68 70 72 61 63 65 67 69 71
Terminal Color Signal Name [Specification] of Wire	Terminal Color Signal Name [Specification]	Terminal Color Signal Name [Specification] of Wire	Terminal Color Signal Name [Specification]
44 BR COMM (DISP->CONT) 56 Y COMM (CONT->DISP)	86 L CAN-H 87 P CAN-L	52 L CAN-H 53 P CAN-L	70 L COMM (CONT->DISP) 71 LG COMM (DISP->CONT)

JCNWA1732GE



Fail-safe

FAIL-SAFE

The unified meter and A/C amp. activates the fail-safe control if CAN communication with each unit is malfunctioning.

< ECU DIAGNOSIS INFORMATION >

	Function	Specifications	
Speedometer			
Tachometer		Reset to zero by suspending communication.	
Fuel gauge			
Water temperature gauge			
Illumination control		When suspending communication, change to nighttime mode	
Information display		The display turns off by suspending communication.	
Buzzer		The buzzer turns off by suspending communication.	
	ABS warning lamp		
	VDC OFF indicator lamp		
	SLIP indicator lamp	The lamp turns on by suspending communication.	
	Brake warning lamp		
	CRUISE warning lamp		
	AWD warning lamp		
	Low tire pressure warning lamp		
Warning lamp/indicator	4WAS warning lamp		
lamp	AFS OFF indicator lamp	The lamp blinking caused by communication malfunction	
	High beam indicator		
	Turn signal indicator lamp		
	Oil pressure warning lamp		
	Malfunction indicator lamp	The lamp turns off by suspending communication.	
	A/T CHECK warning lamp		
	Key warning lamp		
	Master warning lamp		

DTC Index

Display contents of CON-	Time	Diagnostic item is detected when	Refer to
CAN COMM CIRCUIT [U1000]	CRNT, 1 - 39	When unified meter and A/C amp. is not transmitting or receiving CAN communication signal for 2 seconds or more.	MWI-42, "Diagnosis Procedure"
CONTROL UNIT (CAN) [U1010]	CRNT, 1 - 39	When detecting error during the initial diagnosis of CAN controller of unified meter and A/C amp.	MWI-43. "Diagnosis Procedure"
COMM ERROR 1 [B2201]	CRNT, 1 - 39	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	MWI-44, "Diagnosis Procedure"
COMM ERROR 2 [B2202]	CRNT, 1 - 39	If a communication error is present in the communication line between unified meter and A/C amp. and combination meter for 2 seconds or more.	MWI-46, "Diagnosis Procedure"
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-48, "Diagnosis Procedure"
ENGINE SPEED [B2267]	CRNT, 1 - 39	If ECM continuously transmits abnormal engine speed signals for 2 seconds or more.	MWI-49, "Diagnosis Procedure"
WATER TEMP [B2268]	CRNT, 1 - 39	If ECM continuously transmits abnormal engine coolant temperature signals for 60 seconds or more.	MWI-50. "Diagnosis Procedure"

< ECU DIAGNOSIS INFORMATION >

BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITE	V
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Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
I IX WIF LIX I II	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
I K WIF LK LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
ED WIDED INT	Other than front wiper switch INT	Off
FR WIPER INT	Front wiper switch INT	On
ED WIDED STOD	Front wiper is not in STOP position	Off
FR WIPER STOP	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dia position
TUDNI GIONIAL D	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
TUDNI QIQNINI I	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
TAIL AND OW	Other than lighting switch 1ST and 2ND	Off
TAIL LAMP SW	Lighting switch 1ST or 2ND	On
	Other than lighting switch HI	Off
HI BEAM SW	Lighting switch HI	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 1	Lighting switch 2ND	On
	Other than lighting switch 2ND	Off
HEAD LAMP SW 2	Lighting switch 2ND	On
	Other than lighting switch PASS	Off
PASSING SW	Lighting switch PASS	On
	Other than lighting switch AUTO	Off
AUTO LIGHT SW	Lighting switch AUTO	On
	Front fog lamp switch OFF	Off
FR FOG SW	Front fog lamp switch ON	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
DOOD OW DD	Driver door closed	Off
DOOR SW-DR	Driver door opened	On
DOOR SWAR	Passenger door closed	Off
DOOR SW-AS	Passenger door opened	On
DOOD OW DD	Rear RH door closed	Off
DOOR SW-RR	Rear LH door opened	On
D00D 0W 5:	Rear LH door closed	Off
DOOR SW-RL	Rear LH door opened	On

Revision: 2009 October WCS-63 2009 G37 Sedan

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Monitor Item	Condition	Value/Status					
DOOR SW-BK	NOTE: The item is indicated, but not monitored.	Off					
ODL LOCK OW	Other than power door lock switch LOCK	Off					
CDL LOCK SW	Power door lock switch LOCK	On					
	Other than power door lock switch UNLOCK	Off					
CDL UNLOCK SW	Power door lock switch UNLOCK	On					
KEY OWL LIK OW	Other than driver door key cylinder LOCK	Off					
KEY CYL LK-SW	Driver door key cylinder LOCK	On					
KEY CYLLIN CW	Other than driver door key cylinder UNLOCK	Off					
KEY CYL UN-SW	Driver door key cylinder LOCK	On					
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off					
114.74.DD 014/	Hazard switch is OFF	Off					
HAZARD SW	Hazard switch is ON	On					
REAR DEF SW	NOTE: The item is indicated, but not monitored.	Off					
H/L WASH SW	NOTE: The item is indicated, but not monitored.	Off					
TR CANCEL SW	Trunk lid opener cancel switch OFF	Off					
TH CANCLE OW	Trunk lid opener cancel switch ON	On					
TD/DD ODEN SW	Trunk lid opener switch OFF	Off					
TR/BD OPEN SW	While the trunk lid opener switch is turned ON	On					
TRNK/HAT MNTR	Trunk lid closed	Off					
	Trunk lid opened	On					
RKE-LOCK	LOCK button of the Intelligent Key is not pressed	Off					
KKL-LOCK	LOCK button of the Intelligent Key is pressed	On					
RKE-UNLOCK	UNLOCK button of the Intelligent Key is not pressed	Off					
KKL-ONLOCK	UNLOCK button of the Intelligent Key is pressed	On					
RKE-TR/BD	TRUNK OPEN button of the Intelligent Key is not pressed	Off					
KKE-TK/DD	TRUNK OPEN button of the Intelligent Key is pressed	On					
DICE DANIC	PANIC button of the Intelligent Key is not pressed	Off					
RKE-PANIC	PANIC button of the Intelligent Key is pressed	On					
	UNLOCK button of the Intelligent Key is not pressed	Off					
RKE-P/W OPEN	UNLOCK button of the Intelligent Key is pressed and held	On					
RKE-MODE CHG	LOCK/UNLOCK button of the Intelligent Key is not pressed and held simultaneously	Off					
	LOCK/UNLOCK button of the Intelligent Key is pressed and held simultaneously	On					
OPTICAL SENSOR	Bright outside of the vehicle	Close to 5 V					
OI HOAL SENSOR	Dark outside of the vehicle	Close to 0 V					
DEU SM DD	Driver door request switch is not pressed	Off					
REQ SW -DR	Driver door request switch is pressed	On					
DEO SW. AS	Passenger door request switch is not pressed	Off					
REQ SW -AS	Passenger door request switch is pressed	On					
REQ SW -RR	NOTE						
REQ SW -RL	Off						

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
DEO SW. DD/TD	Trunk lid opener request switch is not pressed	Off
REQ SW -BD/TR	Trunk lid opener request switch is pressed	On
DUCH CW	Push-button ignition switch (push switch) is not pressed	Off
PUSH SW	Push-button ignition switch (push switch) is pressed	On
ION DIVO E/D	Ignition switch in OFF or ACC position	Off
IGN RLY2 -F/B	Ignition switch in ON position	On
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCUCW	The clutch pedal is not depressed	Off
CLUCH SW	The clutch pedal is depressed	On
	The brake pedal is depressed when No. 7 fuse is blown	Off
BRAKE SW 1	The brake pedal is not depressed when No. 7 fuse is blown, or No. 7 fuse is normal	On
DDAKE CW C	The brake pedal is not depressed	Off
BRAKE SW 2	The brake pedal is depressed	On
DETE/CANCL CW	Selector lever in P position (Except M/T models) The clutch pedal is depressed (M/T models)	Off
DETE/CANCL SW	 Selector lever in any position other than P (Except M/T models) The clutch pedal is not depressed (M/T models) 	On
OFT DAI/ALOVA/	Selector lever in any position other than P and N	Off
SFT PN/N SW	Selector lever in P or N position	On
0/1 1 0 0 1 /	Steering is unlocked	Off
S/L -LOCK	Steering is locked	On
	Steering is locked	Off
S/L -UNLOCK	Steering is unlocked	On
0/L DEL AV E/D	Ignition switch in OFF or ACC position	Off
S/L RELAY-F/B	Ignition switch in ON position	On
UNLK SEN -DR	Driver door is unlocked	Off
UNLK SEN -DK	Driver door is locked	On
DUCH CW. IDDM	Push-button ignition switch (push-switch) is not pressed	Off
PUSH SW -IPDM	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
IGN KLTT-F/D	Ignition switch in ON position	On
DETE SW. IDDM	Selector lever in any position other than P	Off
DETE SW -IPDM	Selector lever in P position	On
SFT PN -IPDM	Selector lever in any position other than P and N (Except M/T models) The clutch pedal is not depressed (M/T models)	Off
	Selector lever in P or N position (Except M/T models) The clutch pedal is depressed (M/T models)	On
SET D MET	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
OFT N. BAFT	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On

Revision: 2009 October WCS-65 2009 G37 Sedan

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Monitor Item	Condition	Value/Status					
	Engine stopped	Stop					
ENGINE STATE	While the engine stalls	Stall					
	At engine cranking	Crank					
	Engine running	Run					
	Steering is unlocked	Off					
S/L LOCK-IPDM	Steering is locked	On					
C/L LINIU IZ IDDM	Steering is locked	Off					
S/L UNLK-IPDM	Steering is unlocked	On					
C/L DELAY DEO	Steering lock system is not the LOCK condition and the changing condition from LOCK to UNLOCK	Off					
S/L RELAY-REQ	Steering lock system is the LOCK condition or the changing condition from LOCK to UNLOCK	On					
VEH SPEED 1	While driving	Equivalent to speed- ometer reading					
VEH SPEED 2	ED 2 While driving						
	Driver door is locked	LOCK					
DOOR STAT-DR	Wait with selective UNLOCK operation (60 seconds)	READY					
	Driver door is unlocked	UNLOCK					
	Passenger door is locked	LOCK					
DOOR STAT-AS	Wait with selective UNLOCK operation (60 seconds)	READY					
	Passenger door is unlocked	UNLOCK					
ID OK ELAC	Steering is locked	Reset					
ID OK FLAG	Steering is unlocked	Set					
PRMT ENG STRT	The engine start is prohibited	Reset					
FRIMI ENG STRT	The engine start is permitted	Set					
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset					
KEY CW CLOT	The Intelligent Key is not inserted into key slot	Off					
KEY SW -SLOT	The Intelligent Key is inserted into key slot	On					
RKE OPE COUN1	During the operation of the Intelligent Key	Operation frequency of the Intelligent Key					
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_					
CONFOMIDALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet					
CONFRM ID ALL	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done					
CONFIDMIDA	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet					
CONFIRM ID4	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done					
CONFIDM ID2	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet					
CONFIRM ID3	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done					

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status		
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet		
OOM INWIDE	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done		
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet		
COM IKWIDI	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done		
TP 4	The ID of fourth Intelligent Key is not registered to BCM	Yet		
164	The ID of fourth Intelligent Key is registered to BCM	Done		
TP 3	The ID of third Intelligent Key is not registered to BCM	Yet		
IF 3	The ID of third Intelligent Key is registered to BCM	Done		
TP 2	The ID of second Intelligent Key is not registered to BCM	Yet		
IF Z	The ID of second Intelligent Key is registered to BCM	Done		
TP 1	The ID of first Intelligent Key is not registered to BCM	Yet		
11 1	The ID of first Intelligent Key is registered to BCM	Done		
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire		
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire		
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire		
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire		
ID DECCT EL 4	ID of front LH tire transmitter is registered	Done		
ID REGST FL1	ID of front LH tire transmitter is not registered	Yet		
ID DECCT ED4	ID of front RH tire transmitter is registered	Done		
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet		
ID REGST RR1	ID of rear RH tire transmitter is registered	Done		
ID REGST RRT	ID of rear RH tire transmitter is not registered	Yet		
ID REGST RL1	ID of rear LH tire transmitter is registered	Done		
ID REGST RLT	ID of rear LH tire transmitter is not registered	Yet		
MADAUNO LAND	Tire pressure indicator OFF	Off		
WARNING LAMP	Tire pressure indicator ON	On		
0117750	Tire pressure warning alarm is not sounding	Off		
BUZZER	Tire pressure warning alarm is sounding	On		

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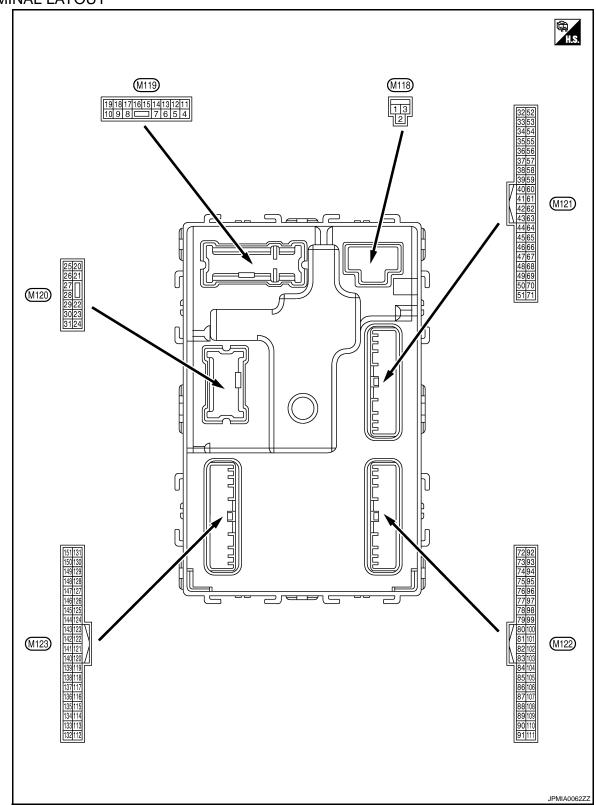
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TERMINAL LAYOUT



PHYSICAL VALUES

Terminal No. (Wire color)		Description	-		Condition		
+	-	Signal name	Input/ Output	Condition		(Approx.)	
1 (W)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage	
2 (Y)	Ground	P/W power supply (BAT)	Output	Ignition switch (OFF	12 V	
3 (O)	Ground	P/W power supply (RAP)	Output	Ignition switch (DN	12 V	
				Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)		0 V	
4 (LG)	Ground	Interior room lamp power supply	Output	vated.	mp battery saver is not acti- erior room lamp power sup-	12 V	
5	Ground	Passenger door UN-	Output	Passenger	UNLOCK (Actuator is activated)	12 V	
(P)	Ground	LOCK	Output	door	Other than UNLOCK) Actuator is not activated	0 V	
7	Cround	Ston lamp	Output	Stan Jama	ON	0 V	
(BR)	Ground	Step lamp	Output	Step lamp	OFF	12 V	
8	8 (V) Ground All doors, fuel lid LOCK	All doors, fuel lid		All doors, fuel	LOCK (Actuator is activated)	12 V	
(V)		LOCK	Output	Output lid	Other than LOCK (Actuator is not activated)	0 V	
9		Driver door, fuel lid UNLOCK	Outrout	Driver door, fuel lid	UNLOCK (Actuator is activated)	12 V	
(G)			Output		Other than UNLOCK (Actuator is not activated)	0 V	
10	Cround	Rear RH door and	Output an	0	Rear RH door	UNLOCK (Actuator is activated)	12 V
(BR)	Ground	rear LH UNLOCK		and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V	
11 (R)	Ground	Battery power supply	Input	Ignition switch (DFF	Battery voltage	
13 (B)	Ground	Ground	_	Ignition switch (NC	0 V	
					OFF	0 V	
14 (W)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brightening/dimming level is in the neutral position (V) 10 0 2 ms	
15	Ground	ACC indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage	
(O)		,		-	ACC	0 V	

	nal No.	Description				Value	
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)	
17 (W)	Ground	Turn signal RH (Front)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch RH	0 V (V) 15 10 5 1	
					Turn signal switch OFF	6.5 V	
18 (O)	Ground	Turn signal LH (Front)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V	
19	Ground	Room lamp timer	Output	Interior room	OFF	12 V	
(V)	Orouna	control	Output	lamp	ON	0 V	
20 (V)	Ground	Turn signal RH (Rear)	Output	Ignition switch ON	Turn signal switch OFF Turn signal switch RH	0 V (V) 15 10 5 1 s PKID0926E 6.5 V	
23 (L)	Ground	Trunk lid open	Output	Trunk lid	OPEN (Trunk lid opener actuator is activated) Other than OPEN	12 V	
					(Trunk lid opener actuator is not activated)	0 V	
					Turn signal switch OFF	0 V	
25 (Y)	Ground	Turn signal LH (Rear)	Output	Ignition switch ON	Turn signal switch LH	(V) 15 10 5 0 1 s PKID0926E 6.5 V	
30				Trunk room	Trunk room	ON	0.5 V
(P)	Ground	Trunk room lamp	Output	lamp	OFF	12 V	

Terminal No. (Wire color)		Description			0 199	Value	
+ (vvire	- COIOF)	Signal name	Input/ Output		Condition	(Approx.)	Α
34		Trunk room antenna		Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	C
(SB)	Ground	(-)	Output	ŎFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0063GB	F
35	0	Trunk room antenna	0.4	Ignition switch	When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB	F
(V)	Ground	(+)	Output	ŎFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB	K
38	0	Rear bumper anten-	0.4	When the trunk	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	W
(B)	Ground	na (–)	Output	quest switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 JMKIA0063GB	F

	nal No.	Description				Value	
+	color)	Signal name	Input/ Output		Condition	(Approx.)	
39	Ground	Rear bumper anten-	Output	When the trunk lid opener request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	
(W)		na (+)	Сара		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	
47		Ignition relay (IPDM			OFF or ACC	12 V	
(Y)	Ground	E/R) control	Output	Ignition switch	ON	0 V	
50 (O)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (Trunk lid is closed)	(V) 15 10 5 0 10 ms JPMIA0011GB	
					ON (Trunk lid is opened)	0 V	
	Ground	Ground Starter relay control	Output -	Ignition switch ON (A/T mod-	When selector lever is in P or N position	12 V	
52				els)	When selector lever is not in P or N position	0 V	
(SB)					When the clutch pedal is depressed	Battery voltage	
				els)	When the clutch pedal is not depressed	0 V	
					ON (Pressed)	0 V	
61 (SB)	Ground	Trunk lid opener request switch	Input	Trunk lid open- er request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016GB	
		Intelligent Key warn-		Intelligent Key	Sounding	1.0 V 0 V	
64 (G)	Ground	ing buzzer (Engine room)	Output	warning buzzer (Engine room)	Not sounding	12 V	

	inal No. e color)	Description			One distant	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					Pressed	0 V
67 (GR)	Ground	Trunk lid opener switch	Input	Trunk lid open- er switch	Not pressed	(V) 15 10 5 0 10 ms JPMIA0011GB
68 (BR)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When rear RH door opens)	0 V
69 (R) Grou	Ground	nd Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When rear LH door opens)	0 V
					When Intelligent Key is in the passenger compart-	(V) 15 10 5
72		Room antenna 2 (–)		Ignition switch	ment	1 s JMKIA0062GB
72 (R) Grour	Ground	(Center console)	Output	OFF	When Intelligent Key is not in the passenger compart-	(V) 15 10 5
					ment	1 s

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
70					When Intelligent Key is in the passenger compartment	(V) 15 10 5 0 1 s JMKIA0062GB
73 (G)	Ground	Room antenna 2 (+) (Center console)	Output	Ignition switch OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
74	Ground	Passenger door antenna (-)	Output	When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB
(SB)					When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB
75	Ground	d Passenger door antenna (+)		When the passenger door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 JMKIA0062GB
(BR)			Output		When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB

	nal No.	Description				Value	А
+	color)	Signal name	Input/ Output		Condition	(Approx.)	^
76 Ground		Driver door antenna		When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB	B C D
(V)	Ground	(-)	Output	switch is oper- ated with igni- tion switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 10 1 1 s	E
						JMKIA0063GB	G
77		Driver door antenna (+)	Output	When the driver door request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0	Н
	Ground					JMKIA0062GB	I
(LG)	Ground				When Intelligent Key is not in the antenna detection	(V) 15 10 5 0	J K
					area	JMKIA0063GB	L
						(V) 15 10	M
					When Intelligent Key is in the passenger compart- ment	10 5 0 1 s JMKIA0062GB	WCS
78 (Y)	Ground	Room antenna 1 (–) (Instrument panel)	Output	Ignition switch OFF			0
					When Intelligent Key is not in the passenger compartment	(V) 15 10 0	Р
						JMKIA0063GB	

	nal No.	Description				Value
+ (vvire	color)	Signal name	Input/ Output		Condition	(Approx.)
79	Ground	Room antenna 1 (+) (Instrument panel)	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(BR)				OFF	When Intelligent Key is not in the passenger compartment	(V) 15 10 5 0 JMKIA0063GB
80 (GR)	Ground	NATS antenna amp (Built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
81 (W)	Ground	NATS antenna amp (Built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelligent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
82 (R)	Ground	Ignition relay [Fuse block (J/B)] control	Output	Ignition switch	OFF or ACC	0 V 12 V
83	Ground	Remote keyless entry receiver communication	Input/ Output	During waiting		(V) 15 10 5 0 1 ms JMKIA0064GB
(Y)				When operating gent Key	either button on the Intelli-	(V) 15 10 5 0 1 ms JMKIA0065GB

< ECU DIAGNOSIS INFORMATION >

Termin		Description				Value	^
(Wire	color)	Signal name	Input/ Output		Condition	(Approx.)	А
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB	С
87 (Y)	Ground	Combination switch INPUT 5	Input	Combination switch	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB	E
					Any of the conditions below with all switches OFF Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 6 Wiper intermittent dial 7	(V) 15 10 2 ms JPMIA0040GB	G H

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(Wire color) + -		Signal name	Input/ Output		Condition	Value (Approx.)
						(V)
				Combination switch	All switches OFF (Wiper intermittent dial 4)	(V) 15 10 0 2 ms JPMIA0041GB
88 Groui		Combination switch	Input		Lighting switch HI (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB 1.3 V
(O) Groun		INPUT 3			Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0037GB
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3	(V) 15 10 5 0 2 ms JPMIA0040GB
89 Grou		Push-button ignition	Input	Push-button ig- nition switch	Pressed	0 V
(BR)	unu	switch (Push switch)	прис	(push switch)	Not pressed	Battery voltage
90 (P) Grou	und	CAN-L	Input/ Output		_	_
91 (L) Grou	und	CAN-H	Input/ Output		_	_
					OFF	0 V
92 (LG) Grou	und	Key slot illumination	Output	Key slot illumi- nation	Blinking	(V) 15 10 5 0 1 s JPMIA0015GB
					ON	6.5 V 12 V

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	nal No. color)	Description				Value
+	_	Signal name	Input/ Output		Condition	(Approx.)
93 (V)	Ground	ON indicator lamp	Output	Ignition switch	OFF (LOCK indicator is not illuminated)	Battery voltage
. ,					ON	0 V
95	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
(O)					ACC or ON	12 V
96 (GR)	Ground	A/T shift selector (Detention switch) power supply	Output		_	12 V
97	Ground	Steering lock condi-	Input	Steering lock	LOCK status	0 V
(L)	Cround	tion No. 1	прис	Olooning look	UNLOCK status	12 V
98	Ground	Steering lock condi-	Input	Steering lock	LOCK status	12 V
(P)	Ground	tion No. 2	iliput	Steering lock	UNLOCK status	0 V
		Selector lever P posi-		Calastanlayer	P position	0 V
		tion switch (A/T models) ASCD clutch switch (M/T models without		ASCD clutch switch	Any position other than P	12 V
99			Input		OFF (Clutch pedal is depressed)	0 V
(R)* ¹ (BR)* ²	Ground	ICC)			ON (Clutch pedal is not depressed)	12 V
		ICC clutch switch (M/		ICC clutch	OFF (Clutch pedal is depressed)	0 V
		T models with ICC)		switch	ON (Clutch pedal is not depressed)	12 V
					ON (Pressed)	0 V
100 (Y)	Ground	Passenger door request switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA0016G
					ON (Pressed)	0 V
101 (P)	Ground	Driver door request switch	Input	Driver door request switch	OFF (Not pressed)	(V) 15 10 5 0 10 ms JPMIA00160
102 (O)	Ground	Blower fan motor re- lay control	Output	Ignition switch	OFF or ACC	0 V 12 V
103 (L)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch C	DFF	12 V
106		Steering lock unit			OFF or ACC	12 V
	106 (W) Ground Steering lock power supply		Output	Ignition switch	ON	0 V

	nal No.	Description				Value
+ (Wire	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB
107 (LG)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermit- tent dial 4)	Turn signal switch RH	(V) 15 10 5 0 2 ms JPMIA0036GB
					Front wiper switch LO	(V) 15 10 5 0 2 ms JPMIA0038GB
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description	ı		2 111	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0041GB
108	Ground	Combination switch	Input	Combination	Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms 1.3 V
(R)	o, ou ii	INPUT 4	mput	switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 10 5 0 2 ms JPMIA0036GB
					Any of the conditions below with all switches OFF Wiper intermittent dial 1 Wiper intermittent dial 5 Wiper intermittent dial 6	(V) 15 10 5 0 2 ms JPMIA0039GB
						1.3 V

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Revision: 2009 October WCS-81 2009 G37 Sedan

	nal No.	Description				Value
+ (VVire	color)	Signal name	Input/ Output		Condition	(Approx.)
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB
					Lighting switch PASS	(V) 15 10 5 0 2 ms JPMIA0037GB
109 (W)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	(V) 15 10 5 0 2 ms JPMIA0036GB
					Front wiper switch INT	(V) 15 10 5 0 2 ms JPMIA0038GB
					Front wiper switch HI	(V) 15 10 5 0 2 ms JPMIA0040GB
					ON	0 V
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 10 5 0 10 ms JPMIA0012GB

	nal No. color)	Description		_	Condition	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
					LOCK status	12 V
111 (Y) Ground	Ground	Steering lock unit communication			LOCK or UNLOCK	(V) 15 10 50 ms JMKIA0066GB
					For 15 seconds after UN- LOCK	12 V
					15 seconds or later after UNLOCK	0 V
113	Ground	Optical sensor	Input	Ignition switch	When bright outside of the vehicle	Close to 5 V
(O)	Ground		input	ON	When dark outside of the vehicle	Close to 0 V
114	Ground	Clutch interlock	Input	Clutch interlock switch	OFF (Clutch pedal is not depressed)	0 V
(R)	Giound	switch	Input		ON (Clutch pedal is depressed)	Battery voltage
116 (SB)	Ground	Stop lamp switch 1	Input		_	Battery voltage
		Stop lamp switch 2 (Without ICC) ound Stop lamp switch 2	— Input	Stop lamp	OFF (Brake pedal is not depressed)	0 V
118	Ground			switch	ON (Brake pedal is depressed)	Battery voltage
(BR)	Ground				h OFF (Brake pedal is not ICC brake hold relay OFF	0 V
		(With ICC)		Stop lamp switch ON (Brake pedal is depressed) or ICC brake hold relay ON		Battery voltage
119 (SB)	Ground	Front door lock assumd sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	(V) 15 10 5 0 10 ms JPMIA0012GB
					UNLOCK status (Unlock switch sensor ON)	1.1 V 0 V
121				When the Intellig	gent Key is inserted into key	12 V
(SB)	Ground	Key slot switch	Input	When the Intelligence key slot	gent Key is not inserted into	0 V
123	Ground	IGN feedback	Input	Ignition switch	OFF or ACC	0 V
(W)	Ciodila	. OIT IOOGDAOK	Input	- igrillori owitori	ON	Battery voltage

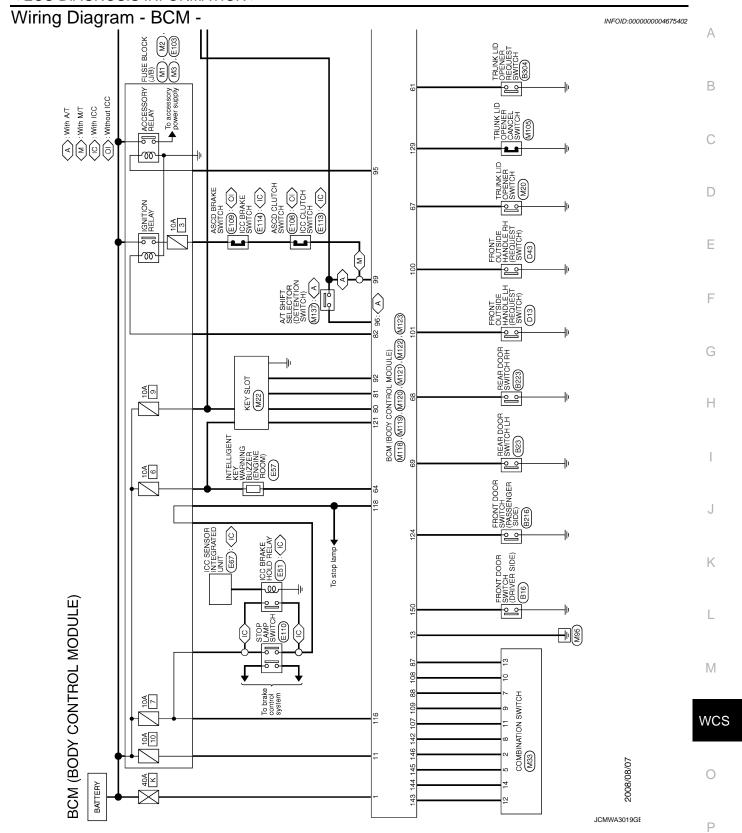
	nal No.	Description				Value
(Wire	color)	Signal name	Input/ Output		Condition	Value (Approx.)
124 (LG)	Ground	Passenger door switch	Input	Passenger door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (Door open)	0 V
129 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid open- er cancel switch	CANCEL	(V) 15 10 5 0 10 ms JPMIA0012GB
					ON	0 V
132 (V)	Ground	Power window switch communication	Input/ Output	Ignition switch C		(V) 15 10 5 0 10 ms JPMIA0013GB
				Ignition switch C		12 V
					ON (Tail lamps OFF)	9.5 V
133 (L)	Ground	Push-button ignition switch illumination	Output	Push-button ig- nition switch il-	ON (Tail lamps ON)	NOTE: The pulse width of this wave is varied by the illumination brightening/dimming level. (V) 15 10 5
				lumination		JPMIA0159GB
					OFF	0 V
134 (LG)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	OFF ON	Battery voltage 0 V
137 (O)	Ground	Receiver and sensor ground	Input	Ignition switch C		0 V
138	Ground	Pagaiyar and concar	Output	Ignition switch	OFF	0 V
(V) Ground		power supply	Juiput	igindon switch	ACC or ON	5.0 V

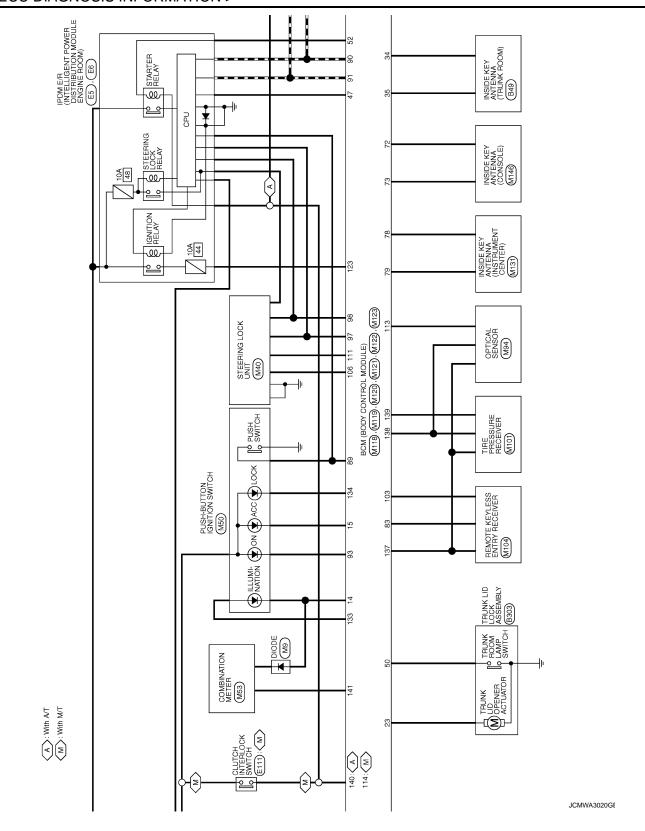
	nal No.	Description				Value	Λ
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)	А
139	Ground	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	B C
(L)	Ground	er communication	Output	ON	When receiving the signal from the transmitter	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	E
140		Selector lever P/N	_		P or N position	12 V	
(GR)	Ground	position	Input	Selector lever	Except P and N positions	0 V	G
					ON	0 V	
141 (R)	Ground	Security indicator	Output	Security indicator	Blinking	(V) 15 10 5 0 JPMIA0014GB	Н
						11.3 V	J
					OFF	12 V	
					All switches OFF	0 V	K
142 (BR)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	(V) 15 10 5 0 2 ms	L
						JPMIA0031GB 10.7 V	IVI
					All switches OFF (Wiper intermittent dial 4)	0 V	W
					Front wiper switch HI (Wiper intermittent dial 4)	(V)————————————————————————————————————	
143 (P)	Ground	Combination switch OUTPUT 1	Output	Combination switch	Any of the conditions below with all switches OFF Wiper intermittent dial 1 Wiper intermittent dial 2 Wiper intermittent dial 3 Wiper intermittent dial 6 Wiper intermittent dial 7	(V) 15 10 5 0 2 ms JPMIA0032GB	O P

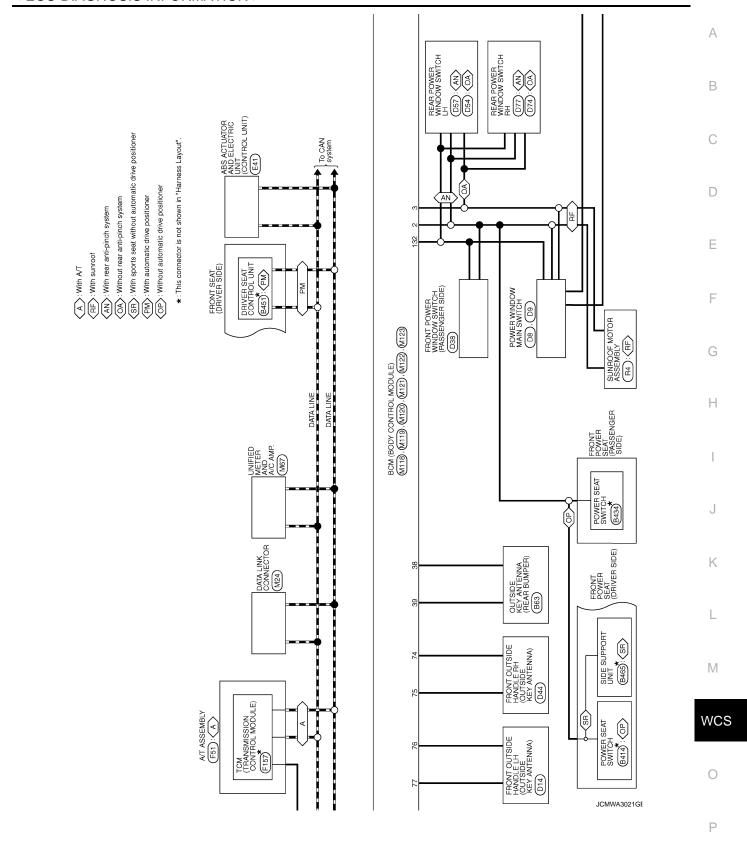
	nal No.	Description				Value				
+	color)	Signal name	Input/ Output		Condition	(Approx.)				
					All switches OFF (Wiper intermittent dial 4)	0 V				
					Front washer switch ON (Wiper intermittent dial 4)	(V)				
144 (G)	Ground	Combination switch OUTPUT 2	Output	Combination switch	Any of the conditions below with all switches OFF Wiper intermittent dial 1 Wiper intermittent dial 5 Wiper intermittent dial 6	15 10 5 0 2 ms JPMIA0033GB				
-					All switches OFF	0 V				
					Front wiper switch INT	-				
				Combination	Front wiper switch LO	(V)				
145 (L)	Ground	Combination switch OUTPUT 3	Output	switch (Wiper intermit- tent dial 4)	Lighting switch AUTO	2 ms JPMIA0034GB				
-					All switches OFF	0 V				
					Front fog lamp switch ON					
			Combination			ļ		Combination	Lighting switch 2ND	(V)
146	Ground	Combination switch	Output	switch	Lighting switch PASS	10				
(SB)	Ground	OUTPUT 4	Output	(Wiper intermittent dial 4)	Turn signal switch LH	0 2 ms 3 3 3 3 3 3 3 3 3 3 3 3 3				
149 (W)	Ground	Tire pressure warning check switch	Input		_	12 V				
150 (GR)	Ground	Driver door switch	Input	Driver door switch	OFF (Door close)	(V) 15 10 5 0 10 ms JPMIA0011GB				
					ON (Door open)	0 V				
151	Ground	Rear window defog-	Output	Rear window	Active	0 V				
(G)	2.300	ger relay control		defogger	Not activated	Battery voltage				

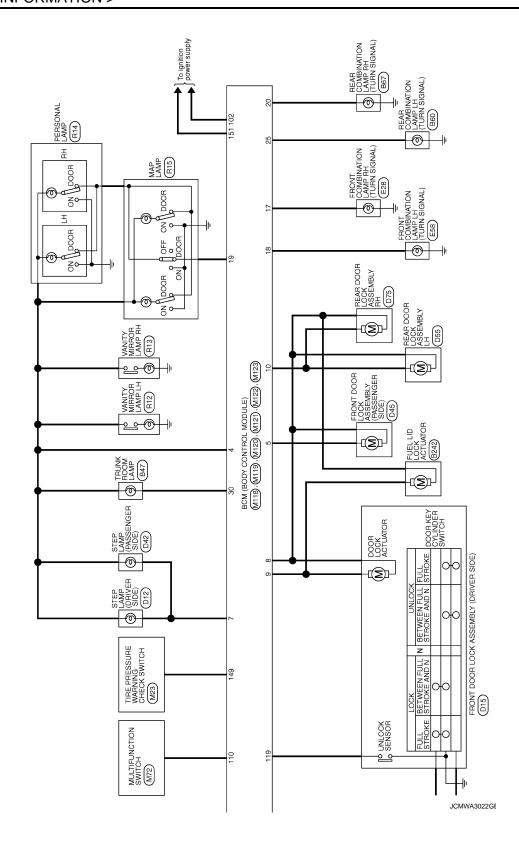
^{• *1:} A/T models

^{• *2:} M/T models









< ECU DIAGNOSIS INFORMATION >

TURN SIGNAL LH (FRONT) ROOM LAMP TIMER CONTROL					В
0 >					C D
SONTROL MODULE) 10 17 18 19 10 15 16 17 18 19 10 15 15 15 15 15 15 15	Signal Name [Specification] INTERIOR ROOM LAMP POWER SUPPLY PASSENGER DOOR UNLOCK OUTPUT ALL DOOR FUEL LID LOCK OUTPUT REAR DOOR FUEL LID LOCK OUTPUT REAR DOOR FUEL LID LOCK OUTPUT BATCH OR THE LID LOCK OUTPUT REAR DOOR UNLOCK OUTPUT BATCH OR SUPPLY ACC IND ACC IND ACC IND TURN SIGNAL RH (FRONT)	REAR LH DOOR SW			E
MI19 BCM (BODY (NSI) FW-CS NSI) FW-CS 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Odolor Of Wire Of Wire Of Wire Of Wire Of Wire Of Wire Of	α			G
Connector No. Connector Name Connector Type H.S.	Terminal No. No. 15 7 7 7 7 9 8 8 8 11 11 11 11 11 11 11 11 11 11 11	69			Н
MITIB BOM (BODY CONTROL MODULE) MAGFB-LC 13	Signal Name (Specification) BAT (F/L) POWER WINDOW POWER SUPPL V(RAT) POWER WINDOW POWER SUPPL V(RAP)	MIZI TH40FGY-NH TH40FGY-NH TH64S 44 SIZI TH 40 SIZI SIZI SIZI SIZI SIZI SIZI SIZI SIZ	Signal Name (Specification) TRUNK ROOM ANT- TRUNK ROOM ANT- TRUNK ROOM ANT- REAR BUMPER ANT- REAR BUMPER ANT- IGN RELAY (PDM E. R) CONT TRUNK ROOM LAMP SW TRUNK LIO OPEIGE REQUEST SW I-KEY WARN BUZZER (ENIC ROOM) TRUNK LID OPEIGER SW REAR RH DOOR SW		l J
Connector No. M118 Connector Name BCM (BOD) Connector Type M03FB-LC M1.5	Terminal Color Si	Connector Name BCM (BOD) Connector Type TH40FGY-N TABLE STREET S	Terminal Color Signature of Micro 19 Signatu		К
Democtor No. M33	Signal Name [Specification] OUTPUT 4 OUTPUT 3 INPUT 3 OUTPUT 5 INPUT 1 INPUT 1 OUTPUT 1 INPUT 1 INPUT 2 INPUT 2	MIZO NSIZFW-CS NSIZFW-CS 20 21	Signal Name [Specification] TURN SIGNAL HERAP) TRUNK LID OPEN OUTPUT TURN SIGNAL LH (REAR) TRUNK ROOM LAMP		M
МАЗ (ОМВИАТОИ SWITCH ТИПБТИ-ЛИН 1 2 3 10 11 12		MI20 BCM (BODY (NSIZFW-CS)			WCS
BCM (BOD Connector No. Connector Name Connector Type	Terminal Color	Connector No. Connector Name Connector Type	Cerminal Color	JCMWA3023GE	0
					Р

Revision: 2009 October WCS-91 2009 G37 Sedan

Connector No. M122	or No.	M122	83	٨	KEYLESS ENTRY RECEIVER COMM	Connector No.		M123	134	ΓG	LOCK IND
	Name of	(a III MODINGO MODINE)	87	٨	COMBI SW INPUT 5	2		CALIFORN CONTROL MOBILE)	137	0	RECEIVER/SENSOR GND
Connector Name	o name		88	0	COMBI SW INPUT 3	Confidence		SOM (BODT CONTROL MODGLE)	138	۸	RECEIVER/SENSOR POWER SUPPLY
Connector Type	or Type	TH40FB-NH	68	BR	PUSH SW	Connector Type		TH40FG-NH	139	٦	TIRE PRESSURE RECEIVER COMM
1			06	۵	CAN-L	ı			140	GR	SHIFT N/P
B			91	1	CAN-H	F			141	ď	SECURITY INDICATOR
Ę			92	97	KEY SLOT ILL	Ę			142	BR	COMBI SW OUTPUT 5
3			93	^	ONI NO	2			143	Ь	COMBI SW OUTPUT 1
	91 90 89 8	90 89 88 87 86 85 84 83 82 81 80 79 78 77 76 75 74 73 72	92	0	ACC RELAY CONT	1341	130 129 128 1.	27 126 125 124 123 122 121 120 119 118 117 116 115 114 113 112	144	5	COMBI SW OUTPUT 2
	111 110 109 1.	108 107 108 105 104 103 102 101 100 99 98 97 96 95 94 93 92	96	GR	A/T SHIFT SELECTOR POWER SUPPLY	151	150 149 148 1	150 148 148 147 146 146 144 143 142 141 140 139 138 137 136 135 134 133 132	145	7	COMBI SW OUTPUT 3
			6	7	S/L CONDITION 1				146	SB	COMBI SW OUTPUT 4
			86	Ь	S/L CONDITION 2				149	Μ	TIRE PRESSURE WARN CHECK SW
Terminal	Color	Complete Street Street	66	BR	ASCD CLUTCH SW [With M/T without ICC]	Terminal	Color	Simple Name (Supplementations)	150	GR	DRIVER DOOR SW
No.	of Wire		66	BR	ICC CLUTCH SW [With M/T and ICC]	No. of	of Wire	Ogral Ivalle Lopechicatory	151	5	REAR WINDOW DEFOGGER RELAY CONT
72	Я	ROOM ANT2-	66	В	SHIFT P [With A/T]	113	0	OPTICAL SENSOR			
73	5	ROOM ANT2+	100	Υ	PASSENGER DOOR REQUEST SW	114	ч	CLUTCH INTERLOCK SW			
74	SB	PASSENGER DOOR ANT-	101	Ь	DRIVER DOOR REQUEST SW	116	SB	STOP LAMP SW 1			
75	BR	PASSENGER DOOR ANT+	102	0	BLOWER FAN MOTOR RELAY CONT	118	BR	STOP LAMP SW 2			
9/	>	DRIVER DOOR ANT-	103	_	KEYLESS ENTRY RECEIVER POWER SUPPLY	119	SB	DR DOOR UNLOCK SENSOR			
77	97	DRIVER DOOR ANT+	106	W	S/L UNIT POWER SUPPLY	121	SB	KEY SLOT SW			
78	Υ	ROOM ANTI-	107	97	COMBI SW INPUT 1	123	M	IGN F/B			
79	BR	ROOM ANT1+	108	В	COMBI SW INPUT 4	124	LG	PASSENGER DOOR SW			
80	GR	IMMOBI ANTENNA CONTROL	109	W	COMBI SW INPUT 2	129	0	TRUNK LID OPENER CANCEL SW			
81	М	IMMOBI ANTENNA SIGNAL	110	9	HAZARD SW	132	^	POWER WINDOW SW COMM			
82	۵	IGN RFI AY (F/R) CONT		٨	S/I LINIT COMM	133	ŀ	PLISH-RUTTON IGNITION SWILL DOWER			

JCMWA3024GE

Fail-safe

INFOID:0000000004675403

FAIL-SAFE CONTROL BY DTC

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

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent Starter control relay signal Starter relay status signal
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	5 seconds after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	 500 ms after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (battery voltage) P range signal or N range signal (CAN): ON Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	 500 ms after the following CAN signal communication status becomes consistent Steering lock relay signal (Request signal) Steering lock relay signal (Condition signal)

Revision: 2009 October WCS-93 2009 G37 Sedan

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent Starter motor relay control signal Starter relay status signal (CAN)
B2609: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When the following steering lock conditions agree BCM steering lock control status Steering lock condition No. 1 signal status Steering lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	 When any of the following conditions are fulfilled Power position changes to ACC Receives engine status signal (CAN)
B2612: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When any of the following conditions are fulfilled Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E8: CLUTCH SW	Inhibit engine cranking	When any of the following BCM recognition conditions are fulfilled Status 1 Clutch switch signal (CAN from ECM): ON Clutch interlock switch signal: OFF (0 V) Status 2 Clutch switch signal (CAN from ECM): OFF Clutch interlock switch signal: ON (Battery voltage)
B26E9: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled Steering condition No. 1 signal: LOCK (0 V) Steering condition No. 2 signal: LOCK (Battery voltage)

HIGH FLASHER OPERATION

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

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

NOTE:

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

DTC Inspection Priority Chart

INFOID:0000000004675404

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

< ECU DIAGNOSIS INFORMATION >

Priority	DTC	Α
1	B2562: LOW VOLTAGE	
2	U1000: CAN COMM U1010: CONTROL UNIT(CAN)	В
3	B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM B2195: ANTI SCANNING	C
	B2013: ID DISCORD BCM-S/L B2014: CHAIN OF S/L-BCM B2553: IGNITION RELAY B2555: STOP LAMP B2556: PUSH-BTN IGN SW B2557: VEHICLE SPEED B2560: STARTER CONT RELAY	D
	 B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW 	F
	 B2606: S/L RELAY B2607: S/L RELAY B2608: STARTER RELAY 	G
4	B2609: S/L STATUS B260A: IGNITION RELAY B260B: STEERING LOCK UNIT B260C: STEERING LOCK UNIT	Н
	B260D: STEERING LOCK UNIT B260F: ENG STATE SIG LOST B2612: S/L STATUS B2614: ACC RELAY CIRC	I
	 B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC 	J
	 B2618: BCM B2619: BCM B261A: PUSH-BTN IGN SW B261E: VEHICLE TYPE 	K
	 B26E8: CLUTCH SW B26E9: S/L STATUS B26EA: KEY REGISTRATION C1729: VHCL SPEED SIG ERR 	L
	U0415: VEHICLE SPEED SIG	M

WCS

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P

< ECU DIAGNOSIS INFORMATION >

Priority	DTC
5	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1709: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RR C1712: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RR C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR C1718: [PRESSDATA ERR] RR C1719: [PRESSDATA ERR] RR C1720: [CODE ERR] FR C1721: [CODE ERR] FR C1722: [CODE ERR] RR C1723: [CODE ERR] RR C1724: [BATT VOLT LOW] FR C1726: [BATT VOLT LOW] FR C1727: [BATT VOLT LOW] RR C1727: [BATT VOLT LOW] RL
6	B2621: INSIDE ANTENNA B2622: INSIDE ANTENNA B2623: INSIDE ANTENNA

DTC Index

NOTE:

The details of time display are as follows.

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

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to WCS-17, "COMMON ITEM: CONSULT-III Function (BCM - COMMON ITEM)".

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
No DTC is detected. further testing may be required.	_	_	_	_	_
U1000: CAN COMM	_	_	_	_	BCS-35
U1010: CONTROL UNIT(CAN)	_	_	_	_	BCS-36
U0415: VEHICLE SPEED SIG	_	_	_	_	BCS-37
B2013: ID DISCORD BCM-S/L	×	×	_	_	SEC-55
B2014: CHAIN OF S/L-BCM	×	×	_	_	SEC-56
B2190: NATS ANTENNA AMP	×	_	_	_	SEC-47
B2191: DIFFERENCE OF KEY	×	_	_	_	SEC-50
B2192: ID DISCORD BCM-ECM	×	_	_	_	SEC-51
B2193: CHAIN OF BCM-ECM	×	_	_	_	SEC-53
B2195: ANTI SCANNING	×	_	_	_	<u>SEC-54</u>
B2553: IGNITION RELAY	_	×	_	_	PCS-49
B2555: STOP LAMP	_	×	_	_	<u>SEC-59</u>

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
B2556: PUSH-BTN IGN SW	_	×	×	_	SEC-61
B2557: VEHICLE SPEED	×	×	×	_	SEC-63
B2560: STARTER CONT RELAY	×	×	×	_	SEC-64
B2562: LOW VOLTAGE	_	×	_	_	BCS-38
B2601: SHIFT POSITION	×	×	×	_	SEC-65
B2602: SHIFT POSITION	×	×	×	_	SEC-68
B2603: SHIFT POSI STATUS	×	×	×	_	SEC-70
B2604: PNP SW	×	×	×	_	SEC-73
B2605: PNP SW	×	×	×	_	SEC-75
B2606: S/L RELAY	×	×	×	_	<u>SEC-77</u>
B2607: S/L RELAY	×	×	×	_	SEC-78
B2608: STARTER RELAY	×	×	×	_	SEC-80
B2609: S/L STATUS	×	×	×	_	SEC-82
B260A: IGNITION RELAY	×	×	×	_	PCS-51
B260B: STEERING LOCK UNIT	_	×	×	_	SEC-86
B260C: STEERING LOCK UNIT	_	×	×	_	SEC-87
B260D: STEERING LOCK UNIT	_	×	×	_	SEC-88
B260F: ENG STATE SIG LOST	×	×	×	_	SEC-89
B2612: S/L STATUS	×	×	×	_	SEC-94
B2614: ACC RELAY CIRC	_	×	×	_	PCS-53
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-55
B2616: IGN RELAY CIRC	_	×	×	_	PCS-57
B2617: STARTER RELAY CIRC	×	×	×	_	SEC-98
B2618: BCM	×	×	×	_	PCS-59
B2619: BCM	×	×	×	_	SEC-100
B261A: PUSH-BTN IGN SW	_	×	×	_	PCS-60
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	SEC-101
B2621: INSIDE ANTENNA	_	×	_	_	DLK-59
B2622: INSIDE ANTENNA	_	×	_	_	DLK-61
B2623: INSIDE ANTENNA	_	×	_	_	DLK-63
B26E8: CLUTCH SW	×	×	×	_	SEC-90
B26E9: S/L STATUS	×	×	× (Turn ON for 15 seconds)	_	SEC-92
B26EA: KEY REGISTRATION		×	× (Turn ON for 15 seconds)		SEC-93
C1704: LOW PRESSURE FL	_	_	_	×	
C1705: LOW PRESSURE FR	_	_	_	×	\/\/T 17
C1706: LOW PRESSURE RR	_	_	_	×	<u>WT-17</u>
C1707: LOW PRESSURE RL	_	_	_	×	1

Revision: 2009 October WCS-97 2009 G37 Sedan

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CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Refer- ence page
C1708: [NO DATA] FL	_	_	_	×	
C1709: [NO DATA] FR	_	_	_	×	W/T 40
C1710: [NO DATA] RR	_	_	_	×	<u>WT-19</u>
C1711: [NO DATA] RL	_	_	_	×	
C1712: [CHECKSUM ERR] FL	_	_	_	×	
C1713: [CHECKSUM ERR] FR	_	_	_	×	W/T O4
C1714: [CHECKSUM ERR] RR	_	_	_	×	<u>WT-21</u>
C1715: [CHECKSUM ERR] RL	_	_	_	×	
C1716: [PRESSDATA ERR] FL	_	_	_	×	
C1717: [PRESSDATA ERR] FR	_	_	_	×	WT-24
C1718: [PRESSDATA ERR] RR	_	_	_	×	<u>VV 1-24</u>
C1719: [PRESSDATA ERR] RL	_	_	_	×	
C1720: [CODE ERR] FL	_	_	_	×	
C1721: [CODE ERR] FR	_	_	_	×	W/T OC
C1722: [CODE ERR] RR	_	_	_	×	<u>WT-26</u>
C1723: [CODE ERR] RL	_	_	_	×	
C1724: [BATT VOLT LOW] FL	_	_	_	×	
C1725: [BATT VOLT LOW] FR	_	_	_	×	W/T 20
C1726: [BATT VOLT LOW] RR	_	_	_	×	<u>WT-29</u>
C1727: [BATT VOLT LOW] RL	_	_	_	×	
C1729: VHCL SPEED SIG ERR	_	_	_	×	<u>WT-32</u>
C1734: CONTROL UNIT	_	_		×	WT-33

THE PARKING BRAKE RELEASE WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

THE PARKING BRAKE RELEASE WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

Description INFOID:000000004238434

- The parking brake warning buzzer sounds continuously during vehicle travel though the parking brake is released.
- The parking brake warning buzzer does not sound at all even though driving the vehicle with the parking brake applied.

Diagnosis Procedure

1. CHECK PARKING BRAKE WARNING LAMP

- 1. Start the engine.
- 2. Check the operation of the brake warning lamp by operating the parking brake.

Parking brake ON : ON
Parking brake OFF : OFF

Is the inspection result normal?

YES >> Replace the combination meter.

NO >> GO TO 2.

2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

Perform a check for the parking brake switch signal circuit. Refer to MWI-61, "Diagnosis Procedure (A/T models)" (M/T models).

[M/T models]

Is the inspection result normal?

YES >> GO TO 3.

NO

NO >> Repair harness or connector.

3.CHECK PARKING BRAKE SWITCH UNIT

Perform a unit check for the parking brake switch. Refer to BRC-72, "Component Inspection".

Is the inspection result normal?

YES >> Replace the combination meter.

>> Replace the parking brake switch. Refer to <u>PB-6</u>, "<u>PEDAL TYPE</u>: <u>Exploded View"</u> (pedal type) or <u>PB-7</u>, "<u>LEVER TYPE</u>: <u>Exploded View"</u> (lever type).

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Revision: 2009 October WCS-99 2009 G37 Sedan

THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE LIGHT REMINDER WARNING DOES NOT SOUND

Description INFOID:000000004238436

Light reminder warning chime does not sound even though headlamp is illuminated.

Diagnosis Procedure

INFOID:0000000004238437

1. CHECK COMBINATION SWITCH (LIGHT SWITCH) OPERATION

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

Do they operate normally?

YES >> GO TO 2.

NO >> Refer to BCS-40, "Diagnosis Procedure".

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

Perform the check for the front door switch (driver side) signal circuit. Refer to <u>DLK-66, "Diagnosis Procedure"</u>. <u>Is the inspection result normal?</u>

YES >> GO TO 3.

NO >> Repair harness or connector.

3.check front door switch (driver side) unit

Perform a unit check for the front door switch (driver side). Refer to <u>DLK-68</u>, "Component Inspection". <u>Is the inspection result normal?</u>

YES >> Replace the BCM. Refer to BCS-82, "Removal and Installation".

NO >> Replace the front door switch (driver side). Refer to <u>DLK-246, "Removal and Installation"</u>.

THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT Α SOUND Description INFOID:0000000004238438 В Seat belt warning does not sound even though driver seat belt is not fastened. • Seat belt warning sounds even though driver seat belt is fastened. Diagnosis Procedure INFOID:0000000004238439 1. CHECK SEAT BELT WARNING LAMP D Turn ignition switch ON. Check the operation of the seat belt warning lamp in the combination meter. Е Seat belt fastened : OFF Seat belt not fastened : ON Is the inspection result normal? F YES >> GO TO 2. NO >> GO TO 4. 2.CHECK UNIFIED METER AND A/C AMP. INPUT SIGNAL Check "Data Monitor". Refer **WCS-24** the buckle switch input signal with the to "Component Function Check". Is the inspection result normal? Н YES >> Replace the unified meter and A/C amp. NO >> GO TO 3. 3.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT Perform the check for the seat belt buckle switch circuit. Refer to WCS-24, "Diagnosis Procedure". Is the inspection result normal? YES >> Replace the unified meter and A/C amp. NO >> Repair harness or connector. 4. CHECK SEAT BELT BUCKLE SWITCH UNIT K Perform a unit check for the seat belt buckle switch (driver side). Refer to SBC-21, "DRIVER SIDE: Component Inspection". Is the inspection result normal? YES >> Replace the combination meter. NO >> Replace the seat belt buckle. Refer to SB-8, "SEAT BELT BUCKLE: Removal and Installation".

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PRECAUTIONS

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PRECAUTION

PRECAUTIONS

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

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

WARNING:

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

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

WARNING:

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