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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

BASIC INSPECTION Α DIAGNOSIS AND REPAIR WORKFLOW Work Flow INFOID:0000000003072162 В **DETAILED FLOW** 1. OBTAIN INFORMATION ABOUT SYMPTOM C Interview the customer to obtain as much information as possible about the conditions and environment under which the malfunction occurred. D >> GO TO 2 2. CHECK SYMPTOM Е • Check the symptom based on the information obtained from the customer. · Check to see if any other malfunctions are present. F >> GO TO 3 3.check consult-iii self-diagnosis results Connect CONSULT-III and perform "SELF-DIAGNOSIS". Refer to MWI-35, "CONSULT-III Function (METER/ M&A)". Are self-diagnosis results normal? Н YES >> GO TO 4 NO >> Repair or replace the malfunctioning parts, GO TO 5 4.NARROW DOWN MALFUNCTIONING PARTS THROUGH SYMPTOM DIAGNOSIS Perform symptom diagnosis and repair or replace the identified malfunctioning parts. >> GO TO 5 5. FINAL CHECK Check that the warning buzzer in the combination meter operates normally. K Does it operate normally? YES >> Inspection End. NO >> GO TO 1 M

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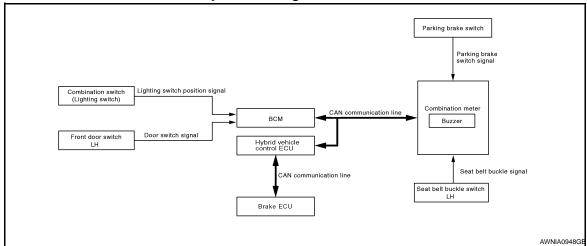
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FUNCTION DIAGNOSIS

WARNING CHIME SYSTEM WARNING CHIME SYSTEM

WARNING CHIME SYSTEM: System Diagram

INFOID:0000000003072163

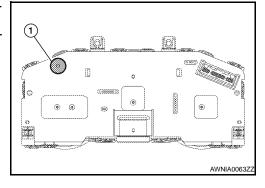


WARNING CHIME SYSTEM: System Description

INFOID:0000000003072164

COMBINATION METER

- The buzzer (1) for warning chime system is installed in the combination meter.
- The buzzer sounds when the combination meter receives a buzzer output signal from each unit.



BCM

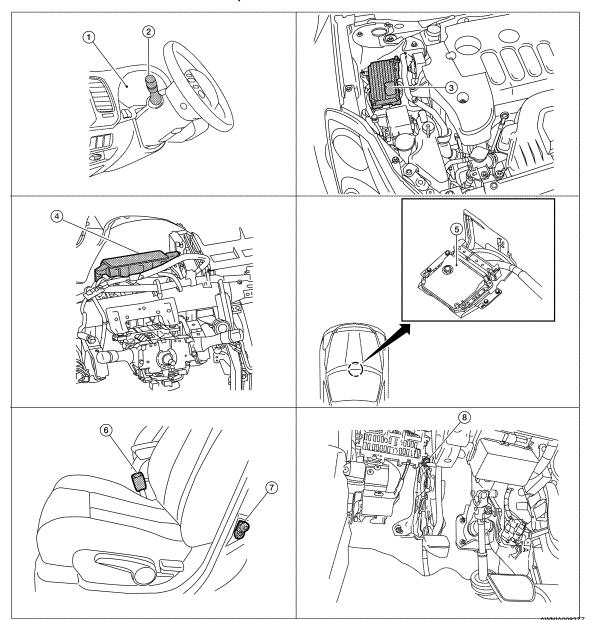
BCM receives signals from various units and transmits a buzzer output signal to the combination meter with CAN communication line if it judges that the warning buzzer should be activated.

BCM warning function list

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

WARNING CHIME SYSTEM : Component Parts Location

INFOID:0000000003072165



- Combination meter M24
- 4. BCM M16, M17, M18, M19 (view with 5. instrument panel removed)
- 7. Front door switch LH B8
- Combination switch (lighting switch) M28
 - Hybrid vehicle control ECU E66
 - Parking brake switch E35 (view with instrument lower cover LH removed)
- 3. Brake ECU E61
- Seat belt buckle switch LH B202

WARNING CHIME SYSTEM: Component Description

INFOID:0000000003072166

Unit	Description
Combination meter	 Judges whether the parking brake is released using the vehicle speed signal and the parking brake switch signal, and sounds the buzzer if necessary. 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.
ВСМ	Transmits signals provided by various units to the combination meter with CAN communication line.

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WARNING CHIME SYSTEM

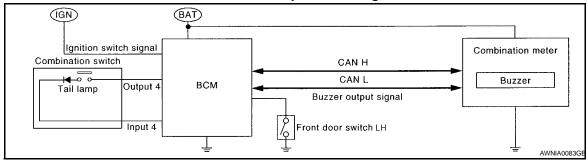
< FUNCTION DIAGNOSIS >

Unit	Description
Hybrid vehicle control ECU	 Receives vehicle speed signal from brake ECU with CAN communication line. Transmits the vehicle speed signal to combination meter with CAN communication line.
Brake ECU	Transmits the vehicle speed signal to hybrid vehicle control ECU with CAN communication line.
Seat belt buckle switch LH	Transmits a seat belt buckle switch signal to the combination meter.
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.
Front door switch LH	Transmits the door switch signal to BCM.
Parking brake switch	Transmits parking brake signal to combination meter.

LIGHT REMINDER WARNING CHIME

LIGHT REMINDER WARNING CHIME: System Diagram

INFOID:0000000003072167



LIGHT REMINDER WARNING CHIME: System Description

INFOID:0000000003072168

DESCRIPTION

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

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

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled

- Lighting switch is at 1st or 2nd position
- Ignition switch is at OFF or ACC
- Front door switch LH is ON

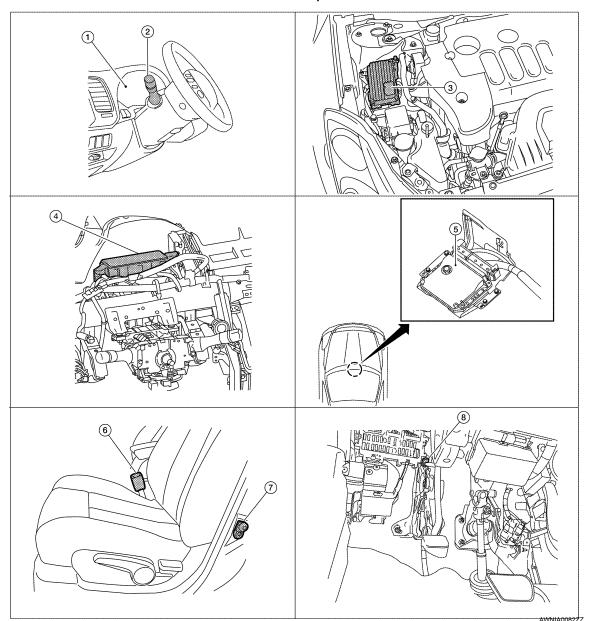
WARNING CANCEL CONDITIONS

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

- Lighting switch OFF
- Ignition switch ON
- Front door switch LH is OFF

LIGHT REMINDER WARNING CHIME: Component Parts Location

INFOID:0000000003304783



- 1. Combination meter M24
- 4. BCM M16, M17, M18, M19 (view with 5. instrument panel removed)
- 7. Front door switch LH B8
- Combination switch (lighting switch) M28
 - Hybrid vehicle control ECU E66
 - Parking brake switch E35 (view with instrument lower cover LH removed)
- 3. Brake ECU E61
- 6. Seat belt buckle switch LH B202

LIGHT REMINDER WARNING CHIME: Component Description

INFOID:0000000003072170

Unit	Description
Combination meter	Receives a buzzer output signal from BCM via CAN communication line and sounds the buzzer.
ВСМ	Judges the light warning conditions from the signals provided by various switches and transmits a buzzer output signal to the combination meter via CAN communication line if necessary.
Combination switch (Lighting switch)	Transmits the lighting switch position signal to BCM.
Front door switch LH	Transmits the door switch signal to BCM.

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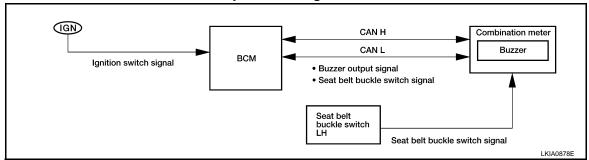
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SEAT BELT WARNING CHIME

SEAT BELT WARNING CHIME: System Diagram

INFOID:0000000003072171



SEAT BELT WARNING CHIME: System Description

INFOID:0000000003072172

DESCRIPTION

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

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

WARNING OPERATION CONDITIONS

If all of the following conditions are fulfilled

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

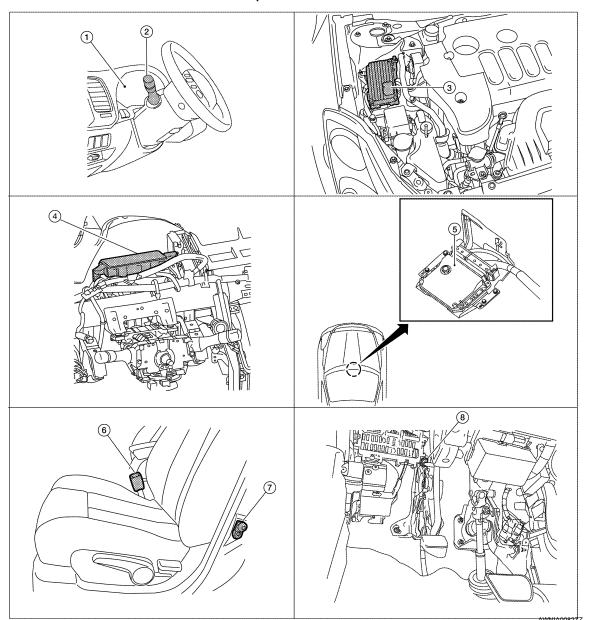
WARNING CANCEL CONDITIONS

Cancels the warning if any of the following conditions is fulfilled.

- Ignition switch OFF
- Seat buckle switch LH is OFF (driver seat belt fastened)
- 90 seconds have passed since the start of the warning

SEAT BELT WARNING CHIME: Component Parts Location

INFOID:0000000003304784



- 1. Combination meter M24
- 4. BCM M16, M17, M18, M19 (view with 5. instrument panel removed)
- 7. Front door switch LH B8
- Combination switch (lighting switch) M28
 - Hybrid vehicle control ECU E66
 - Parking brake switch E35 (view with instrument lower cover LH removed)
- 3. Brake ECU E61
- S. Seat belt buckle switch LH B202

SEAT BELT WARNING CHIME : Component Description

INFOID:0000000003072174

Unit	Description
Combination meter	 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 sounds the buzzer.

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WARNING CHIME SYSTEM

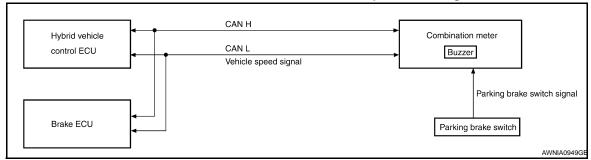
< FUNCTION DIAGNOSIS >

Unit	Description
BCM	Judges the seat belt warning condition from the seat belt buckle switch signal received from the combination meter and transmits a buzzer output signal to the combination meter via CAN communication line if necessary.
Seat belt buckle switch LH	Transmits seat belt buckle switch signal to combination meter.

PARKING BRAKE RELEASE WARNING CHIME

PARKING BRAKE RELEASE WARNING CHIME: System Diagram

INFOID:0000000003072175



PARKING BRAKE RELEASE WARNING CHIME: System Description

INFOID:0000000003072176

DESCRIPTION

- The brake ECU sends a vehicle speed signal to the hybrid vehicle control ECU via CAN communication. The hybrid vehicle control ECU then sends the vehicle speed signal to the combination meter via CAN communication.
- The combination meter judges whether the parking brake is released using 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 approximately 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

PARKING BRAKE RELEASE WARNING CHIME : Component Parts Location

- 1. Combination meter M24
- Combination switch (lighting switch) M28
- 3. Brake ECU E61

- 4. BCM M16, M17, M18, M19 (view with 5. instrument panel removed)
- . Hybrid vehicle control ECU E66
- 6. Seat belt buckle switch LH B202

- 7. Front door switch LH B8
- Parking brake switch E35 (view with instrument lower cover LH removed)

PARKING BRAKE RELEASE WARNING CHIME: Component Description INFOID:000000003072178

Unit	Description
Combination meter	 Judges whether the parking brake is released using the parking brake switch signal from the parking brake switch, and sounds the buzzer if necessary. Receives a vehicle speed signal from high voltage ECU.
Hybrid vehicle control ECU	 Receives vehicle speed signal from brake ECU with CAN communication line. Transmits the vehicle speed signal to combination meter with CAN communication line.

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WARNING CHIME SYSTEM

< FUNCTION DIAGNOSIS >

Unit	Description
Brake ECU	Transmits the vehicle speed signal to the hybrid vehicle control ECU with CAN communication line.
Parking brake switch	Transmits parking brake switch signal to the combination meter.

DIAGNOSIS SYSTEM (METER)

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (METER)

CONSULT-III Function (METER/M&A)

INFOID:0000000003304786

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

METER/M&A diagnosis mode	Description
SELF-DIAG RESULTS	Displays combination meter self-diagnosis results.
DATA MONITOR	Displays combination meter input/output data in real time.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication can be read.

SELF-DIAG RESULTS

Display Item List

Refer to MWI-71, "DTC Index".

DATA MONITOR

Display Item List

X: Applicable

			X: Applicable
Display item [Unit]	MAIN SIGNALS	SELECTION FROM MENU	Description
SPEED METER [km/h] or [mph]	Х	Х	Displays the value of vehicle speed signal.
SPEED OUTPUT [km/h] or [mph]	Х	Х	Displays the value of vehicle speed signal, which is transmitted to each unit with CAN communication.
ODO OUTPUT		Х	Displays the value, which is calculated by vehicle speed signal.
FUEL METER [lit.]	Х	Х	Displays the value, which processes a resistance signal from fuel gauge.
ABS W/L [ON/OFF]		X	Displays [ON/OFF] condition of ABS warning lamp.
VDC/TCS IND [ON/OFF]		X	Displays [ON/OFF] condition of VDC/TCS OFF indicator lamp.
SLIP IND [ON/OFF]		X	Displays [ON/OFF] condition of SLIP indicator lamp.
HEV BRAKE W/L [ON/OFF]		X	Displays [ON/OFF] condition of HEV brake warning lamp.*
DOOR W/L [ON/OFF]		X	Displays [ON/OFF] condition of door warning lamp.
TRUNK/GLAS-H [ON/OFF]		X	Displays [ON/OFF] condition of trunk warning lamp.
HI-BEAM IND [ON/OFF]		Х	Displays [ON/OFF] condition of high beam indicator.
TURN IND [ON/OFF]		X	Displays [ON/OFF] condition of turn indicator.
OIL W/L [ON/OFF]		Х	Displays [ON/OFF] condition of oil pressure warning lamp.
MIL [ON/OFF]		Х	Displays [ON/OFF] condition of malfunction indicator lamp.
CRUISE IND [ON/OFF]		Х	Displays [ON/OFF] condition of CRUISE indicator.
SET IND [ON/OFF]		Х	Displays [ON/OFF] condition of SET indicator.
FUEL W/L [ON/OFF]		Х	Displays [ON/OFF] condition of low-fuel warning lamp.
WASHER W/L [ON/OFF]		Х	Displays [ON/OFF] condition of low-washer fluid warning lamp.
AIR PRES W/L [ON/OFF]		Х	Displays [ON/OFF] condition of tire pressure warning lamp.
KEY G W/L [ON/OFF]		Х	Displays [ON/OFF] condition of key warning lamp.
PUSH ENG IND		Х	Displays the value of Intelligent Key system message indication.
SHIFT IND [P, R, N, D, L]		Х	Displays [P, R, N, D, L] range position of ECVT.
PKB SW [ON/OFF]		X	Displays [ON/OFF] condition of parking brake switch.
BUCKLE SW [ON/OFF]		Х	Displays [ON/OFF] condition of seat belt buckle switch LH.
DISTANCE [km] or [mile]		Х	Displays the value, which is calculated by vehicle speed signal, fuel gauge and fuel consumption from ECM.
OUTSIDE TEMP [°C]		Х	Displays the ambient air temperature, which is input from ambient sensor.

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DIAGNOSIS SYSTEM (METER)

< FUNCTION DIAGNOSIS >

Display item [Unit]	MAIN SIGNALS	SELECTION FROM MENU	Description
FUEL LOW SIG [ON/FF]		Х	Displays [ON/OFF] condition of low-fuel warning signal.
BUZZER [ON/OFF]	Х	Х	Displays [ON/OFF] condition of buzzer.
ALL POWER METER [kw]		X	Displays the value of power meter.
SOC METER [%]		Х	Displays the position of the high voltage battery status meter pointer.
EPS W/L [ON/OFF]		Х	Displays [ON/OFF] condition of EPS warning lamp.
READY IND [ON/OFF]		Х	Displays [ON/OFF] condition of READY indicator.
SYS FAIL W/L [ON/OFF]		Х	Displays [ON/OFF] condition of hybrid system warning lamp.
SFT POSI W/L [ON/OFF]		Х	Displays [ON/OFF] condition of shift position indicator.
HV BAT W/L [ON/OFF]		Х	Displays [ON/OFF] condition of high voltage battery warning lamp.
CHAGE W/L [ON/OFF]		Х	Displays [ON/OFF] condition of charge warning lamp.
LCD		Х	Displays the value of Intelligent Key system message indication.
BRAKE OIL SW [ON/OFF]		Х	Displays [ON/OFF] condition of brake fluid level switch.

NOTE:

Some items are not available due to vehicle specification.

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (BCM)

BUZZER

BUZZER: CONSULT-III Function (BCM - BUZZER)

INFOID:0000000003072180

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CONSULT-III APPLICATION ITEMS

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

DATA MONITOR

Display item [Unit]	Description	
VEH SPEED 1 [Km/h]	Value of vehicle speed signal received from brake ECU.	
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

< COMPONENT DIAGNOSIS >

COMPONENT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT COMBINATION METER

COMBINATION METER: Diagnosis Procedure

INFOID:0000000003304806

Refer to BCS-41, "Diagnosis Procedure".

BCM (BODY CONTROL MODULE)

BCM (BODY CONTROL MODULE): Diagnosis Procedure

INFOID:0000000003306468

1. CHECK FUSE AND FUSIBLE LINK

Check if the following BCM fuse or fusible link are blown.

Terminal No.	Signal name	Fuse and fusible link No.
1	Battery power supply	J
11	battery power supply	10

Is the fuse or fusible link blown?

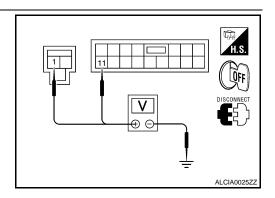
YES >> Replace the blown fuse or fusible link after repairing the affected circuit.

NO >> GO TO 2

$2.\,$ CHECK POWER SUPPLY CIRCUIT

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

	Terminals				
(+)	(-)	Voltage (Approx.)		
В	СМ		(Approx.)		
Connector	Terminal	Ground			
M16	1	Glound	Battery voltage		
M17	11				



Is the measurement normal?

YES >> GO TO 3

NO >> Repair or replace harness.

3. CHECK GROUND CIRCUIT

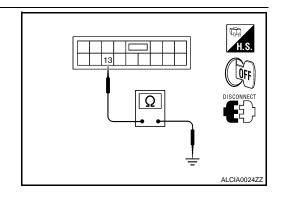
Check continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	Ground	Continuity
M17	13		Yes

Does continuity exist?

YES >> Inspection End.

NO >> Repair or replace harness.



METER BUZZER CIRCUIT

< COMPONENT DIAGNOSIS >

METER BUZZER CIRCUIT Α Description INFOID:0000000003072183 • The buzzer for warning chime system is installed in the combination meter. В • The combination meter sounds the alarm buzzer based on the signals transmitted from various units. Component Function Check INFOID:00000000003072184 1. CHECK OPERATION OF METER BUZZER Select "BUZZER" of "BCM" on CONSULT-III. D 2. Perform "LIGHT WARN ALM" of "ACTIVE TEST". Does meter buzzer activate? YES >> Inspection End. Е >> Replace combination meter. Refer to MWI-135, "Removal and Installation". NO Diagnosis Procedure INFOID:0000000003072185 F 1. CHECK POWER SUPPLY OF COMBINATION METER Check power supply of combination meter. Refer to MWI-40, "COMBINATION METER: Diagnosis Procedure". Is the inspection result normal? YES >> Inspection End. NO >> Repair power supply circuit of combination meter. Н K

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SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

Description INFOID:0000000003072186

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

Component Function Check

INFOID:0000000003072187

1. CHECK COMBINATION METER INPUT SIGNAL

Select "DATA MONITOR" for "METER/M&A" and check the "BELT SW" monitor value.

BELT SW

When seat belt is fastened : OFF When seat belt is unfastened : ON

>> Inspection End.

Diagnosis Procedure

INFOID:0000000003072188

1. CHECK COMBINATION METER INPUT SIGNAL

- 1. Turn ignition switch ON.
- Check voltage between combination meter harness connector M24 terminal 35 and ground.

35 - Ground

When driver seat belt is fastened : Approx. 12V
When driver seat belt is unfastened : Approx. 0V

Is the inspection result normal?

YES >> Replace combination meter. Refer to <u>MWI-135</u>, <u>"Removal and Installation"</u>.

NO >> GO TO 2

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2.CHECK SEAT BELT BUCKLE SWITCH CIRCUIT

- 1. Turn ignition switch OFF.
- Disconnect combination meter connector and seat belt buckle switch LH connector.
- Check continuity between combination meter harness connector M24 terminal 35 and seat belt buckle switch LH harness connector B202 terminal 1.

35 - 1 : Continuity should exist.

4. Check harness continuity between combination meter harness connector M24 terminal 35 and ground.



Is the inspection result normal?

35 - Ground

YES >> GO TO 3

NO >> Repair harness or connector.

3.CHECK SEAT BELT BUCKLE SWITCH GROUND CIRCUIT

SEAT BELT BUCKLE SWITCH SIGNAL CIRCUIT

< COMPONENT DIAGNOSIS >

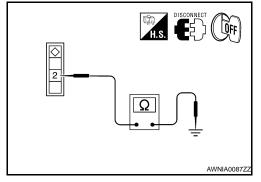
Check harness continuity between seat belt buckle switch LH harness connector B202 terminal 2 and ground.

2 - Ground : Continuity should exist.

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair harness or connector.



INFOID:0000000003072189

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Component Inspection

1. CHECK SEAT BELT BUCKLE SWITCH

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

1-2

When seat belt is : Continuity should not exist.

fastened

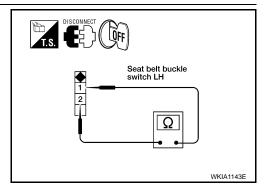
When seat belt is : Continuity should exist.

unfastened

Is the inspection result normal?

YES >> Inspection End.

NO >> Replace the seat belt buckle switch LH.



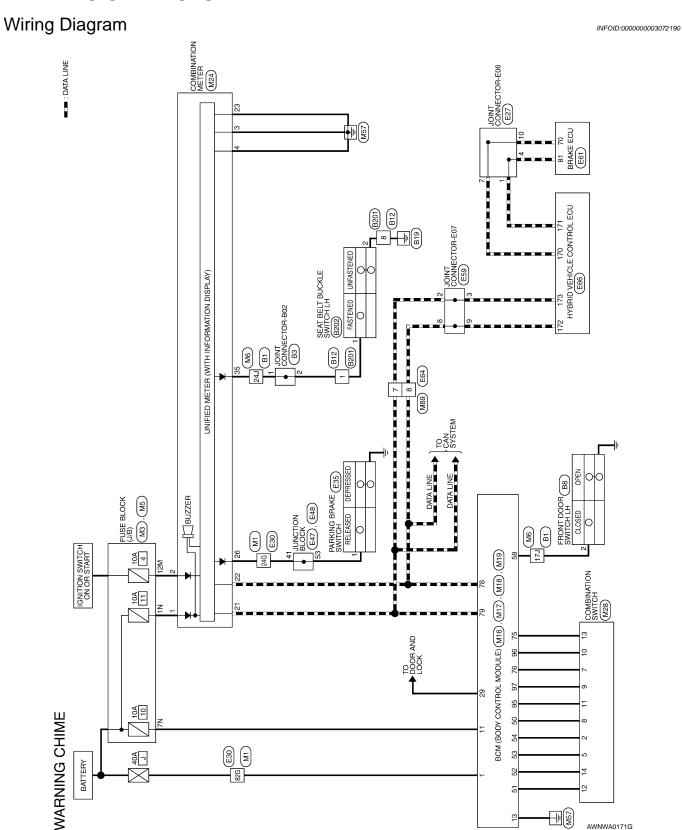
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WARNING CHIME SYSTEM



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Α В Signal Name Signal Name C Connector Name FUSE BLOCK (J/B) D Connector Color WHITE Color of Color of Wire Wire W/L Y/R SB W/B Connector No. Е Terminal No. Terminal No. Z Z 17J 24J H.S. 偃 F G Signal Name 1 9) 8) 7,1 6,1 5,1 4,0 3,1 17,1 18,1 15,1 14,1 13,1 12,1 11,1 18,1 15,1 14,1 13,1 12,1 11,1 18,1 12,1 11,1 25J 24J 23J 22J 30J 25J 28J 27J 26J 21J 20J 15J 18J 551 541 531 521 511 501 491 531 621 511 601 591 581 571 561 481 471 87J 86J 85J 84J 92J 91J 90J 89J 88J 83J 82J 81J 80J 37J 36J 35J 34J 33J 32J 31J 46J 45J 44J 43J 42J 41J 40J 38J 38J 99J 98J 97J 96J 95J 94J 93J Н Connector Name WIRE TO WIRE Connector Color | WHITE Color of Connector No. M6 Wire G/R W/B Terminal No. 82G J 24G 僵 K WARNING CHIME CONNECTORS Signal Name L Connector Name FUSE BLOCK (J/B) 9G 8G 7G 6G 5G 4G 3G 17G 16G 15G 14G 13G 12G 11G 10G 2G 1G 286 256 246 256 226 216 206 346 336 326 316 306 236 286 276 196 186 590 570 560 550 630 620 610 600 590 540 530 520 510 72G 71G 70G 69G 69G 67G 65G 80G 79G 77G 77G 75G 74G 73G 69G Connector No. M1 Connector Name WIRE TO WIRE 910 5M 4M 3M 2M 1M 12M11M10M 9M 8M 7M 6M 836 826 M Connector Color WHITE Connector Color | WHITE Color of M5 Wire Connector No. WCS Terminal No. 12M H.S. E 0 ALNIA0164GB Ρ

Connector No. M18 Connector Name BCM (BODY CONTROL MODULE) Connector Color GREEN		
Connector Name BCM (BODY CONTROL MODULE) Connector Color GREEN	Connector No.	M18
MODULE) Connector Color GREEN	Connector Name	BCM (BODY CONTROL
Connector Color GREEN		MODULE)
	Connector Color	GREEN

	39 38 37 36 35 34 33 32 31 30 29 28 27 26 25 24 23 22 21 20	59 58 57 56 55 54 53 52 51 50 49 48 47 46 45 44 43 42 41 40	Signal Name
	54	44	≌
	52	45	l a
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11/	78	84	
IV.	53	49	
IN.	8	က	<u> </u>
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Э	32	52	Color of
	33	23	ŏ
	34	54	
	35	55	
	36	26	<u> </u>
5	37	22	≝
<u> 2</u>	38	28	[
1	33	29	Terminal No.

Signal Name	FOB_IN_SW_1	INPUT_5	INPUT_1	INPUT_2	INPUT_3	INPUT_4	DR_DOOR_SW	
Color of Wire	λ	B/97	M٦	g/B	H/97	J/5	BS	
Terminal No.	29	50	51	52	53	54	58	

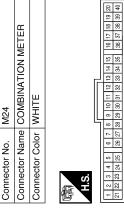
Signal Name	BATT	IGN	GND	GND	CAN-H	CAN-L	GND	PKB	DR BELT
Color of Wire	M/L	0	В	В	7	Ь	В	G/R	M/B
Terminal No.	-	2	3	4	21	22	23	26	35





Signal Name		BAT_BCM_FUSE	נעט דטועט
Color of	Wire	Y/R	۵
Torminal No	ellilliai NO.	11	CT

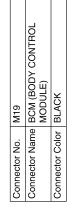
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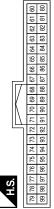


	(BODY CONTROL ULE)	X
Connector No. M16	Connector Name BCM (BODY CONTROL MODULE)	Connector Color BLACK



Signal Name		BAT POWER F/L
Color of	Wire	M/B
Torminal No	-	





Signal Name		OUTPUT_5	0UTPUT_3	CAN-L	CAN-H	OUTPUT_1	OUTPUT_4	OUTPUT_2
Color of	Wire	R/Y	B/B	Ь	7	W/H	B/A	B/B
Torimina	reliffial NO.	75	9/	78	6/	92	96	6

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WARNING CHIME SYSTEM

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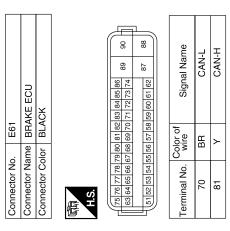
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Connector No. E27 Connector Name JOINT CONNECTOR-E06 Connector Color BLUE	Terminal No.	Connector No. E35 Connector Name PARKING BRAKE SWITCH (WITH CVT) Connector Color BLACK Terminal No. Color of Signal Name 1 G/R ———————————————————————————————————
Connector No. M89 Connector Name WIRE TO WIRE Connector Color WHITE 5 4 3 2 1 1 1 1 1 1 1 1 1	Terminal No. Wire Signal Name 7 L — — 8 8 P — —	Terminal No.
Connector No. M28 Connector Name COMBINATION SWITCH Connector Color WHITE	or of Signal ire NY	Connector No. E30 Connector Name WIRE TO WIRE Connector Color WHITE To 30 world 50 60 70 80 90 To 30 world 50 60 70 80 90 To 30 world 50 80 90 90 To 30 world 50 90 90 90 To 30 world 50 90 90 To 30 0 90 90 90 90 90 To 30 0 90 90 To 30 0 90 90 90 To 30 0 90 To 30 0 90 90 To 30

	Connector Name JOINT CONNECTOR-E06	Е	8 7 6 5 4	Signal Name	1	ı	1	1	
E59	ne JOII	or BLU	12 11 10 9 8	Solor of wire	_	_	۵	Д	
Connector No.	connector Nan	Connector Color BLUE	H.S.	Color of Wire wire	2	က	80	6	
0	<u> </u> 0	0		<u> </u>					
	Connector Name JUNCTION BLOCK	IE .	45	11 12 13 14 15 16 17 18 19 20 43 44 1 2 3 4 5 6 7 8 9 10 41 42			Signal Mamo		
E48	JUNC et	r WHIT	32 33 34 35 22 23 24 25	12 13 14 2 3 4			Color of	Wire	G/R
Connector No. E48	Connector Nan	Connector Color WHITE	H.S.)		Terminal No Color of	GIIIIII NO.	53
	TION BLOCK	Щ	10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0				Signal Name	Olginal Ivaline	J
. E47	me JUNC	lor WHITI	7 6 5 4 16 15 14 13 1				Color of	Wire	G/R
Connector No. E47	Connector Name JUNCTION	Connector Color WHITE	H.S.				Torminal No.	dillia No.	41



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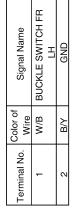
WARNING CHIME SYSTEM

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Terminal No. Color of Wire Signal Name 17J SB — 24J W/B —	Connector No. B12 Connector Name WIRE TO WIRE Connector Color WHITE Terminal No. Wire Signal Name 1 W/B — 8 B/Y —	A B C D
Connector No. B1	Connector No. B8 Connector Name FRONT DOOR SWITCH LH Connector Color WHITE Terminal No. Color of Signal Name 2 SB DOOR SW(DR)	F G H I
Connector No. E66 Connector Name HYBRID VEHICLE CONTROL ECU Connector Color BLACK The part of the pa	Connector No. B3 Connector Name JOINT CONNECTOR-B02 Connector Color WHITE Terminal No. Wire Signal Name 1 W/B — 2 W/B — 2 W/B —	K L M WCS

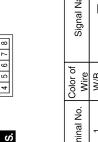
02	AT BELT BUCKLE	SWITCH LH	HTE
Connector No. B202	Connector Name SEAT BELT BUCKLE	SW	Connector Color WHITE













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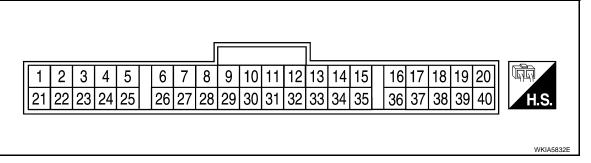
COMBINATION METER

ECU DIAGNOSIS

COMBINATION METER

Reference Value INFOID:0000000003304794 В

TERMINAL LAYOUT



PHYSICAL VALUES

Termi-	Wire			Condition	Reference value (V)		
nal	color	Item	Ignition switch	Operation or condition	(Approx.)		
1	W/L	Battery power supply	_	_	Battery voltage		
2	0	Ignition switch ON or START	ON	_	Battery voltage		
3	В	Ground (Power)			0		
4	В	Ground (Illumination)	_	_	U		
5	R/Y	Illumination output	_	_	Refer to INL-9, "System Description".		
9	GR/W	Illumination switch pow- er	_	_	Refer to INL-9, "System Description".		
10	O/L	Mode switch ground	ON	_	0		
44	1./D		ON	Switch pressed	0		
11	L/R	L/R Mode Switch A	Mode Switch A	Mode switch A	ON	Switch released	5
40	D/D	Mode switch B	Made switch P	ON	Switch pressed	0	
12	B/R		ON	Switch released	5		
14	V/Y	Ignition switch ACC or ON	ON	_	Battery voltage		
15	BR/W	Air bag warning lamp in-	ON	Air bag warning lamp ON	3		
15	BR/W	put	ON	Air bag warning lamp OFF	0		
18	O/B	Ambient sensor signal	ON	_	0 - 5 (Based on ambient temperature)		
20	B/Y	Ambient sensor ground	ON	_	0		
21	L	CAN-H	_	_	_		
22	Р	CAN-L	_	_	_		
23	В	Ground (Circuit)	_	_	0		
24	B/W	Fuel level sensor ground	ON	_	0		
26	G/R	Parking brake switch	ON	Parking brake applied	0		
20	G/K	raining brake Switch	ON	Parking brake released	Battery voltage		
28	L/O	Coourity indicator is not	OFF	Security indicator ON	0		
20	L/O	Security indicator input	OFF	Security indicator OFF	Battery voltage		

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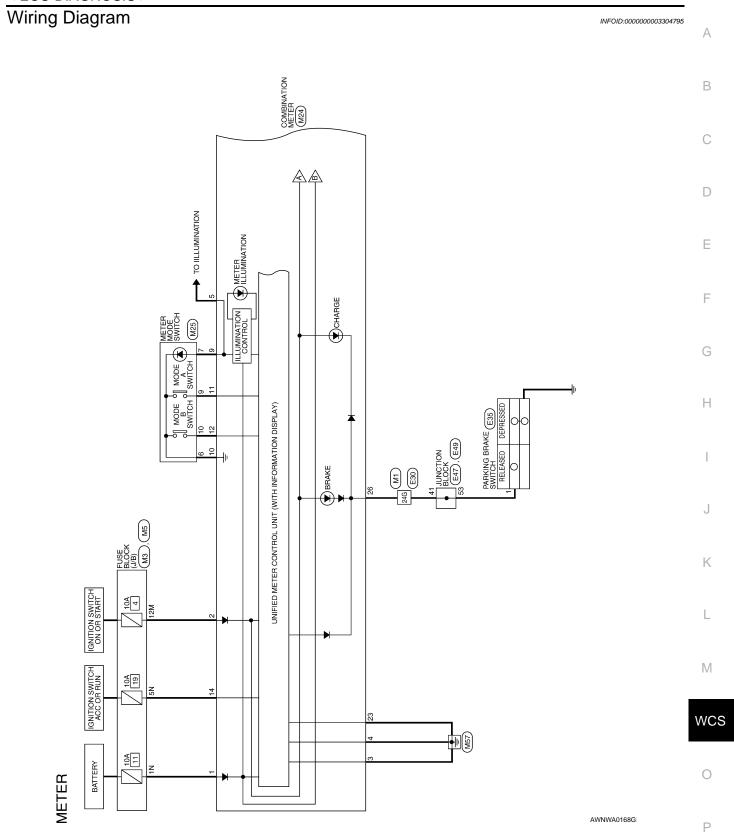
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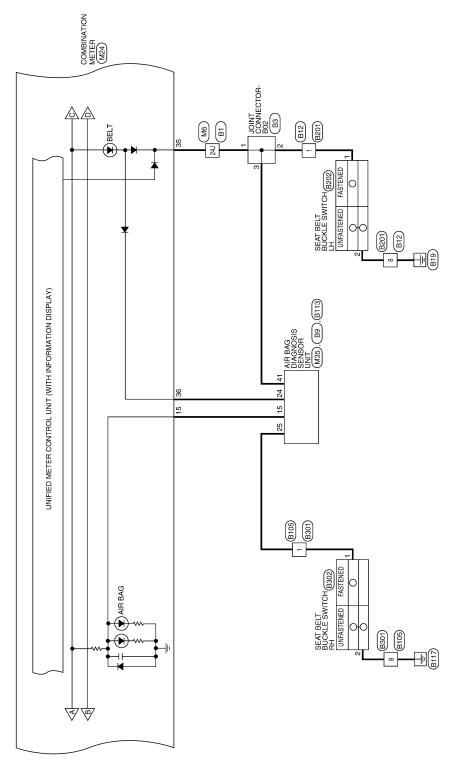
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COMBINATION METER

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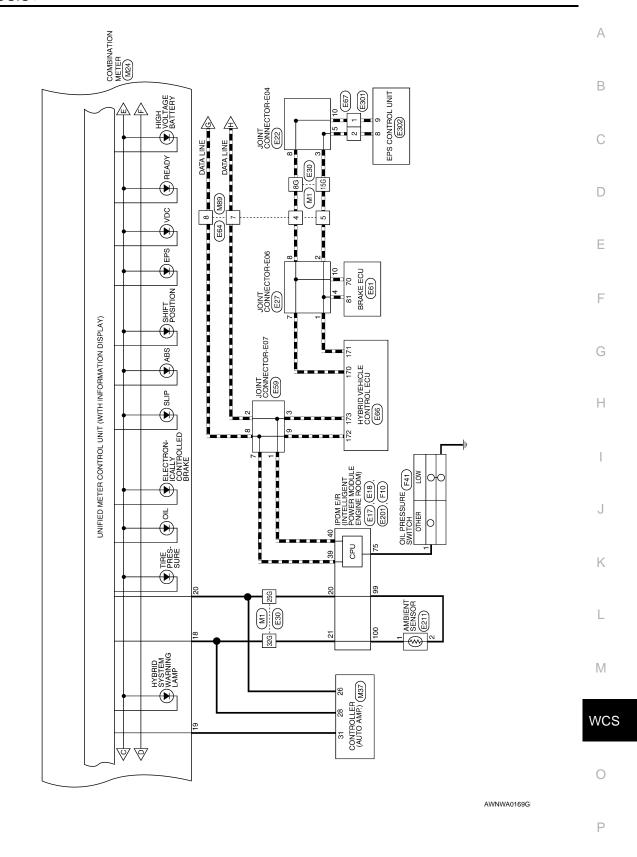
Termi-	Wire			Condition	Deference value (A)
nal	color	Item	Ignition switch	Operation or condition	Reference value (V) (Approx.)
29	R	Washer fluid level switch	ON	Washer fluid level low	0
29	K	washer huld level switch	ON	Washer fluid level normal	Battery voltage
30	L/B	Vehicle speed signal output (2-pulse)	ON	Speedometer operated [When vehicle speed is approx. 20 km/h (12 MPH)]	240 Hz
31	V/W	Vehicle speed signal out- put (8-pulse)	ON	Speedometer operated [When vehicle speed is ap- prox. 40 km/h (25 MPH)]	NOTE: Maximum voltage may be 12V due to specifications (connected units). (V) 6 4 2 0 PKIC0643E
34	G/B	Fuel level sensor signal	_	_	Refer to MWI-13, "FUEL GAUGE : System Description".
35	W/B	Seat belt buckle switch	ON	Unfastened (ON)	0
33	VV/D	LH	ON	Fastened (OFF)	Battery voltage
36	1 ///	Seat belt buckle switch	ON	Unfastened (ON)	0
36 L/W	RH	ON	Fastened (OFF)	Battery voltage	



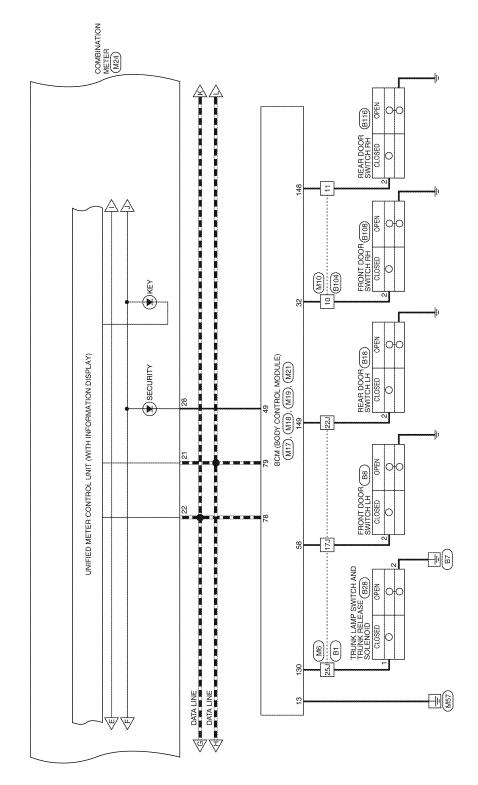


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■■: DATA LINE



MICH : DATA LINE



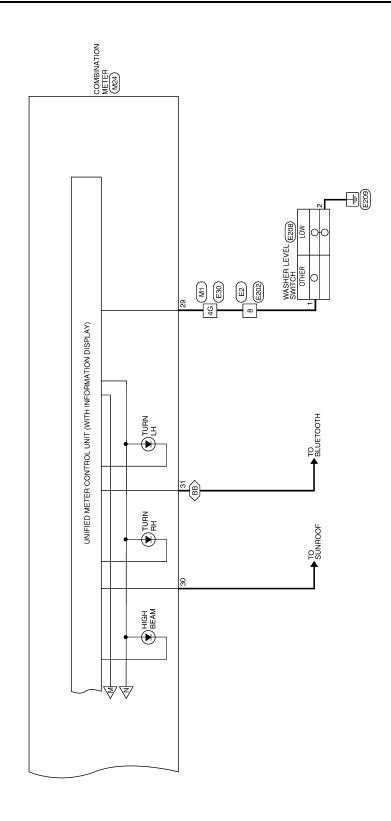
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■■: DATA LINE

Α COMBINATION METER M24 В С D FUEL Е HIGH VOLTAGE BATTERY STATUS METER M6 B1 F 24 UNIFIED METER CONTROL UNIT (WITH INFORMATION DISPLAY) HIGH WATER TEMP G FUEL GAUGE Н POWER METER LOW WATER TEMP MASTER WARNING LAMP J Κ MALFUNCTION INDICATOR LAMP L M1 E30 E30 49 E10 DATA LINE
DATA LINE \mathbb{N} wcs 0 ALNWA0032GE Ρ

WCS-33

⟨BB⟩: WITH BLUETOOTH



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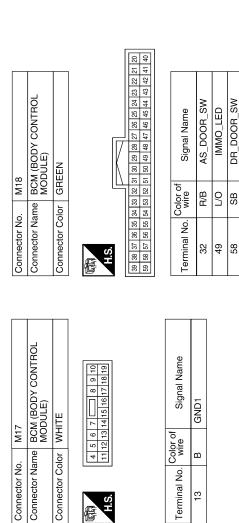
В C Signal Name Signal Name Connector Name FUSE BLOCK (J/B) 1 D Connector Color WHITE Color of wire Connector No. M3 Color of wire M/L ≿ M/B Y/G G/B B/W R/B SB Е Terminal No. Terminal No. Z 2N 24) 255 295 305 22 F G Signal Name 50 80 70 60 55 40 30 170 160 155 144 130 120 110 100 20 10 255 244 233 223 350 239 289 277 269 213 20 193 183 55J 54J 53J 52J 51J 50J 49J 63J 62J 61J 60J 59J 58J 57J 56J 48J 47J 75J 70J 69J 68J 67J 66J 65J 75J 78J 77J 76J 75J 74J 73J 72J 64J 990 980 970 960 950 940 930 1 Н Connector Name | WIRE TO WIRE Connector Color WHITE M6 Terminal No. wire 0/B G/R BB B∕ œ _ Connector No. J 32G 51G 24G 25G 15G 52G 4g 88 K L Signal Name 72G 71G 70G 89G 89G 67G 88G 80G 79G 79G 77G 78G 74G 73G 85G 84G 396 576 566 566 636 626 616 606 596 596 536 526 516 Connector Name FUSE BLOCK (J/B) 9G 8G 7G 6G 5G 4G 3G 17G 16G 15G 14G 13G 12G 11G 10G 2G 816 Connector No. M1 Connector Name WIRE TO WIRE 416 406 396 386 376 386 356 506 495 486 476 466 446 436 METER CONNECTORS 989 M Connector Color WHITE Connector Color WHITE 836 Connector No. M5 Terminal No. wire 0 wcs 12M 僵 0 ALNIA0150GB Ρ

M17

Connector No.

Connector Name WIRE TO WIRE Connector Color BROWN

Connector No. M10



Color of wire

Terminal No.

Signal Name 1

Color of wire

Terminal No. 10 Ξ

R/W R/B

В

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Connector No.		M19		Connector No.	. M21		
Connector Name		BCM (BODY CONTROL MODULE)	•	Connector Name		BCM (BODY CONTROL MODULE)	
Connector Color	_	BLACK	•	Connector Color	or GREY	ξΥ	
可 H.S.				南 H.S.			
79 78 77 76 74 73 72 71 70 69 68 99 98 97 96 95 94 93 92 91 90 89 88	74 73 7 94 93 9	78 77 76 75 74 73 72 71 70 69 68 67 66 65 64 63 62 61 60 61 60 61 60 61 60 61 60 61 60 61 60 61 60 61 60 61 60 61 60 61 60 61 60 61 60 61 61 60 61 61 60 61 61 61 61 61 61 61 61 61 61 61 61 61	8 8	131 130 129 128 127 1 151 150 149 148 147 ·	128 127 126 125 124 123 122 121 121 148 147 146 145 144 143 142 141	229 [227 127 128 125 127 1	112
Terminal No. wire	Color wire	of Signal Name		Terminal No. wire	Color of wire	Signal Name	
78	┛	CAN-L		130	Y/G	TRUNK_SW	
62	_	CAN-H	•	148	R/W	RR_DOOR_SW	

ALNIA0151GB

RL_DOOR_SW

R/B

149

Signal Name	CAN-H	CAN-L	GND (CIRCUIT)	GND (FUEL SENSOR)	PKB	SECURITY	LOW WASH FLUID SW	2P/R OUT	8P/R OUT	FUEL SENSOR	DR_BELT	AS_BELT
Color of Wire	Т	Ь	В	B/W	G/R	0/7	В	L/B	V/W	G/B	W/B	L/W
Terminal No.	21	22	23	24	56	28	59	30	31	34	35	36

Signal Name	BAT	IGN	GND (POWER)	GND (ILL)	ILL OUTPUT	SW ILL PWR	GND (SATELLITE SW)	MODE A SW	MODE B SW	ACC	AIR_BAG	OAT	OAT POWER	GND (OAT SENSOR)
Color of Wire	M/L	0	В	В	R/Υ	GR/W	O/L	L/R	B/R	٨/٨	BR/W	O/B	Ь	В/У
Terminal No.	-	2	ဇ	4	5	6	10	11	12	14	15	18	19	20

ၓ	Ē	ě	ct	Connector No.	ġ		_	M24	4										
ပ	Ē	é	뚱	Connector Name	lar	ne		8	₹	듦	₹	Ĕ	COMBINATION METER	\mathbb{R}	μ	Œ			
ပ	ī	Je l	ct	Connector Color	100	or		∀	WHITE	ш									
F	15																		
7	H.S.	Ś																	
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-	2	က	4	2	9	_	∞	6	9	Ξ	12	<u>ε</u>	9 10 11 12 13 14 15		16 17 18 19	8	13	20	
21	22	23	21 22 23 24 25	32	88	27	28	53	98	3	32	83	26 27 28 29 30 31 32 33 34 35	88	36 37 38	38	33	9	
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Connector No.	M37	
Connector Name		CONTROLLER (AUTO AMP.)
Connector Color	lor WHITE	TE
		014161 014161
23 24 25	26 27 28 29 3	31 32 33 34 35 36 37 38
Terminal No.	Color of Wire	Signal Name
26	В/У	SENS GND
28	O/B	AMB SENS
31	Ь	AMB VDD

Connector No.	M35	
Connector Name		AIR BAG DIAGNOSIS SENSOR UNIT
Connector Color		YELLOW
H.S.	21	24 49 1 47 45 3 4 6 5 18 2
Terminal No.	Color of Wire	Signal Name
15	BR/W	AIR BAG W/L
24	Γ/M	SEAT BELT REMINDER

M25 METER MODE SWITCH WHITE 2 3 4 5 6 7 8 9 10	Signal Name	GND (SATELLITE SW)	SW ILL POWER	MODE A SW	MODE B SW
	Wire	O/L	R/L	L/R	B/R
Connector No. Connector Name Connector Color H.S.	Terminal No.	9	7	6	10

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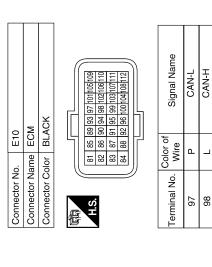
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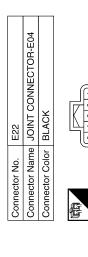
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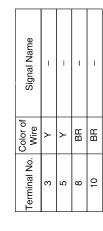
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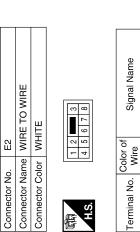
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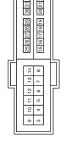




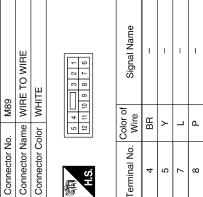
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Connector No.	E18
Connector Name	Connector Name POWER DISTRIBUTION MODULE ENGINE ROOM
Connector Color WHITE	WHITE



	35 36		lame	GND-E/R	SIG-E/R
	2556272829 30(31)32 33(34) 15 16 17 18 19 20 21 22 23 24		Signal Name	AMB_SENS_GND-E/R	AMB_SENS_SIG-E/R
] Г	41 8		Color of Wire	B/Y	O/B
	9 10 11 12 13 3 4 5 6 7		Terminal No.	20	21
		_			

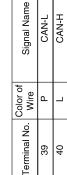






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of Signal Name	1	1	1	1	1	I	1	1
Color of wire	Œ	Д	_	G/R	>	O/B	٦	Ь
Terminal No.	4G	8G	15G	24G	25G	32G	51G	52G

	WIRE	30 40 56 600 76 80 90 90 90 90 90 90 90 90 90 90 90 90 90
E30	WIRE TO WIRE	10 20 100
Connector No.	Connector Name	H.S.

_	JOINT CONNECTOR-E06	JE	8 7 6 5 4 3 2 1	Signal Name	_	_	_	_	_	ı	
). E27		olor BLUE	12 11 10 9	Color of wire	Y	>	>	BR	BR	BR	
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	+	2	4	7	8	10	

			ı			
8	JUNCTION BLOCK	WHITE	50 49 48 47	Signal Name	-	-
o. E48	l			Color of wire	Ф	٦
Connector No.	Connector Name	Connector Color	H.S.	erminal No.	49	20

Connector No.		E47	
Connector Name		NN	JUNCTION BLOCK
Connector Color	_	WHITE	IE .
H.S.		46 45	42 44 43
Terminal No.	Color of wire	5	Signal Name
41	G/R	_	1
43	_		1
44	۵		I

10	PARKING BRAKE SWITCH	BLACK		Signal Name	_	
). E35	ıme PA	_		Color of wire	G/R	
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	-	

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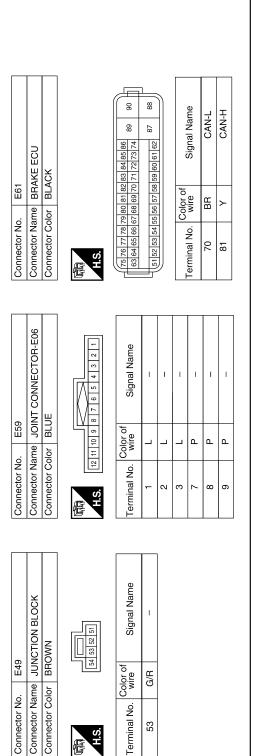
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179 178 177 176 175 185 184 183 182 181	_																							
185 184 183 182 181		180	179	178	177	176	175	128	127	126	125	124	123	122	121	120	119	118	17	116	115	141	131	12
185 184 183 182 181								145	144	143	142	141	140	139	38	137	136	135	34	133	1321	31	301	59
		186	185	184	183	182	181	162	161	160	159	158	157	156	22	154	153	152	. 12	120	1491	481	471	46

Signal Name

Color of wire

Terminal No. 4 2

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142	159		an an				
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144	161		Z	CAN-L	CAN-H	CAN-L	CAN-H
145	162		Signal Name	Ö	ပ	ပ်	S
	181 162 161 160 159 158 157		Š				
T	182						
T	183 182		Color of wire	BR	>	۵	_
T	184		ပိ				
+			<u>o</u>			a	3
	186		<u> </u>	0	_		
	186 185		Terminal No.	170	171	172	173
	\equiv	J	Те				

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Connector No.

Connector Name WIRE TO WIRE

Connector No.

Connector Color WHITE

)2	RE TO WIRE	IITE	2 2 2	Signal Name	1
	. E202	me WIF	lor WH	3 7	Color of Wire	œ
	Connector No.	Connector Name WIRE TO WIRE	Connector Color WHITE	H.S.	Terminal No. Wire	8
ſ						Г

Connector No.	E67		Connector No.	E201		Connector No. E202	02	
Connector Name WIRE TO WIRE	WIRE T	TO WIRE	Connector Name		IPDM E/R (INTELLIGENT POWER DISTRIBLITION	Connector Name WIF	WIRE TO WIRE	
Connector Color	or BLACK				MODULE ENGINE ROOM)	Connector Color WHITE	HTE	
T.		ſī	Connector Color WHITE	r WHI	Щ	9		
H.S.	123	3 4		26 86	26 27 27 28 28 28 28 28 28 28 28 28 28 28 28 28	1 1 1 1 1 1 1 1 1 1	5 2 4 4	
Terminal No.	Color of Wire	Signal Name	S.	106 105 104 1	106 105 104 103 102 101 100 99	Terminal No. Wire	Signal Name	
-	BR	ı				α α	1	
2	>	ı	Terminal No.	Color of Wire	Signal Name			
			96 B	BR/W	AMB_SENS_GND-FEM			
			100	SB	AMB_SENS_SIG-FEM			
:				i				

Connector No.	. E208	<u> </u>	Connect
Connector Name	me WA	WASHER LEVEL SWITCH	Connect
Connector Color WHITE	lor WH	ITE	Connect
H.S.	4-1)		H.S.
Terminal No.	Color of Wire	Signal Name	Termina
-	ш	WASHER	-
c	α	CINC	C

	VIRE			Signal Name	1	ı
E301	WIRE TO V	BLACK	(4) (6) (7) (7)			
	Name 1	\vdash		Color of Wire	BR	>
Connector No.	Connector Name WIRE TO WIRE	Connector Color	m H.S.	Ferminal No.	-	2
					.	
	SOR			Signal Name	NS_SIG	NS_GNI
	AMBIENT SENSOR			Signal	AMB_SENS_SIG	AMB_SENS_GND
E211	AMBIEN	BLACK	(2) 1	e of		
	lame	-		Color of Wire	SB	BR/W
Connector No.	Connector Name	Connector Color	H.S.	Terminal No.	-	2
S	ပိ	Co		Terr		
	ИТСН			٥		
	VEL SW			Signal Name	WASHER	GND
	Name WASHER LEVEL SWITCH	سِ		Sign	W	
E208	e WAS	WHITE		Color of Wire	æ	В
Š.	Nam	Color		9 -		

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Α

Signal Name	OIL_PRESSURE_SW
Color of Wire	P/L
Terminal No.	22

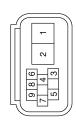


Connector Name | EPS CONTROL UNIT

E302

Connector No.

Connector Color | BLACK



H.S.

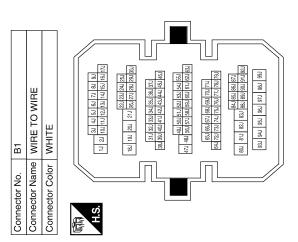
2 1	Signal Name	CAN-H	CAN-L
8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	Color of Wire	У	BR
H.S.	Terminal No.	8	6

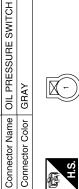
81 82

69|70|71|72|73| 74|75|76|77|78 |59|80|61|82|83| 84|65|66|67|68

79

Signal Name	1	I	ı	ı	1	1
Color of Wire	SB	B/B	M/B	Y/G	G/B	B/W
Terminal No.	17.1	227	24J	25J	29J	301





F41

Connector No.

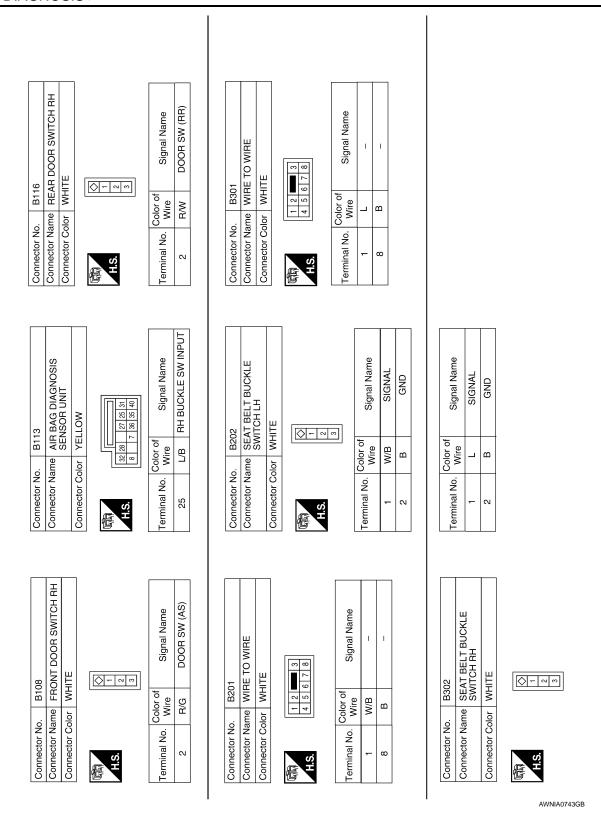






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		А
S DIAGNOSIS N N Signal Name SIGNAL SW INPUT	Vame Vame	В
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olor Colo Wir	O O O O O O O O O O O O O O O O O O O	D
Connector No. Connector Color Connector Color H.S. Terminal No. W. W.	Connector No. Terminal No. M.S. H.S. Terminal No. W. W. W. R. B. B. B. B. B. B. B. B. B	Е
		F
Signal Name	Name Name	G
	B18 REAR DOOR SWITCH LH WHITE Ir of Signal Name B104 WIRE TO WIRE BROWN 2 3	Н
1 1 1 1 10 := 1 := 1	Oolo Oolo Oolo Oolo Oolo Oolo Oolo Oolo	I
Connector No.	Connector No. Connector Name Connector No. Z R/ Connector No. Connector No. Connector No. Connector No. Terminal No. My 2 R/ 10 R/ 11 R/ 11 R/	J
700		K
B3 JOINT CONNECTOR- B02 WHITE	WHRE TO WIRE WHITE WHITE Tof Signal Name B42 FUEL LEVEL SENSOR UNIT GRAY GRAY Tof Signal Name Tof Signal Name	L
Solor Cok W W W W W W W W W W W W W W W W W W W		M
Connector No. Connector Name Connector Color H.S. 1 w 1 w 2 w	Connector No. Connector Name Connector Color Terminal No. Wir Connector Name Connector No. Color Connector Name Connector No. Color Terminal No. Wir Z G/F E S E E E E E E E E E E E	WCS
	AWNIA0742GB	Р



Fail Safe

The combination meter performs a fail-safe operation for the functions listed below when communication is lost.

< ECU DIAGNOSIS >

	Function	Specifications	
Speedometer			
Fuel gauge			
Power meter High voltage battery status meter		Zero indication.	
Illumination control	Meter illumination	Change to nighttime mode when communication is lost.	
0	Odometer	Freeze current indication.	
Segment LCD	ECVT position	Display turns off.	
Buzzer		Buzzer turns off.	
	ABS warning lamp		
	Brake warning lamp	Lamp turns on when communication is lost.	
	VDC OFF indicator lamp		
	SLIP indicator lamp		
	Oil pressure warning lamp	Lamp turns off when communication is lost.	
	Malfunction indicator lamp		
	Master warning lamp		
	Air bag warning lamp		
Warning lamp/indicator lamp	High beam indicator		
	Turn signal indicator lamp		
	Intelligent Key system warning lamp		
	Driver and passenger seat belt warning lamp		
	Charge warning lamp	Lamp turns off when disconnected.	
	Security indicator lamp		
	Low tire pressure warning lamp	Lamp will flash every second for 1 minute and then stay on continuously thereafter.	

DTC Index

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CONSULT-III display	Malfunction	Reference page
CAN COMM CIRC [U1000]	Malfunction is detected in CAN communication. CAUTION: Even when there is no malfunction on CAN communication system, malfunction may be misinterpreted when battery has low voltage (when maintaining 7 - 8 V for about 2 seconds) or 10A fuse [No. 19, located in the fuse block (J/B)] is disconnected.	<u>MWI-38</u>
VEHICLE SPEED CIRC [B2205]	Malfunction is detected when an erroneous speed signal is input. CAUTION: Even when there is no malfunction on speed signal system, malfunction may be misinterpreted when battery has low voltage (when maintaining 7 - 8 V for about 2 seconds).	MWI-39

NOTE:

"TIME" indicates the following.

- 0: Indicates that a malfunction is detected at present.
- 1-63: Indicates that a malfunction was detected in the past. (Displays number of ignition switch OFF \rightarrow ON cycles after malfunction is detected. Self-diagnosis result is erased when "63" is exceeded.)

< ECU DIAGNOSIS >

BCM (BODY CONTROL MODULE)

Reference Value

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	OFF
TIX WIII EIXTII	Front wiper switch HI	ON
FR WIPER LOW	Other than front wiper switch LO	OFF
TR WIFER LOW	Front wiper switch LO	ON
FR WASHER SW	Front washer switch OFF	OFF
FR WASHER SW	Front washer switch ON	ON
ED MIDED INT	Other than front wiper switch INT	OFF
FR WIPER INT	Front wiper switch INT	ON
FR WIPER STOP	Front wiper is not in STOP position	OFF
FR WIPER STOP	Front wiper is in STOP position	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TUDNI CIONAL D	Other than turn signal switch RH	OFF
TURN SIGNAL R	Turn signal switch RH	ON
TUDNI CIONIAL I	Other than turn signal switch LH	OFF
TURN SIGNAL L	Turn signal switch LH	ON
TAIL LAND OW	Other than lighting switch 1ST and 2ND	OFF
TAIL LAMP SW	Lighting switch 1ST or 2ND	ON
HI BEAM SW	Other than lighting switch HI	OFF
HI BEAM SW	Lighting switch HI	ON
HEAD LAMP SW/ 1	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
5.000.000.000	Other than lighting switch PASS	OFF
PASSING SW	Lighting switch PASS	ON
ALITO LIGHT OW	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
200201112	Front door LH closed	OFF
DOOR SW-DR	Front door LH opened	ON
	Front door RH closed	OFF
DOOR SW-AS	Front door RH opened	ON
	Rear door RH closed	OFF
DOOR SW-RR	Rear door RH opened	ON
	Rear door LH closed	OFF
DOOR SW-RL	Rear door LH opened	ON
DOOR SW-BK	NOTE: This item is displayed, but cannot be monitored.	OFF

Monitor Item	Condition	Value/Status
CDL LOCK SW	Other than power door lock switch LOCK	OFF
ODE LOCK SW	Door lock/unlock switch LOCK	ON
CDL UNLOCK SW	Other than door lock/unlock switch UNLOCK	OFF
CDL UNLOCK SVV	Door lock/unlock switch UNLOCK	ON
KEY CYL LK-SW	Other than front door LH key cylinder LOCK position	OFF
NET CTL LK-SW	Front door LH key cylinder LOCK position	ON
KEN OM LINI OM	Other than front door LH key cylinder UNLOCK position	OFF
KEY CYL UN-SW	Front door LH key cylinder UNLOCK position	ON
KEY CYL SW-TR	NOTE: This item is displayed, but cannot be monitored.	OFF
HAZARD CW	When hazard switch is not pressed	OFF
HAZARD SW	When hazard switch is pressed	ON
REAR DEF SW	When rear window defogger switch is pressed	ON
FAN ON SIG	When AUTO switch or fan switch is pressed	ON
AIR COND SW	When A/C switch is pressed	ON
	Trunk lid opener cancel switch OFF	OFF
TR CANCEL SW	Trunk lid opener cancel switch ON	ON
	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	When LOCK button of Intelligent Key is not pressed	OFF
	When LOCK button of Intelligent Key is pressed	ON
RKE-UNLOCK	When UNLOCK button of Intelligent Key is not pressed	OFF
	When UNLOCK button of Intelligent Key is pressed	ON
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is not pressed	OFF
KKE-TR/BD	When TRUNK OPEN button of Intelligent Key is pressed	ON
RKE-PANIC	When PANIC button of Intelligent Key is not pressed	OFF
RKE-PANIC	When PANIC button of Intelligent Key is pressed	ON
	When UNLOCK button of Intelligent Key is not pressed and held	OFF
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is pressed and held	ON
DIE MODE OUG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON
OPTICAL (LIGHT) SEN-	When outside of the vehicle is bright	Close to 5 V
SOR	When outside of the vehicle is dark	Close to 0 V
DEO CW DD	When front door LH request switch is not pressed	OFF
REQ SW-DR	When front door LH request switch is pressed	ON
DEO 014/ 10	When front door RH request switch is not pressed	OFF
REQ SW-AS	When front door RH request switch is pressed	ON
DEO SW DD/TD	When trunk request switch is not pressed	OFF
REQ SW-BD/TR	When trunk request switch is pressed	ON
DI IOLI OW	When push-button ignition switch is not pressed	OFF
PUSH SW	When push-button ignition switch is pressed	ON

Monitor Item	Condition	Value/Status
IGN RLY -F/B	Ignition switch OFF or ACC	OFF
IGN KLT -F/D	Ignition switch ON	ON
ACC RLY -F/B	Ignition switch OFF	OFF
ACC RLT -P/D	Ignition switch ACC or ON	ON
DDAKE CWA	When the brake pedal is not depressed	ON
BRAKE SW 1	When the brake pedal is depressed	OFF
DETE (CANOL C)A(When selector lever is in P position	OFF
DETE/CANCL SW	When selector lever is in any position other than P	ON
SFT PN/N SW	When selector lever is in any position other than P or N	OFF
SFT PIN/IN SVV	When selector lever is in P or N position	ON
S/L -LOCK	Electronic steering column lock LOCK status	OFF
S/L -LOCK	Electronic steering column lock UNLOCK status	ON
S/L -UNLOCK	Electronic steering column lock UNLOCK status	OFF
5/L -UNLOCK	Electronic steering column lock LOCK status	ON
C/L DELAY E/D	Ignition switch OFF or ACC	OFF
S/L RELAY-F/B	Ignition switch ON	ON
	Front door LH UNLOCK status	OFF
UNLK SEN-DR	Front door LH LOCK status	ON
PUSH SW -IPDM	When push-button ignition switch is not pressed (IPDM E/R sends via CAN)	OFF
	When push-button ignition switch is pressed (IPDM E/R sends via CAN)	ON
ION DIVA E/D	Ignition switch OFF or ACC	OFF
IGN RLY1 F/B	Ignition switch ON	ON
	When selector lever is in P position (IPDM E/R sends via CAN)	OFF
DETE SW -IPDM	When selector lever is in any position other than P (IPDM E/R sends via CAN)	ON
SFT PN -IPDM	When selector lever is in any position other than P or N (IPDM E/R sends via CAN)	OFF
	When selector lever is in P or N position (IPDM E/R sends via CAN)	ON
SFT P -MET	When selector lever is in any position other than P (combination meter sends via CAN)	OFF
	When selector lever is in P position (combination meter sends via CAN)	ON
SFT N -MET	When selector lever is in any position other than N (combination meter sends via CAN)	OFF
SFI IN -IVIE I	When selector lever is in N position (combination meter sends via CAN)	ON
	Engine stopped	STOP
ENGINE STATE	While the engine stalls	STALL
	At engine cranking	CRANK
	Engine running	RUN
C/L L OOK IDDA	Electronic steering column lock LOCK status (IPDM E/R sends via CAN)	OFF
S/L LOCK-IPDM	Electronic steering column lock UNLOCK status (IPDM E/R sends via CAN)	ON

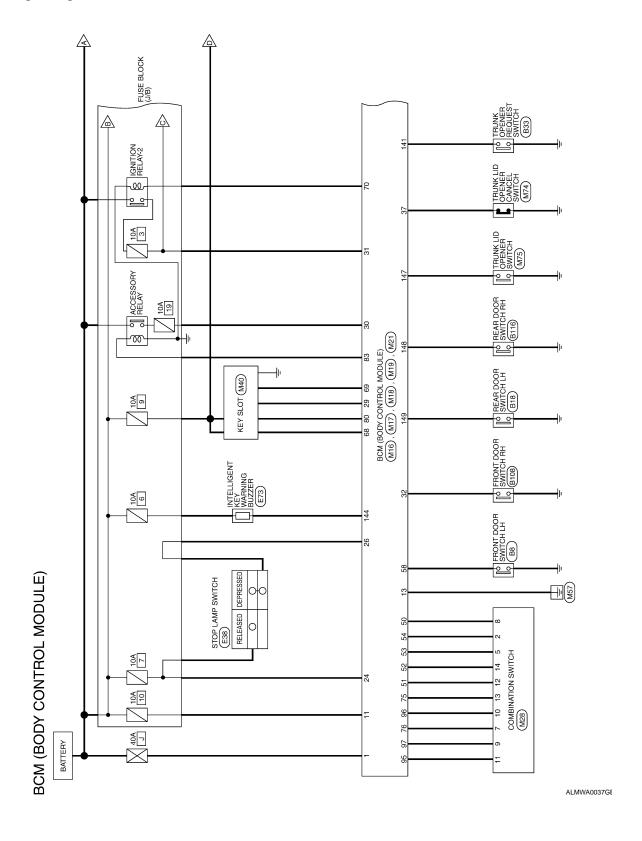
Monitor Item	Condition	Value/Status
	Electronic steering column lock UNLOCK status (IPDM E/R sends via CAN)	OFF
S/L UNLCK-IPDM	Electronic steering column lock LOCK status (IPDM E/R sends via CAN)	ON
0/L DEL AV DEO	Ignition switch OFF or ACC	OFF
S/L RELAY-REQ	Ignition switch ON	ON
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
	Front door LH LOCK status	LOCK
DR DOOR STATE	Wait with selective UNLOCK operation (5 seconds)	READY
	Front door LH UNLOCK status	UNLK
	Front door RH LOCK status	LOCK
AS DOOR STATE	Wait with selective UNLOCK operation (5 seconds)	READY
	Front door RH UNLOCK status	UNLK
D 01/ 51 : 0	Ignition switch ACC or ON	RESET
ID OK FLAG	Ignition switch OFF	SET
	When the hybrid system start is prohibited	RESET
PRMT ENG STAT	When the hybrid system start is permitted	SET
PRMT RKE STAT	NOTE: This item is displayed, but cannot be monitored.	RESET
(E) (O) (O) (O)	When Intelligent Key is not inserted into key slot	OFF
KEY SW -SLOT	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
RKE OPE COUN2	NOTE: This item is displayed, but cannot be monitored.	Operation frequency of Intelligent Key
AIR PRESS FL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	When ID of front LH tire transmitter is registered (refer to <u>WT-6, "ID Registration Procedure"</u>)	DONE
ID REGGI I EI	When ID of front LH tire transmitter is not registered (refer to <u>WT-6</u> . "ID Registration Procedure")	YET
ID REGST FR1	When ID of front RH tire transmitter is registered (refer to <u>WT-6, "ID Registration Procedure"</u>)	DONE
D REGGI FRI	When ID of front RH tire transmitter is not registered (refer to <u>WT-6</u> , <u>"ID Registration Procedure"</u>)	YET
ID REGST RR1	When ID of rear RH tire transmitter is registered (refer to <u>WT-6, "ID Registration Procedure"</u>)	DONE
ID NEGOT KKT	When ID of rear RH tire transmitter is not registered (refer to <u>WT-6.</u> "ID Registration Procedure")	YET
ID REGST RL1	When ID of rear LH tire transmitter is registered (refer to WT-6, "ID Registration Procedure")	DONE
ID NEGOT KET	When ID of rear LH tire transmitter is not registered (refer to WT-6, "ID Registration Procedure")	YET

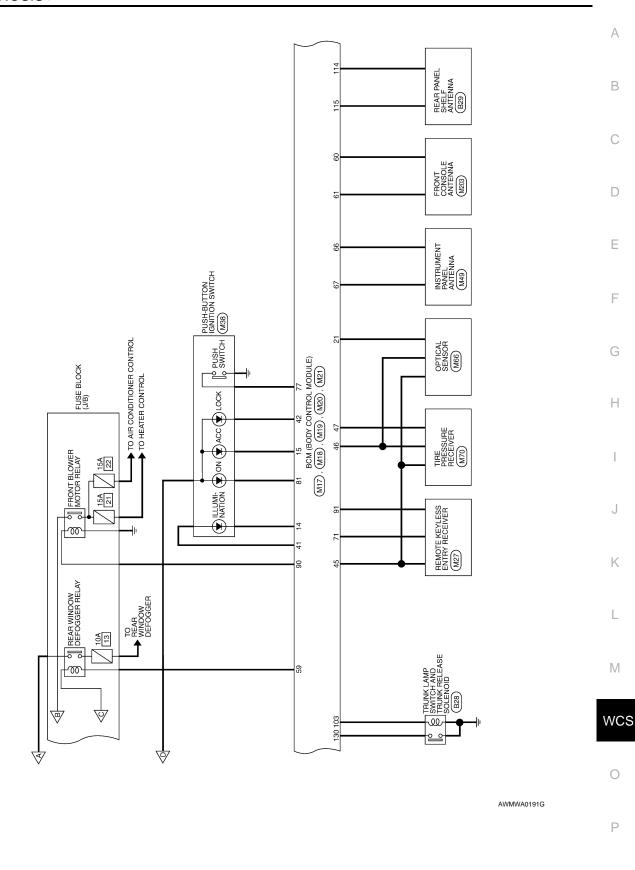
< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
WARNING LAMP	Tire pressure indicator OFF	OFF
	Tire pressure indicator ON	ON

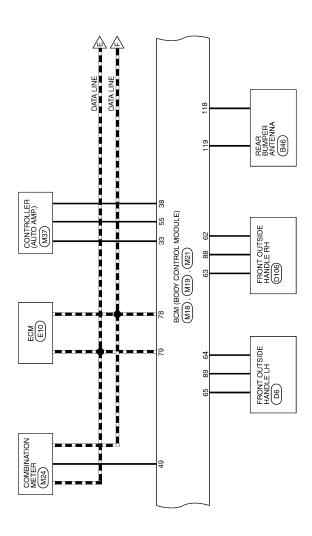
Wiring Diagram

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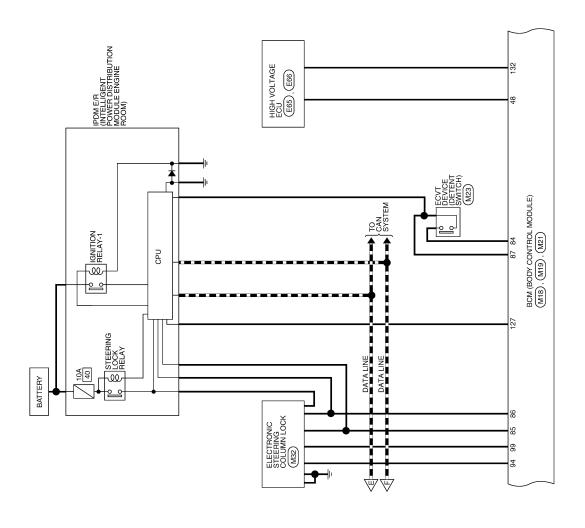


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DATA LINE



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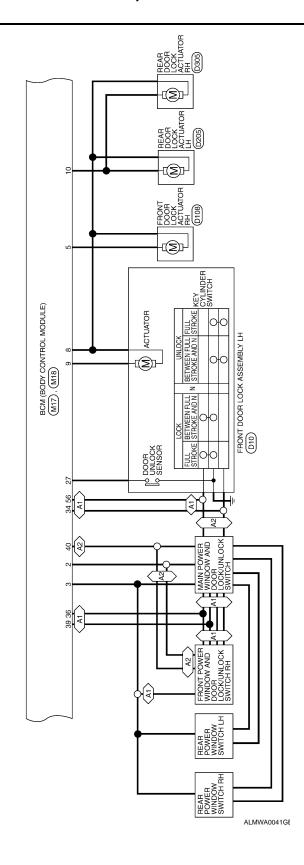
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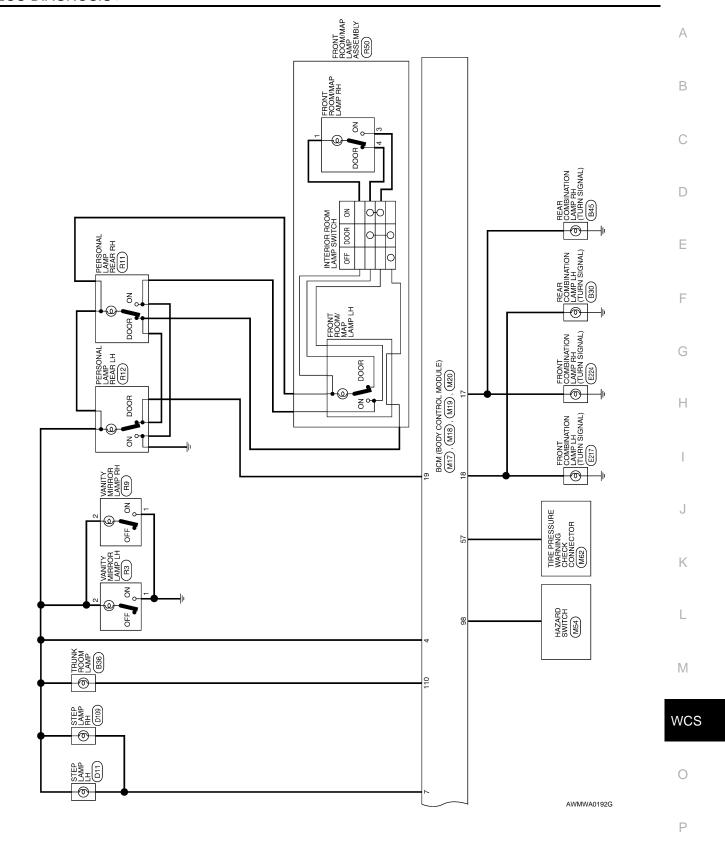
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Signal Name

Color of

Terminal No.

Connector No. M17
Connector Name BCM (BODY CONTROL MODULE)

Connector Color WHITE

BCM (BODY CONTROL MODULE) CONNECTORS

M16	Connector Name BCM (BODY CONTROL	MODULE)	BLACK
Connector No.	Connector Name		Connector Color BLACK

M16	BCM (BODY C MODULE)	BLACK	
Connector No.	Connector Name BCM (BODY C MODULE)	Connector Color BLACK	á





Color of Wire W/B R/Y L/W

FL_FLASHER ROOM_LAMP_OUTPUT

FR_FLASHER

G/B G/O

12 | 29 |

ROOM_LAMP_BAT

M GΥ

Signal Name

Color of Wire

Terminal No.

19

STEP_LAMP_OUTPUT

R/W

ဖ 7 ω

CDL_AS

CDL_COMMON

Signal Name

Color of

16

LOW_SIDE_PUSH_LE

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4

D_OUTPUT ACC_LED

CDL RR RL BACK BAT_BCM_FUSE

GΥ

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7 12 13

P/W_POWER_SUPF Y_PERM	POWER_WINDOW POWER_SUPPLY (RAP)	
R/Y	Γ/W	
2	ဇ	

M18	Connector Name BCM (BODY CONTROL	MODULE)	GREEN	
Connector No.	Connector Name		Connector Color GREEN	



	43	ı
	44	l
	45	l
	46	l
	47	l
	48	l
1	49	l
Ī	20	H
1	51	l
	52	l
	53	l
	54	r
	22	l
	26	l
	57	l
	58	l
	59	l

Signal Name	ı	AUTO_LIGHT_SENSO R_INPUT1	1	ı	STOP I AMP I OW SW
Color of Wire	1	В/А	1	1	B/W
erminal No.	20	21	22	23	24

Signal Name	KEYLESS_TUNER_SI	SHIFT_N/P	IMMO_LED	INPUT_5	INPUT_1	INPUT_2	INPUT_3	INPUT_4	BLOWER_FAN_SW	DOOR_KEY/C_ LOCK_SW	TPMS_MODE_TRIGG ER_SW	DR_DOOR_SW	REAR_DEFOGGER_ BLY
Color of Wire	g/O	B/B	0/7	LG/B	M/I	G/B	LG/R	G/Y	BR/W	L/B	W	SB	G/R
Terminal No.	47	48	49	20	51	52	53	54	22	56	22	58	59

																		_		
Signal Name	DOOR_LOCK_STATUS	-	FOB_IN_SW_1	ACC_F/B	IGN_F/B	AS_DOOR_SW	AIRCON_SW	DOOR_KEY/C_ UNLOCK_SW	1	CENTRAL_LOCK_SW	TRUNK_CANCEL_SW	REAR_DEFOGGER_SW	CENTRAL_UNLOCK_SW	PW_K-LINE	PUSH_LED	S/L_LOCK_LED	1	1	GND_RF2_A/L	A/L_SENS_KEYLESS_ TUNER_POWER_SUP PLY
Color of Wire	G/W	-	Υ	V/Y	Б	B/B	SB	L/R	1	GR	0	GR/W	GR/R	Y/G	Μ	В	1	1	Ь	W/N
Terminal No.	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46

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STOP_LAMP_HIGH_SW

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9		_	DUT	N_1	N 2		ST	ST	⊢	UPPLY			JPPLY_	1	4	_2	W	ш
Signal Name	1	ACC_CONT	AT_DEVICE_OUT	S/L_CONDITION	S/L_CONDITION_2	SHIFT_P	AS_REQUEST SWITCH	DR_REQUEST SWITCH	IGN2_CONT	RF1_POWER_SUPPLY	ı	ı	S/L_POWER_SUPPLY 12V	OUTPUT	OUTPUT	OUTPUT	HAZARD_SW	S/L K-LINE
Color of Wire	1	7	Y/R	0/1	G/R	G/B	T/A	B/W	Υ	L/R	1	1	J/9	B/W	B/B	B/B	B/S	Δ
Terminal No.	82	83	84	85	98	87	88	89	06	91	95	93	94	92	96	26	86	66

Terminal No.	Color of Wire	Signal Name
62	В/У	AS_DOOR_ANT_B
63	ГG	AS_DOOR_ANT_A
64	^	DR_DOOR_ANT_B
65	Ь	DR_DOOR_ANT_A
99	Я	ROOM_ANT_1_B
29	G	ROOM_ANT_1_A
89	0/5	FOB_READER_CLOCK
69	0	FOB_READER_DATA
20	R/B	IGN_ELEC_CONT
71	Γ/0	RF1_TUNER_SIGNAL
72	-	1
73	-	1
75	R/Y	OUTPUT_5
92	R/G	OUTPUT_3
27	BR	ENG_START_SW
78	Ь	CAN-L
62	7	CAN-H
80	B/L	FOB_SLOT_ ILLUMINATION
81	LG	IGN_ON_LED

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	z			99	88		1		A	Æ
	BCM (BODY CONTROL MODULE)			67	87		Signal Name		ROOM_ANT_2_B	ROOM_ANT_2_A
	≿		l 17	89	88		ŝ		2	8
			I IV	69	88				R	Ж
	le 4	×	l IN	20	96					
၈	BCM (BOE MODULE)	BLACK	\	72 71 70 69	91 90		ρĮ			
M19	<u>M</u> ≥	ᆸ		72	8		7	ē	B/R	W/R
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Connector No.	Connector Name	Connector Color	優工	62	88		ا ا	i errillirai No.		
	_				_	1	_			

Terminal No.	100 -	101 –	102 -	103 V CDI	104	105 –	106 –	- 107	108 – 1	- - 100	110 V/W TRUI	111 -
Signal Name	-	-	-	CDL_BACK_TRUNK	_	1	1	1	1	-	TRUNK_LAMP_OUTPU	1



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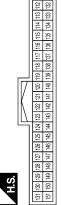
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Terminal No.	Color of Wire	Signal Name
138	1	1
139	1	1
140	1	1
141	G/R	TRUNK_REQUEST_SW
142	1	1
143	1	1
144	GR	BUZZER
145	1	-
146	1	-
147	L/R	BACK_TRUNK_ OPENER
148	R/W	RR_DOOR_SW
149	B/B	RL DOOR SW
150	-	_
151	1	_

Signal Name	BACK DOOR ANT A	_	_	_	_	1	ı	_	IGN_USM_CONT1	_	_	TRUNK_SW	-	ST_CONT_USM	-	1	1	-	I
Color of Wire	BR/W	_	_	_	1	-	-	-	BR/W	-	-	Y/G	-	Я	1	-	-	-	_
Terminal No.	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137

Terminal No.	Color of	Signal Name
dillia No.	Wire	
8	LG/B	OUTPUT_5
6	B/B	INPUT_2
10	B/B	INPUT_4
11	R/W	INPUT_1
12	ΓW	OUTPUT_1
13	R/Y	INPUT_5
14	G/B	OUTPUT_2
15	-	1
16	1	1

Connector No.	M21
Connector Name	Connector Name BCM (BODY CONTROL
	MODULE)
Connector Color GRAY	GRAY



Signal Name	1	-	TRUNK_ANT_1_B	TRUNK ANT 1 A	-	1	BACK_DOOR_ANT_B
Color of Wire	1	-	В	Μ	-	1	0/1
Terminal No.	112	113	114	115	116	117	118

M28	Connector Name COMBINATION SWITCH	WHITE	2 8 9 10 11 12 13 14
Connector No.	Connector Name	Connector Color WHITE	(月) H.S.

Signal Name	WASH_MTR	4_TUPUT_4	-	-	€_TU9TUO	GND	E_TUPNI
Color of Wire	R/L	G/Y	1	_	LG/R	В	R/G
Terminal No.	-	5	3	4	5	9	7

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Fail Safe

Display contents of CONSULT	Fail-safe	Cancellation
B2013: ID DISCORD BCM-S/L	Inhibit hybrid system cranking	Erase DTC
B2014: CHAIN OF S/L-BCM	Inhibit hybrid system cranking	Erase DTC

< ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit hybrid system cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit hybrid system cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit hybrid system cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit hybrid system cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit hybrid system cranking	Erase DTC
B2557: VEHICLE SPEED	Inhibit electronic steering column lock	When normal vehicle speed signals have been received from brake ECU actuator and electric unit (control unit) for 500 ms
B2560: STARTER CONT RELAY	Inhibit hybrid system cranking	500 ms after the following CAN signal communication status has become consistent • Starter control relay signal • Starter relay status signal
B2562: LOW VOLTAGE	Inhibit hybrid system cranking Inhibit electronic steering column lock	100 ms after the power supply voltage increases to more than 8.8 V
B2563: HI VOLTAGE	Inhibit hybrid system cranking Inhibit electronic steering column lock	500 ms after the power supply voltage decreases to less than 18 V
B2601: SHIFT POSITION	Inhibit electronic steering column 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 electronic steering column 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 /h or more
B2603: SHIFT POSI STATUS	Inhibit electronic steering column 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 electronic steering column lock	 500 ms after any of the following BCM recognition conditions is 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

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< ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation
B2605: PNP SW	Inhibit electronic steering column lock	 500 ms after any of the following BCM recognition conditions is fulfilled Ignition switch is in the ON position Power position: IGN Selector lever P/N position signal: Except P and N positions (0 V) Interlock/PNP switch signal (CAN): OFF Status 2 Ignition switch is in the ON position Selector lever P/N position signal: P or N position (battery voltage) PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit hybrid system cranking	 500 ms after the following CAN signal communication status has become consistent Electronic steering column lock relay signal (Request signal) Electronic steering column lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit hybrid system cranking	 500 ms after the following CAN signal communication status has become consistent Electronic steering column lock relay signal (Request signal) Electronic steering column lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit hybrid system 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 hybrid system cranking Inhibit electronic steering column lock	When the following electronic steering column lock conditions agree BCM electronic steering column lock control status Electronic steering column lock condition No. 1 signal status Electronic steering column lock condition No. 2 signal status
B260A: IGNITION RELAY	Inhibit hybrid system 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 is fulfilled • Power position changes to ACC • Receives hybrid system status signal (CAN)
B2612: S/L STATUS	Inhibit hybrid system cranking Inhibit electronic steering column lock	When any of the following conditions is fulfilled Electronic steering column lock unit status signal (CAN) is received normally The BCM electronic steering column lock control status matches the electronic steering column lock status recognized by the electronic steering column lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit hybrid system cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit hybrid system cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B2619: BCM	Inhibit hybrid system cranking	1 second after the electronic steering column lock unit power sup- ply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit hybrid system cranking	BCM initialization
B26E1: ENG STATE NO RECIV	Inhibit hybrid system cranking	When any of the following conditions is fulfilled Power position changes to ACC Receives hybrid system status signal (CAN)

DTC Inspection Priority Chart

INFOID:0000000003304803

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

< ECU DIAGNOSIS >

Priority	DTC	
1	B2562: LOW VOLTAGE B2563: HI VOLTAGE B261E: VEHICLE TYPE	
2	U1000: CAN COMM CIRCUIT U1010: CONTROL UNIT (CAN)	
3	B2190: NATS ANTENNA AMP B2191: DIFFERENCE OF KEY B2192: ID DISCORD BCM-ECM B2193: CHAIN OF BCM-ECM	
	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	
	 B2601: SHIFT POSITION B2602: SHIFT POSITION B2603: SHIFT POSI STATUS B2604: PNP SW B2605: PNP SW B2606: S/L RELAY 	
4	 B2607: S/L RELAY B2608: STARTER RELAY B2609: S/L STATUS B260A: IGNITION RELAY B260B: STEERING LOCK UNIT 	
	 B260C: STEERING LOCK UNIT B260D: STEERING LOCK UNIT B260F: ENG STATE SIG LOST B2611: ACC RELAY B2612: S/L STATUS B2614: ACC RELAY CIRC 	
	 B2615: BLOWER RELAY CIRC B2616: IGN RELAY CIRC B2617: STARTER RELAY CIRC B2618: BCM B2619: BCM 	
	B261A: PUSH-BTN IGN SW B26E1: ENG STATE NO RECIV C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG	

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< ECU DIAGNOSIS >

Priority	DTC
5	 C1704: LOW PRESSURE FL C1705: LOW PRESSURE FR C1706: LOW PRESSURE RR C1707: LOW PRESSURE RL C1708: [NO DATA] FL C1709: [NO DATA] FR C1710: [NO DATA] RR C1711: [NO DATA] RR C1712: [CHECKSUM ERR] FL C1713: [CHECKSUM ERR] FR C1714: [CHECKSUM ERR] RR C1715: [CHECKSUM ERR] RR C1716: [PRESSDATA ERR] FL C1717: [PRESSDATA ERR] FR 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:

Details of time display

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

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	_	_	_	_
U1000: CAN COMM CIRCUIT	_	_	_	PCS-45
U1010: CONTROL UNIT (CAN)	_	_	_	PCS-46
U0415: VEHICLE SPEED SIG	_	_	_	BCS-38
B2013: ID DISCORD BCM-S/L	×	_	_	<u>SEC-35</u>
B2014: CHAIN OF S/L-BCM	×	_	_	SEC-36
B2190: NATS ANTENNA AMP	×	_	_	<u>SEC-28</u>
B2191: DIFFERENCE OF KEY	×	_	_	<u>SEC-32</u>
B2192: ID DISCORD BCM-ECM	×	_	_	<u>SEC-33</u>
B2193: CHAIN OF BCM-ECM	×	_	_	<u>SEC-34</u>
B2553: IGNITION RELAY	_	_	_	PCS-47
B2555: STOP LAMP	_	_	_	SEC-40

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
B2556: PUSH-BTN IGN SW	_	×	_	SEC-43
B2557: VEHICLE SPEED	×	×	_	SEC-45
B2560: STARTER CONT RELAY	×	×	_	SEC-46
B2562: LOW VOLTAGE	_	_	_	BCS-39
B2563: HI VOLTAGE	×	×	_	BCS-40
B2601: SHIFT POSITION	×	×	_	SEC-47
B2602: SHIFT POSITION	×	×	_	SEC-51
B2603: SHIFT POSI STATUS	×	×	_	SEC-54
B2604: PNP SW	×	×	_	SEC-58
B2607: S/L RELAY	×	×	_	SEC-60
B2608: STARTER RELAY	×	×	_	<u>SEC-62</u>
B2609: S/L STATUS	×	×	_	SEC-64
B260A: IGNITION RELAY	×	×	_	PCS-49
B260B: STEERING LOCK UNIT	_	×	_	SEC-69
B260C: STEERING LOCK UNIT	_	×	_	SEC-70
B260D: STEERING LOCK UNIT	_	×	_	SEC-71
B260F: ENG STATE SIG LOST	×	×	_	<u>SEC-72</u>
B2611: ACC RELAY	_	_	_	PCS-50
B2612: S/L STATUS	×	×	_	SEC-73
B2614: ACC RELAY CIRC	_	×	_	PCS-52
B2615: BLOWER RELAY CIRC	_	×	_	PCS-55
B2616: IGN RELAY CIRC	_	×	_	PCS-58
B2617: STARTER RELAY CIRC	×	×	_	SEC-78
B2618: BCM	×	×	_	PCS-61
B2619: BCM	×	×	_	SEC-80
B261A: PUSH-BTN IGN SW	_	×	_	SEC-81
B261E: VEHICLE TYPE	×	× (Turn ON for 15 seconds)	_	SEC-84
B2621: INSIDE ANTENNA	_	_	_	<u>DLK-42</u>
B2622: INSIDE ANTENNA	_	_	_	<u>DLK-45</u>
B2623: INSIDE ANTENNA	_	_	_	<u>DLK-48</u>
C1704: LOW PRESSURE FL	_	_	×	<u>WT-8</u>
C1705: LOW PRESSURE FR	_	_	×	<u>WT-8</u>
C1706: LOW PRESSURE RR	_	_	×	<u>WT-8</u>
C1707: LOW PRESSURE RL	_	_	×	<u>WT-8</u>
C1708: [NO DATA] FL	_	_	×	<u>WT-13</u>
C1709: [NO DATA] FR	_	_	×	<u>WT-13</u>
C1710: [NO DATA] RR	_	_	×	<u>WT-13</u>
C1711: [NO DATA] RL	_	_	×	<u>WT-13</u>
C1712: [CHECKSUM ERR] FL	_	_	×	<u>WT-14</u>
C1713: [CHECKSUM ERR] FR	_	_	×	<u>WT-14</u>
C1714: [CHECKSUM ERR] RR	_	_	×	<u>WT-14</u>
C1715: [CHECKSUM ERR] RL	_	_	×	<u>WT-14</u>

CONSULT display	Fail-safe	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
C1716: [PRESSDATA ERR] FL	_	_	×	<u>WT-15</u>
C1717: [PRESSDATA ERR] FR	_	_	×	<u>WT-15</u>
C1718: [PRESSDATA ERR] RR	_	_	×	<u>WT-15</u>
C1719: [PRESSDATA ERR] RL	_	_	×	<u>WT-15</u>
C1720: [CODE ERR] FL	_	_	×	<u>WT-14</u>
C1721: [CODE ERR] FR	_	_	×	<u>WT-14</u>
C1722: [CODE ERR] RR	_	_	×	<u>WT-14</u>
C1723: [CODE ERR] RL	_	_	×	<u>WT-14</u>
C1724: [BATT VOLT LOW] FL	_	_	×	<u>WT-14</u>
C1725: [BATT VOLT LOW] FR	_	_	×	<u>WT-14</u>
C1726: [BATT VOLT LOW] RR	_	_	×	<u>WT-14</u>
C1727: [BATT VOLT LOW] RL	_	_	×	<u>WT-14</u>
C1729: VHCL SPEED SIG ERR	_	_	×	<u>WT-16</u>
C1734: CONTROL UNIT	_	_	×	WT-17, "Diagnosis Procedure"

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

- 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

- 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. Refer to MWI-135, "Removal and Installation".

NO >> GO TO 2

2.CHECK PARKING BRAKE SWITCH SIGNAL CIRCUIT

Perform inspection of the parking brake switch signal circuit. Refer to MWI-46, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair harness or connector.

3. CHECK PARKING BRAKE SWITCH UNIT

Perform a unit inspection for the parking brake switch. Refer to MWI-46, "Component Inspection".

Is the inspection result normal?

YES >> Replace the combination meter. Refer to MWI-135, "Removal and Installation".

NO >> Replace the parking brake switch.

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THE LIGHT REMINDER WARNING DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE LIGHT REMINDER WARNING DOES NOT SOUND

Description

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

Diagnosis Procedure

INFOID:0000000003072203

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 EXL-4, "Work Flow".

2.CHECK FRONT DOOR SWITCH LH SIGNAL CIRCUIT

Perform inspection of the front door switch LH signal circuit. Refer to <u>DLK-52</u>, "<u>Description</u>".

Is the inspection result normal?

YES >> GO TO 3

NO >> Repair harness or connector.

3. CHECK FRONT DOOR SWITCH LH

Perform a unit inspection for the front door switch LH. Refer to <u>DLK-54, "Component Inspection"</u>. <u>Is the inspection result normal?</u>

YES >> Replace the BCM. Refer to BCS-85, "Removal and Installation".

NO >> Replace the front door switch LH.

THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND

< SYMPTOM DIAGNOSIS >

THE SEAT BELT WARNING CONTINUES SOUNDING, OR DOES NOT SOUND Description INFOID:0000000003072204 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:0000000003072205 1. CHECK WARNING CHIME OPERATION D With key removed from key switch and the front door LH open, turn lighting switch to 1st or 2nd position. Return lighting switch to off position, and insert key into key switch. Does warning chime sound for both steps? Е YES >> GO TO 2 NO >> Replace combination meter. Refer to MWI-135, "Removal and Installation". 2.CHECK SEAT BELT WARNING LAMP F Turn ignition switch ON. Check the operation of the seat belt warning lamp in the combination meter. Seat belt fastened : OFF Seat belt not fastened : ON Н Is the inspection result normal? YES >> Replace BCM. Refer to BCS-85, "Removal and Installation".

3.check seat belt buckle switch circuit

Perform inspection of the seat belt buckle switch circuit. Refer to WCS-18, "Diagnosis Procedure".

Is the inspection result normal?

>> GO TO 3

YES >> GO TO 4

NO

NO >> Repair harness or connector.

4. CHECK SEAT BELT BUCKLE SWITCH UNIT

Perform a unit inspection for the seat belt buckle switch. Refer to WCS-19, "Component Inspection".

Is the inspection result normal?

YES >> Replace the combination meter. Refer to MWI-135, "Removal and Installation".

NO >> Replace the seat belt buckle switch LH.

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PRECAUTIONS

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PRECAUTION

PRECAUTIONS

Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSION-ER"

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 SR and SB section 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 SR section.
- 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.