SECTION WHEELS & TIRES

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >	
BASIC INSPECTION	А
DIAGNOSIS AND REPAIR WORK FLOW	
Repair Work Flow	В
DETAILED FLOW	0
1.VERIFY CUSTOMER COMPLAINTS	С
Interview the customer to obtain detailed information about the symptom.	D
>> GO TO 2. 2.DETERMINE REFERENCE ITEM RELATED TO SYMPTOM	WT
Check the symptom on the vehicle from the information obtained. (cruise test, warning lamp illumination or	VVI
blinking, etc.)	F
YES >> GO TO 3. NO >> GO TO 4.	
3. PRELIMINARY INSPECTION	G
 Check all tire pressures. Refer to <u>WT-111, "Tire Air Pressure"</u>. Check the low tire pressure warning lamp for illumination or blinking. Refer to <u>WT-91, "Symptom Table"</u>. 	
Is the malfunction finished?	Н
YES >> INSPECTION END NO >> GO TO 4.	
4. PERFORM SELF-DIAGNOSIS	I
1. Perform self-diagnosis. Record any DTCs and data displayed on CONSULT-III.	
 Perform inspection according to the displayed DTC. Refer to <u>WT-88, "DTC Index"</u>. Is the causal factor identified from DTC? 	J
YES >> GO TO 6.	
NO >> GO TO 5.	Κ
5.CHECK SYMPTOM	
Perform troubleshooting by symptom. Refer to <u>WT-91, "Symptom Table"</u> . Is the causal factor identified?	L
YES >> GO TO 6.	
NO >> GO TO 4.	M
6.REPAIR OR REPLACE MALFUNCTIONING PARTS	
Repair or replace the applicable part.	Ν
>> GO TO 7.	
7. CHECK SELF-DIAGNOSIS RESULT	0
 Erase DTCs. Refer to <u>WT-12, "AIR PRESSURE MONITOR : Diagnosis Description"</u>. Perform self-diagnosis again. 	<u> </u>
Is any DTC displayed?	Ρ
YES >> GO TO 4.	
NO >> GO TO 8. 8.FINAL CHECK	
1. Perform a cruise test.	

2. Check the warning lamp for illumination or blinking.

Is the malfunction corrected?

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

YES >> INSPECTION END

NO >> GO TO 4.

INSPECTION AND ADJUSTMENT



INSPECTION AND ADJUSTMENT TRANSMITTER WAKE UP OPERATION

TRANSMITTER WAKE UP OPERATION : Description

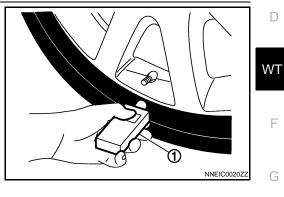
This procedure must be done after replacement of a transmitter, BCM, or rotation of wheels.

TRANSMITTER WAKE UP OPERATION : Special Repair Requirement

1.TRANSMITTER WAKE-UP PROCEDURE

- 1. Turn the ignition switch ON.
- 2. Contact the transmitter activation tool (J-45295) (1) to the side of the tire at the location to the transmitter.
- Press and hold the activation tool button while pushing the tool to the tire surface. (approximately for 5 seconds) CAUTION:

Perform the wake-up procedure starting from the vehicle front left wheel, then repeat the procedure in the order of the front right wheel, rear right wheel, and rear left wheel.



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4. Check that the low tire pressure warning lamp blinks in the pattern shown as per the following. The pattern indicates that the transmitter wake-up procedure for the wheel is completed.

Low tire pressure warning lamp blir	king timing	Activation tire position	
	a : 0.3 sec. b : 1.3 sec.	Front LH	
ON a a b	a : 0.3 sec. b : 1.3 sec.	Front RH	
ON a a a a b	a : 0.3 sec. b : 1.3 sec.	Rear RH	
ON a a a a a b	a : 0.3 sec. b : 1.3 sec.	Rear LH	
ON a b	a : 2 sec. b : 0.2 sec.	All tires	

- Check that the turn signal lamps blink twice when the transmitter wake-up procedure for all wheels is completed.
- 6. Check that the low tire pressure warning lamp turns OFF, after the transmitter wake-up procedure is completed for all wheels and turns OFF.

Is the transmitter wake-up procedure completed?

YES >> Perform the transmitter ID registration procedure. Refer to <u>WT-5, "ID REGISTRATION PROCE-</u> <u>DURE : Special Repair Requirement"</u>.

NO >> Perform trouble diagnosis for the transmitter. Refer to <u>WT-18, "Diagnosis Procedure"</u>. ID REGISTRATION PROCEDURE

ID REGISTRATION PROCEDURE : Description

This procedure must be done after replacing or rotating wheels, replacing transmitter or BCM.

ID REGISTRATION PROCEDURE : Special Repair Requirement

1.TRANSMITTER ID REGISTRATION PROCEDURE

With CONSULT-III.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

1. Display the "WORK SUPPORT" screen and select "ID REGIST".

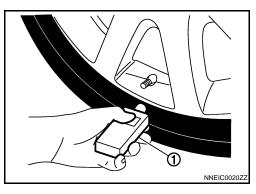
Is the transmitter activation tool (J-45295) used for the transmitter ID registration procedure?

YES >> GO TO 2. NO >> GO TO 3.

2. TRANSMITTER ID REGISTRATION PROCEDURE (WITH TRANSMITTER ACTIVATION TOOL)

- 1. Turn the ignition switch ON.
- 2. Select the start button on the "ID REGIST" screen.
- Contact the transmitter activation tool (J-45295) (1) to the side of the tire at the location to the transmitter.
- Press and hold the activation tool button while pushing the tool to the tire surface. (approximately for 5 seconds) CAUTION:

Perform the ID registration procedure starting from the vehicle front left wheel, then repeat the procedure in the order of the front right wheel, rear right wheel, and rear left wheel.



5. When ID registration is completed, check the following pattern at each wheel.

Se- quence	ID registration position	Turn signal lamp	CONSULT-III		
1	Front left wheel				
2	Front right wheel	2 blinks	"Red"		
3	Rear right wheel		↔ "Green"		
4	Rear left wheel				

6. After the ID registration procedure for all wheels is completed, press "END" to end ID registration, and check that ID registration for all wheels is completed.

Is the check result normal?

YES >> ID registration END.

NO	>> Performs trouble-diagnosis of the	e Tire Pressu	re Monitoring	System	(TPMS).	Refer	to	<u>WT-18.</u>
	"Diagnosis Procedure".							

3. transmitter id registration procedure (without transmitter activation tool)

1. Adjust the tire pressure for all wheels to match the list below.

Tire position	Tire pressure kPa (kg/cm ² , psi)
Front LH	240 (2.4, 35)
Front RH	220 (2.2, 31)
Rear RH	200 (2.0, 29)
Rear LH	180 (1.8, 26)

2. Drive the vehicle at a speed at more than 40 km/h (25 MPH) for 3 minutes or more, then perform the transmitter ID registration procedure.

3. After ID registration for all wheels is completed, press "END" to end ID registration.

ID registration position	CONSULT-III
Front LH	
Front RH	"Red"
Rear RH	"Green"
Rear LH	

4. Adjust the tire pressures for all wheels to the specified value. Refer to WT-111. "Tire Air Pressure".

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

ls	ID	registr	ations	for	all	wheels	completed?	

- YES >> ID registration END.
- NO >> Performs trouble-diagnosis of the Tire Pressure Monitoring System (TPMS). Refer to <u>WT-18</u>, <u>"Diagnosis Procedure"</u>.

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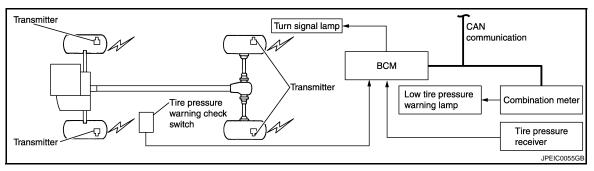
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< FUNCTION DIAGNOSIS > FUNCTION DIAGNOSIS TPMS

System Diagram

INFOID:000000003375939



System Description

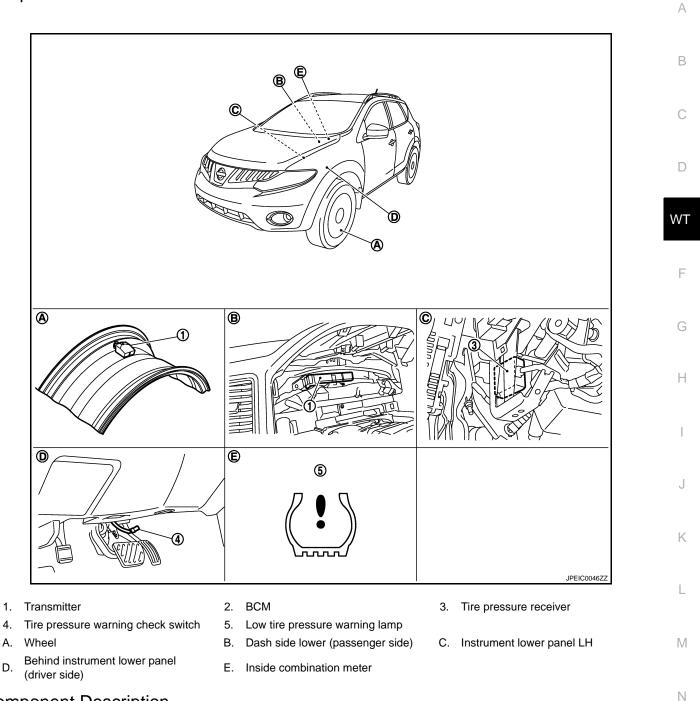
INFOID:000000003375940

DESCRIPTION

During driving, the TPMS (Tire Pressure Monitoring System) receives the signal transmitted from transmitter installed in each wheel. The BCM (Body Control Module) of this system has pressure judgment and trouble diagnosis functions. When the tire pressure monitoring system detects low inflation pressure or another unusual symptom, the low tire pressure warning lamps in the combination meter comes on.

< FUNCTION DIAGNOSIS >

Component Parts Location



TPMS

Component Description

Component parts	Function	0
BCM (Body Control Module)	WT-33, "Description".	-
Transmitter	WT-18. "Description".	D
Tire pressure receiver	WT-36, "Description".	- Г
Tire pressure warning check switch	WT-39, "Description".	-
Turn signal lamp	ID registration of each wheel has been completed, turn signal lamp flashes.	-

< FUNCTION DIAGNOSIS >

Component parts	Function	
	Transmits the vehicle speed signal via CAN communication to BCM.	
Combination meter	 Receives the following signals via CAN communication to BCM. Tire pressure warning lamp signal Hazard lamp signal Buzzer signal 	
Low tire pressure warning lamp	Illuminates if malfunction is detected in electrical system of TPMS.	

DIAGNOSIS SYSTEM (BCM) COMMON ITEM

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

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INFOID:000000003630901

APPLICATION ITEM

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

		0
Diagnosis mode	Function Description	1
Work Support	Changes the setting for each system function.	
Self Diagnostic Result	Displays the diagnosis results judged by BCM.	D
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III opera- tion manual.	WT
Data Monitor	The BCM input/output signals are displayed.	VVI
Active Test	The signals used to activate each device are forcibly supplied from BCM.	
Ecu Identification	The BCM part number is displayed.	F
Configuration	Read and save the vehicle specification.Write the vehicle specification when replacing BCM.	

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

Question		Diagnosis mode		
System	Sub system selection item	Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT*1	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×* ²	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
_	AIR CONDITONER*3			
Intelligent Key systemEngine start system	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	ВСМ	×		
NVIS - NATS	IMMU		×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door opener system	TRUNK		×	×
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

NOTE:

• *1: At models with Intelligent Key system this item is displayed, but is not used.

• *2: At models with rain sensor this mode is displayed, but is not used.

< FUNCTION DIAGNOSIS >

• *3: This item is displayed, but is not used.

FREEZE FRAME DATA (FFD)

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

CONSULT screen item	Indication/Unit		Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected		
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected		
	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	Power position status of the moment a particular DTC is detected	While turning power supply position from "RUN" to "ACC" (Emer- gency stop operation)	
	ACC>OFF		While turning power supply position from "ACC" to "OFF"	
	OFF>LOCK		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 steer- ing 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. 		

AIR PRESSURE MONITOR

AIR PRESSURE MONITOR : Diagnosis Description

INFOID:000000003375944

DESCRIPTION

During driving, the TPMS receives the signal transmitted from the transmitter installed in each wheel, when the tire pressure becomes low. The control unit (BCM) of this system has pressure judgment and trouble diagnosis functions.

When the TPMS detects low inflation pressure or another unusual symptom, the low tire pressure warning lamps in the combination meter comes on.

< FUNCTION DIAGNOSIS >

SELF DIAGNOSTIC PROCEDURE (WITH CONSULT-III)

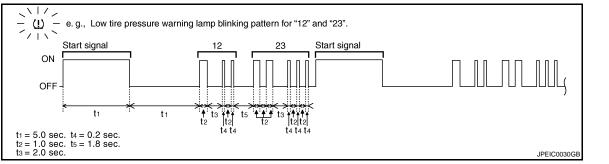
(P) With CONSULT-III

Touch "SELF-DIAG RESULT" display shows malfunction experienced since the last erasing operation. Refer to <u>WT-88, "DTC Index"</u>.

SELF DIAGNOSTIC PROCEDURE (WITHOUT CONSULT-III)

Without CONSULT-III

To start the self-diagnostic results mode, ground terminal of the tire pressure warning check connector. The malfunction location is indicated by the low tire pressure warning lamp blinking.



NOTE:

When the low tire pressure warning lamp blinks 5 Hz and continues repeating it, the system is normal.

Blinking pattern	Items	Diagnostic items detected when	
15	Tire pressure value (Front LH)	Front LH tire pressure drops to * kPa (* kg/cm ² , * psi) or less. [NOTE]	
16	Tire pressure value (Front RH)	Front RH tire pressure drops to * kPa (* kg/cm ² , * psi) or less. [NOTE]	
17	Tire pressure value (Rear RH)	Rear RH tire pressure drops to * kPa (* kg/cm ² , * psi) or less. [NOTE]	<u>— WT-16</u>
18	Tire pressure value (Rear LH)	Rear LH tire pressure drops to * kPa (* kg/cm ² , * psi) or less. [NOTE]	
21	Transmitter no data (Front LH)	Data from front LH transmitter can not be receive.	
22	Transmitter no data (Front RH)	Data from front RH transmitter can not be receive.	WT-18
23	Transmitter no data (Rear RH)	Data from rear RH transmitter can not be receive.	
24	Transmitter no data (Rear LH) Data from rear LH transmitter can not be receive.		
31	Transmitter checksum error (Front LH)	Checksum data from front LH transmitter is malfunctioning.	
32	Transmitter checksum error (Front RH)	Checksum data from front RH transmitter is maltunctioning	
33	Transmitter checksum error (Rear RH)	Checksum data from rear RH transmitter is malfunctioning.	<u>WT-21</u>
34	Transmitter checksum error (Rear LH)	Checksum data from rear LH transmitter is malfunctioning.	
35	Transmitter pressure data error (Front LH)	Air pressure data from front LH transmitter is malfunction.	
36	Transmitter pressure data error (Front RH)	Air pressure data from front RH transmitter is malfunction.	WT-24
37	Transmitter pressure data error (Rear RH)	' Air pressure data trom rear RH transmitter is maltunction	
38	Transmitter pressure data error (Rear LH)	Air pressure data from rear LH transmitter is malfunction.	

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< FUNCTION DIAGNOSIS >

Blinking pattern	Items	Diagnostic items detected when	Check item
41	Transmitter function code error (Front LH)	Function code data from front LH transmitter is malfunction.	
42	Transmitter function code error (Front RH)	Function code data from front RH transmitter is malfunction.	WT-26
43	Transmitter function code error (Rear RH)	Function code data from rear RH transmitter is malfunction.	<u>vv1-20</u>
44	Transmitter function code error (Rear LH)	Function code data from rear LH transmitter is malfunction.	-
45	Transmitter battery voltage low (Front LH)	Battery voltage of front LH transmitter drops.	
46	Transmitter battery voltage low (Front RH)	Battery voltage of front RH transmitter drops.	WT-29
47	Transmitter battery voltage low (Rear RH)	Battery voltage of rear RH transmitter drops.	<u>vv1-29</u>
48	Transmitter battery voltage low (Rear LH)	Battery voltage of rear LH transmitter drops.	
52	Vehicle speed signal error	Vehicle speed signal error.	<u>WT-32</u>
53	Control unit	Tire pressure monitoring system malfunction in BCM.	<u>WT-33</u>
No blinking	Tire pressure warning check switch	Tire pressure warning switch circuit is open.	-

NOTE:

182.7 kPa (1.9 kg/cm², 26 psi): Standard air pressure is for 230 kPa (2.3 kg/cm², 33 psi) vehicles.

ERASE SELF-DIAGNOSIS

(P)With CONSULT-III

- Perform applicable inspection of malfunctioning item and then repair or replace. 1.
- Turn ignition switch ON and select "SELF-DIAG RESULTS" mode for "AIR PRESSURE MONITOR" with 2. CONSULT-III.
- Touch "ERASE" on CONSULT-III screen to erase memory. 3.

Without CONSULT-III

- In order to make it easier to find the cause of hard-to-duplicate malfunctions, malfunction information is stored into the control unit as necessary during use by the user. This memory is not erased no matter how many times the ignition switch is turned ON and OFF.
- However, this information is erased by turning ignition switch OFF after performing self-diagnostic or by erasing the memory using the CONSULT-III.

AIR PRESSURE MONITOR : CONSULT-III Function (BCM - AIR PRESSURE MONI-TOR) INFOID:000000003375945

WORK SUPPORT MODE

ID Read The registered ID number is displayed.

ID Regist Refer to WT-5, "ID REGISTRATION PROCEDURE : Special Repair Requirement".

SELF-DIAG RESULTS MODE

Operation Procedure Refer to WT-88, "DTC Index".

DATA MONITOR MODE

Screen of data monitor mode is displayed.

NOTE: When malfunction is detected, CONSULT-III perform REAL-TIME DIAGNOSIS.

WT-14

< FUNCTION DIAGNOSIS >

Also, any malfunction detected while in this mode will be displayed at real time.

Display item list

Monitor	Condition	Specification	
		Specification	
AIR PRESS FL AIR PRESS FR AIR PRESS RR AIR PRESS RL	 Drive vehicle for a few minutes. or Ignition switch ON and activation tool is transmitting activation signals. 	Tire pressure (kPa, kg/cm ² or Psi)	
ID REGST FL ID REGST FR ID REGST RR ID REGST RL		Registration ID: Green No registration: Red	
WARNING LAMP	Ignition switch ON	Low tire pressure warning lamp on: ON Low tire pressure warning lamp off: OFF	
BUZZER		Buzzer in combination meter on: ON Buzzer in combination meter off: OFF	V

NOTE:

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

ACTIVE TEST MODE

NOTE:

Before performing the self-diagnosis, be sure to register the ID, or erase the actual malfunction may be differ-

TEST ITEM LIST

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

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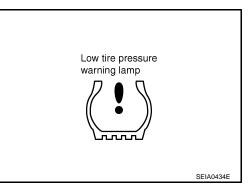
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< COMPONENT DIAGNOSIS >

COMPONENT DIAGNOSIS C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

Description

When the tire pressure monitoring system detects low inflation pressure, the low tire pressure warning lamps in the combination meter comes on.



DTC Logic

INFOID:000000003375947

INFOID:000000003375946

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible cause
C1704	LOW PRESSURE FL	Front LH tire pressure drops to * kPa (* kg/cm ² , * psi) or less. [NOTE]	
C1705	LOW PRESSURE FR	Front RH tire pressure drops to * kPa (* kg/cm ² , * psi) or less. [NOTE]	Tire pressure is low
C1706	LOW PRESSURE RR	Rear RH tire pressure drops to * kPa (* kg/cm ² , * psi) or less. [NOTE]	The pressure is low
C1707	LOW PRESSURE RL	Rear LH tire pressure drops to * kPa (* kg/cm ² , * psi) or less. [NOTE]	

NOTE: 182.7 kPa (1.9 kg/cm², 26 psi): Standard air pressure is for 230 kPa (2.3 kg/cm², 33 psi) vehicles.

DTC CONFIRMATION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(B) With CONSULT-III

- 1. Drive at a speed of 40 km/h (25 MPH) or more for 10 minutes.
- 2. Perform BCM self-diagnosis.

Is DTC "C1704", "C1705", "C1706", "C1707" detected?

- YES >> Proceed to diagnosis procedure. Refer to <u>WT-16, "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

Diagnosis Procedure

1.CHECK TIRE AIR PRESSURE

- 1. Check all tire air pressures.
- 2. Adjust all tire air pressures. Refer to <u>WT-111, "Tire Air Pressure"</u>

Does all tire pressure data meet the specification?

YES >> GO TO 2.

- NO >> Inspect or replace malfunction parts.
- **2.**CHECK AIR PRESSURE SIGNAL
- 1. Drive at a speed of 40 km/h (25 MPH) or more for 10 minutes.
- 2. Check all tire pressure with CONSULT-III "DATA MONITOR" within 5 minutes.

C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

< COMPONENT DIAGNOSIS >

Monitored item	Condition	Display value
AIR PRESS FL		
AIR PRESS FR	Start the engine and drive at a 40 km/h (25 MPH) or	Approximately equal to the indication on vehicle
AIR PRESS RR	more for 10 minutes.	information display.
AIR PRESS RL		

YES >> INSPECTION END

NO >> Repair or replace damaged parts (tire or wheel). Refer to <u>WT-102, "Service Notice or Precau-</u> tions".

Special Repair Requirement

1.CHECK TIRE AIR PRESSURE

Check all tire air pressures. Refer to WT-111, "Tire Air Pressure".

Does all tire pressure data meet the specification?

YES >> GO TO 2.

NO >> Inspect or repair the tires or wheels and adjust the tire pressure to the specification.

2.PERFORM ID REGISTRATION

Perform ID registration. Refer to WT-5, "ID REGISTRATION PROCEDURE : Special Repair Requirement".

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C1708, C1709, C1710, C1711 TRANSMITTER

< COMPONENT DIAGNOSIS >

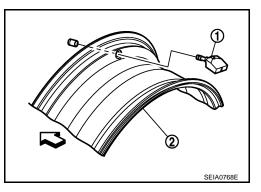
C1708, C1709, C1710, C1711 TRANSMITTER

Description

INFOID:000000003375949

INFOID:000000003375950

The transmitter (1) integrated with a valve is installed on a wheel (2), and transmits a detected air pressure signal by radio wave.



DTC Logic

DTC DETECTION LOGIC

DTC Possible cause Display item Malfunction detected condition C1708 [NO DATA] FL Data from front LH transmitter can not receive. · Harness or connector (Tire pressure receiver, BCM) C1709 [NO DATA] FR Data from front RH transmitter can not receive. · ID registration is not finished C1710 [NO DATA] RR Data from rear RH transmitter can not receive. · Transmitter malfunction BCM malfunction C1711 [NO DATA] RL Data from rear LH transmitter can not receive.

DTC CONFIRMATION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(D)With CONSULT-III

- T. Drive at a speed of 40 km/h (25 MPH) or more for 10 minutes.
- 2. Perform BCM self-diagnosis.
- Is DTC "C1708", "C1709", "C1710", "C1711" detected?
- YES >> Proceed to diagnosis procedure. Refer to WT-18, "Diagnosis Procedure".
- NO >> INSPECTION END

Diagnosis Procedure

1.CHECK AIR PRESSURE SIGNAL

With CONSULT-III

1. Start the engine.

2. Select "DATA MONITOR" mode for "AIR PRESSURE MONITOR" with CONSULT-III.

3. Read out the value of "AIR PRESS FL", "AIR PRESS FR", "AIR PRESS RR", "AIR PRESS RL".

Monitored item	Condition	Display value
AIR PRESS FL		
AIR PRESS FR	Start the engine and drive at a 40 km/h (25 MPH) or more for	Approximately equal to the indication on
AIR PRESS RR		vehicle information display.
AIR PRESS RL		

Are all tire pressures displayed 0 kPa?

YES >> GO TO 2.

NO >> GO TO 4.

2.CHECK HARNESS BETWEEN BCM AND TIRE PRESSURE RECEIVER

1. Turn the ignition switch OFF.

2. Disconnect BCM harness connector and tire pressure receiver harness connector.

WT-18

C1708, C1709, C1710, C1711 TRANSMITTER

< COMPONENT DIAGNOSIS >

BCM	Λ	Tire press	Tire pressure receiver		
Connector	Terminal	Connector	Terminal	Continuity	
	137		1		
M123	138	M21	4	Existed	
	139		2		
. Check continuity be	etween BCM harnes	ss connector and groun	d.		
	BCM				
Connector	Termir	hal	_	Continuity	
	137				
M123	138		Ground	Not existed	
	139				
3. CHECK TIRE PRES Check tire pressure rec s the inspection result	eiver. Refer to <u>WT-3</u> normal?	36, "Diagnosis Procedu			
are damage	ed, repair or replace e tire pressure rece	e damaged parts.	ection with harnes	s connector. If any item	
<u>Requirement"</u> . <u>Can ID registration of a</u> YES >> GO TO 5.	Il transmitters be co	mpleted?	SISTRATION PROC	EDURE : Special Repa	
NO >> Replace ma CHECK TIRE PRES	alfunctioning transm SURE MONITORIN				
With CONSULT-III Drive at a speed of		or more for several mir			
2. Check all tire press	sures with CONSUL	T-III "DATA MONITOR"	within 15 minutes	after stopped vehicle.	

	Monitored Item	Condition	Display value	101
_	AIR PRESS FL			
	AIR PRESS FR	Start the engine and drive at a 40 km/h (25MPH) or	Approximately equal to the indication on vehicle	Ν
	AIR PRESS RR	more several minutes.	information display.	
_	AIR PRESS RL			
Ē	s the inspection result	normal?		0

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace BCM.

Special Repair Requirement

1.CHECK TIRE AIR PRESSURE

Check all tire air pressures. Refer to WT-111, "Tire Air Pressure".

Does all tire pressure data meet the specification?

YES >> GO TO 2. INFOID:000000003375952

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C1708, C1709, C1710, C1711 TRANSMITTER

< COMPONENT DIAGNOSIS >

NO >> Inspect or repair the tires or wheels and adjust the tire pressure to the specification.

2.PERFORM ID REGISTRATION

Perform ID registration. Refer to WT-5, "ID REGISTRATION PROCEDURE : Special Repair Requirement".

>> END

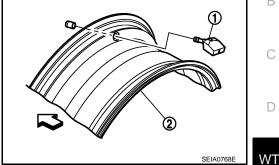
C1712, C1713, C1714, C1715 TRANSMITTER

< COMPONENT DIAGNOSIS >

C1712, C1713, C1714, C1715 TRANSMITTER

Description

The transmitter (1) integrated with a valve is installed on a wheel (2), and transmits a detected air pressure signal by radio wave.



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INFOID:000000003375954

INFOID:000000003412912

DTC Logic

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible case
C1712	[CHECKSUM ERR] FL	Checksum data from front LH transmitter is malfunction.	• Tire pressure receiver malfunc-
C1713	[CHECKSUM ERR] FR	Checksum data from front RH transmitter is malfunction.	tion Transmitter malfunction
C1714	[CHECKSUM ERR] RR	Checksum data from rear RH transmitter is malfunction.	BCM malfunction
C1715	[CHECKSUM ERR] RL	Checksum data from rear LH transmitter is malfunction.	 Harness or connector
DTC CO	NFIRMATION PROC	EDURE	
1. DTC R	EPRODUCTION PRO	CEDURE	
1. Drive 2. Perfo	rm BCM self-diagnosis		
		14", "C1715" detected?	
	 Proceed to diagnosi INSPECTION END 	s procedure. Refer to <u>WT-21, "Diagnosis Procec</u>	<u>lure"</u> .
Diagnos	sis Procedure		INFOID:00000003375955
1. CHECK	K ID REGISTRATION		
(P)With CO	ONSULT-III		

1. Perform the ID registration of all transmitters. Refer to WT-5, "ID REGISTRATION PROCEDURE : Special Repair Requirement".

- 2. Drive at a speed of 40 km/h (25 MPH) or more for 10 minutes.
- 3. Check all tire pressure with CONSULT-III "DATA MONITOR" within 5 minutes.

Monitored item	Condition	Display value	\cap
AIR PRESS FL			0
AIR PRESS FR	Start the engine and drive at a 40 km/h (25 MPH) or	Approximately equal to the indication on vehicle	
AIR PRESS RR	more for 10 minutes.	information display.	Ρ
AIR PRESS RL			

Is the inspection result normal?

>> GO TO 6. YES NO >> GO TO 2.

2.CHECK AIR PRESSURE SIGNAL

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C1712, C1713, C1714, C1715 TRANSMITTER

< COMPONENT DIAGNOSIS >

(I) With CONSULT-III

- 1. Start the engine.
- 2. Select "DATA MONITOR" mode for "AIR PRESSURE MONITOR" with CONSULT-III.
- 3. Read out the value of "AIR PRESS FL", "AIR PRESS FR", "AIR PRESS RR" and "AIR PRESS RL".

Monitored item	Condition	Display value
AIR PRESS FL		
AIR PRESS FR	Start the engine and drive at 40 km/h (25 MPH) or more for 10 minutes.	Approximately equal to the indication on vehicle
AIR PRESS RR		information display.
AIR PRESS RL	-	

Are all tire pressures displayed 0 kPa?

YES >> GO TO 3.

NO >> GO TO 5.

${f 3.}$ CHECK HARNESS BETWEEN BCM AND TIRE PRESSURE RECEIVER

1. Turn the ignition switch OFF.

2. Disconnect BCM harness connector and tire pressure receiver harness connector.

3. Check continuity between BCM harness connector and tire pressure receiver harness connector.

E	CM	Tire pressu	ure receiver	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	137		1	
M123	138	M21	4	Existed
	139		2	

4. Check continuity between BCM harness connector and ground.

В	BCM		Continuity
Connector	Terminal	—	Continuity
	137		Not existed
M123	138	Ground	
	139		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace damaged parts.

4.CHECK TIRE PRESSURE RECEIVER

Check tire pressure receiver. Refer to WT-36, "Diagnosis Procedure".

Is the inspection result normal?

- YES >> Check BCM pin terminals for damage or loose connection with harness connector. If any items are damaged, repair or replace damaged parts.
- NO >> Replace the tire pressure receiver.

5. CHECK ID REGISTRATION

Perform ID registration of all transmitters. Refer to <u>WT-5, "ID REGISTRATION PROCEDURE : Special Repair</u> <u>Requirement</u>".

Can ID registration of all transmitters be completed?

YES >> GO TO 6.

NO >> Replace malfunctioning transmitter.

6.CHECK TIRE PRESSURE MONITORING SYSTEM

(B) With CONSULT-III

- 1. Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping.
- 2. Check all tire pressure with CONSULT-III "DATA MONITOR" within 15 minutes after stopped vehicle.

WT-22

C1712, C1713, C1714, C1715 TRANSMITTER

< COMPONENT DIAGNOSIS >

Monitored item	Condition	Display value
AIR PRESS FL		
AIR PRESS FR	Start the engine and drive at 40 km/h (25 MPH) or more	Approximately equal to the indication on vehicle
AIR PRESS RR	for several minutes.	information display.
AIR PRESS RL		
s the inspection resul	It normal?	·
YES >> INSPECT		1
-	BCM. Refer to <u>BCS-96, "Removal and Installation</u>	<u>on"</u> .
Special Repair R	equirement	INFOID:00000003375956
1. CHECK TIRE AIR	PRESSURE	
Check all tire air press	sures. Refer to <u>WT-111, "Tire Air Pressure"</u> .	
	data meet the specification?	
YES >> GO TO 2.		
-	r repair the tires or wheels and adjust the tire pr	essure to the specification.
2.PERFORM ID REC		
Perform ID registration	n. Refer to WT-5, "ID REGISTRATION PROCE	DURE : Special Repair Requirement".
>> END		

C1716, C1717, C1718, C1719 TRANSMITTER

< COMPONENT DIAGNOSIS >

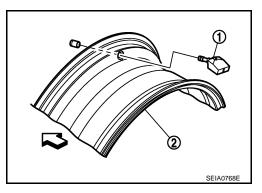
C1716, C1717, C1718, C1719 TRANSMITTER

Description

INFOID:000000003412913

INFOID:000000003375958

The transmitter (1) integrated with a valve is installed on a wheel (2), and transmits a detected air pressure signal by radio wave.



DTC Logic

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible case
C1716	[PRESSDATA ERR] FL	Air pressure data from front LH transmitter malfunction.	
C1717	[PRESSDATA ERR] FR	Air pressure data from front RH transmitter malfunction.	 ID registration is not fin- ished
C1718	[PRESSDATA ERR] RR	Air pressure data from rear RH transmitter malfunction.	Transmitter malfunction
C1719	[PRESSDATA ERR] RL	Air pressure data from rear LH transmitter malfunction.	

DTC CONFIRMATION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(D)With CONSULT-III

- T. Drive at a speed of 40 km/h (25 MPH) or more for 10 minutes.
- 2. Perform BCM self-diagnosis.

Is DTC "C1716", "C1717", "C1718", "C1719" detected?

- YES >> Proceed to diagnosis procedure. Refer to WT-24, "Diagnosis Procedure".
- NO >> INSPECTION END

Diagnosis Procedure

1.CHECK TIRE PRESSURE

With CONSULT-III

- 1. Adjust tire pressure to specified value. Refer to <u>WT-111, "Tire Air Pressure"</u>.
- 2. Perform the ID registration of all transmitters. Refer to <u>WT-5, "ID REGISTRATION PROCEDURE : Special</u> <u>Repair Requirement"</u>.
- 3. Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping.
- 4. Check all tire pressure with CONSULT-III "DATA MONITOR" within 15 minutes after stopped vehicle.

Monitored item	Condition	Display value
AIR PRESS FL		
AIR PRESS FR	Start the engine and drive at 40 km/h (25 MPH) or	Approximately equal to the indication on vehicle
AIR PRESS RR	more for several minutes.	information display.
AIR PRESS RL		

Is tire pressure indicated as 438.60 kPa (4.47kg/cm², 63.60 psi) on the "DATA MONITOR" screen?

YES >> Replace malfunctioning transmitter.

NO >> GO TO 2.

2. CHECK TIRE PRESSURE MONITORING SYSTEM

C1716, C1717, C1718, C1719 TRANSMITTER

< COMPONENT DIAGNOSIS >

With CONSULT-III

- 1. Perform the ID registration of all transmitters. Refer to <u>WT-5, "ID REGISTRATION PROCEDURE : Special</u> A <u>Repair Requirement"</u>.
- 2. Drive at a speed of 40 km/h (25 MPH) or more for 10 minutes.

MONITOR : Diagnosis Description".

3. Check all tire pressures with CONSULT-III "DATA MONITOR" within 5 minutes.

Monitored item	Condition	Display value	
AIR PRESS FL			
AIR PRESS FR	Start the engine and drive at 40 km/h (25 MPH) or	Approximately equal to the indication on vehicle information display.	
AIR PRESS RR	more for 10 minutes.		
AIR PRESS RL			
the inspection result no	rmal?		_
'ES >> INSPECTION	I END self-diagnosis, inspect detected malfunction		١

Component Inspection

INFOID:000000003375960

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1.CHECK TRANSMITTER

With CONSULT-III

- 1. Adjust tire pressure to specified value. Refer to <u>WT-111, "Tire Air Pressure"</u>.
- 2. Perform ID registration of all transmitters. Refer to <u>WT-5, "ID REGISTRATION PROCEDURE : Special</u> <u>Repair Requirement"</u>.
- 3. Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping.
- 4. Check all tire pressure with CONSULT-III "DATA MONITOR" within 15 minutes after stopped vehicle.

Monitored item	Condition	Display value
AIR PRESSURE FL		
AIR PRESSURE FR	Start the engine and drive at s 40 km/h (25 MPH) or	Approximately equal to the indication on vehicle in-
AIR PRESSURE RR	more several minutes.	formation display.
AIR PRESSURE RL		
Is tire pressure indicate	ed as 438.60 kPa (4.47 kg/cm ² , 63.60 psi) o	n the "DATA MONITOR" screen?
YES >> Replace m NO >> INSPECT	nalfunctioning transmitter. ON END	
Special Repair Requirement		INFOID:00000003375961
1. CHECK TIRE AIR F	PRESSURE	
Check all tire air press	ures. Refer to <u>WT-111, "Tire Air Pressure"</u> .	
Does all tire pressure of	data meet the specification?	
YES >> GO TO 2. NO >> Inspect or	repair the tires or wheels and adjust the tire	pressure to the specification.
2.PERFORM ID REG		
Perform ID registration	. Refer to WT-5, "ID REGISTRATION PROC	CEDURE : Special Repair Requirement".

>> END

C1720, C1721, C1722, C1723 TRANSMITTER

< COMPONENT DIAGNOSIS >

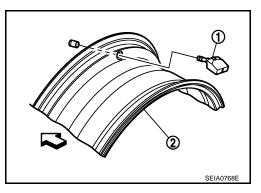
C1720, C1721, C1722, C1723 TRANSMITTER

Description

INFOID:000000003412914

INFOID:000000003375963

The transmitter (1) integrated with a valve is installed on a wheel (2), and transmits a detected air pressure signal by radio wave.



DTC Logic

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible case
C1720	[CODE ERR] FL	Function code data from front LH transmitter is malfunction.	• Tire pressure receiver mal-
C1721	[CODE ERR] FR	Function code data from front RH transmitter is malfunction.	functionTransmitter malfunction
C1722	[CODE ERR] RR	Function code data from rear RH transmitter is malfunction.	BCM malfunction
C1723	[CODE ERR] RL	Function code data from rear LH transmitter is malfunction.	 Harness or connector

DTC CONFIRMATION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(D)With CONSULT-III

- 1. Driving at a speed of 40 km/h (25 MPH) or more for 10 minutes.
- 2. Perform BCM self-diagnosis.

Is DTC "C1720", "C1721", "C1722", "C1723" detected?

- YES >> Proceed to diagnosis procedure. Refer to WT-26, "Diagnosis Procedure".
- NO >> INSPECTION END

Diagnosis Procedure

1.CHECK ID REGISTRATION

With CONSULT-III

- 1. Perform the ID registration of all transmitters. Refer to <u>WT-5, "ID REGISTRATION PROCEDURE : Special</u> <u>Repair Requirement"</u>.
- 2. Drive at a speed of 40 km/h (25 MPH) or more for 10 minutes.
- 3. Check all tire pressure with CONSULT-III "DATA MONITOR" within 5 minutes.

Monitored item	Condition	Display value	
AIR PRESS FL			
AIR PRESS FR	Start the engine and drive at 40 km/h (25 MPH) or	Approximately equal to the indication on vehicle	
AIR PRESS RR	more for 10 minutes.	information display.	
AIR PRESS RL			

Is the inspection result normal?

YES >> GO TO 6.

NO >> GO TO 2.

2.CHECK ALL TIRE PRESSURE SIGNAL

() With CONSULT-III

C1720, C1721, C1722, C1723 TRANSMITTER

< COMPONENT DIAGNOSIS >

1. Start the engine.

- 2. Select "DATA MONITOR" mode for "AIR PRESSURE MONITOR" with CONSULT-III.
- 3. Read out the value of "AIR PRESS FL", "AIR PRESS FR", "AIR PRESS RR" and "AIR PRESS RL".

Monitored item	Condition	Display value
AIR PRESS FL		
AIR PRESS FR	Start the engine and drive at 40 km/h (25 MPH) or	Approximately equal to the indication on vehicle
AIR PRESS RR	more for several minutes.	information display.
AIR PRESS RL		

Are all tire pressure displayed 0 kPa?

YES >> GO TO 3.

NO >> GO TO 5.

$\mathbf{3}$.check harness between BCM and tire pressure receiver

- 1. Turn the ignition switch OFF.
- 2. Disconnect BCM harness connector and tire pressure receiver harness connector.
- 3. Check continuity between BCM harness connector and tire pressure receiver harness connector.

BCM		Tire pressure receiver		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	G
	137		1		-
M123	138	M21	4	Existed	Н
	139		2		11

4. Check continuity between BCM harness connector and ground.

В	СМ	Continuity		
Connector	Terminal	_	Continuity	
	137			J
M123	138	Ground	Not existed	
	139			K

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace damage parts.

4.CHECK TIRE PRESSURE RECEIVER

Check tire pressure receiver. Refer to WT-36, "Diagnosis Procedure".

Is the inspection result normal?

- YES >> Check BCM pin terminals for damage or loose connection with harness connector. If any items are damaged, repair or replace damaged parts.
- NO >> Replace the tire pressure receiver.

5.CHECK TIRE PRESSURE MONITORING SYSTEM

With CONSULT-III

1. Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping.

2. Check all tire pressures with CONSULT-III "DATA MONITOR" within 15 minutes after stopped vehicle.

Monitored item	Condition	Display value	
AIR PRESS FL			
AIR PRESS FR	Start the engine and drive at 40 km/h (25 MPH) or	Approximately equal to the indication on vehicle	
AIR PRESS RR	more for several minutes.	information display.	
AIR PRESS RL			

Is the inspection result normal?

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C1720, C1721, C1722, C1723 TRANSMITTER

< COMPONENT DIAGNOSIS >

YES >> GO TO 6.

NO >> Replace BCM. Refer to <u>BCS-96</u>, "Removal and Installation".

6.CHECK TRANSMITTER

()With CONSULT-III

1. Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping.

2. Check all tire pressures with CONSULT-III "DATA MONITOR" within 5 minutes after stopped vehicle.

Monitored item	Condition	Display value	
AIR PRESS FL			
AIR PRESS FR	Start the engine and drive at 40 km/h (25 MPH) or	Approximately equal to the indication on vehicle	
AIR PRESS RR	more for several minutes.	information display.	
AIR PRESS RL			

Is the inspection result normal?

YES >> INSPECTION END

NO >> Replace malfunction transmitter.

Special Repair Requirement

INFOID:000000003375965

1.CHECK TIRE AIR PRESSURE

Check all tire air pressures. Refer to WT-111. "Tire Air Pressure".

Does all tire pressure data meet the specification?

YES >> GO TO 2.

NO >> Inspect or repair the tires or wheels and adjust the tire pressure to the specification.

2. PERFORM ID REGISTRATION

Perform ID registration. Refer to WT-5, "ID REGISTRATION PROCEDURE : Special Repair Requirement".

>> END

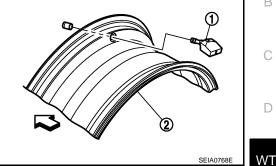
C1724, C1725, C1726, C1727 TRANSMITTER

< COMPONENT DIAGNOSIS >

C1724, C1725, C1726, C1727 TRANSMITTER

Description

The transmitter (1) integrated with a valve is installed on a wheel (2), and transmits a detected air pressure signal by radio wave.



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INFOID:000000003412915

INFOID:000000003375967

DTC Logic

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible case
C1724	[BATT VOLT LOW] FL	Battery voltage of front LH transmitter drops.	Transmitter malfunction
C1725	[BATT VOLT LOW] FR	Battery voltage of front RH transmitter drops.	Tire pressure receiver mal- function
C1726	[BATT VOLT LOW] RR	Battery voltage of rear RH transmitter drops.	BCM malfunction
C1727	[BATT VOLT LOW] RL	Battery voltage of rear LH transmitter drops.	Harness or connector
DTC CONF	FIRMATION PROCEDU	URE	
1.DTC RE	PRODUCTION PROCED	DURE	
		5 MPH) or more for 10minutes.	
Is DTC "C1]	724", "C1725", "C1726", '	"C1727" detected?	
YES >>		ocedure. Refer to <u>WT-29. "Diagnosis Procec</u>	dure".
YES >> NO >>	Proceed to diagnosis pro	ocedure. Refer to <u>WT-29, "Diagnosis Procec</u>	<u>dure"</u> . INF01D:000000003412998
YES >> NO >> Diagnosis	Proceed to diagnosis pro	ocedure. Refer to <u>WT-29, "Diagnosis Procec</u>	
YES >> NO >> Diagnosis 1. CHECK	Proceed to diagnosis pro INSPECTION END S Procedure ID REGISTRATION		INFOID:000000003412998
YES >> NO >> Diagnosis 1.CHECK With CON 1. Perform	Proceed to diagnosis pro INSPECTION END S Procedure ID REGISTRATION	ocedure. Refer to <u>WT-29, "Diagnosis Procec</u> transmitters. Refer to <u>WT-5, "ID REGISTRA</u>	INFOID:000000003412998
YES >> NO >> Diagnosis 1.CHECK With CON 1. Perform <u>Repair</u> 2. Drive at	Proceed to diagnosis pro INSPECTION END S Procedure ID REGISTRATION SULT-III In the ID registration of all Requirement". a 40 km/h (25MPH) or r	transmitters. Refer to <u>WT-5, "ID REGISTRA</u> nore for 10 minutes.	INFOID:000000003412990
YES >> NO >> Diagnosis 1.CHECK With CON 1. Perform <u>Repair</u> 2. Drive at 3. Check a	Proceed to diagnosis pro INSPECTION END S Procedure ID REGISTRATION NSULT-III In the ID registration of all Requirement". It a 40 km/h (25MPH) or r all tire pressure with CON	transmitters. Refer to <u>WT-5, "ID REGISTRA</u> nore for 10 minutes. NSULT-III "DATA MONITOR" within 5 minute	INFOID:000000003412990
YES >> NO >> Diagnosis 1.CHECK With CON 1. Perform <u>Repair</u> 2. Drive at 3. Check at Can ID regis	Proceed to diagnosis pro INSPECTION END S Procedure ID REGISTRATION NSULT-III In the ID registration of all Requirement". It a 40 km/h (25MPH) or r all tire pressure with CON stration of all transmitters	transmitters. Refer to <u>WT-5, "ID REGISTRA</u> nore for 10 minutes. NSULT-III "DATA MONITOR" within 5 minute	INFOID:000000003412990
YES >> NO >> Diagnosis 1.CHECK With CON 1. Perform <u>Repair</u> 2. Drive at 3. Check at Can ID regis YES >>	Proceed to diagnosis pro INSPECTION END S Procedure ID REGISTRATION NSULT-III In the ID registration of all Requirement". It a 40 km/h (25MPH) or r all tire pressure with CON	transmitters. Refer to <u>WT-5, "ID REGISTRA</u> nore for 10 minutes. NSULT-III "DATA MONITOR" within 5 minute	INFOID:000000003412990

Read out the value of "AIR PRESS FL", "AIR PRESS FR", "AIR PRESS RR", "AIR PRESS RL". 3.

F

C1724, C1725, C1726, C1727 TRANSMITTER

< COMPONENT DIAGNOSIS >

Monitored item	Condition	Display value
AIR PRESS FL		
AIR PRESS FR	Start the engine and drive at 40 km/h (25 MPH) or more	Approximately equal to the indication on vehicle
AIR PRESS RR	for several minutes.	information display.
AIR PRESS RL		

Are all tire pressures displayed 0 kPa?

YES >> GO TO 3. NO >> GO TO 5.

$\mathbf{3}$. Check harness between BCM and tire pressure receiver

- 1. Turn the ignition switch OFF.
- 2. Disconnect BCM harness connector and tire pressure receiver harness connector.
- 3. Check continuity between BCM harness connector and tire pressure receiver harness connector.

	BCM		Tire pressure receiver	
Connector	Terminal	Connector	Terminal	Continuity
	137		1	
M123	138	M21	4	Existed
	139		2	

4. Check continuity between BCM harness connector and ground.

В	СМ	_	Continuity	
Connector Terminal		—	Continuity	
	137			
M123	138	Ground Not ex	Not existed	
	139			

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace damaged parts.

4.CHECK TIRE PRESSURE RECEIVER

Check tire pressure receiver. Refer to WT-36, "Diagnosis Procedure".

Is the inspection result normal?

- YES >> Check BCM pin terminals for damage or loose connection with harness connector. If any items are damaged, repair or replace damaged parts.
- NO >> Replace the tire pressure receiver.

5.CHECK ID REGISTRATION

Perform ID registration of all transmitters. Refer to <u>WT-5, "ID REGISTRATION PROCEDURE : Special Repair</u> <u>Requirement</u>".

Can ID registration of all transmitters be completed?

YES >> GO TO 6.

NO >> Replace malfunctioning transmitter.

6.CHECK TIRE PRESSURE MONITORING SYSTEM

With CONSULT-III

- 1. Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping.
- 2. Check all tire pressures with CONSULT-III "DATA MONITOR" within 15 minutes after stopped vehicle.

C1724, C1725, C1726, C1727 TRANSMITTER

< COMPONENT DIAGNOSIS >

Monitored item	Condition	Display value
AIR PRESS FL		
AIR PRESS FR	Start the engine and drive at 40 km/h (25 MPH) or more for several minutes. Approximately equal to the indication or information display.	
AIR PRESS RR		
AIR PRESS RL		
s the inspection result	normal?	
YES >> INSPECTION		
-	CM. Refer to <u>BCS-96, "Removal and Installation of the second sec</u>	<u>on"</u> .
Special Repair Re	quirement	INFOID:000000003375969
1. CHECK TIRE AIR P	RESSURE	
	ures. Refer to <u>WT-111, "Tire Air Pressure"</u> .	
	lata meet the specification?	
YES >> GO TO 2.		
	repair the tires or wheels and adjust the tire pr	essure to the specification.
2.PERFORM ID REGI	ISTRATION	
Perform ID registration	. Refer to WT-5, "ID REGISTRATION PROCE	DURE · Special Repair Requirement"
enem 12 regionation		<u> </u>
>> END		

< COMPONENT DIAGNOSIS >

C1729 VEHICLE SPEED SIGNAL

Description

BCM detects no vehicle speed signal.

DTC Logic

INFOID:000000003375971

INFOID:00000003375970

DTC DETECTION LOGIC

DTC number	Trouble diagnosis name	DTC detecting condition	Possible case
C1729	VHCL SPEED SIG ERR	Vehicle speed signal error.	CAN communication errorCombination meter malfunction

DTC CONFIRMATION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

With CONSULT-III

- 1. Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping.
- 2. Perform BCM self-diagnosis.

Is DTC "C1729" detected?

- YES >> Proceed to diagnosis procedure. Refer to <u>WT-32, "Diagnosis Procedure"</u>.
- NO >> INSPECTION END

Diagnosis Procedure

1.CHECK COMBINATION METER SELF-DIAGNOSIS

With CONSULT-III

Perform combination meter self-diagnosis.

Is any DTC detected?

YES >> Check the DTC.

NO >> Check combination meter. Refer to <u>MWI-33</u>, "Diagnosis Description".

Special Repair Requirement

1.CHECK TIRE AIR PRESSURE

Check all tire air pressures. Refer to WT-111, "Tire Air Pressure".

Does all tire pressure data meet the specification?

YES >> GO TO 2.

NO >> Inspect or repair the tires or wheels and adjust the tire pressure to the specification.

2. PERFORM ID REGISTRATION

Perform ID registration. Refer to WT-5, "ID REGISTRATION PROCEDURE : Special Repair Requirement".

>> END

INFOID:000000003375972

< COMPONENT DIAGNOSIS >

C1734 BCM

Description

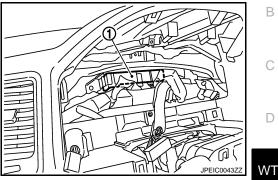
The BCM (1) reads the air pressure signal received by the tire pressure receiver, and controls the low tire pressure warning lamp and the buzzer operations. It also has a judgment function to detect a system malfunction.

INFOID:00000003375974

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D

F



INFOID:000000003375975

DTC Logic

DTC DETECTION LOGIC

DTC Display item Malfunction detected condition Possible case C1734 CONTROL UNIT **BCM** malfunction Tire pressure monitoring system malfunction in BCM. DTC CONFIRMATION PROCEDURE **1.**DTC REPRODUCTION PROCEDURE Н With CONSULT-III Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping. 1. Perform BCM self-diagnosis with CONSULT-III "DATA MONITOR" within 15 minutes after stopped vehicle. 2. Is DTC "C1734" detected? YES >> Proceed to diagnosis procedure. Refer to WT-33, "Diagnosis Procedure". NO >> INSPECTION END Diagnosis Procedure INFOID:000000003375976 Κ 1.CHECK SELF-DIAGNOSTIC RESULTS With CONSULT-III On "SELECT DIAG" mode, select the "SELF-DIAG RESULT" screen. 1. Check display contents in self-diagnostic result. 2. Does self-diagnostic results indicate any malfunction? M YES >> Perform trouble diagnosis. Refer to WT-88, "DTC Index". NO >> GO TO 2. 2.CHECK BCM POWER SUPPLY CIRCUIT Ν 1. Turn the ignition switch OFF. 2. Disconnect BCM harness connector. 3. Check voltage between BCM harness connector terminals and ground. BCM Voltage Terminal Connector M118 1

M119 Is the power supply normal?

YES >> GO TO 3.

Check the following. If any items are damaged, repair or replace damage parts. NO >>

11

 40A fusible link [No. L located in the fuse block]. Refer to PG-102, "Fuse and Fusible Link Arrangement".

Ground

Battery voltage

C1734 BCM

< COMPONENT DIAGNOSIS >

- 10A fuse [No. 10 located in the fuse block (J/B)]. Refer to <u>PG-101, "Fuse, Connector and Termi-nal Arrangement"</u>.
- Harness for short or open between battery and BCM harness connector M118 terminal 1.
- Harness for short or open between battery and BCM harness connector M119 terminal 11.
- Check Battery voltage.

3.CHECK BCM GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM			Continuity	
Connector	Terminal	—	Continuity	
M119	13	Ground	Existed	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair open circuit or short to power in harness or connectors.

4.CHECK HARNESS BETWEEN BCM AND TIRE PRESSURE RECEIVER

1. Disconnect tire pressure receiver harness connector.

2. Check continuity between BCM harness connector and tire pressure receiver harness connector.

BCM		Tire pressure receiver			
Connector	Terminal	Connector	Terminal	Continuity	
	137		1		
M123	138	M21	4	Existed	
	139	-	2		

3. Check continuity between BCM harness connector and ground.

BCM			Continuity
Connector	Terminal	—	Continuity
	137	Ground	Not existed
M123	138		
	139		

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace damaged parts.

5. СНЕСК ВСМ

Check BCM input/output signal. Refer to <u>WT-46, "Reference Value"</u>.

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 6.

6.CHECK BCM HARNESS CONNECTOR

Check BCM pin terminals for damage or loose connection with harness connector.

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.

NO >> Repair or replace damaged parts.

Special Repair Requirement

1.CHECK TIRE AIR PRESSURE

Check all tire air pressures. Refer to <u>WT-111, "Tire Air Pressure"</u>. <u>Does all tire pressure data meet the specification?</u>

Revision: 2008 October

C1734 BCM

2.PERFORM ID REGISTRATION	
Perform ID registration. Refer to WT-5, "ID REGISTRATION PROCEDURE : Special Repair Requirement'	<u>-</u> E
>> END	C
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< COMPONENT DIAGNOSIS >

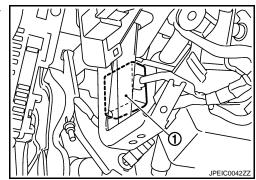
< COMPONENT DIAGNOSIS >

TIRE PRESSURE RECEIVER

Description

. . .

The tire pressure receiver (1) receives the air pressure signal transmitted by the transmitter in each wheel.



Component Function Check

INFOID:000000003528608

INFOID:000000003375984

1. TIRE PRESSURE MONITORING SYSTEM OPERATION

With CONSULT-III

- 1. Drive at a speed 40 km/h (25 MPH) or more for 10 minutes.
- 2. Check tire pressure with CONSULT-III "DATA MONITOR" within 5 minutes.

Monitored item	Condition	Display value
AIR PRESS FL		
AIR PRESS FR	Start engine and drive at 40 km/h (25MPH) or	Approximately equal to the indication on vehicle
AIR PRESS RR	more for 10 minutes.	information display.
AIR PRESS RL		

Is the inspection result normal?

- YES >> INSPECTION END
- NO-1 >> Perform BCM self-diagnosis. Refer to <u>WT-88, "DTC Index"</u>.
- NO-2 >> Proceed to diagnosis procedure. Refer to WT-36, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:000000003375985

1.CHECK TIRE PRESSURE RECEIVER SIGNAL

1. Turn the ignition switch ON. CAUTION:

Never start the engine.

2. Check tire pressure receiver connector and ground signal with oscilloscope.

TIRE PRESSURE RECEIVER

< COMPONENT DIAGNOSIS >

Tire pressu	ire receiver		Conditio	n	Vol	tage (Approx.)
Connector	Terminal		Conditio	1	VOI	
Mod	2	Grand	round When receiving the signal from the tra mitter		(V) 6 4 2 0	• 0.2s
M21	2	Ground				
NO >>	INSPECT GO TO 2.	ION END		TAGE		OCC3880D
			eiver connector. pressure receiver con	nector and gro	ound.	
			•			
		pressure rece	Terminal	-	_	Voltage (Approx.)
	Connector M21		4 Groun		ound	5.0 V
YES >> NO >> 3. CHECK	TIRE PRE	M harness SSURE RE narness co	and connector. ECEIVER GROUND (nnector. CM harness connecto		ssure receiver co	nnector.
		• • •		T:		
Conn	BC	Tern	ninal Con	Tire pressure	receiver Terminal	Continuity
M1				121	1	Existed
		etween B0	CM harness connecto	r and ground.		
		BCM				
Co	onnector		Terminal	-	-	Continuity
	M123		137	Gr	ound	Not existed
<u>s the inspe</u>	ction result	normal?		1		
YES >>	GO TO 4.		. .			
NO >> 4. CHECK	-	-	maged parts.			
				Due e e el		
•			BCS-44, "Diagnosis	<u>-rocedure"</u> .		
•	circuit norr					

YES >> Replace tire pressure receiver.

TIRE PRESSURE RECEIVER

< COMPONENT DIAGNOSIS >

NO >> Repair or replace BCM circuit. Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.

TIRE PRESSURE WARNING CHECK SWITCH

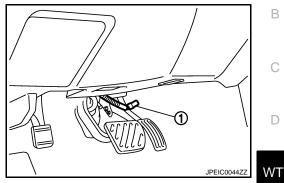
< COMPONENT DIAGNOSIS >

TIRE PRESSURE WARNING CHECK SWITCH

Description

The following item can be checked by grounding the tire pressure warning check switch harness connector terminal (1).

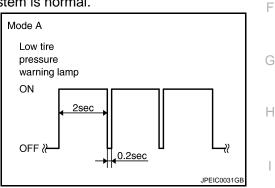
• The low tire pressure warning lamp in the combination meter blink according to the self-diagnostic results.



NOTE:

If low tire pressure warning lamp blinks as shown in the figure, the system is normal.

• This mode shows transmitter status is in OFF-mode. Perform transmitter wake up operation. Refer to <u>WT-5, "TRANS-</u><u>MITTER WAKE UP OPERATION : Special Repair Requirement"</u>.



Component Function Check

INFOID:000000003528663

1. CHECK LOW TIRE PRESSURE WARNING LAMP OPERATION

Check if low tire pressure warning lamp blinks 1 second and then goes off after turning ignition switch ON.
Is inspection result normal?
YES >> GO TO 2.
NO >> Check low tire pressure warning lamp. Refer to <u>WT-41, "Diagnosis Procedure"</u> .
2. CHECK TIRE PRESSURE WARNING CHECK SWITCH OPERATION
1. Ground the tire pressure warning check switch harness connector terminal.
2. Check the low tire pressure warning lamp blinks.
s the inspection result normal?
YES >> INSPECTION END
NO >> Proceed to diagnosis procedure. Refer to <u>WT-39, "Diagnosis Procedure"</u> .
Diagnosis Procedure
1. CHECK TIRE PRESSURE WARNING CHECK SWITCH POWER SUPPLY CIRCUIT
1. Turn the ignition switch ON.
CAUTION:
Never start the engine.
2. Check voltage between tire pressure warning check switch connector and ground.
Tire pressure warning check switch

Tire pressure warning check switch—Voltage (Approx.)ConnectorTerminal—Voltage (Approx.)M191Ground11.8 V

Is the inspection result normal?

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INFOID:000000003375986

TIRE PRESSURE WARNING CHECK SWITCH

< COMPONENT DIAGNOSIS >

YES >> Repair or replace BCM circuit. Replace BCM. Refer to BCS-96. "Removal and Installation".

NO >> GO TO 2.

2.CHECK TIRE PRESSURE WARNING CHECK SWITCH CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect BCM harness connector

3. Check continuity between BCM harness connector and tire pressure warning check switch connector.

BCM		Tire pressure warning check switch		Continuity	
Connector	Terminal	Connector	Terminal	Existed	
M123	149	M19	1		

4. Check continuity between BCM harness connector and ground.

B	CM		Continuity	
Connector	Terminal		Continuity	
M123	149	Ground	Not existed	

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace damaged parts.

3. СНЕСК ВСМ

Check BCM input/output signal. Refer to WT-46, "Reference Value".

Is the inspection result normal?

- YES >> INSPECTION END
- NO >> Check BCM pin terminals for damage or loose connection with harness connector. If any items are damaged, repair or replace damaged parts. Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u>.

LOW TIRE PRESSURE WARNING LAMP

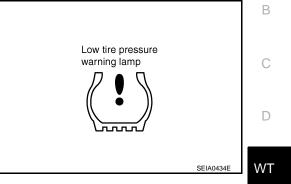
< COMPONENT DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP

Description

The combination meter receives tire pressure status from the BCM via CAN communication.

When BCM judges from a transmitter signal that tire pressure is insufficient, BCM transmits a signal to combination meter via CAN communication. Combination meter turns on the low tire pressure warning lamp mounted on the combination meter.



Condition	Low tire pressure warning lamp
Ignition switch off	OFF
Ignition switch on	Warning lamp turns on for 1second, then turns off.
Less than 182.7 kPa (1.9 kg/cm ² , 26 psi) [NOTE]	ON
Tire pressure monitoring system malfunction [Other diagnostic item]	Warning lamp blinks 1 min, then turns on.
NOTE: Standard air pressure is for 230 kPa (2.3 kg/cm ² , 33 psi) vehicles.	
Component Function Check	INFOID:0000000341292
1. CHECK LOW TIRE PRESSURE WARNING LAMP	
Check if low tire pressure warning lamp blinks for 1 second a ON.	and then goes off after turning the ignition switch
<u>Is inspection result normal?</u> YES >> INSPECTION END NO >> Proceed to diagnosis procedure. Refer to <u>WT-41</u>	<u>, "Diagnosis Procedure"</u> .
Diagnosis Procedure	- INFOID:00000000341292
1.CHECK SELF DIAGNOSTIC RESULTS	
Perform self-diagnosis of tire pressure monitoring system.	
Is inspection result normal?	
YES >> GO TO 2. NO >> Check the DTC.	
2. CHECK LOW TIRE PRESSURE WARNING LAMP	
	there are a first the transition the invition and the ON
Check if low tire pressure warning lamp blinks 1 second and <u>Is inspection result normal?</u>	then goes of after turning the ignition switch ON
YES >> INSPECTION END	
NO >> Check combination meter.	

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INFOID:000000003412922

POWER SUPPLY AND GROUND CIRCUIT

< COMPONENT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:000000003758224

1.CHECK FUSE AND FUSIBLE LINK

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

Signal name	Fuse and fusible link No.	
Battery power supply	L	
Dattery 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

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

	Terminals			
(+)	(-)	Voltage	
B	CM		(Approx.)	
Connector	Terminal	Ground		
M118	1			
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.

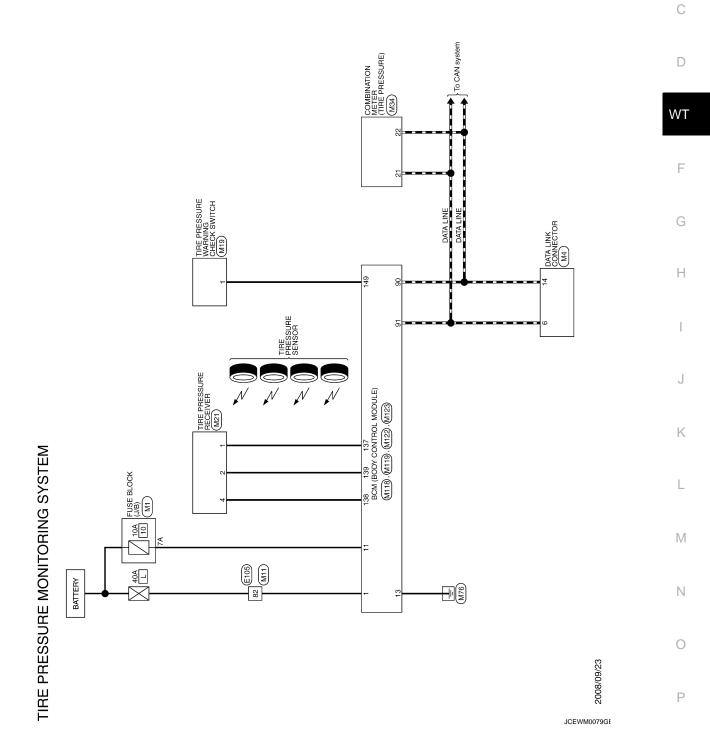
В	CM		Continuity
Connector	Terminal	Ground	Continuity
M119	13	•	Existed

Does continuity exist?

YES >> INSPECTION END

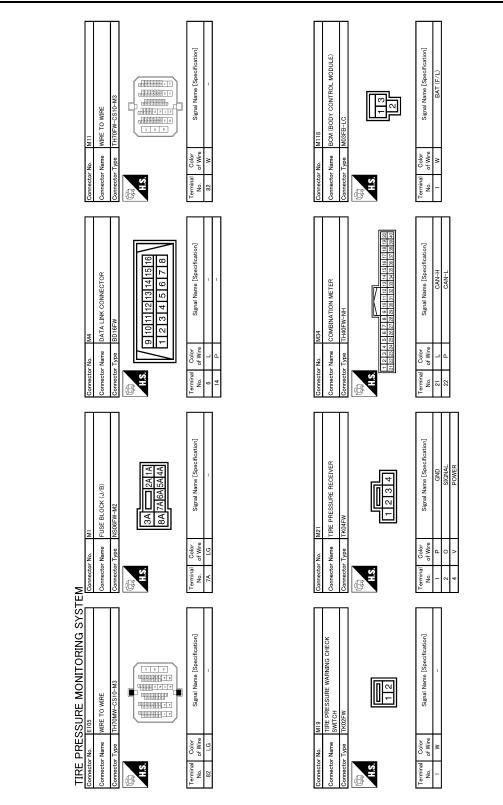
NO >> Repair harness or connector.



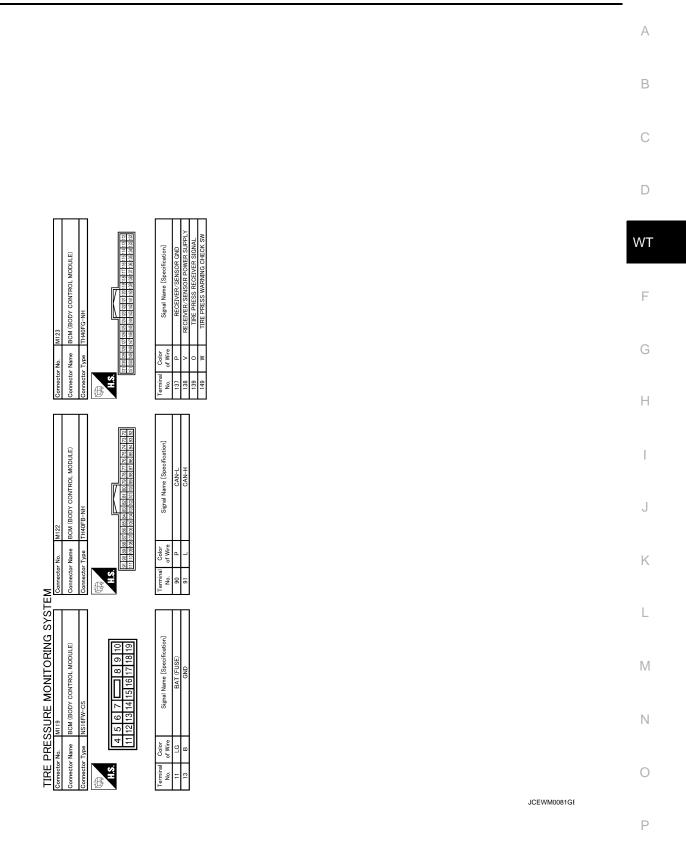


TPMS

< COMPONENT DIAGNOSIS >



JCEWM0080GE



< ECU DIAGNOSIS >

ECU DIAGNOSIS BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000003630902

VALUES ON THE DIAGNOSIS TOOL

CONSULT-III MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
FR WIFER LOW	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
FR WASHER SW	Front washer switch ON	On
	Other than front wiper switch INT/AUTO	Off
FR WIPER INT	Front wiper switch INT/AUTO	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
RR WIPER ON	Other than rear wiper switch ON	Off
RR WIPER ON	Rear wiper switch ON	On
	Other than rear wiper switch INT	Off
RR WIPER INT	Rear wiper switch INT	On
	Rear washer switch OFF	Off
RR WASHER SW	Rear washer switch ON	On
	Rear wiper is in STOP position	Off
RR WIPER STOP	Rear wiper is not in STOP position	On
	Other than turn signal switch RH	Off
TURN SIGNAL R	Turn signal switch RH	On
	Other than turn signal switch LH	Off
TURN SIGNAL L	Turn signal switch LH	On
	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

Monitor Item	Condition	Value/Status	
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off	
	Driver door closed	Off	
DOOR SW-DR	Driver door opened	On	
	Passenger door closed	Off	
DOOR SW-AS	Passenger door opened	On	
	Rear RH door closed	Off	
DOOR SW-RR	Rear RH door opened	On	
	Rear LH door closed	Off	
DOOR SW-RL	Rear LH door opened	On	
	Back door closed	Off	
DOOR SW-BK	Back door opened	On	
	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	
	Other than driver door key cylinder LOCK position	Off	
KEY CYL LK-SW	Driver door key cylinder LOCK position	On	
	Other than driver door key cylinder UNLOCK position	Off	
KEY CYL UN-SW	Driver door key cylinder UNLOCK position	On	
KEY CYL SW-TR	NOTE: The item is indicated, but not monitored.	Off	
	Hazard switch is OFF	Off	
HAZARD SW	Hazard switch is ON	On	
REAR DEF SW	Rear window defogger switch OFF	Off	
NOTE: At model with BOSE au- dio system this item is not monitored.	Rear window defogger switch ON	On	
TR CANCEL SW	NOTE: The item is indicated, but not monitored.	Off	
TR/BD OPEN SW	Back door opener switch OFF	Off	
	While the back door opener switch is turned ON	On	
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off	
RKE-LOCK	LOCK button of the key is not pressed	Off	
	LOCK button of the key is pressed	On	
RKE-UNLOCK	UNLOCK button of the key is not pressed	Off	
	UNLOCK button of the key is pressed	On	
	BACK DOOR OPEN button of the key is not pressed	Off	
RKE-TR/BD	BACK DOOR OPEN button of the key is pressed	On	
	PANIC button of the key is not pressed	Off	
RKE-PANIC	PANIC button of the key is pressed	On	
	UNLOCK button of the key is not pressed	Off	
RKE-P/W OPEN	UNLOCK button of the key is pressed and held	On	

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
	LOCK/UNLOCK button of the key is not pressed and held simulta- neously	Off
RKE-MODE CHG	LOCK/UNLOCK button of the key is pressed and held simulta- neously	On
	Bright outside of the vehicle	Close to 5 V
OPTICAL SENSOR	Dark outside of the vehicle	Close to 0 V
REQ SW -DR	Driver door request switch is not pressed	Off
REQ SW -DR	Driver door request switch is pressed	On
REQ SW -AS	Passenger door request switch is not pressed	Off
REQ 3W -AS	Passenger door request switch is pressed	On
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off
REQ SW -BD/TR	Back door request switch is not pressed	Off
	Back door request switch is pressed	On
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off
F 0311 3W	Push-button ignition switch (push switch) is pressed	On
IGN RLY2 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
ACC RLY -F/B	NOTE: The item is indicated, but not monitored.	Off
CLUCH SW	NOTE: The item is indicated, but not monitored.	Off
	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
BRAKE SW 2	The brake pedal is not depressed	Off
DIVARE OW 2	Stop lamp switch 1 signal circuit is normal	On
DETE/CANCL SW	Selector lever in P position	Off
DETE/CANCE SW	Selector lever in any position other than P	On
SFT PN/N SW	Selector lever in any position other than P and N	Off
	Selector lever in P or N position	On
S/L -LOCK	Steering is unlocked	Off
5/L -LOOK	Steering is locked	On
S/L -UNLOCK	Steering is locked	Off
S/L -ONLOOK	Steering is unlocked	On
S/L RELAY-F/B	Ignition switch in OFF or ACC position	Off
O/L RELATIND	Ignition switch in ON position	On
UNLK SEN -DR	Driver door is unlocked	Off
UNLA SEN -DK	Driver door is locked	On
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off
	Push-button ignition switch (push-switch) is pressed	On
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off
	Ignition switch in ON position	On
DETE SW -IPDM	Selector lever in any position other than P	Off
	Selector lever in P position	On

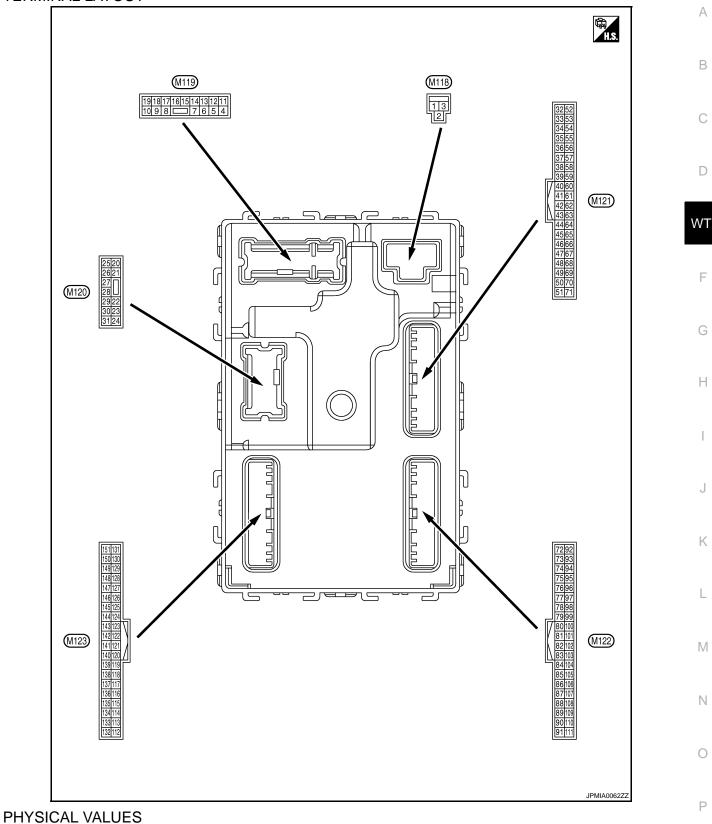
Revision: 2008 October

Monitor Item	Condition	Value/Status
SFT PN -IPDM	Selector lever in any position other than P and N	Off
SFT PN -IPDM	Selector lever in P or N position	On
	Selector lever in any position other than P	Off
SFT P -MET	Selector lever in P position	On
	Selector lever in any position other than N	Off
SFT N -MET	Selector lever in N position	On
	Engine stopped	Stop
	While the engine stalls	Stall
ENGINE STATE	At engine cranking	Crank
	Engine running	Run
	Steering is unlocked	Off
S/L LOCK-IPDM	Steering is locked	On
	Steering is locked	Off
S/L UNLK-IPDM	Steering is unlocked	On
	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 condi- tion from LOCK to UNLOCK.	On
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
	Driver door is locked	LOCK
DOOR STAT-DR	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
	Passenger door is locked	LOCK
DOOR STAT-AS	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
	Steering is locked	Reset
D OK FLAG	Steering is unlocked	Set
	The engine start is prohibited	Reset
PRMT ENG STRT	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
	The key is not inserted into key slot	Off
KEY SW -SLOT	The key is inserted into key slot	On
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	_
	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
	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

Monitor Item	Condition	Value/Status
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done
CONFIRM ID2	The key ID that the key slot receives is not recognized by the sec- ond key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done
	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet
CONFIRM ID1	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 key is not registered to BCM	Yet
12 4	The ID of fourth key is registered to BCM	Done
TD 0	The ID of third key is not registered to BCM	Yet
TP 3	The ID of third key is registered to BCM	Done
TP 2	The ID of second key is not registered to BCM	Yet
	The ID of second key is registered to BCM	Done
TP 1	The ID of first key is not registered to BCM	Yet
	The ID of first key is registered to BCM	Done
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire
ID REGST FL1	ID of front LH tire transmitter is registered	Done
ID REGGI FLI	ID of front LH tire transmitter is not registered	Yet
	ID of front RH tire transmitter is registered	Done
ID REGST FR1	ID of front RH tire transmitter is not registered	Yet
	ID of rear RH tire transmitter is registered	Done
ID REGST RR1	ID of rear RH tire transmitter is not registered	Yet
	ID of rear LH tire transmitter is registered	Done
ID REGST RL1	ID of rear LH tire transmitter is not registered	Yet
	Tire pressure indicator OFF	Off
WARNING LAMP	Tire pressure indicator ON	On
BUZZER	Tire pressure warning alarm is not sounding	Off
	Tire pressure warning alarm is sounding	On

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TERMINAL LAYOUT



	Ferminal No. Description			Condition	Value	
+	-	Signal name	Input/ Output		Condition	(Approx.)
1 (W)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
2 (GR)	Ground	P/W power supply (BAT)	Output	Ignition switch OF	F	Battery voltage
3 (L)	Ground	P/W power supply (RAP)	Output	Ignition switch ON	I	Battery voltage
4		Interior room lown			b battery saver is activated. room lamp power supply)	0 V
4 (P)	Ground	Interior room lamp power supply	Output	ed.	b battery saver is not activat- for room lamp power supply)	Battery voltage
5	Crownd	Passenger door UN-	Outrout	Dessenant dest	UNLOCK (Actuator is activated)	Battery voltage
(G)	Ground	LOCK	Output	Passenger door	Other than UNLOCK (Actuator is not activated)	0 V
7	Ground	Step lamp	Output	Step lamp	ON	0 V
(W)	Ground	Step lamp	Output	Step lamp	OFF	Battery voltage
8	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activat- ed)	Battery voltage
(V)	(V) Croand	All doors LOCK	Output		Other than LOCK (Actuator is not activated)	0 V
9		Driver door UNLOCK	Output	out Driver door	UNLOCK (Actuator is activated)	Battery voltage
(G)	Ground		Output		Other than UNLOCK (Actuator is not activated)	0 V
10	Ground	Rear RH door and rear LH door UN-	Output	Rear RH door	UNLOCK (Actuator is activated)	Battery voltage
(P)	Cround	LOCK	Output	and rear LH door	Other than UNLOCK (Actuator is not activated)	0 V
11 (LG)	Ground	Battery power supply	Input	Ignition switch OF	F	Battery voltage
13 (B)	Ground	Ground	_	Ignition switch ON	I	0 V
					OFF	0 V
14 (O)	Ground	Push-button ignition Ground switch illumination ground	Output	Tail lamp	ON	NOTE: When the illumination brighten ing/dimming level is in the neutra position
						2 ms
15					OFF	Battery voltage
15 (L)	Ground	ACC indicator lamp	Output	lgnition switch	ACC	0.2 V
					ON	0 V

	inal No.	Description				Value	٥
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	A
17 (G)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V	B C D
					Turn signal switch OFF	6.5 V 0 V	WT
18 (BR)		Output	Ignition switch ON	Turn signal switch LH	10 10 10 10 10 10 10 10 10 10	F	
19	Oneveral	Room lamp timer	Quataria	Interior room	OFF	Battery voltage	Н
(Y)	Ground	control	Output	lamp	ON	0 V	
23			door open Output	Back door	OPEN (Back door opener actuator is activated)	Battery voltage	I
(BR)	Ground	Back door open			Other than OPEN (Back door opener actuator is not activated)	0 V	J
26	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V	0
(G)	Giouna	Real wiper	Output	Real wiper	ON (Operated)	Battery voltage	
34* ¹	Ground	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	K L M
(B)	Siguid	na (-)	Caput	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB	N O P

	Terminal No. Description				Value	
(Wire	e color)	Signal name	Input/ Output		Condition	(Approx.)
35* ¹	Ground	Luggage room anten-	Output	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0062GB
(W)		na (+)			When Intelligent Key is not in the passenger compart- ment	(V) 15 0 1 1 5 JMKIA0063GB
38* ¹	Ground	Rear bumper anten-	Output	When the back door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 0 0 1 s JMKIA0062GB
(L)		na (-)			When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0063GB
39* ¹	Ground	Rear bumper anten-	Output	When the back door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 0 15 0 15 0 15 15 15 15 15 15 15 15 15 15
(BR)	Giouna	na (+)	Cuput		When Intelligent Key is not in the antenna detection area	(V) 15 0 0 1 s JMKIA0063GB
47 (L)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
(-)		,			ON	0 V

Terminal No.		Description				
(Wir +	e color) –	Signal name	Input/ Output		Condition	Value (Approx.)
_				Ignition switch	When selector lever is in P or N position	Battery voltage
52 (R)	Ground	Starter relay control	Output	ON	When selector lever is not in P or N position	0.3 V
				Ignition switch OFI	F	0 V
					ON (Pressed)	0 V
61* ¹ (R)	Ground	Back door request switch	Input	Back door re- quest switch	OFF (Not pressed)	15 10 50 10 ms JPMIA0016GB
					Sounding	1.0 V 0 V
64* ¹ (GR)	Ground	Warning buzzer	Output	Warning buzzer	Not sounding	
						Battery voltage
65 (O)	Ground	Rear wiper stop posi- tion	Input	Rear wiper	In stop position	(V) 15 10 10 10 10 10 10 10 10 10 10
					Not in stop position	0 V
66 (Y)	Ground	Back door switch	Input	Back door switch	OFF (When back door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB
					ON (When back door	11.8 V 0 V
					opens) Pressed	0 V
					F162260	υ ν
67 (LG)	Ground	Back door opener switch	Input	Back door opener switch	Not pressed	(V) 15 10 5 0 •••••• 10 ms
						JPMIA0011GB

	inal No. e color)	Description			0	Value
+	-	Signal name	Input/ Output		Condition	(Approx.)
68 (W)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closes)	(V) 15 10 5 0 10 ms JPMIA0011GB 11.8 V
					ON (When rear RH door opens)	0 V
69 (R)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closes)	(V) 15 10 5 10 10 10 11.8 V
					ON (When rear LH door opens)	0 V
72* ¹	Ground	ound Room antenna 2 (-) Ou (Center console)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB
(B)			Output		When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB

Terminal No.		Description				Value	
(Wire +	e color) –	Signal name Input/ Output			Condition	(Approx.)	
73* ¹	Ground	Room antenna 2 (+)	Outout	Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	
(W)		Output	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0063GB		
74 ^{*1} Ground			When the pas-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0062GB		
	Ground	d Passenger door an- tenna (-)	Output	senger door re- quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 0 0 15 0 0 15 0 15 0 15 0 15 0 15 0	
75* ¹ (LG) Groun	Ground	Passenger door an-	Output	When the pas- senger door re-	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 1 5 10 5 0 1 5 10 5 0 1 5 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 15 10 15 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10	
	Siouna	tenna (+)	Capat	quest switch is operated with ig- nition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 15 10 5 0 15 15 15 15 15 15 15 15 15 15 15 15 15	

	inal No.	Description				Value	
(vvire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	
76* ¹		Driver door antenna		When the driver door request	When Intelligent Key is in the antenna detection area	(V) 15 10 0 1 1 s JMKIA0062GB	
(V)	Ground	(-)	Output	switch is operat- ed with ignition switch OFF	When Intelligent Key is not in the antenna detection area	(V) 15 10 5 0 1 s JMKIA0063GB	
77* ¹	Ground	Driver door antenna (+)	Output	When the driver door request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	(V) 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 10 5 0 15 15 10 5 0 15 15 10 5 0 15 10 5 0 15 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 15 10 10 10 10 10 10 10 10 10 10 10 10 10	
(P)	Ground				When Intelligent Key is not in the antenna detection area	(V) 15 0 5 0 1 s JMKIA0063GB	
78* ¹	Ground	Room antenna 1 (-) (Instrument panel)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compart- ment	(V) 15 10 5 0 1 s JMKIA0062GB	
(R)					When Intelligent Key is not in the passenger compart- ment	(V) 15 10 5 0 1 5 1 5 0 1 5 10 5 0 5 0 5 15 5 0 5 15 5 0 5 15 5 10 5 10 5 0 5	

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	inal No.	Description				Value	А
(Wire +	e color) -	Signal name	Input/ Output		Condition	(Approx.)	
79* ¹		Room antenna 1 (+)		Ignition switch	When Intelligent Key is in the passenger compart- ment	(V) 15 0 0 1 s JMKIA0062GB	B C D
(G)	Ground	(Instrument panel)	Output	OFF	When Intelligent Key is not in the passenger compart- ment	(V) 15 0 1 1 1 1 1 1 1 1 1 1 1 1 1	WT F
80 (SB)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	G
81 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.	Н
82 (BR)	Ground	Ignition relay [fuse block (J/B)] control	Output	Ignition switch	OFF or ACC ON	0 V Battery voltage	I
83	Remote keyless entr		Input/	During waiting		(V) 15 10 5 0 1 1 ms JMKIA0064GB	J K L
(P)	Ground	receiver communica- tion	Output	When operating e	either button on the key	(V) 15 10 5 0 1 1 ms JMKIA0065GB	M

Ρ

	inal No.	Description				Value	
(VVire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	
					All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V	
87	Ground	Combination switch INPUT 5	Input	Combination	Front fog lamp switch ON (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0037GB 1.3 V	
(R)				switch	Rear wiper switch ON (Wiper intermittent dial 4)	(V) 15 10 2 ms JPMIA0039GB 1.3 V	
					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 0 2 ms JPMIA0040GB 1.3 V	

Terminal No.		Description	Description			Value	
(Wire +	e color) -	Signal name	Input/ Output		Condition	(Approx.)	
					All switches OFF (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0041GB 1.4 V	B
					Lighting switch HI (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0036GB 1.3 V	F
88 (GR)	Ground	Sround Combination switch INPUT 3 Input Combination switch	Input	Combination switch	Lighting switch 2ND (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0037GB 1.3 V	G H I
				Rear washer switch ON (Wiper intermittent dial 4)	(V) 10 0 2 ms JPMIA0039GB 1.3 V	J K L	
					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 1.3 V	M
89 (BR)	Ground	Push-button ignition switch (push switch)	Input	Push-button igni- tion switch (push switch)	Pressed Not pressed	0 V Battery voltage	0
90 (P)	Ground	CAN - L	Input/ Output		_	_	Ρ
91 (L)	Ground	CAN - H	Input/ Output		_	_	

	inal No.	Description				Value
(Wire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)
					OFF	0 V
92 (R)* ¹ (L)* ²	Ground	Key slot illumination	Output	Key slot illumina- tion	Blinking	(V) 15 10 5 0 1 s JPMIA0015GB 6.5 V
					ON	Battery voltage
					OFF or ACC	Battery voltage
93 (L)	Ground	ON indicator lamp	Output	Ignition switch	ACC	0.2 V
(Ľ)	(L)				ON	0 V
95	Cround	ACC relay control	Quitout	Ignition owitch	OFF	0 V
(L)	Ground	ACC relay control	Output	Ignition switch	ACC or ON	Battery voltage
96 (Y)	Ground	Control device (de- tention switch) power supply	Output			Battery voltage
97	97 Steeri	Steering lock condi-			LOCK status	0 V
(O)	Ground	tion No. 1	Input	Steering lock	UNLOCK status	Battery voltage
98	0	Steering lock condi-	1	Stooring lock	LOCK status	Battery voltage
(L)	Ground	tion No. 2	Input	Steering lock	UNLOCK status	0 V
99	Ground	Selector lever P posi- tion switch	Input	Selector lever	P position	0 V
(V)	Cround		input		Any position other than P	Battery voltage
					ON (Pressed)	0 V
100* ¹ (P)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	OFF (Not pressed)	(V) 15 10 5 10 10 ms JPMIA0016GB
					ON (Pressed)	1.0 V 0 V
101* ¹ (W)	Ground	Driver door request switch	Input	Driver door re- quest switch	OFF (Not pressed)	(V) 15 10 10 ms JPMIA0016GB 1.0 V
102	0	Blower fan motor re-	0 · · ·		OFF or ACC	0 V
(Y)	Ground	lay control	Output	Ignition switch	ON	Battery voltage
103 (L)	Ground	Remote keyless entry receiver power sup- ply	Output	Ignition switch OF	F	Battery voltage

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Terminal No. (Wire color)		Description				Value	
(VVir +	e color) –	Signal name	Input/ Output	Condition		(Approx.)	
106 (Y)	Ground	Steering lock unit power supply	Output	Ignition switch	OFF or ACC ON	Battery voltage 0 V	
					All switches OFF	(V) 15 10 5 0 2 ms JPMIA0041GB 1.4 V	
					Turn signal switch LH	(V) 15 10 5 0 2 ms JPMIA0037GB 1.3 V	
107 (O)	Ground	Front wiper switch LO	(V) 15 10 5 0				
					Front wiper switch LO		
					Front washer switch ON	(V) 15 10 5 0 2 ms JPMIA0039GB 1.3 V	

Ρ

	inal No. e color)	Description		Condition		Value
+	-	Signal name	Input/ Output			(Approx.)
					All switches OFF (Wiper intermittent dial 4)	(V) 15 10 0 2 ms JPMIA0041GB 1.4 V
					Lighting switch AUTO (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0038GB 1.3 V
108 (P)	Ground	Combination switch INPUT 4	Input	Combination switch	Lighting switch 1ST (Wiper intermittent dial 4)	(V) 15 0 2 ms JPMIA0036GB 1.3 V
					Rear wiper switch INT (Wiper intermittent dial 4)	(V) 15 10 0 2 ms JPMIA0040GB 1.3 V
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	(V) 15 10 0 2 ms JPMIA0039GB 1.3 V

	inal No.	Description				Value	0
(VVire +	e color) –	Signal name	Input/ Output		Condition	(Approx.)	A
					All switches OFF	(V) 15 10 2 ms JPMA0041GB 1.4 V	B C D
					Lighting switch PASS	(V) 15 0 2 ms JPMIA0037GB 1.3 V	WT F G
109 (SB)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	Lighting switch 2ND	0 2 ms JPMIA0036GB 1.3 V (V) 15 10 5	H
					Front wiper switch INT/ AUTO		J K L
					Front wiper switch HI	(V) 15 0 2 ms JPMIA0040GB 1.3 V	M
					ON	0 V	0
110 (G)	Ground	Hazard switch	Input	Hazard switch	OFF	(V) 15 0 5 0 10 ms JPMIA0012GB 1.1 V	Ρ

	inal No.	Description				Value
(Wire +	e color) -	Signal name	Input/ Output		Condition	(Approx.)
					LOCK status	Battery voltage
111 (LG)	Ground	Steering lock unit communication	Input/ Output	Steering lock	LOCK or UNLOCK	(V) 15 10 50 50 ms JMKIA0066GB
					For 15 seconds after UN- LOCK	Battery voltage
					15 seconds or later after UNLOCK	0 V
112 (R)	Ground	Rain sensor serial link	Input/ Output	Ignition switch ON		(V) 15 10 5 0 10 10 10 10 10 10 10 10 10
113* ³	Oracia	Ontinel anno an	lunut	Ignition switch	When bright outside of the vehicle	Close to 5 V
(O)	Ground	Optical sensor	Input	ŎN	When dark outside of the vehicle	Close to 0 V
116 (GR)	Ground	Stop lamp switch 1	Input		_	Battery voltage
118	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
(L)	Cround		input		ON (Brake pedal is de- pressed)	Battery voltage
119* ¹ (W)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (unlock sen- sor switch OFF)	(V) 15 10 10 ms JPMIA0012GB 1.1 V
					UNLOCK status (unlock sensor switch ON)	0 V
121	0			When the key is inserted into key slot		Battery voltage
(Y)	Ground	Key slot switch	Input	When the key is not inserted into key slot		0 V
122 (R)	Ground	ACC feedback	Input	Ignition switch	OFF ACC or ON	0 V
					OFF or ACC	Battery voltage
123 (G)	Ground	IGN feedback	Input	Ignition switch	ON	Battery voltage

color) –	0				Value	
	Signal name	Input/ Output		Condition	(Approx.)	
Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closes)	(V) 15 10 10 10 10 10 10 ms JPMIA0011GB 11.8 V	
				ON (When passenger door opens)	0 V	
Ground	Rear window defog- ger switch	Input	Ignition switch ON	Rear window defogger switch OFF	(V) 15 0 10 10 ms JPMIA0012GB 1.1 V	
				Rear window defogger switch ON	0 V	
Ground	Power window switch communication	Input/ Output	Ignition switch ON		(V) 15 10 10 10 10 10 10 10 10 10 10	
			Ignition switch OFI	= or ACC	10.2 V Battery voltage	
				ON (When tail lamps OFF)	9.5 V NOTE: The pulse width of this wave is varied by the illumination bright- ening/dimming level.	
Ground	Push-button ignition switch illumination	Output	Push-button igni- tion switch illumi- nation	ON (When tail lamps ON)	(V) 15 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	
	Receiver and sensor			OFF	0 V	
Ground	ground	Input	Ignition switch ON		0 V	
Ground	Receiver and sensor	Output	Ignition switch		0 V 5.0 V	
	Ground Ground Ground	Bround switch Bround Rear window defog-ger switch Bround Power window switch communication Bround Power window switch communication Bround Push-button ignition switch illumination Bround Receiver and sensor ground Bround Receiver and sensor ground	BroundswitchInputSroundRear window defog- ger switchInputGroundPower window switch communicationInput/ OutputGroundPower window switch communicationInput/ OutputGroundPush-button ignition switch illuminationOutputGroundReceiver and sensor groundInput	Stound switch Input switch Stound Rear window defog- ger switch Input Ignition switch ON Stound Power window switch communication Input/ Output Ignition switch ON Stound Power window switch communication Input/ Output Ignition switch ON Stound Push-button ignition switch illumination Output Ignition switch OFI Stound Receiver and sensor ground Input Ignition switch ON Stound Receiver and sensor ground Input Ignition switch ON	Bround switch Passenger door switch Passenger door switch door closes) Bround Rear window defog- ger switch Input Ignition switch ON Rear window defogger switch OFF Bround Rear window defog- ger switch Input Ignition switch ON Rear window defogger switch OFF Bround Power window switch communication Input Ignition switch ON Rear window defogger switch OFF Bround Power window switch communication Input Ignition switch ON Rear window defogger switch ON Bround Power window switch communication Input Ignition switch ON ON (When tail lamps OFF) Bround Push-button ignition switch illumination Output Push-button ignition ion switch illumin- ation ON (When tail lamps OFF) Bround Receiver and sensor ground Input Ignition switch ON ON (When tail lamps ON) Bround Receiver and sensor Input Ignition switch ON OFF	

	inal No.	Description				Value	
(Wire +	e color)	Signal name	Input/ Output	Condition		(Approx.)	
139* ⁵	Crowned	Tire pressure receiv-	Input/	Ignition switch	Standby state	(V) 6 4 2 0 • • 0.2s OCC3881D	
(O)	Ground	er communication	Output	ON	When receiving the signal from the transmitter	(V) 6 4 2 0 + 0.2s OCC3880D	
140	Ground	Selector lever P/N	Input	Selector lever	P or N position	Battery voltage	
(GR)	Cround	position	mput		Except P and N positions ON	0 V 0 V	
141 (O)	Ground	Security indicator	Output	Security indicator	Blinking	(V) 15 0 1 s JPMIA0014GB 11.3 V	
					OFF	Battery voltage	
142 (L)	Ground	Combination switch OUTPUT 5	Output	Combination switch (Wiper intermit- tent dial 4)	All switches OFF Lighting switch 1ST Lighting switch HI Lighting switch 2ND Turn signal switch RH	0 V (V) 15 10 5 0 2 ms JPMIA0031GB	
143 (W)	Ground	Combination switch OUTPUT 1	Output	Combination switch	All switches OFF (Wiper intermittent dial 4) Front wiper switch HI (Wiper intermittent dial 4) Rear wiper switch INT (Wiper intermittent dial 4) 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	10.7 V 0 V (V) 15 0 2 ms 10.7 V	

Terminal No.		Description				Value (Approx.)	
(Wire +	e color) –	Signal name Inp Out		Condition			
					All switches OFF (Wiper intermittent dial 4)	0 V	
					Front washer switch ON (Wiper intermittent dial 4)		
144	Ground	Combination switch	Output	Combination	Rear wiper switch ON (Wiper intermittent dial 4)		
(P)	Ground	OUTPUT 2	Output	switch	Rear washer switch ON (Wiper intermittent dial 4)	5 0 	
					Any of the conditions below with all switches OFF • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6	2 ms JPMIA0033GB	
					All switches OFF	0 V	
					Front wiper switch INT/ AUTO	(V)	
145		Combination switch		Combination switch	Front wiper switch LO	15 10 5	
(V)	Ground	OUTPUT 3	Output	(Wiper intermit- tent dial 4)	Lighting switch AUTO	5 2 ms JPMIA0034GB 10.7 V	
					All switches OFF	0 V	
		Combination switch OUTPUT 4	Output	Combination	Front fog lamp switch ON		
	Ground				Lighting switch 2ND	(V) 15 10 5	
146				switch	Lighting switch PASS		
(Y)				(Wiper intermit- tent dial 4)	Turn signal switch LH	0 2 ms JPMIA0035GB	
						10.7 V	
149* ⁵ (W)	Ground	Tire pressure warn- ing check switch	Input	Ignition switch ON		(V) 15 10 5 0 10 ms JPMIA0011GB	
						11.8 V	
150 (SB)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closes)	(V) 15 0 10 10 ms JPMIA0011GB	
					ON (When driver door	11.8 V	
					opens)	0 V	

< ECU DIAGNOSIS >

	inal No.	Description				Value	
(Wire	e color)	Signal name	Input/		Condition	(Approx.)	
+	—	Signarhame	Output				
151	Ground	Rear window defog-	Output	Rear window de-	Active	0 V	
(G)	Giouna	ger relay control	Output	fogger	Not activated	Battery voltage	

NOTE:

• *1: With Intelligent Key system

• *2: Without Intelligent Key system

• *3: With auto light system

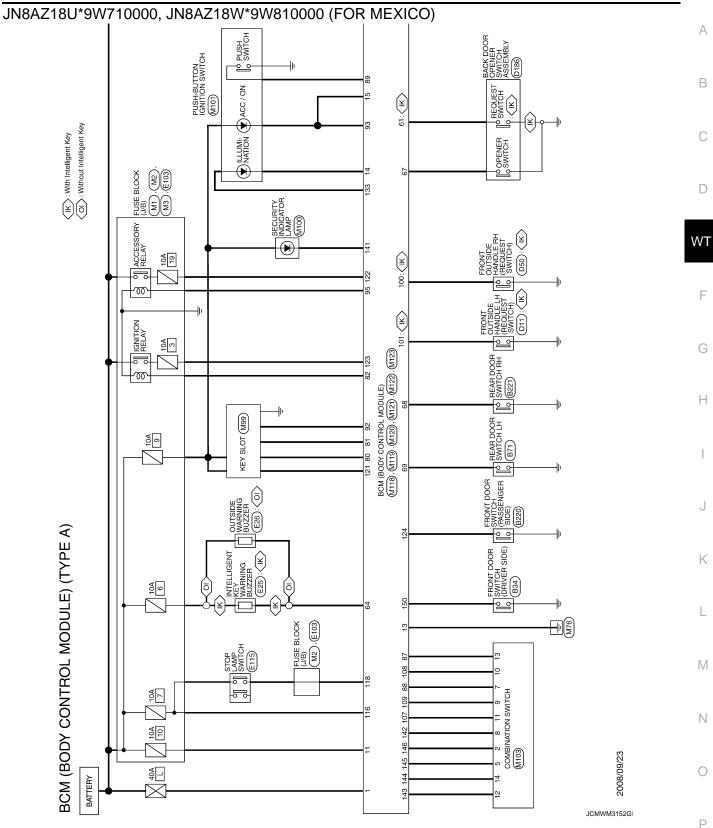
• *4: Without BOSE audio system

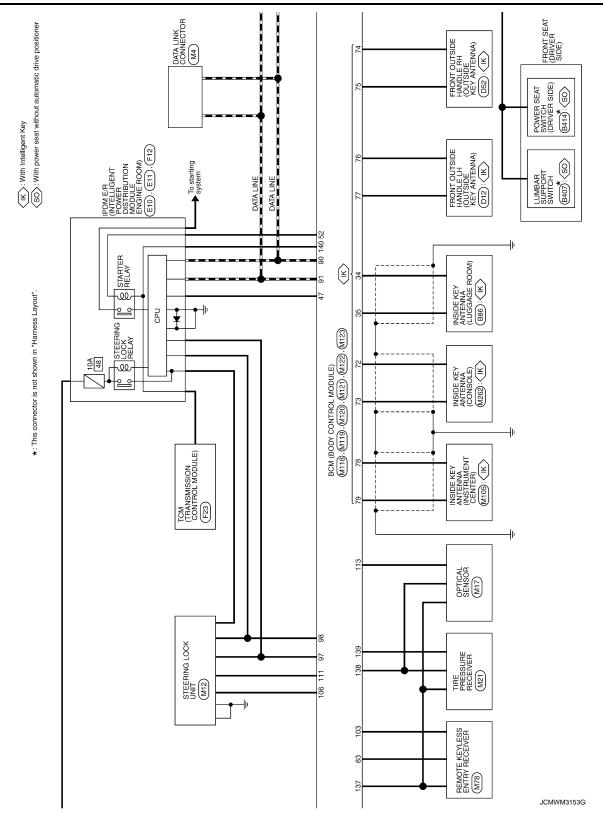
• *5: With TPMS

Wiring Diagram - BCM -

INFOID:000000003630903

UP TO VIN: JN8AZ18U*9W100000, JN8AZ18W*9W200000 (EXCEPT FOR MEXICO),

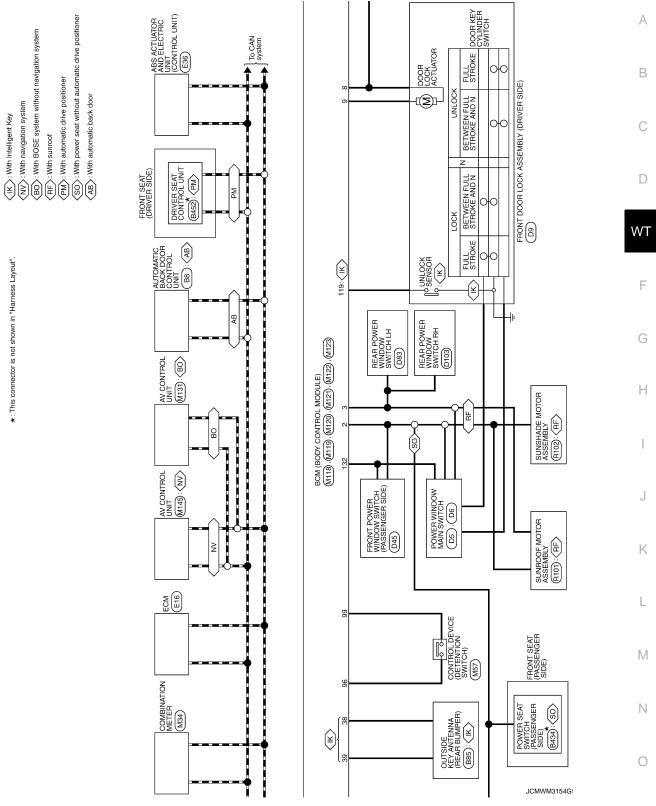




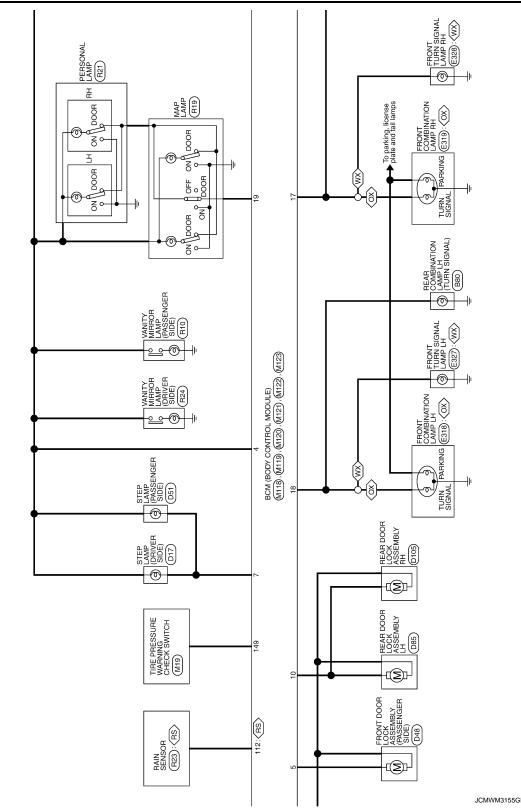


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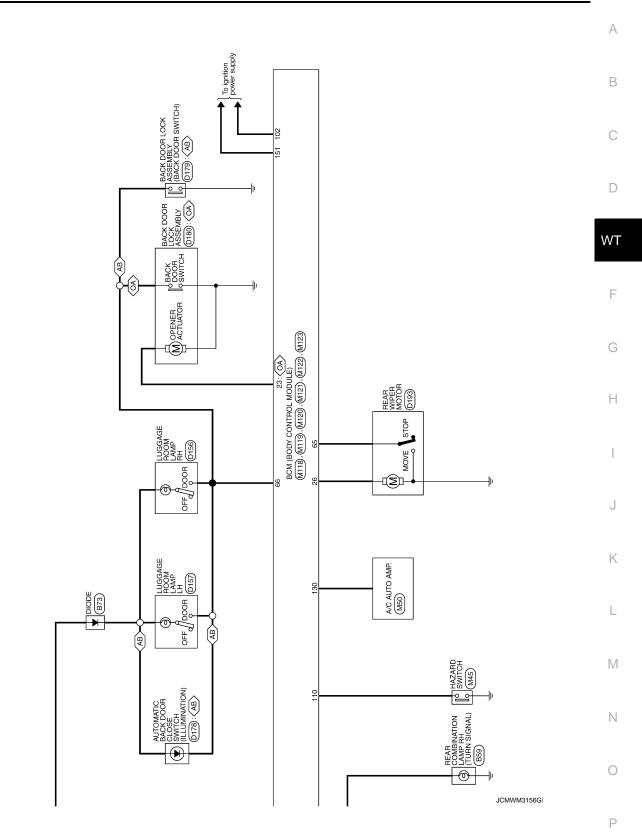
* : This connector is not shown in "Harness Layout".



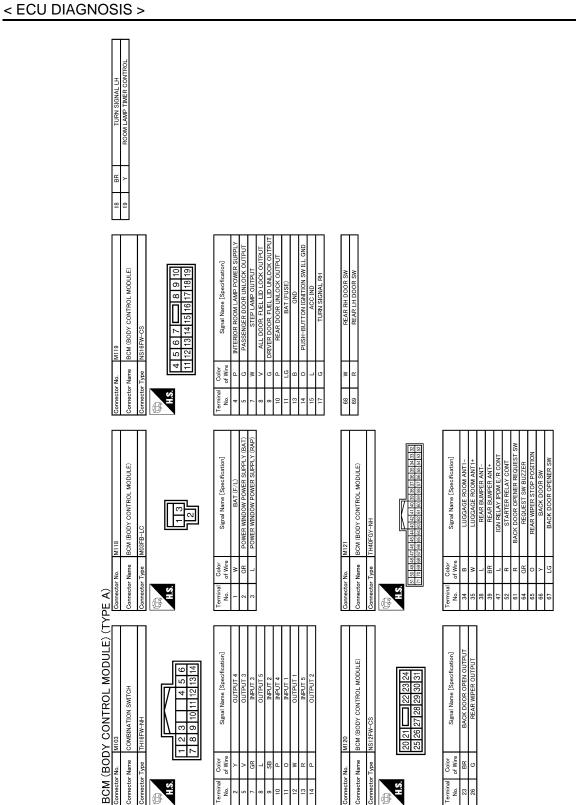
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(RS) : With rain sensor ⟨WX) : With xenon headlamp ⟨OX) : Without xenon headlamp

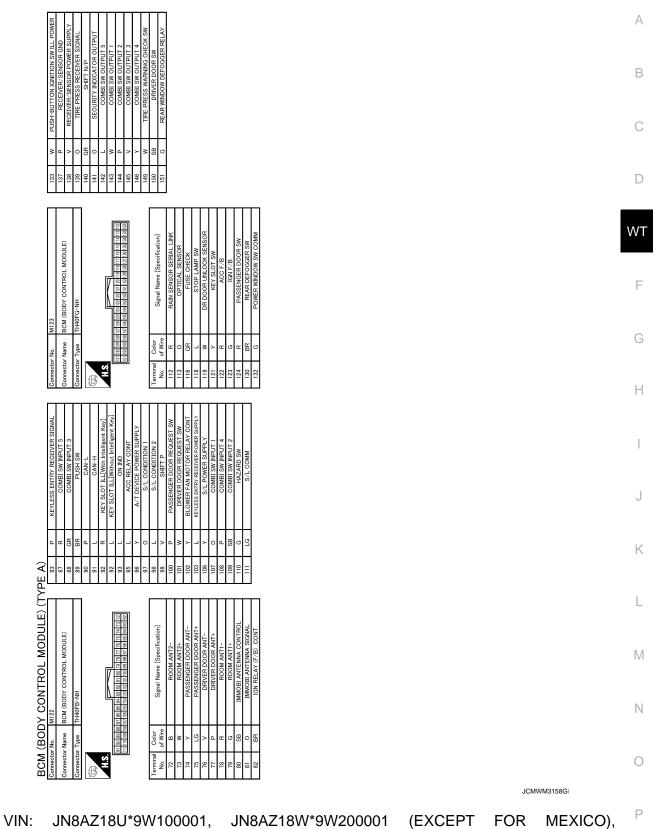


(AB): With automatic back door
 (OA): Without automatic back door



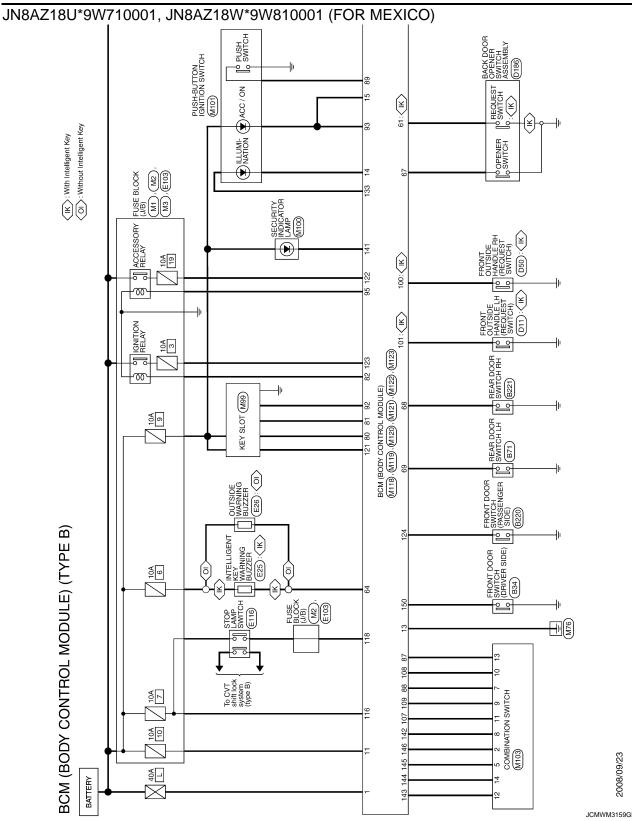
JCMWM3157G

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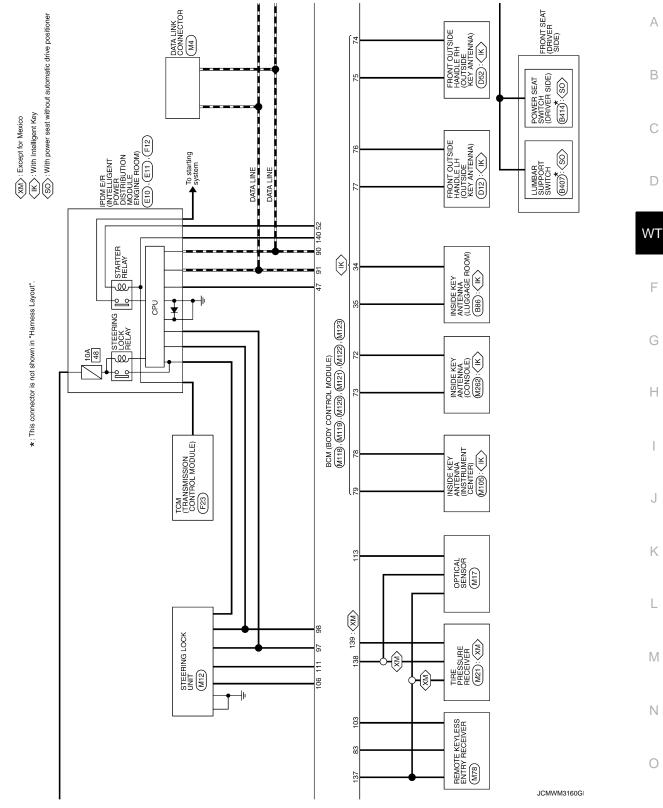


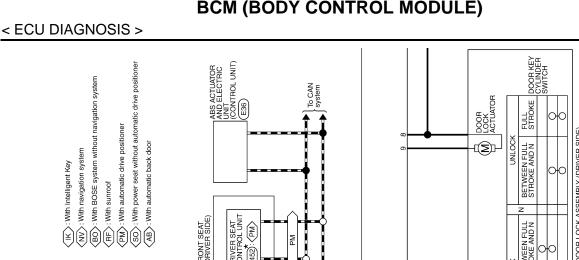
FROM

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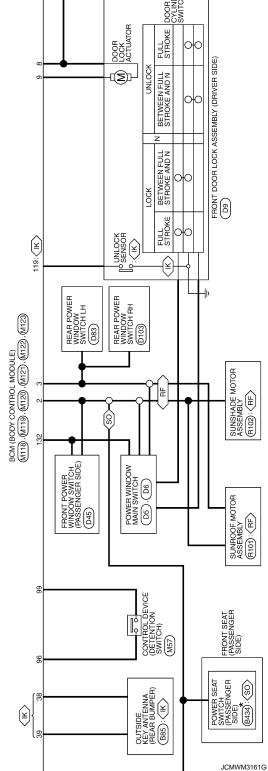
< ECU DIAGNOSIS >





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

DRIVER SEAT CONTROL UNIT (B452): (PM) FRONT SEAT (DRIVER SIDE) BACK DOOR CONTROL UNIT BB : AB AV CONTROL UNIT (M131): (BO) BO AV CONTROL UNIT (M145): (NV) N ECM E16 COMBINATION METER (M34)

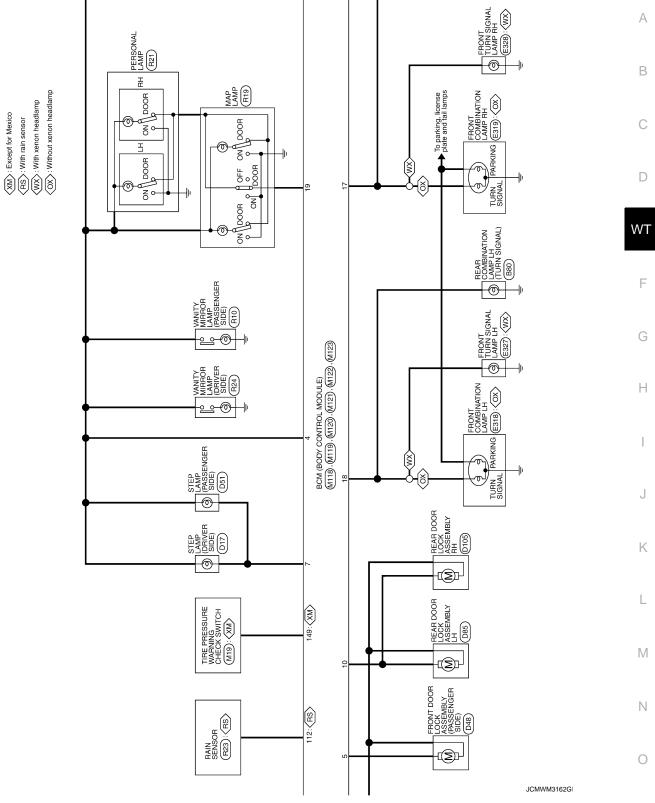


BCM (BODY CONTROL MODULE)

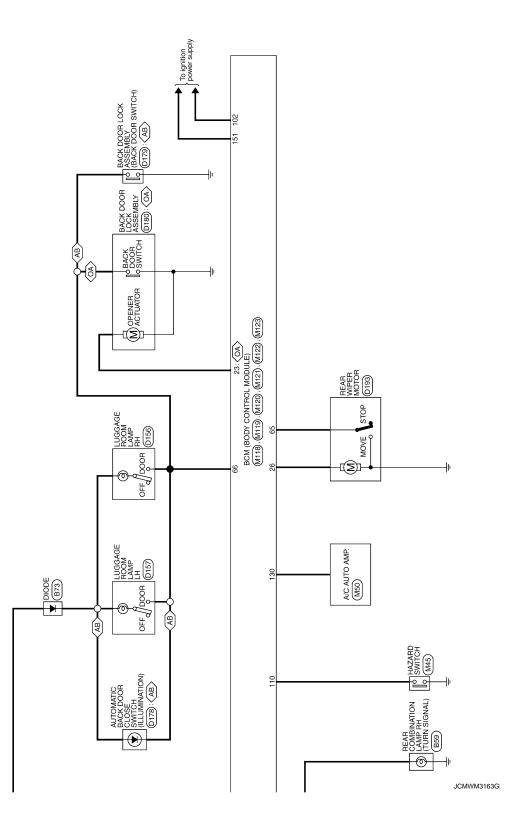
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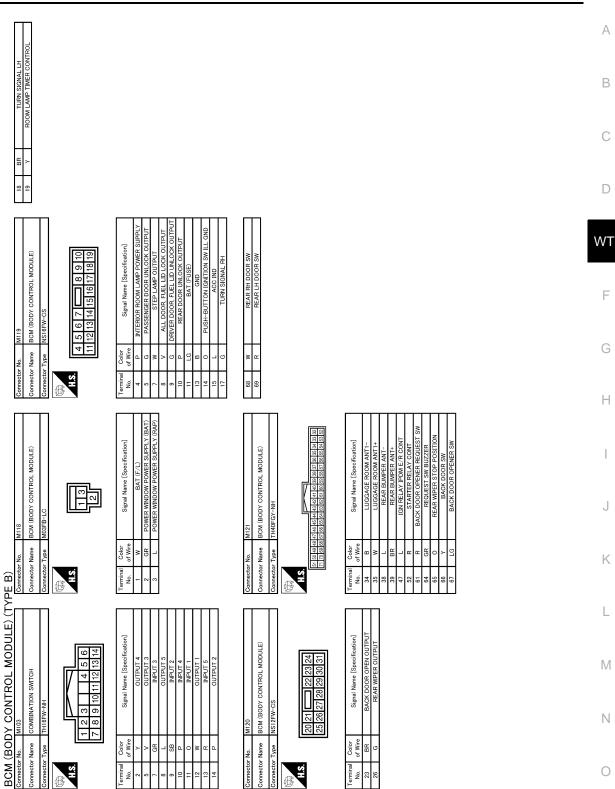
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< ECU DIAGNOSIS >





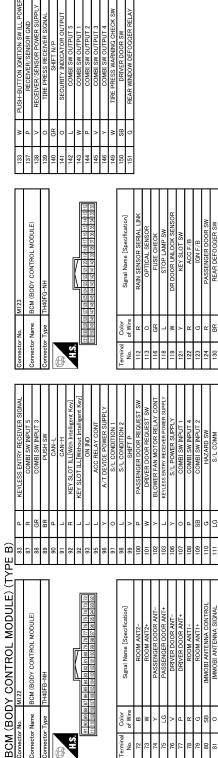




JCMWM3164G



< ECU DIAGNOSIS >



Fail-safe

FAIL-SAFE CONTROL BY DTC

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

JCMWM3165G

< ECU DIAGNOSIS >

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 $ON \rightarrow OFF$
B2557: VEHICLE SPEED	Inhibit steering lock	When normal vehicle speed signals are received from ABS actua- tor 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 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 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)

< ECU DIAGNOSIS >

Display contents of CONSULT	Fail-safe	Cancellation
B2607: 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)
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 crankingInhibit 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 fulfilledPower position changes to ACCReceives engine status signal (CAN)
B2612: S/L STATUS	Inhibit engine crankingInhibit 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 be- comes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control in- side BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E9: S/L STATUS	Inhibit engine crankingInhibit 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 (0V) 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.

FAIL-SAFE CONTROL BY RAIN SENSOR MALFUNCTION

- BCM judges the rain sensor serial link error by the rain sensor serial link condition and detects the rain sensor malfunction by rain sensor malfunction signal.
- When BCM detects the rain sensor serial link error or the rain sensor malfunction while front wiper AUTO operation, BCM operates a fail-safe control.

NOTE:

If rain sensor malfunction is detected when ignition switch is turned OFF \Rightarrow ON and front wiper switch is INT/ AUTO position, BCM operates a fail-safe control.

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

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

Condition of cancellation

1. More than 1 minute is passed after the rear wiper stop.

< ECU DIAGNOSIS >

- 2. Turn rear wiper switch OFF.
- 3. Operate the rear wiper switch or rear washer switch.

DTC Inspection Priority Chart

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

Priority	DTC	
1	B2562: LOW VOLTAGE	
2	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 B2195: ANTI SCANNING 	
	 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 B2607: S/L RELAY B2608: STARTER RELAY D26082: STARTER RELAY 	
4	 B2609: S/L STATUS B260A: IGNITION RELAY B260B: STEERING LOCK UNIT B260C: STEERING LOCK UNIT 	
	 B260D: STEERING LOCK UNIT B260F: ENG STATE SIG LOST 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 B261E: VEHICLE TYPE 	
	 B26E9: S/L STATUS B26EA: KEY REGISTRATION C1729: VHCL SPEED SIG ERR U0415: VEHICLE SPEED SIG 	

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Priority	DTC	
	C1704: LOW PRESSURE FL	
	C1705: LOW PRESSURE FR	
	C1706: LOW PRESSURE RR	
	C1707: LOW PRESSURE RL	
	• C1708: [NO DATA] FL	
	• C1709: [NO DATA] FR	
	• C1710: [NO DATA] RR	
	• C1711: [NO DATA] RL	
	C1712: [CHECKSUM ERR] FL	
	C1713: [CHECKSUM ERR] FR	
	C1714: [CHECKSUM ERR] RR	
	C1715: [CHECKSUM ERR] RL	
5	C1716: [PRESSDATA ERR] FL	
	C1717: [PRESSDATA ERR] FR	
	C1718: [PRESSDATA ERR] RR	
	C1719: [PRESSDATA ERR] RL	
	• C1720: [CODE ERR] FL	
	C1721: [CODE ERR] FR	
	C1722: [CODE ERR] RR	
	• C1723: [CODE ERR] RL	
	C1724: [BATT VOLT LOW] FL	
	C1725: [BATT VOLT LOW] FR	
	C1726: [BATT VOLT LOW] RR	
	C1727: [BATT VOLT LOW] RL	
	C1734: CONTROL UNIT	
	B2621: INSIDE ANTENNA	
6	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 <u>BCS-17, "COM-MON ITEM : CONSULT-III Function (BCM - COMMON ITEM)"</u>.

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	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	—	—	_	_	BCS-40
U1010: CONTROL UNIT (CAN)	—	—	_	_	BCS-41
U0415: VEHICLE SPEED SIG	—	—	—	—	BCS-42
B2013: ID DISCORD BCM-S/L	×	×	_	—	<u>SEC-55</u>
B2014: CHAIN OF S/L-BCM	×	×	_	—	<u>SEC-56</u>
B2190: NATS ANTENNA AMP	×	—	—	—	<u>SEC-47</u>
B2191: DIFFERENCE OF KEY	×	—	—	—	<u>SEC-50</u>
B2192: ID DISCORD BCM-ECM	×	—	—	—	<u>SEC-51</u>
B2193: CHAIN OF BCM-ECM	×	—	—	—	<u>SEC-53</u>
B2195: ANTI SCANNING	×	—	—	—	<u>SEC-54</u>
B2553: IGNITION RELAY	—	×		_	PCS-49

< ECU DIAGNOSIS >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	A
B2555: STOP LAMP		×			<u>SEC-59</u>	-
B2556: PUSH-BTN IGN SW	_	×	×		SEC-61	-
B2557: VEHICLE SPEED	×	×	×		SEC-63	C
B2560: STARTER CONT RELAY	×	×	×		<u>SEC-64</u>	-
B2562: LOW VOLTAGE	_	×	_		BCS-43	D
B2601: SHIFT POSITION	×	×	×		<u>SEC-65</u>	-
B2602: SHIFT POSITION	×	×	×		<u>SEC-68</u>	
B2603: SHIFT POSI STATUS	×	×	×		<u>SEC-70</u>	WT
B2604: PNP SW	×	×	×		<u>SEC-73</u>	_
B2605: PNP SW	×	×	×		<u>SEC-75</u>	F
B2606: S/L RELAY	×	×	×	_	<u>SEC-77</u>	-
B2607: S/L RELAY	×	×	×		<u>SEC-78</u>	-
B2608: STARTER RELAY	×	×	×		<u>SEC-80</u>	G
B2609: S/L STATUS	×	×	×	_	<u>SEC-82</u>	-
B260A: IGNITION RELAY	×	×	×		PCS-51	Н
B260B: STEERING LOCK UNIT	_	×	×		<u>SEC-86</u>	-
B260C: STEERING LOCK UNIT	_	×	×	_	<u>SEC-87</u>	-
B260D: STEERING LOCK UNIT	_	×	×	_	<u>SEC-88</u>	
B260F: ENG STATE SIG LOST	×	×	×	_	<u>SEC-89</u>	-
B2612: S/L STATUS	×	×	×	_	<u>SEC-92</u>	
B2614: ACC RELAY CIRC	_	×	×	_	PCS-53	
B2615: BLOWER RELAY CIRC	_	×	×	_	PCS-56	-
B2616: IGN RELAY CIRC	_	×	×	—	PCS-59	K
B2617: STARTER RELAY CIRC	×	×	×	_	<u>SEC-96</u>	-
B2618: BCM	×	×	×	_	PCS-62	
B2619: BCM	×	×	×	_	<u>SEC-98</u>	
B261A: PUSH-BTN IGN SW	_	×	×	_	<u>SEC-99</u>	-
B261E: VEHICLE TYPE	×	×	× (Turn ON for 15 seconds)	_	<u>SEC-102</u>	Μ
B2621: INSIDE ANTENNA	_	×	—	_	DLK-95	-
B2622: INSIDE ANTENNA	_	×		_	DLK-97	N
B2623: INSIDE ANTENNA	_	×	—	_	DLK-99	-
B26E9: S/L STATUS	×	×	imes (Turn ON for 15 seconds)	_	<u>SEC-90</u>	0
B26EA: KEY REGISTRATION	_	×	imes (Turn ON for 15 seconds)	_	<u>SEC-91</u>	_
C1704: LOW PRESSURE FL	_	_	—	×		P
C1705: LOW PRESSURE FR	—	_	—	×		
C1706: LOW PRESSURE RR	—	—	_	×	<u>WT-16</u>	
C1707: LOW PRESSURE RL	_	_	—	×]	

< ECU DIAGNOSIS >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condi- tion	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page	
C1708: [NO DATA] FL	—	—	—	×		
C1709: [NO DATA] FR	—	—	—	×	M/T 40	
C1710: [NO DATA] RR	—	—	—	×	<u>WT-18</u>	
C1711: [NO DATA] RL	—	—	—	×		
C1712: [CHECKSUM ERR] FL	—	—		×		
C1713: [CHECKSUM ERR] FR	—	—	—	×	MT 21	
C1714: [CHECKSUM ERR] RR	—	—	—	×	<u>WT-21</u>	
C1715: [CHECKSUM ERR] RL	—	—	—	×		
C1716: [PRESSDATA ERR] FL	—	—	—	×		
C1717: [PRESSDATA ERR] FR	—	—	—	×		
C1718: [PRESSDATA ERR] RR	—	—	—	×	<u>WT-24</u>	
C1719: [PRESSDATA ERR] RL	—	—	—	×	-	
C1720: [CODE ERR] FL	—	—	—	×		
C1721: [CODE ERR] FR	—	—	—	×	<u>WT-26</u>	
C1722: [CODE ERR] RR	—	—	—	×	<u>vv1-20</u>	
C1723: [CODE ERR] RL	—	—	—	×		
C1724: [BATT VOLT LOW] FL	—	—	—	×		
C1725: [BATT VOLT LOW] FR	—	—	—	×	<u>WT-29</u>	
C1726: [BATT VOLT LOW] RR	—	—	—	×	<u>vv1-29</u>	
C1727: [BATT VOLT LOW] RL	—	—	—	×		
C1729: VHCL SPEED SIG ERR	—	—	—	×	<u>WT-32</u>	
C1734: CONTROL UNIT	—	—	—	×	<u>WT-33</u>	

< SYMPTOM DIAGNOSIS > SYMPTOM DIAGNOSIS TPMS

Symptom Table

INFOID:000000003375993

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LOW TIRE PRESSURE WARNING LAMP SYMPTOM CHART

Diagnosis Item	Symptom (Ignition switch ON)	Low tire pressure warning lamp	Cause	Action
	Low tire pressure warning lamp comes on immediately and turns off after 1 sec- ond.	ON 1 sec > stays OFF SEIA0592E	All wheel transmit- ters are "activated" (working).	None (system OK)
Low tire pres- sure warning lamp	Low tire pressure warning lamp blinks on for 2 seconds, then turns off for 0.2 seconds-repeats.	Blinks: ON 2 sec > OFF 0.2 sec	All wheel transmit- ters are not activat- ed.	Activate all wheel tire pressure transmitters. Refer to <u>WT-5,</u> <u>"TRANSMITTER WAKE UP</u> <u>OPERATION : Special Repair</u> <u>Requirement</u> ".
	Low tire pressure warning lamp blinks 1 time.	Blinks 1 time ON 0.3 sec > OFF 1.3 sec SEIA0594E	Tire pressure trans- mitter front LH is not activated.	Activate tire pressure transmit- ter front LH. Refer to <u>WT-5,</u> <u>"TRANSMITTER WAKE UP</u> <u>OPERATION : Special Repair</u> <u>Requirement"</u> .
	Low tire pressure warning lamp blinks 2 times.	Blinks 2 times ON 0.3 sec > OFF 0.3 sec SEIA0595E	Tire pressure trans- mitter front RH is not activated.	Activate tire pressure transmit- ter front RH. Refer to <u>WT-5,</u> <u>"TRANSMITTER WAKE UP</u> <u>OPERATION : Special Repair</u> <u>Requirement"</u> .
	Low tire pressure warning lamp blinks 3 times.	Blinks 3 times ON 0.3 sec > OFF 0.3 sec SEIA0596E	Tire pressure trans- mitter rear RH is not activated.	Activate tire pressure transmit- ter rear RH. Refer to <u>WT-5,</u> <u>"TRANSMITTER WAKE UP</u> <u>OPERATION : Special Repair</u> <u>Requirement"</u> .

TPMS

< SYMPTOM DIAGNOSIS >

Diagnosis Item	Symptom (Ignition switch ON)	Low tire pressure warning lamp	Cause	Action
Low tire pres- sure warning lamp	Low tire pressure warning lamp blinks 4 times.	Blinks 4 times ON 0.3 sec > OFF 0.3 sec SEIA0597E	Tire pressure trans- mitter rear LH is not activated.	Activate tire pressure transmit- ter rear LH. Refer to <u>WT-5,</u> <u>"TRANSMITTER WAKE UP</u> <u>OPERATION : Special Repair</u> <u>Requirement"</u> .
	Low tire pressure warning lamp comes on and does not turn off.	Comes ON and stays ON	Tire pressure is low.	Check tire pressure with CON- SULT-III. Refer to <u>WT-14. "AIR</u> <u>PRESSURE MONITOR :</u> <u>CONSULT-III Function (BCM -</u> <u>AIR PRESSURE MONITOR)"</u> .
	Low tire pressure warning lamp blinks on for 0.5 seconds then turns off for 0.5 seconds-repeats for 1 minute, and then stays on.		The fuse for combi- nation meter from battery is pulled out.	Check the fuse for combina- tion meter from battery. Install or replace (if needed).
			BCM connector pulled out.	Check BCM connector. Re- connect if needed.
		Blinks 1 min CLOCATION ON 0.5 sec > OFF 0.5 sec and stays ON SEIA0788E	Low tire pressure or tire pressure moni- toring system mal- function.	 Perform CONSULT-III Self- Diagnosis. Refer to <u>WT-14,</u> <u>"AIR PRESSURE MONI- TOR : CONSULT-III Func- tion (BCM - AIR <u>PRESSURE MONITOR)"</u>.</u> Perform ID Registration if needed. Refer to <u>WT-5, "ID</u> <u>REGISTRATION PROCE-</u> <u>DURE : Special Repair Re- quirement"</u>.
Turn signal lamp	Turn signal lamp does not blink 2 times or buzzer does not sound after trans- mitter activation.		 Tool J-45295 [SST] does not activated. Ignition OFF during activa- tion. Tool J-45295 [SST] not posi- tioned correct- ly. Transmitters already activat- ed. 	 Install new battery. Check ignition is ON during activation. Position tool correctly during activation. Nothing.

NOTE:

If more than one wheel transmitter is NOT activated, the low tire pressure warning lamp blinking patterns for those wheels will combine. (Example: one blink/OFF/three blinks = Tire pressure transmitter rear LH and rear RH are not activated.)

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN ON

Description INFOID:000000003375994
DESCRIPTION The low tire pressure warning lamp illuminates for approximately 1 second and then turns OFF when the igni- tion switch is turned ON. This is to check that no abnormal condition is present in the tire pressure monitoring system. The lamp bulb may be burnt out or the tire pressure monitoring system may be malfunctioning if the low tire pressure warning lamp does not illuminate when the ignition switch is turned ON.
Diagnosis Procedure
1.CHECK SELF-DIAGNOSIS RESULTS
 With CONSULT-III On the "SELECT DIAG" mode, select the "SELF-DIAG RESULTS" screen. Check display contents in self-diagnosis results. Is "CAN COMM CIRCUIT" displayed in the self-diagnosis display items? YES >> Perform trouble diagnosis for CAN communication system. Refer to LAN-16, "Trouble Diagnosis Flow Chart". NO >> GO TO 2. CHECK COMBINATION METER
Check combination meter function. Refer to <u>MWI-34, "CONSULT-III Function (METER/M&A)"</u> .
<u>Is the inspection result normal?</u> YES >> GO TO 3. NO >> Repair or replace damaged parts. 3. CHECK LOW TIRE PRESSURE WARNING LAMP
 Turn the ignition switch OFF. Disconnect BCM harness connectors. Turn the ignition switch ON. CAUTION: Never start the engine.
Does low tire pressure warning lamp turn on? YES >> GO TO 4.
NO >> Check combination meter and repair or replace. Refer to <u>MWI-33, "Diagnosis Description"</u> .
4. СНЕСК ЅҮМРТОМ
Check symptom again.
Is the inspection result normal? YES >> INSPECTION END NO >> GO TO 5.
5.снеск всм
Check BCM input/output signal. Refer to WT-46, "Reference Value".

Is the inspection result normal?

YES >> GO TO 4.

NO >> GO TO 6.

6.CHECK BCM HARNESS CONNECTOR

Check BCM pin terminals for damage or loose connection with harness connector.

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-96, "Removal and Installation".

NO >> Repair or replace damaged parts. А

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LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF

Description

INFOID:000000003375996

DESCRIPTION

The tire pressure monitoring system is checked and the warning lamp is illuminated for approximately 1 second when the ignition switch is turned ON. The low tire pressure warning lamp turns OFF after the system check finishes.

The system may be malfunctioning if the low tire pressure warning lamp does not turn off approximately 1 second after the ignition switch is turned ON.

Diagnosis Procedure

INFOID:000000003375997

1.CHECK SYSTEM FOR BCM

With CONSULT-III

1. On "SELF-DIAG" mode, select the "SELF-DIAG RESULTS" screen.

2. Check display contents in self-diagnosis results.

Does self-diagnostic results indicate any malfunction?

- YES >> Perform trouble diagnosis. Refer to <u>WT-14, "AIR PRESSURE MONITOR : CONSULT-III Function</u> (<u>BCM - AIR PRESSURE MONITOR)</u>".
- NO >> GO TO 2.

2. CHECK ID REGISTRATION

Perform ID registration of all transmitters. Refer to <u>WT-5, "ID REGISTRATION PROCEDURE : Special Repair</u> Requirement".

Does low tire pressure warning lamp turn OFF?

YES >> INSPECTION END

NO >> GO TO 3.

3.CHECK BCM POWER SUPPLY CIRCUIT

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

BCM			Voltage (Approx.)
Connector	Terminal		vollage (Applox.)
M118	1	Ground	Battery voltage
M119	11	Gibullu	Dallery Vollage

Is the inspection result normal?

YES >> GO TO 4.

- NO >> Check the following. If any items are damaged, repair or replace damaged parts.
 - 40 A fusible link [No. L located in the fuse block]. Refer to <u>PG-102, "Fuse and Fusible Link</u> <u>Arrangement"</u>.
 - 10 A fuse [No. 10 located in the fuse block (J/B)]. Refer to <u>PG-101, "Fuse, Connector and Termi-nal Arrangement"</u>.
 - Harness for short or open between battery and BCM harness connector M118 terminal 1.
 - Harness for short or open between battery and BCM harness connector M119 terminal 11.
 - Check battery voltage.

4.CHECK BCM GROUND CIRCUIT

1. Check continuity between BCM harness connector and ground.

В	CM		Continuity	
Connector	Terminal		Continuity	
M119	13	Ground	Existed	

Is the inspection result normal?

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF

< SYMPTOM DIAGNOSIS >	
YES >> GO TO 5. NO >> Repair or replace damaged parts.	A
5.снеск сумртом	
Check symptom again.	В
Is the inspection result normal? YES >> INSPECTION END	
YES >> INSPECTION END NO >> GO TO 6.	0
6.снеск всм	С
Check BCM input/output signal. Refer to WT-46, "Reference Value".	_
Is the inspection result normal?	D
YES >> GO TO 5. NO >> GO TO 7.	
7. CHECK BCM HARNESS CONNECTOR	WT
Check BCM pin terminals for damage or loose connection with harness connector.	
Is the inspection result normal?	F
YES >> Replace BCM. Refer to <u>BCS-96, "Removal and Installation"</u> . NO >> Repair or replace damaged parts.	
NO >> Repair of replace damaged parts.	G
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LOW TIRE PRESSURE WARNING LAMP BLINKS

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP BLINKS

Description

INFOID:000000003375998

DESCRIPTION

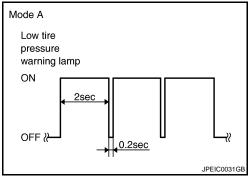
The low tire pressure warning lamp illuminates or blinks.

However, a check is necessary because the symptom may not be caused by a system malfunction. For example, the transmitter may not be initialized.

NOTE:

If low tire pressure warning lamp blinks as shown in the figure, the system is normal.

Blink Mode A
This mode shows transmitter status is in OFF- mode.
Perform transmitter wake up operation. Refer to <u>WT-5</u>, <u>"TRANS-MITTER WAKE UP OPERATION : Special Repair Requirement"</u>.



Diagnosis Procedure

INFOID:000000003375999

1. CHECK TIRE PRESSURE WARNING CHECK SWITCH POWER SUPPLY

 Turn the ignition switch ON.
 CAUTION: Never start the engine.

2. Check voltage between tire pressure warning check switch connector and ground.

Tire pressure wa	ming check switch		Voltage (Approx.)
Connector	Terminal		vollage (Applox.)
M19	1	Ground	11.8 V

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace damaged parts.

2.check tire pressure warning check switch circuit

1. Turn the ignition switch OFF.

2. Disconnect BCM harness connector.

3. Check continuity between BCM harness connector and tire pressure warning check switch connector.

B	BCM Tire pressure warning check sw			- Continuity
Connector	Terminal	Connector	Terminal	Continuity
M123	149	M19	1	Existed

4. Check continuity between BCM harness connector and ground.

B	CM		Continuity		
Connector	Terminal		Continuity		
M123	149	Ground	Not existed		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace damaged parts.

LOW TIRE PRESSURE WARNING LAMP BLINKS

< SYMPTOM DIAGNOSIS >	
3. СНЕСК ВСМ	A
Check BCM input/output signal. Refer to WT-46. "Reference Value".	A
Is the inspection result normal?	
 YES >> Check tire pressure warning check switch. Refer to <u>WT-39</u>. "Diagnosis Pro NO >> Repair or replace the BCM. 	bcedure". B
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< SYMPTOM DIAGNOSIS >

TURN SIGNAL LAMP BLINKS

Description

DESCRIPTION

- The turn signal lamp blinks when the ignition switch is turned ON.
- The BCM connector or circuit may have a malfunction.

Diagnosis Procedure

INFOID:000000003376001

INFOID:00000003376000

1. CHECK TIRE PRESSURE WARNING CHECK SWITCH POWER SUPPLY CIRCUIT

1. Turn the ignition switch ON. CAUTION: Never start the engine.

2. Check voltage between tire pressure warning check switch connector and ground.

Tire pressure wa	ning check switch		Voltage (Approx.)
Connector	Terminal		vollage (Approx.)
M19	1	Ground	11.8 V

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace damaged parts.

2. CHECK TIRE PRESSURE WARNING CHECK SWITCH CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect BCM harness connector.

3. Check continuity between BCM harness connector and tire pressure warning check switch connector.

B	СМ	Tire pressure wa	Continuity	
Connector	Terminal	Connector	Terminal	Existed
M123	149	M19	1	Existed

4. Check continuity between BCM harness connector and ground.

В	CM		Continuity		
Connector	Terminal		Continuity		
M123	149	Ground	Not existed		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace damaged parts.

3.CHECK SYMPTOM

Check again.

Does the turn signal lamp remain blinking?

YES >> Check turn signal lamp operation. Refer to EXL-49. "Component Function Check".

NO >> INSPECTION END

ID REGISTRATION CANNOT BE COMPLETED

< SYMPTOM DIAGNOSIS >

ID REGISTRATION CANNOT BE COMPLETED

Description

DESCRIPTION The ID of the transmitter installed in each wheel cannot be registered in the tire pressure monit Inspect the transmitter or the tire pressure monitoring system circuit.	oring system.
Diagnosis Procedure	INFOID:000000003376003
	INFOID:00000000337600:

1.CHECK ID REGISTRATION

- 1. Perform ID registration of all transmitters. Refer to <u>WT-5, "ID REGISTRATION PROCEDURE : Special</u> <u>Repair Requirement"</u>.
- 2. Drive at a speed of 40 km/h (25 MPH) or more for 10 minutes.
- 3. Check all tire pressures with CONSULT-III "DATA MONITOR" within 5 minutes.

Condition Monitored item Display value F AIR PRESS FL AIR PRESS FR Start the engine and drive at 40 km/h (25 MPH) or more Approximately equal to the indication on vehicle for 10 minutes. information display. AIR PRESS RR AIR PRESS RL Is the inspection result normal? YES >> INSPECTION END Н NO >> GO TO 2. 2. CHECK TRANSMITTER Perform trouble diagnosis for transmitters. Refer to WT-18, "Diagnosis Procedure". 1. Perform ID registration of all transmitters. Refer to WT-5, "ID REGISTRATION PROCEDURE : Special 2. Repair Requirement". Can ID registration of all transmitters be completed?

- YES >> INSPECTION END
- NO >> Replace the transmitter.

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< SYMPTOM DIAGNOSIS >

NORMAL OPERATING CONDITION

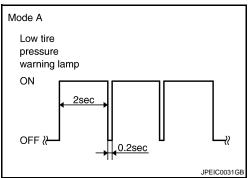
Description

LOW TIRE PRESSURE WARNING LAMP BLINKS

The tire pressure monitoring system is not malfunctioning if the low tire pressure warning lamp blinks in the pattern as shown in the figure.

The incident occurs because the transmitter of each wheel is not wake up.

Perform transmitter wake up operation. Refer to <u>WT-5</u>, <u>"TRANSMIT-TER WAKE UP OPERATION : Special Repair Requirement"</u>.



NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING < SYMPTOM DIAGNOSIS >

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NVH Troubleshooting Chart

INFOID:000000003376005

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Use chart below to find the cause of the symptom. If necessary, repair or replace these parts.

Reference	page		<u>FSU-10, FSU-8.</u>	WT-104, "Inspection"	WT-105, "Adjustment"	WT-111, "Tire Air Pressure"	WT-105, "Adjustment"	I	I	WT-111, "Tire Air Pressure"	NVH in DLN section.	NVH in DLN section.	NVH in FAX and FSU sections.	NVH in RAX and RSU sections.	Refer to TIRES in this chart.	Refer to ROAD WHEEL in this chart.	NVH in FAX, RAX section.	NVH in BR section.	NVH in ST section.	C D WT
Possible ca	ause and SI	JSPECTED PARTS	Improper installation, looseness	Out-of-round	unbalance	Incorrect tire pressure	Uneven tire wear	Deformation or damage	Non-uniformity	Incorrect tire size	PROPELLER SHAFT	DIFFERENTIAL	FRONT AXLE AND FRONT SUSPENSION	REAR AXLE AND REAR SUSPENSION	TIRES	ROAD WHEELS	DRIVE SHAFT	BRAKE	STEERING	F G H J
		Noise	×	×	×	×	×	×	×		×	×	×	×		×	×	×	×	-
		Shake	×	×	×	×	×	×		×	×		×	×		×	×	×	×	K
		Vibration				×				×	×		×	×			×		×	-
	TIRES	Shimmy	×	×	×	×	×	×	×	×			×	×		×		×	×	-
		Judder	×	×	×	×	×	×		×			×	×		×		×	×	L
Symptom		Poor quality ride or handling	×	×	×	×	×	×		×			×		×	×				_
		Noise	×	×	×			×			×	×	×	×	×		×	×	×	M
	DOAD	Shake	×	×	×			×			×		×	×	×		×	×	×	-
	ROAD WHEEL	Shimmy, Judder	×	×	×			×					×	×	×			×	×	N
		Poor quality ride or handling	×	×	×			×					×	×	×					_

< PRECAUTION > PRECAUTION PRECAUTIONS

Service Notice or Precautions

- Low tire pressure warning lamp blinks for 1min, then turns ON when occurring any malfunction except low tire pressure. Delete the memory with CONSULT-III, or register the ID to turn low tire pressure warning lamp OFF. Refer to <u>WT-12, "AIR PRESSURE MONITOR : Diagnosis Description"</u>, <u>WT-5, "ID REGISTRATION</u> <u>PROCEDURE : Special Repair Requirement"</u>.
- ID registration is required when replacing or rotating wheels, replacing transmitter or BCM. Refer to <u>BCS-96</u>, <u>"Exploded View"</u>
- Replace grommet seal, valve core and cap of transmitter in TPMS every tire replacement by reaching wear limit of tire. Refer to <u>WT-108</u>, "Exploded View".

PREPARATION

< PREPARATION >	
PREPARATION	
PREPARATION	
Special Service Tool	
The actual shapes of Kent-Moore tools may differ from those of spec	ial servi
Tool number (Kent-Moore No.) Tool name	Descri
– (J-45295) Transmitter activation tool	ID regi

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ice tools illustrated here.

Tool number (Kent-Moore No.) Tool name		Description	С
_		ID registration	D
(J-45295)			
Transmitter activation tool			WT
	SEIA0462E		F
Commercial Service Tool			NF0ID:000000003376008
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Tool name		Description	
Power tool		Loosening bolts and nuts	Н
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	PBIC0190E		

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<u>< ON-VEHICLE MAINTENANCE ></u> ON-VEHICLE MAINTENANCE > ROAD WHEEL

Inspection

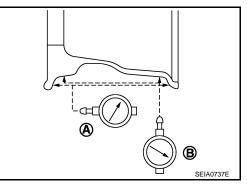
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ALUMINUM WHEEL

- 1. Check tires for wear and improper inflation.
- 2. Check wheels for deformation, cracks and other damage. If deformed, remove wheel and check wheel runout.
- a. Remove tire from aluminum wheel and mount on a tire balance machine.
- b. Set dial indicator as shown in the figure.
- c. If the lateral deflection (A) or vertical deflection (B) for radial runout value exceeds the limit, replace aluminum wheel.

Limit

- A: Refer to <u>WT-111, "Road</u> <u>Wheel"</u>.
- B: Refer to <u>WT-111, "Road</u> <u>Wheel"</u>.



< ON-VEHICLE REPAIR	>
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ON-VEHICLE REPAIR ROAD WHEEL TIRE ASSEMBLY

Adjustment

BALANCING WHEELS (BONDING WEIGHT TYPE)

Preparation Before Adjustment

Using releasing agent, remove double-faced adhesive tape from the road wheel. **CAUTION:**

- Be careful not to scratch the road wheel during removal.
- After removing double-faced adhesive tape, wipe clean traces of releasing agent from the road wheel.

Wheel Balance Adjustment

If a tire balance machine has adhesion balance weight mode settings and drive-in weight mode setting, select and adjust a drive-in weight mode suitable for road wheels.

- 1. Set road wheel on tire balance machine using the center hole as a guide. Start the tire balance machine.
- 2. When inner and outer unbalance values are shown on the tire balance machine indicator, multiply outer unbalance value by 5/3 to determine balance weight that should be used. Select the outer balance weight with a value closest to the calculated value above and install to the designated outer position of, or at the designated angle in relation to the road wheel. CAUTION:

• Do not install the inner balance weight before installing the outer balance weight.

- Before installing the balance weight, be sure to clean the mating surface of the road wheel.
- a. Indicated unbalance value $\times 5/3$ = balance weight to be installed Calculation example:

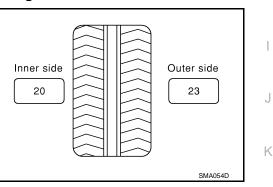
23 g (0.81 oz) \times 5/3 = 38.33 g (1.35 oz) \Rightarrow 37.5 g (1.32 oz) balance weight (closer to calculated balance weight value) **NOTE:**

Note that balance weight value must be closer to the calculated balance weight value.

Example:

 $\begin{array}{l} 36.2 \Rightarrow 35 \text{ g} (1.23 \text{ oz}) \\ 36.3 \Rightarrow 37.5 \text{ g} (1.32 \text{ oz}) \end{array}$

b. Installed balance weight in the position.



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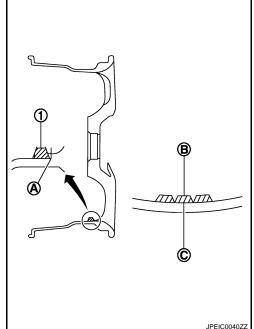
ROAD WHEEL TIRE ASSEMBLY

< ON-VEHICLE REPAIR >

• When installing balance weight (1) to road wheels, set it into the grooved area (A) on the inner wall of the road wheel as shown in the figure so that the balance weight center (B) is aligned with the tire balance machine indication position (angle) (C).

CAUTION:

- Always use genuine NISSAN adhesion balance weights.
- Balance weights are non-reusable; always replace with new ones.
- Do not install more than three sheets of balance weight.



 c. If calculated balance weight value exceeds 50 g (1.76 oz), install two balance weight sheets in line with each other as shown in the figure.
 CAUTION:

Do not install one balance weight sheet on top of another.

- 3. Start the tire balance machine again.
- Install drive-in balance weight on inner side of road wheel in the tire balance machine indication position (angle).
 CAUTION:

Do not install more than two balance weight.

- 5. Start the tire balance machine. Make sure that inner and outer residual unbalance values are 5 g (0.17 oz) each or below.
- 6. If either residual unbalance value exceeds 5 g (0.17 oz), repeat installation procedures.

Limit

Dynamic (At flange):Refer to WT-111, "Road Wheel".Static (At flange):Refer to WT-111, "Road Wheel".

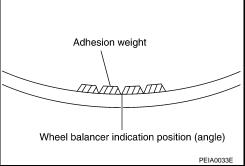
TIRE ROTATION

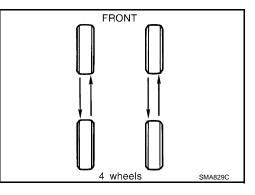
- Follow the maintenance schedule for tire rotation service intervals. Refer to <u>MA-5</u>, "FOR NORTH AMERICA : Explanation of General <u>Maintenance</u>" (For North America), <u>MA-7</u>, "FOR MEXICO : General Maintenance" (For Mexico).
- When installing the wheel, tighten wheel nuts to the specified torque.

CAUTION:

- Do not include the T-type spare tire when rotating the tires.
- When installing wheels, tighten them diagonally by dividing the work two to three times in order to prevent the wheels from developing any distortion.
- Be careful not to tighten wheel nut at torque exceeding the criteria for preventing strain of disc rotor.
- Use NISSAN genuine wheel nuts for aluminum wheels.

Wheel nuts tighting torque: Refer to <u>WT-111, "Road Wheel"</u>.





ROAD WHEEL TIRE ASSEMBLY

< ON-VEHICLE REPAIR >

• Perform the ID registration, after tire rotation. Refer to <u>WT-5, "ID REGISTRATION PROCEDURE : Special</u> <u>Repair Requirement"</u>.

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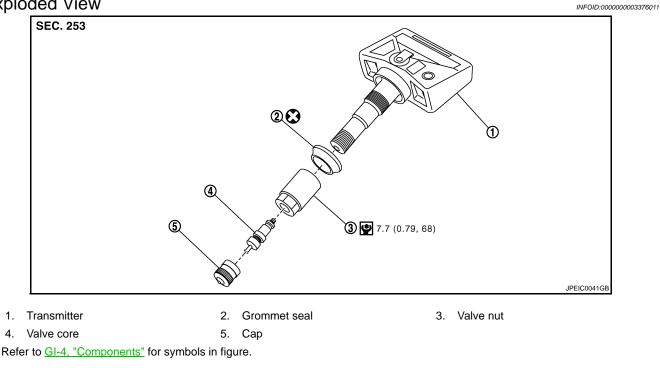
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TRANSMITTER

< ON-VEHICLE REPAIR > TRANSMITTER

Exploded View

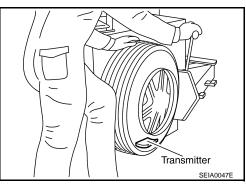


Removal and Installation

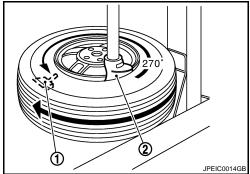
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REMOVAL

- 1. Deflate tire. Unscrew transmitter retaining nut and allow transmitter to fall into tire.
- 2. Gently bounce tire so that transmitter falls to bottom of tire. Place on tire changing machine and break both tire beads ensuring that the transmitter remains at the bottom of the tire.



- 3. Turn tire so that valve hole is at bottom and bounce so that transmitter (1) is near valve hole. Carefully lift tire onto turntable and position valve hole (and transmitter) 270 degree from mounting/dismounting head (2).
- 4. Lubricate tire well and remove first side of the tire. Reach inside the tire and remove the transmitter.

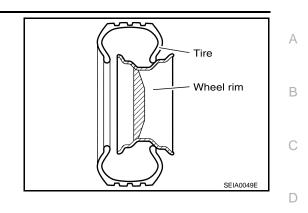


INSTALLATION

TRANSMITTER

< ON-VEHICLE REPAIR >

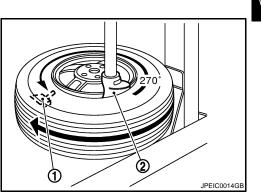
1. Put first side of tire onto rim.



- Mount transmitter on rim and tighten nut.
 CAUTION:
 Speed for tightening nut should be less than 10 rpm.
- Place wheel on turntable of tire machine. Ensure that transmitter (1) is 270 degree from mounting head (2) when second side of tire is fitted.
 NOTE:

Do not touch transmitter at mounting head.

- 4. Lubricate tire well and fit second side of tire as normal. Ensure that tire does not rotate relative to rim.
- 5. Inflate tire and fit to appropriate wheel position.



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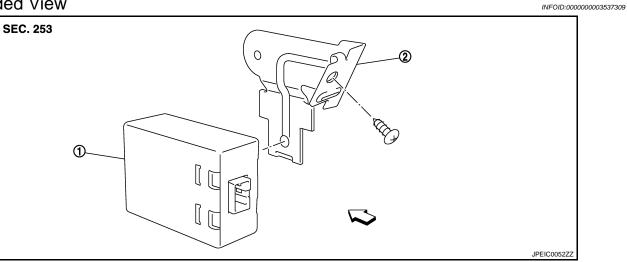
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TIRE PRESSURE RECEIVER

< ON-VEHICLE REPAIR >

TIRE PRESSURE RECEIVER

Exploded View

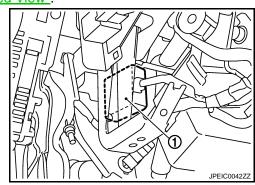


1. Tire pressure receiver 2. Bracket

Removal and Installation

REMOVAL

- 1. Remove the instrument lower panel LH. Refer to IP-11, "Exploded View".
- 2. Disconnect tire pressure receiver (1) harness connector.
- 3. Remove Tire pressure receiver mounting screw.
- 4. Remove tire pressure receiver.



INSTALLATION Install is the reverse order of removal.

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS) SERVICE DATA AND SPECIFICATIONS (SDS)

Road Wheel

INFOID:000000003376013

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ALUMINUM WHEEL

Item		Limit		
Dediel runeut	Lateral deflection	Less then (Less than 0.3 mm (0.012 in)	
Radial runout	Vertical deflection	Less than t		
Allowable unbalance	Dynamic (At flange)	Less than 5 g	(0.17 oz) (one side)	
	Static (At flange)	Less that	Less than 10 g (0.35 oz)	
Wheel Nut			INFOID:00000000364652	
Item		S	Standard	
Wheel nut tighting torque		108 N⋅m (′	108 N·m (11 kg-m, 80 ft-lb)	
Fire Air Pressure			INFOID:00000000337601	
			Unit: kPa (kg/cm ² , psi	
lion		Standard	Unit: kPa (kg/cm ² , psi	
Item		Standard	Unit: kPa (kg/cm ² , psi Rear	
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