

WT

D

CONTENTS

PRECAUTION3	tion (BCM - AIR PRESSURE MONITOR)
PRECAUTIONS 3	ECU DIAGNOSIS INFORMATION13
FOR USA AND CANADA	BCM13 List of ECU Reference
"SEAT BELT PRE-TENSIONER"3 FOR USA AND CANADA : Service Notice or Pre-	WIRING DIAGRAM14
cautions	TIRE PRESSURE MONITORING SYSTEM14 Wiring Diagram14
FOR MEXICO: Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT	BASIC INSPECTION17
PRE-TENSIONER"3 FOR MEXICO: Service Notice or Precautions4	DIAGNOSIS AND REPAIR WORK FLOW17 Work Flow17
PREPARATION5	ADDITIONAL SERVICE WHEN REPLACING
PREPARATION 5 Special Service Tool 5 Commercial Service Tool 5	BCM 19 Description 19 Work Procedure 19
SYSTEM DESCRIPTION6	TRANSMITTER WAKE UP OPERATION20 Description20
COMPONENT PARTS6	Work Procedure20
Component Parts Location	ID REGISTRATION 21 Description 21 Work Procedure 21
Tire Pressure Receiver7 Information Display7	DTC/CIRCUIT DIAGNOSIS23
TPMS8	C1704, C1705, C1706, C1707 LOW TIRE PRESSURE23
System Description8	Description23
DIAGNOSIS SYSTEM (BCM)9	DTC Logic23 Diagnosis Procedure23
COMMON ITEM9 COMMON ITEM : CONSULT-III Function (BCM -	C1708, C1709, C1710, C1711 TRANSMITTER
COMMON ITEM)9	25 DTC Logic25
AIR PRESSURE MONITOR10	Diagnosis Procedure25

C1716, C1717, C1718, C1719 TRANSMITTER	LOW TIRE PRESSURE WARNING LAMP	
28 DTC Logic		
Diagnosis Procedure		
C1729 VEHICLE SPEED SIGNAL29		
Description		
DTC Logic	·	
Diagnosis Procedure	Diagnosis Procedure	42
C1734 BCM30	NOISE, VIBRATION AND HARSHNESS	
DTC Logic		43
Diagnosis Procedure	NVH Troubleshooting Chart	43
TIRE PRESSURE RECEIVER32		44
Component Function Check		
Diagnosis Procedure		
LOW TIRE PRESSURE WARNING LAMP 34	Adjustment	44
Component Function Check34		47
Diagnosis Procedure34		
POWER SUPPLY AND GROUND CIRCUIT 35	ROAD WHEEL TIRE ASSEMBLY	
Diagnosis Procedure	=/-	
Diagnosis Flocedule	Inspection	
SYMPTOM DIAGNOSIS36	Inspection	41
TDMO	TRANSMITTER	
TPMS	Exploded view	
Symptom Table	Removal and Installation	49
LOW TIRE PRESSURE WARNING LAMP	TIRE PRESSURE RECEIVER	51
DOES NOT TURN ON39	Removal and Installation	
Description 39		
Diagnosis Procedure		
LOW TIRE PRESSURE WARNING LAMP	(SDS)	52
DOES NOT TURN OFF40	SERVICE DATA AND SPECIFICATIONS	
Description		52
Diagnosis Procedure40		
•	Tire Air Pressure	

PRECAUTION

PRECAUTIONS FOR USA AND CANADA

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

FOR USA AND CANADA: Service Notice or Precautions

- ID registration is required when replacing or rotating wheels, replacing transmitter or BCM. Refer to <u>BCS-85</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-49</u>, "<u>Exploded View</u>".

FOR MEXICO

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

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

WARNING:

Always observe the following items for preventing accidental activation.

 WT

Α

, , i

G

Н

Κ

_

INFOID:0000000006260263

VI

Ν

PRECAUTIONS

< PRECAUTION >

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

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

WARNING:

Always observe the following items for preventing accidental activation.

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

INFOID:0000000006260265

FOR MEXICO: 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 <a href="https://www.withun.consult.nih.gov/withun.consult
- ID registration is required when replacing or rotating wheels, replacing transmitter or BCM. Refer to BCS-85,
 "Exploded View"
- Replace grommet seal, valve core and cap of transmitter in TPMS every tire replacement by reaching wear limit of tire. Refer to WT-49, "Exploded View".

PREPARATION

< PREPARATION >

PREPARATION

PREPARATION

Special Service Tool

R

Α

D

The actual shapes of Kent-Moore tools may differ from those of special service tools illustrated here.
--

Tool number (Kent-Moore No.) Tool name	Description	
– (J-45295) Transmitter activation tool	ID registration	V

Commercial Service Tool

INFOID:0000000006260267

Tool name		Description	
Power tool		Loosening bolts and nuts	
	PBIC0190E		

Н

K

L

M

Ν

0

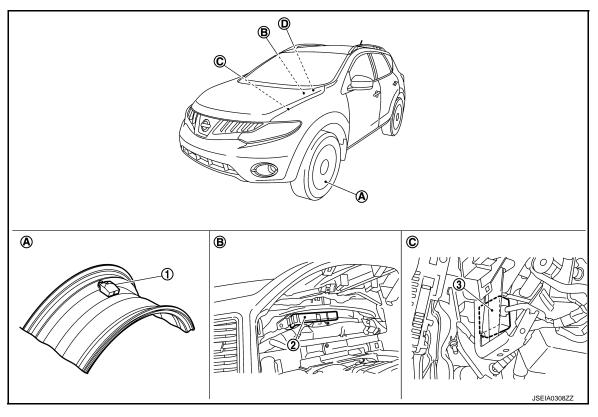
P

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000006260268



- 1. Transmitter
- ۸ \//hool
- D. Low tire pressure warning lamp, information display (in combination meter)
- 2. BCM
- B. Behind of combination meter
- 3. Tire pressure receiver
- C. Instrument lower panel LH

Component Description

INFOID:0000000006260269

Component parts	Function
BCM (Body Control Module)	<u>WT-6, "BCM"</u> .
Transmitter	WT-7, "Transmitter".
Tire pressure receiver	WT-7, "Tire Pressure Receiver".
Turn signal lamp	ID registration of each wheel has been completed, turn signal lamp flashes.
	Transmits the vehicle speed signal via CAN communication to BCM.
Combination meter	Receives the following signals via CAN communication to BCM. • Low tire pressure warning lamp signal • TPMS warning lamp signal
Low tire pressure warning lamp	WT-8, "System Description"
Information display	WT-7, "Information Display"

BCM INFOID:00000000006260270

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

COMPONENT PARTS

< SYSTEM DESCRIPTION >

Transmitter INFOID:000000006260271

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

Tire Pressure Receiver

INFOID:0000000006260272

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

Information Display

INFOID:0000000006598169

The vehicle information display is shown when a low tire pressure warning lamp signal is transmitted from BCM to combination meter via CAN communication.

Condition	Vehicle information display	
Ignition switch OFF Non-indication		
Low tire pressure	Indication	

WT

 D

Α

В

.

Г

Н

.

K

L

ΝЛ

Ν

0

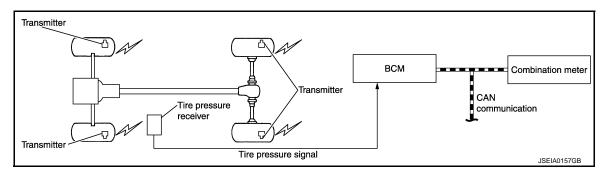
TPMS

System Description

INFOID:0000000006598474

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.

SYSTEM DIAGRAM



INPUT/OUTPUT SIGNAL

The signal transmission/reception between units via a communication line is mainly as listed in the following table.

Component parts	Signal item
ВСМ	Transmits the following signals via CAN communication to combination meter. • Low tire pressure warning lamp signal
Combination meter	Transmits the vehicle speed signal via CAN communication to BCM.

LOW TIRE PRESSURE WARNING LAMP INDICATION CONDITION

Uses CAN communication from the BCM to illuminate the low tire pressure warning lamp on the combination meter.

Condition	Low tire pressure warning lamp	
Ignition switch OFF	OFF	
Ignition switch ON (system normal)	Warning lamp turns on for 1second, then turns off.	
Low tire pressure	ON	
Transmitter ID not registered in BCM	- ON	
Tire pressure monitoring system malfunction (Other diagnostic item)	Warning lamp blinks 1 min, then turns on.	
Tire pressure sensor is in OFF state	Blink (Blinking pattern depends on the positions of non-operational tire pressure sensors.)	

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

INFOID:0000000006260278

Α

В

D

Н

L

Ν

APPLICATION ITEM

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

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

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

×: Applicable item

System	Sub system selection item	Diagnosis mode		
Gystern		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	BCM	×		
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.

Revision: 2011 November WT-9 2011 MURANO

< SYSTEM DESCRIPTION >

• *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	r 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 ACC>OFF	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)
		While turning power supply position from "ACC" to "OFF"	
	OFF>LOCK	Power position status of the moment a particular	While turning power supply position from "OFF" to "LOCK"
Vehicle Condition OFF>ACC ON>CRANK	OFF>ACC		While turning power supply position from "OFF" to "ACC"
	DTC is detected	While turning power supply position from "IGN" to "CRANKING"	
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)
	OFF		Power supply position is "OFF" (Ignition switch OFF with steering is unlocked.)
	ACC		Power supply position is "ACC" (Ignition switch ACC)
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)
	CRANKING		Power supply position is "CRANKING" (At engine cranking)
IGN Counter	0 - 39	 The number of times that ignition switch is turned ON after DTC is detected The number is 0 when a malfunction is detected now. The number increases like 1 → 2 → 338 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 	

AIR PRESSURE MONITOR

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

APPLICATION ITEMS

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

< SYSTEM DESCRIPTION >

Diagnosis mode	Function Description
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Work Support	Components can be quickly and accurately adjusted.

SELF DIAGNOSTIC RESULT

Refer to BCS-78, "DTC Index".

When "CRNT" is displayed on self-diagnosis result,

The system is presently malfunctioning.

When "PAST" is displayed on self-diagnosis result,

System malfunction in the past is detected, but the system is presently normal.

DATA MONITOR MODE

Screen of data monitor mode is displayed.

NOTE:

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

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

Monitor item (Unit)	Remark		
AIR PRESS FL (kPa//kg/cm ² /Psi)			
AIR PRESS FR (kPa//kg/cm²/Psi)	Tire pressure		
AIR PRESS RR (kPa//kg/cm ² /Psi)	The pressure	Tire pressure	
AIR PRESS RL (kPa//kg/cm²/Psi)			
ID REGST FL1 (Green/Red)			
ID REGST FR1 (Green/Red)	Desistantian ID		
ID REGST RR1 (Green/Red)	Registration ID		
ID REGST RL1 (Green/Red)			
WARNING LAMP (On/Off)	Low tire pressure warning lamp		
BUZZER (On/Off)	NOTE: This item is displayed, but cannot be use this item.		

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 different from that displayed on CONSULT-III.

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 low tire pressure warning lamp turns on.
FLASHER	This test is able to check to check that each turn signal lamp turns on.
HORN	This test is able to check to check that the horn sounds.

WORK SUPPORT MODE

Revision: 2011 November WT-11 2011 MURANO

WT

D

Α

В

Н

K

M

. . .

Ν

0

< SYSTEM DESCRIPTION >

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

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

ECU	Reference
	BCS-47, "Reference Value"
BCM	BCS-76, "Fail-safe"
BCIVI	BCS-78, "DTC Inspection Priority Chart"
	BCS-78, "DTC Index"

WT

D

Α

В

С

INFOID:0000000006260281

Н

J

Κ

L

M

Ν

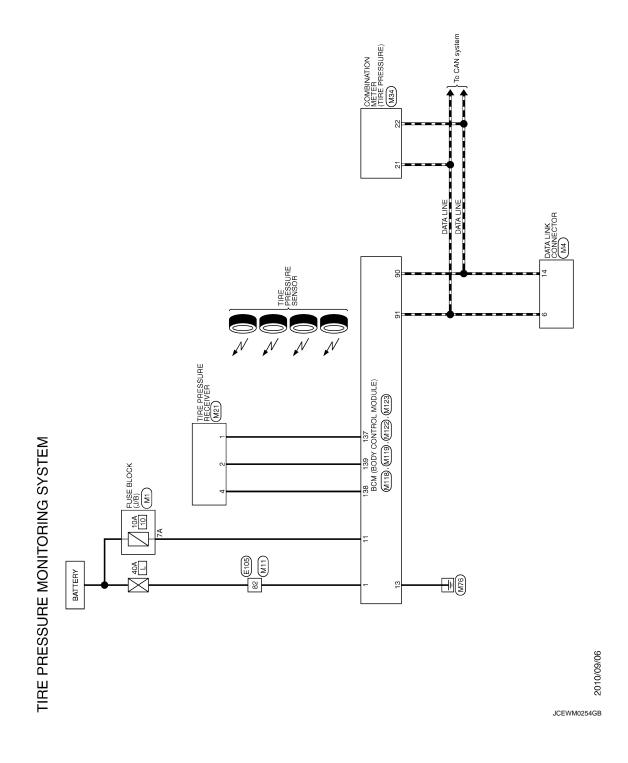
0

Ρ

WIRING DIAGRAM

TIRE PRESSURE MONITORING SYSTEM

Wiring Diagram



TIRE PRESSURE MONITORING SYSTEM

< WIRING DIAGRAM >

	65 SB	C C C C C C C C C C C C C C C C C C C	
	Color Of Wire Signal Name [Specification] of Wire Signal Name [Specification]	No. Mil Name Wife TO Wife Name Wife TO Wife Name Signal Name Specification Name Name	V
	Terminal Of	Connector No. Connector No. Connector Name Connector Name Connector Type Connec	
		OCK (J/B) MZ ATABASA 4A ATABASA 4A Signal Name [Specification]	
	– [With n – [With Pod wit – [Without iPod	MI NSOBEW-M2 3A 12 14 15 15	
	72 Y 73 L 74 W 75 BR BR 6R 75 GR 77 9 GR 77 9 GR 77 9 GR 77 9 GR 78 G 78 8 G 78 8 9 W 81 81 W 81 M M M 81 M M M 81 M M M M	tor No. ctor No. ctor No. ctor Type ctor Name ctor Type ctor Name ctor Type ctor Name ctor Type ctor Name ctor Type ctor Type	
SYSTEM			
TIRE PRESSURE MONITORING	0,400	Signul Name (Specification)	1
SSURE	WIRE TO WIRE THT/0MW-CSIO-M3		
TIRE PRE	Connector No. Connector Type	No. of Wires	
			JCEWM0255GB

TIRE PRESSURE MONITORING SYSTEM

TIRE P	RESS	TIRE PRESSURE MONITORING SYST	TEM								
Connector No.	lo. M34	34	Conn	Connector No.	M118	Connector No.	M122	Conne	Connector No.	M123	
Connector Name		COMBINATION METER	Conn	Connector Name	BCM (BODY CONTROL MODULE)	Connector Name	e BCM (BODY CONTROL MODULE)	Conne	Connector Name	BCM (BODY CONTROL MODULE)	
Connector Type	П	TH40FW-NH	Conn	Connector Type	M03FB-LC	Connector Type	TH40FB-NH	Conne	Connector Type	TH40FG-NH	
匮			售		[售		匮			
N N	2 3 4 5 22 23 24 25	5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 80 5 5 5 5 2 10 13 12 13 14 15 16 17 18 19 80 40	4	ν <u>ί</u>	- 1 - 3 - 1	\$ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	89 89 87 80 85 84 82 82 81 80 77 78 77 77 75 75 74 77 72 72 100 100 100 100 100 100 100 100 100 10		NO 1881 1881 1881 1881 1881 1881 1881 18		
Terminal	Color	3	Termina	ninal Color	3	Terminal Color		Terminal	nal		
_	of Wire	Signal Name [Specification]	Š.	<u> </u>	Signal Name [Specification]	No. of Wire	fire Signal Name [Specification]	No.	Ť	Signal Name [Specification]	
- 2	. 0	IGN	2	g	POWER WINDOW POWER SUPPLY (BAT)	╀		= =	╀	OPTICAL SENSOR	
e	В	GROUND	e.	-	POWER WINDOW POWER SUPPLY (RAP)	┞	PASSENGER DOOR ANT-	9=	Ľ	FUSE CHECK	
4	В	GROUND				75 LG	Ρ,	118	_	STOP LAMP SW	
5	SB	ILLUMINATION CONTROL				\dashv		119	>	DR DOOR UNLOCK SENSOR	
8	SB	TRIP RESET SWITCH	Conn	Connector No.	M119	\dashv	4	121	≻	KEY SLOT SW	
6	Α	SW ILL POWER	, door	Connector Name	BCM (BODY CONTROL MODILLE)	80 SB	ú	123	4	IGN F/B	
10	0	METER CONTROL SW GND	5	o la	Com (bob) control modern	\dashv	=	124	Н	PASSENGER DOOR SW	
11	٦	ENTER SWITCH	Conn	Connector Type	NS16FW-CS	82 BR	Ц	130	BR	REAR DEFOGGER SW	
12	ч	SELECT SWITCH	4			83 P	KEYLES	132	9	POWER WINDOW SW COMM	
13	V ILLUS	ILLUMINATION CONTROL SWITCH (+) [With automatic drive positioner]	F	-		Н		133	W	PUSH-BUTTON IGNITION SW ILL POWER	
13	У пли	ILLUMINATION CONTROL SWITCH (+) [Without automatic drive positioner]	7	Ĺ		88 GR	R COMBI SW INPUT 3	134	œ	LOCK IND	
14		ILLUMINATION CONTROL SWITCH (-)		=	4 5 6 7 0 8 9 10	90 P		137	а.	RECEIVER / SENSOR GND	
15	BR	AIR BAG		<u>. "</u>	11 12 13 17 15 16 17 18 10	91 L	CAN-H	138	>	RECEIVER / SENSOR POWER SUPPLY	
18	٦	AMBIENT SENSOR		_	0 4 10 0 0 11 10	92 R	KEY SLOT ILL	139	0	TIRE PRESS RECEIVER SIGNAL	
19	Ь	AMBIENT SENSOR POWER				93 P		140	GR	SHIFT N/P	
20	Υ	AMBIENT SENSOR GROUND				36	ACC RELAY CONT	141	0	SECURITY INDICATOR OUTPUT	
21	٦	CAN-H	Terminal	_	Simpl Name [Specification]	. √ 96	CVT SHIFT SELECTOR POWER SUPPLY	142	٦	COMBI SW OUTPUT 5	
22	Ь	CAN-L	No.	of Wire	4	^ 66	SHIFT P	143	Μ	COMBI SW OUTPUT 1	
23	В	GROUND	4	۵.	INTERIOR ROOM LAMP POWER SUPPLY	\dashv	Ь/	144	<u>а</u>	COMBI SW OUTPUT 2	
\dashv	Α	FUEL LEVEL SENSOR GROUND	9	ŋ	PASSENGER DOOR UNLOCK OUTPUT	101 W	\dashv	145	>	COMBI SW OUTPUT 3	
\dashv	BR	CHG	7	>	STEP LAMP OUTPUT	102 Y	BLOWER FAN MOTOR RELAY CONT	146	>	COMBI SW OUTPUT 4	
26	9	PARKING BRAKE SWITCH	8	>	ALL DOOR, FUEL LID LOCK OUTPUT	103	KEYLESS ENTRY RECEIVER POWER SUPPLY	150	\dashv	DRIVER DOOR SW	
27	>	BRAKE FLUID LEVEL SWITCH	6	4	DRIVER DOOR, FUEL LID UNLOCK OUTPUT	4		151	g	REAR WINDOW DEFOGGER RELAY	
29	ر م	WASHER LEVEL SWITCH	2 :	+	REAR DOOR UNLOCK OUTPUT	+					
30	۵	VEHICLE SPEED (2-PULSE)	=	7	BAT (FUSE)	4	S				
31	>	VEHICLE SPEED (8-PULSE)	23	+	GND	110 G	HAZARD SW	_			
32	rc S	OD OFF / SPORTS	4	0	PUSH-BUTTON IGNITION SW ILL GND						
34	┪	FUEL LEVEL SENSOR	5	+	ACC IND						
32	T	SEAT BELT BUCKLE SWITCH (DRIVER SIDE)	12	+	TURN SIGNAL RH						
36	R	SEAT BELT BUCKLE SWITCH (PASSENGER SIDE)	<u>∞</u> ;	+	TURN SIGNAL LH						
			61	٨ .	ROOM LAMP TIMER CONTROL						

JCEWM0256GB

DIAGNOSIS AND REPAIR WORK FLOW < BASIC INSPECTION > BASIC INSPECTION Α DIAGNOSIS AND REPAIR WORK FLOW Work Flow INFOID:0000000006260283 В **DETAILED FLOW** ${f 1}$.collect the information from the customer It is also important to clarify customer concerns before starting the inspection. Reproduce the symptom, and understand it fully. Interview the customer about the concerns carefully. In some cases, it is necessary to D check the symptoms by driving the vehicle with the customer. **CAUTION:** Customers are not professionals. Never assume "maybe the customer means..." or "maybe the customer mentioned this symptom. WT >> GO TO 2. 2.BASIC INSPECTION Turn the ignition switch ON. **CAUTION:** Never start the engine. 2. Check the tire pressure for all wheels and adjust to the specified value. Refer to WT-52, "Tire Air Pressure". Н Is the inspection result normal? YES >> GO TO 3. NO >> Inspect or repair the tires or wheels. 3.CHECK LOW TIRE PRESSURE WARNING LAMP Check low tire pressure warning lamp display. Does not low tire pressure warning lamp turn OFF? YES >> GO TO 4. NO >> INSPECTION END 4.CRUISE TEST K

Start the engine and drive the vehicle.

>> GO TO 5.

PERFORM SELF-DIAGNOSIS

(P)With CONSULT-III

Perform "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM".

Is any DTC detected?

YES >> GO TO 7.

NO >> GO TO 6.

6.CHECK SYMPTOM

Perform trouble diagnosis for the applicable symptom. Refer to WT-36, "Symptom Table".

Is the cause of the malfunction detected?

YES >> GO TO 8.

NO >> GO TO 10.

.CIRCUIT DIAGNOSIS

Inspect the malfunctioning system indicated by the DTC code that is detected during self-diagnosis. Refer to BCS-78, "DTC Index".

N

Р

>> GO TO 8.

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

8. REPAIR WORK

Repair or replace the malfunctioning part.

>> GO TO 9.

9. PERFORM SELF-DIAGNOSIS

- 1. Select "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM".
- 2. Touch "ERASE" on CONSULT-III screen to erase memory.
- 3. Drive the vehicle.
- 4. Perform "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM".

Is any DTC detected?

YES >> GO TO 7. NO >> GO TO 10.

10. FINAL CHECK

- 1. Perform a cruise test.
- 2. Check that the low tire pressure warning lamp turn OFF.

Dose the tire pressure warning lamp turn OFF?

YES >> INSPECTION END

NO >> GO TO 2.

ADDITIONAL SERVICE WHEN REPLACING BCM

ADDITIONAL SERVICE WHEN REPLACING BCM Description When replacing BCM, transmitter ID registration is required. Work Procedure 1.PERFORM TRANSMITTER ID REGISTRATION Perform transmitter ID registration.

>> Refer to WT-21, "Work Procedure".

WT

G

Н

ı

Κ

L

M

Ν

0

TRANSMITTER WAKE UP OPERATION

Description

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

Work Procedure

1. TRANSMITTER WAKE-UP PROCEDURE

1. Turn the ignition switch ON.

CAUTION:

Never start the engine.

NOTE:

The position of an inactive transmitter can be identified by checking the blinking timing of the low tire pressure warning lamp.

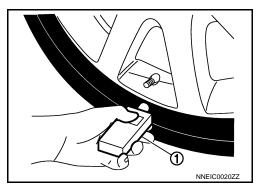
Low tire pressure warning lamp blinking	timing	Activation tire position
ON a b	a : 0.3 sec. b : 1.0 sec.	Front LH
ON a a b	a : 0.3 sec. b : 1.0 sec.	Front RH
ON a a a a b	a : 0.3 sec. b : 1.0 sec.	Rear RH
ON a a a a a b	a : 0.3 sec. b : 1.0 sec.	Rear LH
ON a b	a : 2 sec. b : 0.2 sec.	All tires

JPEIC0089GB

- 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.

- 4. Check that the turn signal lamps blink twice when the transmitter wake-up procedure for all wheels is completed.
- 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 WT-21, "Work Procedure".

NO >> Perform trouble diagnosis for the transmitter. Refer to WT-25, "Diagnosis Procedure".

ID REGISTRATION

Description INFOID:0000000006598668

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

Work Procedure INFOID:0000000006598669

1. TRANSMITTER ID REGISTRATION PROCEDURE

With CONSULT-III.

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

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

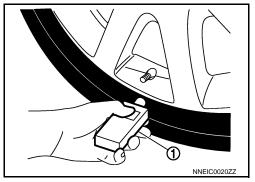
>> GO TO 2. YES

NO >> GO TO 3.

2.transmitter id registration procedure (with transmitter activation tool)

- Turn the ignition switch ON.
- Select the start button on the "ID REGIST" screen. 2.
- 3. Contact the transmitter activation tool (J-45295) (1) to the side of the tire at the location to the transmitter.
- 4. 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.



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	2 DIII IKS	"Green"	
4	Rear left wheel			

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.

>> Performs trouble-diagnosis of the Tire Pressure Monitoring System (TPMS). Refer to BCS-78. NO "DTC Index".

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

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

Tire position	Tire pressure kPa (kg/cm², 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)

WT-21 2011 MURANO

WT

D

Α

В

Н

M

Ν

Р

Revision: 2011 November

ID REGISTRATION

< BASIC INSPECTION >

- 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 <u>WT-52, "Tire Air Pressure"</u>. <u>Is ID registrations for all wheels completed?</u>

YES >> ID registration END.

NO >> Performs trouble-diagnosis of the Tire Pressure Monitoring System (TPMS). Refer to <u>BCS-78.</u> "<u>DTC Index</u>".

C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

Description INFOID:0000000006260288

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:0000000006260289

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible cause
C1704	LOW PRESSURE FL	Front LH tire pressure drops to * kPa (* kg/cm², * psi) or less. [NOTE]	
C1705	LOW PRESSURE FR	Front RH tire pressure drops to * kPa (* kg/cm², * psi) or less. [NOTE]	Low tire pressureTransmitter mal-
C1706	LOW PRESSURE RR	Rear RH tire pressure drops to * kPa (* kg/cm², * psi) or less. [NOTE]	
C1707	LOW PRESSURE RL	Rear LH tire pressure drops to * kPa (* kg/cm², * 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

(P)With CONSULT-III

Turn the ignition switch ON.

CAUTION:

Never start the engine.

- 2. Check the tire pressure for all wheels and adjust to the specified value. Refer to WT-52, "Tire Air Pressure".
- Perform "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM".

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

>> Perform trouble diagnosis. Refer to WT-23, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK TIRE PRESSURE

Check the internal pressure of all wheels. Refer to WT-52, "Tire Air Pressure".

Is the inspection result normal?

YES >> Replace the DTC-detected malfunctioning transmitter. Refer to WT-49, "Exploded View".

NO >> After adjusting the air pressure, GO TO 2.

2.CHECK TIRE PRESSURE SIGNAL

(P)With CONSULT-III

- Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- Perform "DATA MONITOR" in "AIR PRESSURE MONITOR" of "BCM".
- Select "BCM" in "DATA MONITOR", and check that the tire pressures match the standard value.

Monitor item	Condition	Displayed value
AIR PRESS FL		
AIR PRESS FR	Drive for 3 minutes at a speed of 40 km/h (25 MPH) or	Internal pressure of tires
AIR PRESS RR	more, then drive normally for 10 minutes.	internal pressure of tires
AIR PRESS RL		

WT-23 Revision: 2011 November **2011 MURANO**

WT

D

Α

В

Н

K

INFOID:0000000006260290

N

C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

< DTC/CIRCUIT DIAGNOSIS >

CAUTION:

Stop the vehicle and within 5 minutes, use "DATA MONITOR" in "AIR PRESSURE MONITOR" of "BCM" to display the tire pressure for all wheels.

Is the inspection result normal?

YES >> Inspect or repair the tires or wheels and adjust the tire pressure to the specification.

NO >> GO TO 1.

C1708, C1709, C1710, C1711 TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

C1708, C1709, C1710, C1711 TRANSMITTER

DTC Logic INFOID:0000000006260292

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible cause		
C1708	[NO DATA] FL	Tire pressure data signal from the front left wheel transmitter cannot be detected.	Harness or connector (Tire pressure receiver, BCM) ID registration is not finished Transmitter malfunction BCM malfunction		
C1709	[NO DATA] FR	Tire pressure data signal from the front right wheel transmitter cannot be detected.		(Tire pressure receiver, BCM)	
C1710	[NO DATA] RR	Tire pressure data signal from the rear right wheel transmitter cannot be detected.			
C1711	[NO DATA] RL	Tire pressure data signal from the rear left wheel transmitter cannot be detected.		V	

DTC CONFIRMATION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT-III

- Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- Perform "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM".

Is DTC "C1708", "C1709", "C1710", "C1711" detected?

>> Perform trouble diagnosis. Refer to WT-25, "Diagnosis Procedure". YES

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK TIRE PRESSURE SIGNAL

With CONSULT-III

- Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- Perform "DATA MONITOR" in "AIR PRESSURE MONITOR" of "BCM".
- Select "BCM" in "DATA MONITOR", and check that the tire pressures match the standard value.

Monitor item	Condition	Displayed value	
AIR PRESS FL			
AIR PRESS FR	Drive for 3 minutes at a speed of 40 km/h (25 MPH) or	Internal pressure of tires	
AIR PRESS RR	more, then drive normally for 10 minutes.	internal pressure of thes	
AIR PRESS RL			

CAUTION:

Stop the vehicle and within 5 minutes, use "DATA MONITOR" in "AIR PRESSURE MONITOR" of "BCM" to display the tire pressure for all wheels.

Is a tire pressure of 0 kPa (0 Psi) displayed for all wheels?

YES >> GO TO 2. NO >> GO TO 5.

2.CHECK HARNESS BETWEEN BCM AND TIRE PRESSURE RECEIVER

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

Н

INFOID:0000000006260293

D

Α

В

M

Ν

Р

K

WT-25

C1708, C1709, C1710, C1711 TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

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

4. Check the continuity between BCM harness connector and ground.

BO	CM		Continuity	
Connector	Terminal	_	Continuity	
	137	Ground Not existe		
M123	138		Not existed	
	139			

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace damaged parts.

3.check tire pressure receiver power supply circuit

- Connect the BCM harness connector.
- 2. Turn the ignition switch ON.

CAUTION:

Never start the engine.

3. Check the voltage between the BCM harness connector and ground.

В	CM	_	Voltage
Connector	Terminal	_	(Approx.)
M123	138	Ground	5 V

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-32, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace tire pressure receiver. Refer to WT-51, "Removal and Installation".

5. CHECK ID REGISTRATION

Perform ID registration of all transmitters. Refer to WT-21, "Work Procedure".

Can ID registration of all transmitters be completed?

YES >> GO TO 6.

NO >> Replace transmitter. Refer to WT-49, "Exploded View".

$oldsymbol{6}.$ CHECK TIRE PRESSURE MONITORING SYSTEM

(P)With CONSULT-III

- 1. Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping.
- 2. Perform "DATA MONITOR" in "AIR PRESSURE MONITOR" of "BCM".
- 3. Select "BCM" in "DATA MONITOR", and check that the tire pressures match the standard value.

C1708, C1709, C1710, C1711 TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

Monitor item	Condition	Displayed value	
AIR PRESS FL			
AIR PRESS FR	Drive at a speed of 40 km/h (25 MPH) or more, for several	Internal pressure of tires	
AIR PRESS RR	minutes without stopping.	internal pressure of thes	
AIR PRESS RL			

CAUTION:

Stop the vehicle and within 15 minutes, use "DATA MONITOR" in "AIR PRESSURE MONITOR" of "BCM" to read the tire pressure for all wheels.

Is the inspection result normal?

YES >> Replace the DTC-detected malfunctioning transmitter. Refer to <u>WT-49</u>, "Exploded View".

NO >> Replace BCM. Refer to BCS-85, "Exploded View".

 WT

D

Α

В

Н

Κ

L

M

Ν

0

C1716, C1717, C1718, C1719 TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

C1716, C1717, C1718, C1719 TRANSMITTER

DTC Logic

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. DTC REPRODUCTION PROCEDURE

(P)With CONSULT-III

1. Turn the ignition switch ON.

CAUTION:

Never start the engine.

- Check the tire pressure for all wheels and adjust to the specified value. Refer to <u>WT-52, "Tire Air Pressure"</u>.
- 3. Perform "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM".

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

YES >> Perform trouble diagnosis. Refer to WT-28, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000006260296

1. CHECK TIRE PRESSURE

Check the internal pressure of all wheels. Refer to WT-52, "Tire Air Pressure".

Is the inspection result normal?

YES >> Replace the DTC-detected malfunctioning transmitter. Refer to WT-49, "Exploded View".

NO >> After adjusting the tire pressure, GO TO 2.

2.CHECK TIRE PRESSURE SIGNAL

(P)With CONSULT-III

- 1. Check and adjust the tire pressure for all wheels. Refer to WT-52, "Tire Air Pressure".
- 2. Perform transmitter ID registration for all wheels. Refer to WT-21, "Work Procedure".
- 3. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- 4. Perform "DATA MONITOR" in "AIR PRESSURE MONITOR" of "BCM".
- 5. Select "BCM" in "DATA MONITOR", and check that the tire pressures match the standard value. CAUTION:

Stop the vehicle and within 15 minutes, use CONSULT-III "DATA MONITOR" to display the tire pressure for all wheels.

6. Check that "DATA MONITOR" displays tire pressure of 438.60 kPa (4.47 kg/cm², 63.60 Psi).

Is the inspection 438.60 kPa (4.47 kg/cm², 63.60 Psi)?

YES >> Replace transmitter the tire pressure 438.60 kPa (4.386 bar, 4.47 kg/cm², 63.60 Psi) displayed. Refer to WT-49, "Exploded View".

NO >> GO TO 1.

	CCUIT DIAGNOSIS > VEHICLE SPEE	1729 VEHICLE SPEED SIGNAL		
Descripti		DSIGNAL		Α
•		l	INFOID:000000006260298	
DTC Log	ts no vehicle speed sig	nai.	INFOID:000000006260299	В
_	ECTION LOGIC		NF-0 L:000000000200299	С
DTC number	Trouble diagnosis name	DTC detecting condition	Possible case	D
C1729	VHCL SPEED SIG ERR	Vehicle speed signal not detected.	CAN communication error Combination meter malfunction	
4	FIRMATION PROCE			WT
2. Perforr Is DTC "C1 YES >>	or several minutes at a m "SELF-DIAG RESUL' <u>729" detected?</u>	speed of 40 km/h (25 MPH) or more, then storms in "AIR PRESSURE MONITOR" of "BCM" osis. Refer to WT-29, "Diagnosis Procedure".		F G
Diagnosi	s Procedure		INFOID:000000006260300	Н
1.PERFO	RM COMBINATION ME	ETER SELF-DIAGNOSIS		ı
With CO Perform "S	NSULT-III ELF-DIAG RESULTS" (of "METER/M&A".		
<u>ls any DTC</u> YES >>	detected?	r to <u>MWI-77, "DTC Index"</u> .		J
_	RM SELF-DIAGNOSIS			K
Is DTC "C1 YES >>	ELF-DIAG RESULTS" i 729" detected? > Replace BCM. Refer ITEM)".	in "AIR PRESSURE MONITOR" of "BCM". to <u>WT-9, "COMMON ITEM : CONSULT-III</u>	Function (BCM - COMMON	L
_	OF TO 3. INFORMATION			M

Select "BCM" in "DATA MONITOR", and check the input/output values. Refer to BCS-47, "Reference

>> Check pin terminal and connection of each harness connector for malfunctioning conditions.

Ν

0

Ρ

1. Perform "DATA MONITOR" in "AIR PRESSURE MONITOR" of "BCM".

>> Replace BCM. Refer to BCS-85, "Exploded View".

(II) With CONSULT-III

Is the inspection result normal?

Value".

YES

NO

C1734 BCM

DTC Logic INFOID:0000000006260302

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible case
C1734	CONTROL UNIT	Tire pressure monitoring system malfunction in BCM	BCM malfunction

DTC CONFIRMATION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT-III

- Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping.
- Perform "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM".

CAUTION:

Perform within 15 minutes after stop the vehicle.

Is DTC "C1734" detected?

>> Perform trouble diagnosis. Refer to WT-30, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000006260303

${f 1}$.CHECK BCM POWER SUPPLY

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

В	CM		Voltage
Connector	Terminal	_	(Approx.)
M118	1	Ground	Battery voltage
M119	11	Giouna	Dattery Voltage

Is the power supply normal?

YES >> GO TO 2.

NO

>> Check the following. If any items are damaged, repair or replace damage parts.

- 40A fusible link [No. L located in the fuse block]. Refer to PG-113, "Fuse and Fusible Link Arrangement".
- 10A fuse [No. 10 located in the fuse block (J/B)]. Refer to PG-112, "Fuse, Connector and Terminal Arrangement".
- 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 the Battery voltage.

2.CHECK BCM GROUND

Check the continuity between BCM harness connector and ground.

ВСМ			Continuity
Connector	Terminal	_	Continuity
M119	13	Ground	Existed

Is the inspection result normal?

YES >> GO TO 3.

>> Repair or replace damaged parts. NO

3.CHECK HARNESS BETWEEN BCM AND TIRE PRESSURE RECEIVER

- Disconnect tire pressure receiver harness connector.
- Check the continuity between BCM harness connector and tire pressure receiver harness connector.

C1734 BCM

< DTC/CIRCUIT DIAGNOSIS >

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

3. Check the 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 4.

NO >> Repair or replace damaged parts.

4.CHECK BCM

Check the BCM input/output signal. Refer to BCS-47, "Reference Value".

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 5.

5. CHECK BCM HARNESS CONNECTOR

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

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-85, "Exploded View".

NO >> Check for looseness or damage at the harness connector pins of the BCM. Repair or replace if necessary.

Α

В

D

WT

Н

K

M

Ν

 \cup

TIRE PRESSURE RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

TIRE PRESSURE RECEIVER

Component Function Check

1. TIRE PRESSURE MONITORING SYSTEM OPERATION

(P)With CONSULT-III

- 1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- 2. On "DATA MONITOR", select "AIR PRESS FL", "AIR PRESS FR", "AIR PRESS RR" and "AIR PRESS RL", and check that the tire pressures match the standard value.

Monitor item	Condition	Displayed value
AIR PRESS FL		
AIR PRESS FR	Drive for 3 minutes at a speed of 40 km/h (25 MPH) or	Internal pressure of tires
AIR PRESS RR	more, then drive normally for 10 minutes.	internal pressure of thes
AIR PRESS RL		

CAUTION:

Stop the vehicle and within 5 minutes, use CONSULT-III "DATA MONITOR" to display the tire pressure for all wheels.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Perform trouble diagnosis. Refer to WT-32, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000006260306

INFOID:0000000006260305

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 pressu	Tire pressure receiver		Condition	Voltage	
Connector	Terminal	_	Condition	(Approx.)	
M21	2	Ground	Stand by state	(V) 6 4 2 0 *** 0.2s	
21		Glodina	When receiving the signal from the transmitter	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2. CHECK TIRE PRESSURE RECEIVER INPUT VOLTAGE

- 1. Turn the ignition switch OFF.
- 2. Disconnect tire pressure receiver connector.
- 3. Turn the ignition switch ON.

TIRE PRESSURE RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

CAUTION:

Never start the engine.

4. Check voltage between tire pressure receiver connector and ground.

Tire pressure receiver		_	Voltage
Connector	Terminal	_	(Approx.)
M21	4	Ground	5.0 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace damaged parts.

${f 3.}$ CHECK TIRE PRESSURE RECEIVER GROUND CIRCUIT

1. Turn the ignition switch OFF.

2. Disconnect BCM harness connector.

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

В	CM	Tire pressure receiver		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M123	137	M21	1	Existed

4. Check continuity between BCM harness connector and ground.

BCM		_	Continuity	
Connector Terminal			Continuity	
M123	137	Ground	Not existed	

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace damaged parts.

4. CHECK BCM CIRCUIT

Inspect the BCM circuit. Refer to WT-30, "Diagnosis Procedure".

Is the BCM circuit normal?

YES >> Replace tire pressure receiver. Refer to WT-51, "Removal and Installation".

NO >> Replace BCM. Refer to <u>BCS-85</u>, "Exploded View".

WT

D

Α

В

G

Н

J

k

L

N

0

LOW TIRE PRESSURE WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP

Component Function Check

INFOID:0000000006260309

${f 1.}$ CHECK THE ILLUMINATION OF THE LOW TIRE PRESSURE WARNING LAMP

Check that the low tire pressure warning lamp is turned OFF after illuminating for approximately 1 second, when the ignition switch is turned ON.

Is the inspection result normal?

YES >> INSPECTION END

NO >> Perform trouble diagnosis. Refer to <u>WT-34, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000006260310

1. POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit. Refer to WT-35, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace damaged parts.

2. PERFORM SELF-DIAGNOSIS

(P)With CONSULT-III

Perform "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM".

Is any DTC detected?

YES >> Check the DTC. Refer to MWI-77, "DTC Index".

NO >> GO TO 3.

3.check low tire pressure warning lamp signal

(P)With CONSULT-III

Turn the ignition switch ON.

CAUTION:

Never start the engine.

- 2. Perform "DATA MONITOR" in "AIR PRESSURE MONITOR" of "BCM".
- 3. Select "BCM" in "DATA MONITOR", and check that the low tire pressure warning lamp is turned OFF after illuminating for approximately 1 second, when the ignition switch is turned ON.

Is the inspection result normal?

YES >> Check the combination meter. Refer to MWI-6, "METER SYSTEM: System Description".

NO >> Replace the BCM. Refer to BCS-85, "Exploded View".

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000006260311

1. POWER SUPPLY SYSTEM CHECK

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

CAUTION:

Never start the engine.

4. Check the voltage between the BCM harness connector and the ground.

всм			Voltago
Connector	Terminal	_	Voltage
M118	1	Ground	Battery voltage
M119	11	Giodila	Ballery Vollage

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace damaged parts.

2. GROUND SYSTEM INSPECTION

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

ВСМ		_	Continuity
Connector Terminal		_	Continuity
M119	13	Ground	Existed

Is the inspection result normal?

YES >> • Check the 10A fuse [No. 10 in fuse block (J/B)].

• Check the 40A fusible link [No. L in fuse block].

NO >> Repair or replace damaged parts.

WT

Α

В

C

D

F

G

Н

K

L

M

Ν

0

TPMS

SYMPTOM DIAGNOSIS

TPMS

Symptom Table

LOW TIRE PRESSURE WARNING LAMP SYMPTOM CHART

Diagnosis items	Symptom (Ignition switch ON)	Low tire pressure warning lamp	Cause	Action
	The low tire pressure warning lamp illuminates for 1 second, then turns OFF.	ON 1 sec > stays OFF SEIA0592E	Wake-up operation for all transmitters at wheels is completed.	No system malfunctions
	The low tire pressure warning lamp repeats blinking ON for 2 seconds and OFF for 0.2 seconds.	Blinks: ON 2 sec > OFF 0.2 sec SEIA0593E	Wake-up operation for all transmitters at wheels is not completed.	Perform the wake-up operation for all transmitters at wheels. Refer to <u>WT-20</u> , <u>"Work Procedure"</u> .
	The low tire pressure warning lamp blinks once.	Blinks 1 time ON 0.3 sec > OFF 1.0 sec JPEIC0090GB	The front left transmitter is not activated.	Perform the wake-up operation for the transmitter at front left wheel. Refer to WT-20, "Work Procedure".
Low tire pres- sure warning amp	The low tire pressure warning lamp repeats blinking twice.	Blinks 2 times ON 0.3 sec > OFF 0.3 sec SEIA0595E	The front right transmitter is not activated.	Perform the wake-up operation for the transmitter at front right wheel. Refer to WT-20, "Work Procedure".
	The low tire pressure warning lamp repeats blinking for 3 times.	Blinks 3 times ON 0.3 sec > OFF 0.3 sec SEIA0596E	The rear right transmitter is not activated.	Perform the wake-up operation for the transmitter at rear right wheel. Refer to WT-20, "Work Procedure".
	The low tire pressure warning lamp repeats blinking for 4 times.	Blinks 4 times ON 0.3 sec > OFF 0.3 sec SEIA0597E	The rear left transmitter is not activated.	Perform the wake-up operation for the transmitter at rear left wheel. Refer to WT-20, "Work Procedure".
	The low tire pressure warning lamp turns ON and stays illuminated.	Comes ON and stays ON	Low tire pressure	Check the tire pressure for all wheels and adjust to the specified value. Refer to WT-52, "Tire Air Pressure".

Diagnosis items	Symptom (Ignition switch ON)	Low tire pressure warning lamp	Cause	Action		
			The combination meter fuse is open or removed (or pulled out).	Check and install the combination meter fuse. If necessary, replace the fuse.		
	The low tire pressure warning lamp repeats blinking at 0.5-second intervals for 1 minute, and then stays illuminated.		The BCM harness connector is removed.	Check the connection conditions of the BCM harness connector, and repair if necessary.		
Low tire pressure warning lamp		Blinks 1 min ON 0.5 sec > OFF 0.5 sec and stays ON SEIA0788E	Tire Pressure Monitoring System (TPMS) malfunction.	Perform CONSULT-III self-diagnosis. Refer to WT-10, "AIR PRES-SURE MONITOR: CONSULT-III Function (BCM-AIR PRESSURE MONITOR)". If necessary, perform transmitter ID registration. Refer to WT-21, "Work Procedure".		
Hazard warn- ing lamp	The hazard warning lamp does not blink twice when the transmitter is activated.		 The transmitter activation tool (J-45295) does not activate. The ignition switch is OFF when the transmitter wakeup operation is performed. The transmitter activation tool (J-45295) is not used in the correct position. The transmitter is already waked up. 	 Replace the battery in the transmitter activation tool (J-45295). Turn the ignition switch ON when performing the transmitter wake-up operation. Operate the transmitter activation tool (J-45295) in the correct position when performing the wake-up operation. No procedure. 		

NOTE:

If transmitter wake-up operation is not completed for two or more transmitters, the applicable low tire pressure warning lamp blinking patterns are displayed continuously.

(Example: Blinks once/OFF/blinks 3 times = Wake-up operation is not completed at the front left wheel and rear right wheel transmitters.)

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN ON

Description

The low tire pressure warning lamp does not illuminate when the ignition switch is turned ON. **NOTE:**

The low tire pressure warning lamp illuminates for approximately 1 second and then turns OFF when the ignition 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

INFOID:0000000006598691

1. CHECK LOW TIRE PRESSURE WARNING LAMP

Perform trouble diagnosis of the low tire pressure warning lamp. Refer to <u>WT-34, "Diagnosis Procedure"</u>. <u>Is the inspection result normal?</u>

YES >> Check pin terminal and connection of each connector for damage and loose connection.

NO >> Repair or replace damaged parts.

WT

D

Α

В

F

G

Н

Κ

L

M

Ν

0

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF

Description

The low tire pressure warning lamp does not turn OFF after several seconds is passed after engine starts.

Diagnosis Procedure

INFOID:0000000006598693

1. CHECK TIRE PRESSURE

1. Turn the ignition switch ON.

CAUTION:

Never start the engine.

2. Check the tire pressure for all wheels and adjust to the specified value. Refer to WT-52, "Tire Air Pressure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Inspect or repair the tires or wheels.

2. CHECK LOW TIRE PRESSURE WARNING LAMP

Check low tire pressure warning lamp display.

Does not low tire pressure warning lamp turn OFF?

YES >> GO TO 3.

NO >> INSPECTION END

3.CHECK BCM

(P)With CONSULT-III

Perform "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM".

Is any DTC detected?

YES >> Check the DTC. Refer to BCS-78, "DTC Index".

NO >> GO TO 4.

f 4.CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Perform the trouble diagnosis for power supply and ground circuit. Refer to <u>WT-35, "Diagnosis Procedure"</u>. <u>Is the inspection result normal?</u>

YES >> Replace BCM. Refer to BCS-85, "Exploded View".

NO >> Repair or replace error-detected parts.

LOW TIRE PRESSURE WARNING LAMP BLINKS

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP BLINKS

Description INFOID:0000000006598694

The low tire pressure warning lamp blinks when the ignition switch is turned ON.

NOTE:

The position of an inactive transmitter can be identified by checking the blinking timing of the low tire pressure warning lamp.

Low tire pressure warning lamp blinking	ng timing	Activation tire position
ON a b	a : 0.3 sec. b : 1.0 sec.	Front LH
OFF a a b	a: 0.3 sec. b: 1.0 sec.	Front RH
ON a a a a b	a : 0.3 sec. b : 1.0 sec.	Rear RH
ON a a a a a b	a: 0.3 sec. b: 1.0 sec.	Rear LH
ON a b	a : 2 sec. b : 0.2 sec.	All tires

JPEIC0089GB

Diagnosis Procedure

1.TRANSMITTER WAKE-UP OPERATION

Perform the transmitter wake-up. Refer to WT-20, "Work Procedure".

Is the transmitter wake-up completed?

YES >> GO TO 2.

NO >> Perform trouble diagnosis for the transmitter. Refer to WT-25, "Diagnosis Procedure".

2. TRANSMITTER ID REGISTRATION

Perform transmitter ID registration. Refer to WT-21, "Work Procedure".

Is transmitter ID registration completed?

YES >> INSPECTION END

NO >> Perform the self-diagnosis for "AIR PRESSURE MONITOR". Refer to BCS-78, "DTC Index".

INFOID:0000000006598695

Α

В

C

D

WT

K

M

Ν

Р

WT-41 Revision: 2011 November **2011 MURANO**

ID REGISTRATION CANNOT BE COMPLETED

< SYMPTOM DIAGNOSIS >

ID REGISTRATION CANNOT BE COMPLETED

Description

The ID of the transmitter installed in each wheel cannot be registered in the tire pressure monitoring system. Inspect the transmitter or the tire pressure monitoring system circuit.

Diagnosis Procedure

INFOID:0000000006598697

1. TRANSMITTER WAKE-UP

Perform the transmitter wake-up. Refer to WT-20, "Work Procedure".

Is the transmitter wake-up completed?

YES >> GO TO 3.

NO >> GO TO 2.

2. CHECK ACTIVATION TOOL

Check activation tool.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace battery for activation tool, or repair or replace activation tool.

3.transmitter id registration

Perform transmitter ID registration. Refer to WT-21, "Work Procedure".

Is transmitter ID registration completed?

YES >> GO TO 4.

NO >> Change the work location and perform ID registration again.

4. CHECK TIRE PRESSURE SIGNAL

(P)With CONSULT-III

- 1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- Stop the vehicle.
- Select "DATA MONITOR" for "AIR PRESSURE MONITOR" with CONSULT-III.
- Within 5 minutes after vehicle stopped, check that the tire pressures match the standard value.

Monitor item	Displayed value
AIR PRESS FL	Approximately equal to the indication on tire gauge value for front LH tire
AIR PRESS FR	Approximately equal to the indication on tire gauge value for front RH tire
AIR PRESS RR	Approximately equal to the indication on tire gauge value for rear RH tire
AIR PRESS RL	Approximately equal to the indication on tire gauge value for rear LH tire

Is the inspection result normal?

YES >> INSPECTION END

NO >> Change the work location, then GO TO 3.

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

< SYMPTOM DIAGNOSIS >

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NVH Troubleshooting Chart

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

Use chart bei	ow to find tr	ne cause of the sympton	om. It	nece	ssary,	repai	r or re	epiace	tnese	e parts	3.												
Reference	page		FSU-9, FSU-11.	WT-47, "Inspection"	WT-44, "Adjustment"	WT-52, "Tire Air Pressure"	WT-44, "Adjustment"	ı	ı	WT-52, "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.				
Possible ca	ause and Sl	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				
		Noise	×	×	×	×	×	×	×		×	×	×	×		×	×	×	×	•			
		Shake	×	×	×	×	×	×		×	×		×	×		×	×	×	×				
		Vibration				×				×	×		×	×			×		×	_			
	TIRES	TIRES	TIRES	TIRES	Shimmy	×	×	×	×	×	×	×	×			×	×		×		×	×	_
		Judder	×	×	×	×	×	×		×			×	×		×		×	×	-			
Symptom		Poor quality ride or handling	×	×	×	×	×	×		×			×		×	×							
		Noise	×	×	×			×			×	×	×	×	×		×	×	×				
	ROAD	Shake	×	×	×			×			×		×	×	×		×	×	×	_			
	WHEEL	Shimmy, Judder	×	×	×			×					×	×	×			×	×	_			
		Poor quality ride or handling	×	×	×			×					×	×	×								

×: Applicable

WT-43 Revision: 2011 November **2011 MURANO**

Α

В

C

D

Н

K

L

M

Ν

INFOID:0000000006260324

0

PERIODIC MAINTENANCE

ROAD WHEEL

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:**

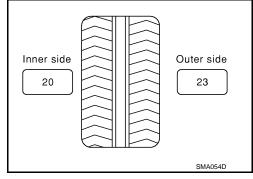
23 g (0.81 oz) \times 5/3 = 38.33 g (1.35 oz) \Rightarrow 37.5 g (1.32 oz) balance weight (closer to calculated balance weight value)

NOTE:

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

Example:

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



b. Installed balance weight in the position.

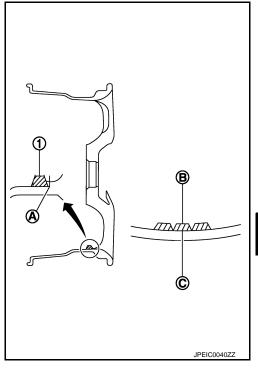
ROAD WHEEL

< PERIODIC MAINTENANCE >

 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.



Α

В

D

WT

Н

N

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.



Dynamic (At flange): Refer to WT-52, "Road Wheel".

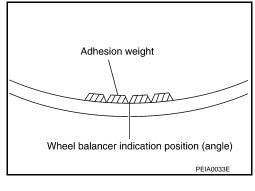
Static (At flange): Refer to WT-52, "Road Wheel".

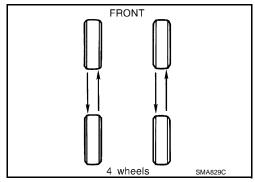
TIRE ROTATION

- Follow the maintenance schedule for tire rotation service intervals.
 Refer to MA-5, "FOR NORTH AMERICA: Explanation of General Maintenance" (For North America), MA-7, "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 WT-47, "Exploded View".

ROAD WHEEL

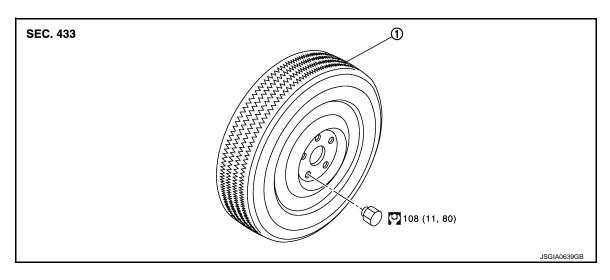
_	PFR	IODIC	MAIN	IENA	N(:⊢ >

• Perform the ID registration, after tire rotation. Refer to WT-21, "Work Procedure".

REMOVAL AND INSTALLATION

ROAD WHEEL TIRE ASSEMBLY

Exploded View



1. Tire assembly

Refer to GI-4. "Components" for symbols in the figure.

Removal and Installation

REMOVAL

- 1. Remove wheel nuts.
- Remove tire assembly.

INSTALLATION

Note the following, install in the reverse order of removal.

When replacing or rotating wheels, perform the ID registration. Refer to WT-21, "Work Procedure".

Inspection INFOID:0000000006260328

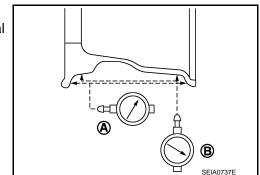
ALUMINUM WHEEL

- 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.
- Remove tire from aluminum wheel and mount on a tire balance machine.
- 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 WT-52, "Road Wheel".

B: Refer to WT-52, "Road Wheel".



Α

В

D

WT

K

M

Ν

Р

INFOID:0000000006260327

STEEL WHEEL

1. Check tires for were and improper inflation.

Revision: 2011 November WT-47 2011 MURANO

ROAD WHEEL TIRE ASSEMBLY

< REMOVAL AND INSTALLATION >

- Check wheels for deformation, clacks and other damage. If deformed, remove wheel and check wheel runout.
- a. Remove tire from steel wheel and mount wheel on a tire balance machine.
- b. Set two dial indicators as shown in the illustration.
- c. Set each dial indicator to "0".
- d. Rotate wheel and check dial indicators at several points around the circumference of the wheel.
- e. Calculate runout at each point as shown below.

Lateral runout limit (A): (1+2)/2
Radial runout limit (B): (3+4)/2

f. Select maximum positive runout value and the maximum negative value. Add the two values to determine total runout. CAUTION:

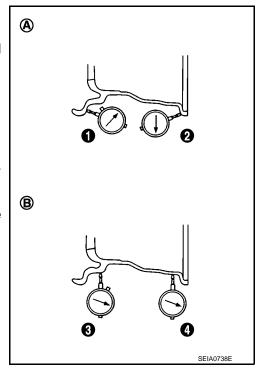
In case a positive or negative value is not available, use the maximum value (negative or positive) for total runout.

Limit

A: Refer to <u>WT-52, "Road Wheel"</u>.

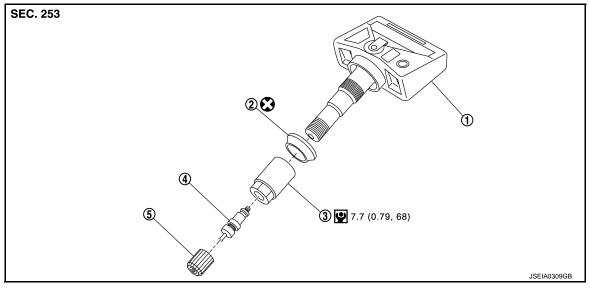
B: Refer to <u>WT-52, "Road Wheel"</u>.

g. If the total runout value exceeds limit, replace steel wheel.



TRANSMITTER

Exploded View



Valve core

1. Transmitter

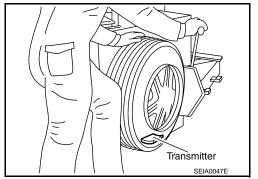
Grommet seal

Refer to GI-4, "Components" for symbols in figure.

Removal and Installation

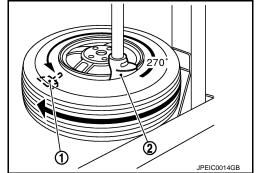
REMOVAL 1. Deflate tire. Unscrew transmitter retaining nut and allow transmitter to fall into tire.

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. Valve nut

- 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

В

Α

INFOID:0000000006260329

D

WT

Н

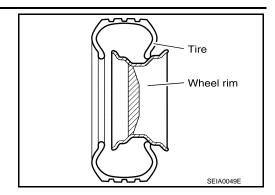
INFOID:0000000006260330

Ν

TRANSMITTER

< REMOVAL AND INSTALLATION >

Put first side of tire onto rim.



2. Mount transmitter on rim and tighten nut.

CAUTION:

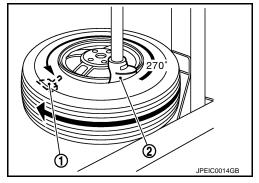
Speed for tightening nut should be less than 10 rpm.

Place wheel on turntable of tire machine. Ensure that transmitter
 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.
- 6. Perform the transmitter wake-up after replacing transmitter. Refer to <u>WT-20</u>, "<u>Work Procedure</u>".



TIRE PRESSURE RECEIVER

< REMOVAL AND INSTALLATION >

TIRE PRESSURE RECEIVER

Removal and Installation

INFOID:0000000006260331

REMOVAL

- 1. Remove the instrument lower panel LH. Refer to IP-12, "Exploded View".
- 2. Disconnect tire pressure receiver harness connector.
- 3. Remove tire pressure receiver.

INSTALLATION

Install is the reverse order of removal.

WT

D

Α

В

Н

1

J

Κ

L

M

Ν

0

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Road Wheel

ALUMINUM WHEEL (CONVENTIONAL)

Item		Limit		
Radial runout	Lateral deflection	Less than 0.3 mm (0.012 in)		
Nadiai fullout	Vertical deflection	Less than 0.3 mm (0.012 m)		
Allowable unbalance	Dynamic (At flange)	Less than 5 g (0.17 oz) (one side)		
Allowable unbalance	Static (At flange)	Less than 10 g (0.35 oz)		

STEEL WHEEL (FOR EMERGENCY USE)

Item		Limit			
Radial runout	Lateral deflection	Less than 1.5 mm (0.059 in)			
Radia ranout	Vertical deflection	Less than 1.5 min (0.005 m)			

Tire Air Pressure

INFOID:0000000006260333

Unit: kPa (kg/cm², psi)

Item	Standard						
item	Front	Rear					
P235/65R18 104T	230 (2.3, 33)						
P235/55R20 102T	230 (2.3, 33)						
T165/90D18 107M	420 (4	4.2, 60)					