SECTION SECTION ROAD WHEELS & TIRES

WT

D

CONTENTS

PRECAUTION3	TIRE PRESSURE MONITORING SYSTEM18
PRECAUTIONS 3	Wiring Diagram18
Precaution for Supplemental Restraint System	BASIC INSPECTION27
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	DIAGNOSIS AND REPAIR WORK FLOW27
SIONER"3 Precautions for Removing of Battery Terminal3	Work Flow27
Service Notice and Precautions for TPMS	
Service Notice and Precautions for Road Wheel4	ADDITIONAL SERVICE WHEN REPLACING
	LOW TIRE PRESSURE WARNING CON-
PREPARATION5	TROL UNIT29
PREPARATION5	Description
Special Service Tools5	Work Procedure29
Commercial Service Tools5	TIRE PRESSURE SENSOR WAKE UP OP-
	ERATION30
SYSTEM DESCRIPTION6	Description30
COMPONENT PARTS6	Work Procedure30
Component Parts Location6	ID REGISTRATION31
Component Description	Description31
Low Tire Pressure Warning Control Unit7	Work Procedure31
Tire Pressure Sensor7	
Tire Pressure Receiver8	DTC/CIRCUIT DIAGNOSIS32
Information Display8	C1704, C1705, C1706, C1707 LOW TIRE
SYSTEM9	PRESSURE32
System Description9	DTC Logic32
·	Diagnosis Procedure32
DIAGNOSIS SYSTEM (LOW TIRE PRES-	•
SURE WARNING CONTROL UNIT)11	C1708, C1709, C1710, C1711 TIRE PRES-
CONSULT Function11	SURE SENSOR34
ECU DIAGNOSIS INFORMATION13	DTC Logic34 Diagnosis Procedure34
	Diagnosis Procedure34
LOW TIRE PRESSURE WARNING CON-	C1716, C1717, C1718, C1719 TIRE PRES-
TROL UNIT13	SURE SENSOR38
Reference Value	DTC Logic38
DTC Inspection Priority Chart	Diagnosis Procedure38
DTC Index17	C1728 RECEIVER ID40
WIRING DIAGRAM18	DTC Logic40
	_ :

Diagnosis Procedure	Diagnosis Procedure5	9
C1729 VEHICLE SPEED SIGNAL42	ID REGISTRATION CANNOT BE COMPLET-	
DTC Logic 42	ED6	0
Diagnosis Procedure42	Description6	
•	Diagnosis Procedure6	
C1750, C1751, C1752, C1753 RECEIVER 43		
DTC Logic 43	HAZARD WARNING LAMP REMAINS ON 6	1
Diagnosis Procedure43	Description6	1
04754 LOW TIPE PRESSURE WARNING	Diagnosis Procedure6	<u>i</u> 1
C1754 LOW TIRE PRESSURE WARNING		
CONTROL UNIT46	NOISE, VIBRATION AND HARSHNESS	
DTC Logic 46	(NVH) TROUBLESHOOTING 6	
Diagnosis Procedure46	NVH Troubleshooting Chart6	<u>i</u> 2
C1755, C1756, C1757, C1758 POOR RE-	PERIODIC MAINTENANCE 6	:3
CEIVING CONDITIONS48		Ī
DTC Logic 48	ROAD WHEEL 6	3
Diagnosis Procedure	Adjustment6	3
	,,	
U1000 CAN COMM CIRCUIT50	REMOVAL AND INSTALLATION 6	5
Description 50	DOAD WHEEL TIDE ACCEMBLY	
DTC Logic 50	ROAD WHEEL TIRE ASSEMBLY 6	
Diagnosis Procedure50	Exploded View	
LIAGAG CONTROL LINIT (CANI)	Removal and Installation6	
U1010 CONTROL UNIT (CAN)51	Inspection6	5
Description 51	LOW TIRE PRESSURE WARNING CON-	
DTC Logic 51	TROL UNIT6	. 7
Diagnosis Procedure51		
POWER SUPPLY AND GROUND CIRCUIT 52	Exploded View6 Removal and Installation6	
	Removal and installation	1
Diagnosis Procedure 52	TIRE PRESSURE SENSOR6	8
LOW TIRE PRESSURE WARNING LAMP 53	Exploded View6	
Component Function Check	Removal and Installation6	
Diagnosis Procedure53		_
Diagnosis i roccadio i i i i i i i i i i i i i i i i i i	TIRE PRESSURE RECEIVER7	0
SYMPTOM DIAGNOSIS54	Exploded View7	0
TPMS SYMPTOMS54	FRONT TIRE PRESSURE RECEIVER7	'n
Symptom Table	FRONT TIRE PRESSURE RECEIVER : Removal	J
Symptom rable54	and Installation7	'n
LOW TIRE PRESSURE WARNING LAMP		
DOES NOT TURN ON57	REAR TIRE PRESSURE RECEIVER7	0
Description	REAR TIRE PRESSURE RECEIVER : Removal	
Diagnosis Procedure	and Installation7	0
Diagnosis i roccadio		
LOW TIRE PRESSURE WARNING LAMP	SERVICE DATA AND SPECIFICATIONS	
DOES NOT TURN OFF58	(SDS)7	1
Description 58	OFDVIOR DATA AND ORFOLEIGATIONS	
Diagnosis Procedure58	SERVICE DATA AND SPECIFICATIONS	
•	(SDS)7	
LOW TIRE PRESSURE WARNING LAMP	Road Wheel7	
BLINKS59	Tire Air Pressure7	'1
Description59		

PRECAUTION

PRECAUTIONS

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

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

WARNING:

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.

Precautions for Removing of Battery Terminal

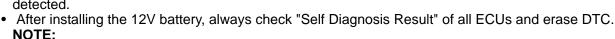
 When removing the 12V battery terminal, turn OFF the ignition switch and wait at least 30 seconds.

NOTE:

ECU may be active for several tens of seconds after the ignition switch is turned OFF. If the battery terminal is removed before ECU stops, then a DTC detection error or ECU data corruption may occur.

• For vehicles with the 2-batteries, be sure to connect the main battery and the sub battery before turning ON the ignition switch.

If the ignition switch is turned ON with any one of the terminals of main battery and sub battery disconnected, then DTC may be detected.



The removal of 12V battery may cause a DTC detection error.

Service Notice and Precautions for TPMS

WT

D

Α

В

G

Н

INFOID:000000010106252

190

BATTERY

SEF289H

M

Ν

C

INFOID:0000000010100054

PRECAUTIONS

< PRECAUTION >

- ID registration is required when replacing or rotating wheels, replacing tire pressure sensor or low tire pressure warning control unit. Refer to <a href="https://www.wr.au.num.neels.n
- Replace grommet seal, valve core and cap of tire pressure sensor in TPMS, when replacing each tire by reaching the wear limit. Refer to WT-68. "Exploded View".

Service Notice and Precautions for Road Wheel

INFOID:0000000010100055

- Genuine NISSAN aluminum wheel is designed for each type of vehicle. Use it on the specified vehicle only.
- Use Genuine NISSAN parts for the wheel nuts.
- Always use them after adjusting the wheel balance. For the balance weights, use Genuine NISSAN aluminum wheel weights.
- Use caution when handling the aluminum wheels, because they can be easily scratched. When removing
 dirt, do not use any abrasives, a wire brush, or other items that may scratch the coating. Use a neutral detergent if a detergent is needed.
- After driving on roads scattered with anti-icing salts, wash off the wheels completely.
- When installing road wheels onto the vehicle, always wipe off any dirt or foreign substances to prevent them from being trapped between the contact surfaces of wheel.
- Never apply oil to nut and bolt threads.

PREPARATION

< PREPARATION >

PREPARATION

PREPARATION

Special Service Tools

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) Tire pressure sensor activation tool	SEIA0462E	Tire pressure sensor wake-up procedure and ID registration	V

Commercial Service Tools

INFOID:0000000010100057

INFOID:0000000010100056

Tool name		Description
Power tool		Loosening wheel nuts
	PBIC0190E	

K

Н

Α

В

С

D

L

IVI

Ν

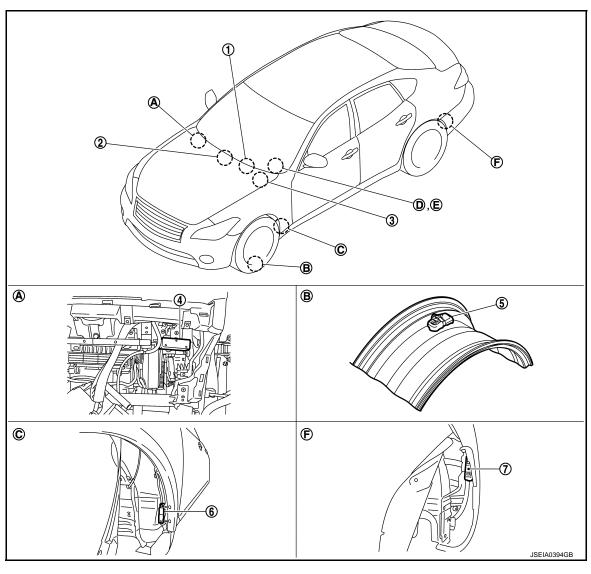
D

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000010100058



- BCM
 Refer to <u>BCS-4, "BODY CONTROL SYSTEM : Component Parts Location"</u>.
- 4. Low tire pressure warning control unit 5.
- 7. Rear tire pressure receiver
- A. Glove box assembly removed
- D. Low tire pressure warning lamp, infor- E. mation display (in combination meter)
- AV control unit
 Refer to <u>AV-11</u>, "<u>Component Parts</u>
 <u>Location</u>" (without navigation) or <u>AV-148</u>, "<u>Component Parts Location</u>"
 (with navigation).
 - Tire pressure sensor
- B. Wheel
 - Buzzer (in combination meter)
- ABS actuator and electric unit (control unit)
 Refer to <u>BRC-10</u>, "Component Parts <u>Location"</u>.
- 6. Front tire pressure receiver
- C. Fender protector (rear side)
- F. Inside rear wheel house protector

Component Description

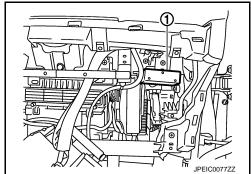
INFOID:0000000010100059

Component parts	Reference/Function
Tire pressure sensor	WT-7, "Tire Pressure Sensor"
Tire pressure receiver	WT-8, "Tire Pressure Receiver"
Low tire pressure warning control unit	WT-7, "Low Tire Pressure Warning Control Unit"
Low tire pressure warning lamp	WT-9, "System Description"
Combination meter (buzzer)	MWI-9, "METER SYSTEM : System Description"
AV control unit	AV-12, "Component Description" (Without navigation), AV-151, "Component Description" (With navigation).
BCM	BCS-5, "BODY CONTROL SYSTEM: System Description"
ABS actuator and electric unit (control unit)	BRC-11, "Component Description"
Information display	WT-8, "Information Display"

Low Tire Pressure Warning Control Unit

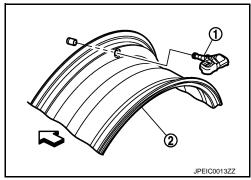
INFOID:0000000010100060

- After the low tire pressure warning control unit (1) receives the tire pressure signal from the tire pressure receiver, it controls the operation of the low tire pressure warning lamp and buzzer.
- Performs self-diagnosis of the Tire Pressure Monitoring System (TPMS).



Tire Pressure Sensor

The tire pressure sensor (1) is installed at the position of the air valve on the road wheel (2). It measures the tire pressure and transmits the tire pressure information by radio waves.



D

Α

В

INFOID:0000000010100061

Ν

M

K

0

COMPONENT PARTS

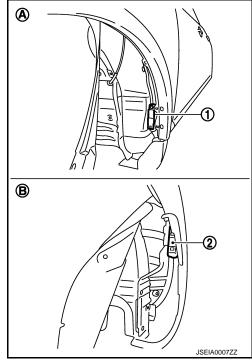
< SYSTEM DESCRIPTION >

Tire Pressure Receiver

INFOID:0000000010100062

The front tire pressure receiver (1) and rear tire pressure receiver (2) receive the tire pressure signal by radio waves from the tire pressure sensor at each wheel, and transmit the tire pressure signal to the low tire pressure warning control unit.

A : Front sideB : Rear side



Information Display

INFOID:0000000010100063

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		Not indicated
Ignition switch ON	Low tire pressure warning lamp remains ON after blinking for one minute. [Tire Pressure Monitoring System (TPMS) malfunction.]	Not indicated
Ignition switch ON	Low tire pressure warning lamp remains ON. (low tire pressure)	Indicated

SYSTEM

System Description

INFOID:0000000010100064

Α

D

WT

K

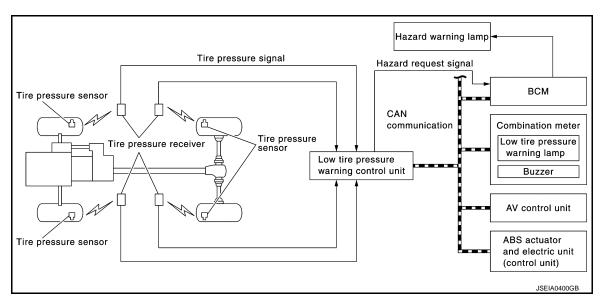
L

N

Р

- During driving, the TPMS (Tire Pressure Monitoring System) receives the signal transmitted from tire pressure sensor installed in each wheel. The low tire pressure warning control unit has pressure judgment and trouble diagnosis functions. When the low tire pressure warning control unit detects low inflation pressure or another unusual symptom, the low tire pressure warning lamps in the combination meter comes on.
- If the tire pressure is less than the specified value, the low tire pressure warning lamp illuminates that the tire pressure is less than the specified value.
- Activates the TPMS (Tire Pressure Monitoring System) when the vehicle speed is 40 km/h (25 MPH) or more.
- The tire pressure information for each wheel is displayed on the vehicle information display.

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
Low tire pressure warning control unit	Transmits the following signals via CAN communication to the BCM. Low tire pressure warning lamp signal Buzzer request signal Transmits the following signal via CAN communication to the AV control unit. Low tire pressure warning lamp signal Tire pressure data signal
всм	Transmits the following signals via CAN communication to the combination meter, based on signals from low tire pressure warning control unit. Low tire pressure warning lamp signal Buzzer request signal
AV control unit	Receives the following signal via CAN communication from low tire pressure warning control unit. Low tire pressure warning lamp signal Tire pressure data signal
ABS actuator and electric unit (control unit)	Transmits the following signal via CAN communication to low tire pressure warning control unit. • Vehicle speed signal

LOW TIRE PRESSURE WARNING LAMP CONTROL CONDITION

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

SYSTEM

< SYSTEM DESCRIPTION >

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	
Tire pressure sensor 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.)	
When performing tire pressure sensor wake-up operation	Refer to WT-30, "Work Procedure".	

HAZARD WARNING LAMP CONTROL CONDITION

The low tire pressure warning control unit transmits a hazard request signal to BCM. BCM blinks the hazard warning lamp, according to the signal.

The hazard warning lamp blinks under the following conditions.

Condition of Blinking The Hazard Warning Lamp

- When wake-up of registered wheel has been completed. Refer to WT-30, "Work Procedure".
- When ID registration is completed. Refer to WT-31, "Work Procedure".

BUZZER CONTROL CONDITION

The low tire pressure warning control unit transmits a buzzer request signal to BCM. Based on the signal, BCM sends a command to the combination meter to sound the buzzer.

The buzzer sounds under the following conditions.

Condition of Sounding Buzzer

• When wake-up of registered wheel has been completed. Refer to WT-30, "Work Procedure".

DIAGNOSIS SYSTEM (LOW TIRE PRESSURE WARNING CONTROL UNIT)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (LOW TIRE PRESSURE WARNING CONTROL UNIT)

CONSULT Function

APPLICATION ITEMS

CONSULT performs the following functions in combination of data reception, instruction, and transmission via communication lines from low tire pressure warning control unit.

Mode	FUNCTION DESCRIPTION	
ECU identification information	Displays the part number of low tire pressure warning control unit.	
SELF-DIAGNOSIS RESULTS	Self-diagnosis result can be quickly read.*	
DATA MONITOR	Input and output data of low tire pressure warning control unit can be read.	
ACTIVE TEST	Sends command to the low tire pressure warning control unit to change output signals and check operation of output system.	
WORK SUPPORT	Components can be quickly and accurately adjusted.	

^{*:} The following diagnosis information is erased by erasing.

ECU IDENTIFICATION

Part number of low tire pressure warning control unit is displayed.

SELF DIAGNOSIS RESULTS

Refer to WT-17, "DTC Index".

DATA MONITOR

Monitor item (Unit)	Remarks	
VHCL SPEED SE [(km/h) or (MPH)]	Vehicle speed is displayed.	
AIR PRESS FL [(kPa), (kg/cm²) or (Psi)]	Air pressure of front LH tires is displayed.	
AIR PRESS FR [(kPa), (kg/cm²) or (Psi)]	Air pressure of front RH tires is displayed.	
AIR PRESS RR [(kPa), (kg/cm²) or (Psi)]	Air pressure of rear RH tires is displayed.	
AIR PRESS RL [(kPa), (kg/cm²) or (Psi)]	Air pressure of rear LH tires is displayed.	
ID REGST FL1	ID registration status of front LH tire pressure sensor is displayed.	
ID REGST FR1	ID registration status of front RH tire pressure sensor is displayed.	
ID REGST RR1	ID registration status of rear RH tire pressure sensor is displayed.	
ID REGST RL1	ID registration status of rear LH tire pressure sensor is displayed.	
WARNING LAMP	Control status of low tire pressure warning lamp is displayed.	
BUZZER	Control status of combination meter buzzer by low tire pressure warning contro unit is displayed.	

ACTIVE TEST

NOTE:

After completing the work below, perform an active test.

- Check ID registration state and perform self-diagnosis.
- 2. Erase the self-diagnosis result history.

Revision: 2013 November WT-11 2014 Q70

D

Α

В

WT

F

Г

Н

П

J

K

L

N /I

N

0

[•] DTC

DIAGNOSIS SYSTEM (LOW TIRE PRESSURE WARNING CONTROL UNIT)

< SYSTEM DESCRIPTION >

Test item	Condition	Description
BUZZER	Vehicle stopped	This test is able to check to check that the buzzer operates.
WARN LAMP	The system is normal	This test is able to check to check that the low tire pressure warning lamp turns on.

WORK SUPPORT

Item	Usage
ID READ	Registered tire pressure sensor ID can be displayed.
ID REGIST	Tire pressure sensor ID can be registered. Refer to WT-31, "Work Procedure".

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

LOW TIRE PRESSURE WARNING CONTROL UNIT

Reference Value

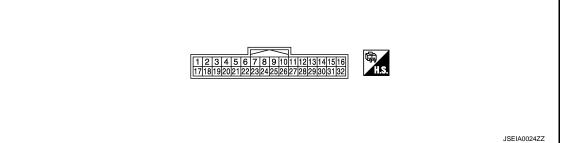
VALUES ON THE DIAGNOSIS TOOL

CAUTION:

The reference values in the table below come from the control unit calculation data. The normal values may in some cases be displayed even though the power circuit (harness) is open or shorted.

Monitor item	Condition	Value/Status
	Vehicle stopped	0.00 km/h (0.00 mph)
VHCL SPEED SE	Vehicle running CAUTION: Check air pressure of tire under standard condition.	Approx. equal to the indication on speed meter (Inside of ±10%)
AIR PRESS FL	Start engine and drive at 40 km/h (25 MPH) or more for 10 minutes.	Approximately equal to the indi- cation on tire gauge value for front LH tire
AIR PRESS FR	Start engine and drive at 40 km/h (25 MPH) or more for 10 minutes.	Approximately equal to the indi- cation on tire gauge value for front RH tire
AIR PRESS RR	Start engine and drive at 40 km/h (25 MPH) or more for 10 minutes.	Approximately equal to the indication on tire gauge value for rear RH tire
AIR PRESS RL	Start engine and drive at 40 km/h (25 MPH) or more for 10 minutes.	Approximately equal to the indi- cation on tire gauge value for rear LH tire
ID REGST FL1	Front LH tire pressure sensor ID registered	Done
ID REGST FLT	Front LH tire pressure sensor ID unregistered	Yet
ID REGST FR1	Front RH tire pressure sensor ID registered	Done
ID REGGI FRI	Front RH tire pressure sensor ID unregistered	Yet
ID REGST RR1	Rear RH tire pressure sensor ID registered	Done
ID REGST KKT	Rear RH tire pressure sensor ID unregistered	Yet
ID REGST RL1	Rear LH tire pressure sensor ID registered	Done
ID REGGI KLI	Rear LH tire pressure sensor ID unregistered	Yet
WARNING LAMP	Low tire pressure warning lamp: ON	On
WARNING LAWP	Low tire pressure warning lamp: OFF	Off
BUZZER	When buzzer sound heard from combination meter by low tire pressure warning control unit control	On
DOLLEIN	When buzzer sound not heard from combination meter by low tire pressure warning control unit control	Off

TERMINAL LAYOUT



Revision: 2013 November WT-13 2014 Q70

В

Α

D

ΝT

F

Н

J

K

L

. .

0

Ν

< ECU DIAGNOSIS INFORMATION >

PHYSICAL VALUES

CAUTION:

When using circuit tester to measure voltage for inspection, be sure not to extend forcibly any connector terminals.

Tormi	nal No.	Description				
	color)	Signal name	Input/ Output	Condi	tion	Value (Approx.)
1 (P)	_	CAN-L	Input/ Output	_		_
2 (L)	_	CAN-H	Input/ Output	_		_
3	Ground	Tire pressure receiver rear	Input	Ignition switch ON	Standby status	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
(B)	Glound	RH signal	при	Igrillion Switch On	When signal is received	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
4	Ground	Tire pressure receiver rear	Input	Ignition switch ON	Standby status	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
(B)	Ground	LH signal	mput	Igrillion Switch ON	When signal is received	(V) 4 2 0 ••• 0.2s OCC3880D Approx. 4.5 V

< ECU DIAGNOSIS INFORMATION >

Tormi	nal No.	Description				
	color)	Signal name	Input/ Output	Condi	tion	Value (Approx.)
5		Tire pressure receiver front			Standby status	(V) 6 4 2 0 ••• 0.2s OCC3879D Approx. 4.5 V
(B)	Ground	RH signal	Input	Ignition switch ON	When signal is received	(V) 6 4 2 0 ••• 0.2s OCC3880D Approx. 4.5 V
6		Tire pressure receiver front			Standby status	(V) 6 4 2 0 ••• 0.2s OCC3879D Approx. 4.5 V
(G)	Ground	LH signal	Input	Ignition switch ON	When signal is received	(V) 6 4 2 0 ••• 0.2s OCC3880D Approx. 4.5 V
7	Ground	Tire pressure receiver rear	Output	Ignition switch ON		Approx. 7 - 16 V
(R)	Stourid	RH power supply*	Juipui	Ignition switch OFF		0 V
8 (W)	Ground	Tire pressure receiver rear LH power supply*	Output	Ignition switch ON Ignition switch OFF		Approx. 7 - 16 V 0 V
9 (W)	Ground	Tire pressure receiver front RH power supply*	Output	Ignition switch ON Ignition switch OFF		Approx. 7 - 16 V 0 V
10 (W)	Ground	Tire pressure receiver front LH power supply*	Output	Ignition switch ON Ignition switch OFF		Approx. 7 - 16 V
15 (Y)	Ground	Power supply	Input	Ignition switch ON Ignition switch OFF		Battery voltage
19 (G)	Ground	Tire pressure receiver rear RH signal (sensitivity)	Input	Ignition switch ON Ignition switch OFF		Approx. 0.7 V
20 (G)	Ground	Tire pressure receiver rear LH signal (sensitivity)	Input	Ignition switch ON Ignition switch OFF		Approx. 0.7 V

< ECU DIAGNOSIS INFORMATION >

Tormi	nal No.	Description			
	color)	Signal name	Input/ Output	Condition	Value (Approx.)
21	Ground	Tire pressure receiver front	Input	Ignition switch ON	Approx. 0.7 V
(G)	Ground	RH signal (sensitivity)	прис	Ignition switch OFF	0 V
22	Ground	Tire pressure receiver front	Input	Ignition switch ON	Approx. 0.7 V
(R)	Giodila	LH signal (sensitivity)	iriput	Ignition switch OFF	0 V
23 (W)	Ground	Tire pressure receiver rear RH ground	Input	Always	0 V
24 (R)	Ground	Tire pressure receiver rear LH ground	Input	Always	0 V
25 (R)	Ground	Tire pressure receiver front RH ground	Input	Always	0 V
26 (B)	Ground	Tire pressure receiver front LH ground	Input	Always	0 V
30	Ground	Hazard warning lamp	Output	Hazard warning lamp switch ON	0 V
(G)	Giodila	riazaiu waiiiiig laliip	Output	Hazard warning lamp switch OFF	Battery voltage
32 (B)	Ground	Ground		Always	0 V

^{*:} Power is supplied to the tire pressure receiver from the low tire pressure warning control unit.

DTC Inspection Priority Chart

INEOID-0000000010100065

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

Priority	Detected items (DTC)
1	U1000 CAN COMM CIRCUIT U1010 CONTROL UNIT (CAN)
2	C1704 LOW PRESSURE FL C1705 LOW PRESSURE FR C1706 LOW PRESSURE RR C1707 LOW PRESSURE RL
3	C1755 PR RECEIV COND FL C1756 PR RECEIV COND FR C1757 PR RECEIV COND RR C1758 PR RECEIV COND RL
4	 C1708 [NO DATA] FL C1709 [NO DATA] FR C1710 [NO DATA] RR C1711 [NO DATA] RL
5	 C1716 [PRESSDATA ERR] FL C1717 [PRESSDATA ERR] FR C1718 [PRESSDATA ERR] RR C1719 [PRESSDATA ERR] RL
7	C1728 RECEIVER ID NO REG
8	C1729 VHCL SPEED SIG ERR
9	 C1750 [RECEIVER ERR] FL C1751 [RECEIVER ERR] FR C1752 [RECEIVER ERR] RR C1753 [RECEIVER ERR] RL
10	C1754 CONT UNIT (EEPROM)

< ECU DIAGNOSIS INFORMATION >

DTC Index	INFOID:000000010100068
-----------	------------------------

DTC	Items (CONSULT screen terms)	Reference	_
C1704	LOW PRESSURE FL		В
C1705	LOW PRESSURE FR	W/T 22 "DTC Logic"	
C1706	LOW PRESSURE RR	WT-32, "DTC Logic"	
C1707	LOW PRESSURE RL		С
C1708	[NO DATA] FL		=
C1709	[NO DATA] FR	WT 24 "DTC Logic"	D
C1710	[NO DATA] RR	WT-34, "DTC Logic"	
C1711	[NO DATA] RL		
C1716	[PRESSDATA ERR] FL		W
C1717	[PRESSDATA ERR] FR	W/T 00 IIDTO I a riall	
C1718	[PRESSDATA ERR] RR	WT-38, "DTC Logic"	F
C1719	[PRESSDATA ERR] RL		
C1728	RECEIVER ID NO REG	WT-40, "DTC Logic"	=
C1729	VHCL SPEED SIG ERR	WT-42, "DTC Logic"	G
C1750	[RECEIVER ERR] FL		=
C1751	[RECEIVER ERR] FR	WT 40 IIDTO I a riall	Н
C1752	[RECEIVER ERR] RR	WT-43, "DTC Logic"	
C1753	[RECEIVER ERR] RL		
C1754	CONT UNIT (EEPROM)	WT-46, "DTC Logic"	-
C1755	PR RECEIV COND FL		-
C1756	PR RECEIV COND FR	WT 40 IIDTO I II	
C1757	PR RECEIV COND RR	WT-48, "DTC Logic"	J
C1758	PR RECEIV COND RL		
U1000	CAN COMM CIRCUIT	WT-50, "DTC Logic"	K
U1010	CONTROL UNIT (CAN)	WT-51, "DTC Logic"	=

NOTE

If some DTCs are displayed at the same time, refer to WT-16, "DTC Inspection Priority Chart".

Α

Ν

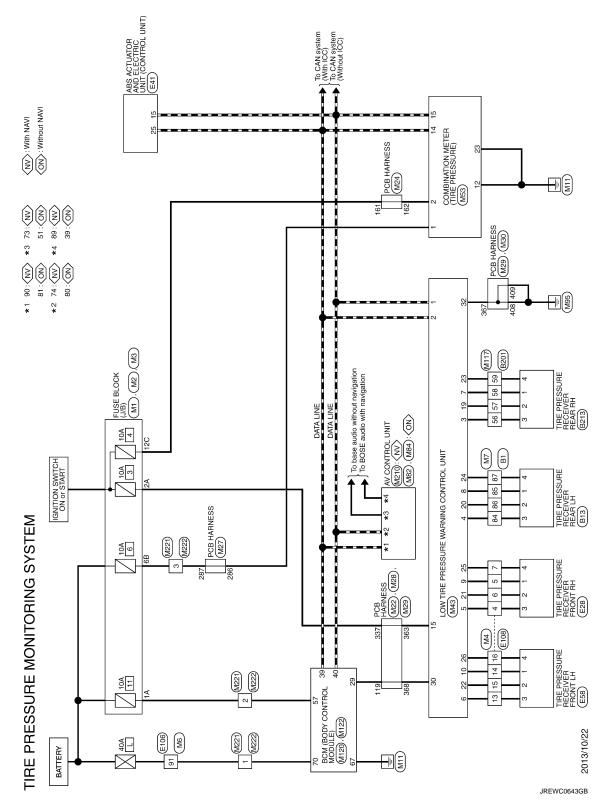
0

P

WIRING DIAGRAM

TIRE PRESSURE MONITORING SYSTEM

Wiring Diagram



TIRE PRESSURE MONITORING SYSTEM

	36	97 09		24	> 0	
2 4 4	40 8	Н		79 5	n > c	1 1 1
	2			588	>	
	ω 4			8 8	a 0	1 1
	22	- Connector Name	REAR LI	31	B/R	-
7	<u></u>			35	> 1	-
	2 9	4		7 7	W/P	1 1
7				40	>	
			,	44	. a	1
[Specification]			6	94	ļ	
I	+		4)	į s	+	Direction of the second
	1)	Q.	+	th climate controlled sead
	<u>_</u>			94	1	- [Wrth heated seat]
0				47		th climate controlled seat.]
iii	89	LG = Terminal Color Of Signal Magne (Specification)	Soution	47		- With heated seat
-	69	No. Wire		48		1
19	00	33A M I M		49	0	
40	-	- B		20	œ	
	,			ŭ		
	1				5	
1	2	- 4 G		25	רפ	1
	10	0		23	۵	
	9	1		56	۵	
T		V Donnesdon Na Donn		12	3	
leated seat	+	Collifector No.		à		
_ 		LG Connector Name WIRE TO WIRE		28	0	-
	62			29	>	1
12	5	B - Connector Type TH80MM-CS16-TM4		6	ay	1
	,	od income			3	
	<u>,</u>	4	[70	7	
7.	2			63	*	-
7	5	i i	s .	g		
	+]	3	1	
12	22		1	67	>	1
12	٩		6 ×	08	00	
	٥			80	SB	
1	-	0.00	I	69	00	
	1		1			
7.	78			70	æ	_
32	100			7.1		
	,				_	
8	8	Terminal Color Of Signature Constitution	2-7-1	74	ω	
- Co	81	Dadol autri Natura Logica et M. ON	lication	75	-	
	1		I	2	1	
86	82	m		9/	SHELD	,
à	83	000		77	ď	•
I	1					
200	8			78	œ	-
	200	GO 11		0		
ó	2	AD //		9	L	1
	98	0. 87		80	9	
	۱,		I	3		
200		BR		8	0	_
	9	g0 06		00	00	
	,	15		ď	á	
6	=			83	ES.	1
	إ			3	2	
	75			ě	,	
6	,	œ		82	57	1

JREWC0644GB

Р

Α

В

С

D

G

Н

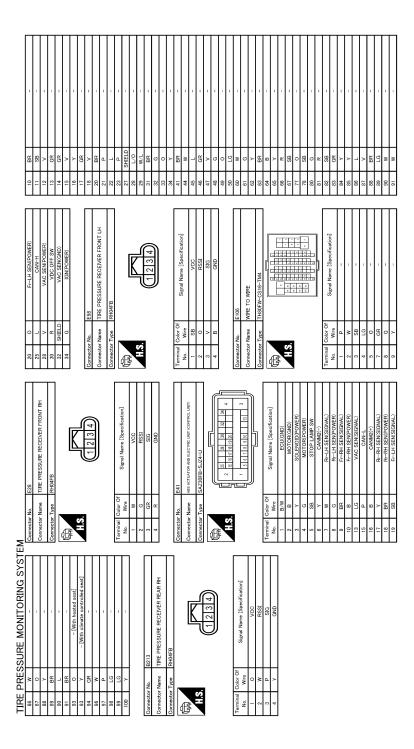
Κ

L

M

Ν

0



JREWC0645GB

TIRE PRESSURE MONITORING SYSTEM

Signal Name (Specification)		
<u></u>		
Terminal Color Of Signal Name [Specification] No. Wire 100 LG	Connector No. M4	
Terminal Color Of Signal Name [Specification]	Connector No. M2 Connector No.	
	Connector No. E108	

JREWC0646GB

Ρ

Α

В

С

D

G

Н

Κ

L

M

Ν

0

	-	1	1	1	-	1		1	-	1		1 1	-	1	-	- [With VK engine]	- [With VQ engine]	1	1		M24		PCB HARNESS	TH40FW-NH			150 CO 100 PER	20) 1839 1986 1987 1987 1989 1889 1887 1989 1885 1484 1803 1882			Signal Name [Specification]		1	,	1	1			1	1	1	
	9	o	o	g	7	۵	۵ ۵	á	>	>	BR	≻ α	۵	_	œ	в 8	9g a	+	>		oN rot		Connector Name	Connector Type			બ				I Color Of	e co	BG BG	O	>	>	α	DJ LG	œ	Н	+	ο ≥
	97	86	66	100	101	102	02	105	107	108	109	1 19	13	114	116	117	= = =	119	120		Connector No	5	Connec	Connec	Q.	季	H.S.				Terminal	16.	162	163	164	165	166	167	168	169	92	174
	-	1	1	1		ı		1	-		1	1 1	1	1	-	1				M22	PCB HARNESS	TH40FB-NH				100 89 98 97 98 96 94 83 92 91 88 88 87 88 88 81 81 81 81 81	ns premains in proposition		Control of the second	olgran warne Lobectmoarton	1		1	1		1			-		-	
	а	g	>	SB	٨	BR	97 8	8	В	M	9	œ c	*	ŋ	٨	BG	<u>-</u>	3		No.	Name	Type	,						Color Of	Wire	_ 0	1 a	9 8		m	В	>	>	>	8	m 9	BB ES
	75	76	77	78	79	8	æ 8	8 8	84	82	98	88	16	92	96	97	86	3		Connector No.	Connector Name	Connector Type	ſ	ß	E	1			Terminal	Vo	8 8	28 82	ŧ 58	98	87	88	88	91	92	93	98	96
	-	1	1	1		1		1	-	1		1 1	1	1	-	1		1	-	1	1 1	1	_	1			-	1 1	1	-	-				1	-		-	-	1	1	
	>	g	ı	ı			- 1	_	П	+	+	+	╁	Н	Н	4	+	L	Ц	4	1	Ļ	Ц	4	1	\downarrow	Ц	1	L	Ц	4	1	ļ	L	L	Ц	Ц	Н	Н	Н	+	Н
	Н	Ľ		>	Я	В	9 a	>	9	BR	SB	۵ _	SHIELD		Д	_ (d 8	SB	SB	>	_ a	>	7	FIG	ag >	> >	А	BG	a.	PΠ	> 6	¥ a	9 5	an an	W	а	>	ΓG	SB	>	_ _	
Σ	16	17	18	H	20 R	\dashv	22 m	+	25 G	+	+	28 P	t	Н	\dashv	+	38 % B	+	Н	+	44 B	+	Н	\dashv	49 BR	+	52 P	53 BG	┝	Н	+	90 GK	+	╀	Н	Н	Н	Н	69 SB	Н	+	74
ESSURE MONITORING SYSTEM	-		- 18	- 1	Н	- 21	- 22	- 23	- 25	- 26	- 27	28	- 30	- 32	- 33	+	+	+	WIRE TO WIRE	42	TH80MW-CS16-TM4 43	45	* 47	48	+	31.50	52	Signal Name [Specification] 53	- 22	- 28	- 59	09	69	63	- 65	99 -	67	- [With climate controlled seat] 68	- [With heated seat] 69	- [With climate controlled seat] 70	- 72	74
TIRE PRESSURE MONITORING SYSTEM	82 B - 16	17	18	5-	50	V 21	22	BG - 24	- 25	BG - 26	- 27	+	30	R - 32	- 33	+	+	37	ne WIRE TO WIRE	42	ctor Type TH80MW-CS16-TM4 43	45	1 6 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8 1 8	48	6 6	31.50	52	53	╀	- 28	- 29	+	69	63	H	99 -	L - [With heated seat] 67	- [With climate controlled seat] 68	69	P = [With climate controlled seat] 70	BR - 72	74

JREWC0647GB

TIRE PRESSURE MONITORING SYSTEM

г	_		_	1				_					ı			_	_	_	_	_	_	_	_	_	_			_	_	_	_	_	_	_	_			_	_	_	_	_		1																																																																							
	1	me PCB HARNESS	THADEW-NH	1			K		A 20	439 438 427 438 435 432 433 439 438 427 422				Color Of Color Of	Vire Signal Name [Specification]			- 02	^			1			BR -		- 8	SS							97		- ·	- ^		ng a		n.	-																																																																								
	Connector No.	Connector Name	Connector Type		1	手	Ę	2						Terminal Co	- 2	2	402	403	407		+	409	+	413	\dashv			419	т	т	+	/75	428	429	430	431	432	435	╀	+	+	4	439																																																																								
	Ö	Š	[]		Q <u>r</u>	手	_	\ _		_	_	_		Ter	_	1	`	Ľ	Ľ	Ľ	1	1	1	1		_	_	Ľ	Ľ	L	Τ	1	1	1	<u> </u>	_	Ľ	Ľ	Ľ	Τ	1	1	_	l _	_	_	_	_	_				_	_	_																																																	_				_			_		_		
	343 L = =	╀	346	347 P	. 8	Y5	4	P. C.	۵.	α		ı	358 W -	H	c	\exists			Consector No M29	Т	Connector Name PCB HARNESS	Т	Connector Type TH40FB-NH	4				188	180 SSS 35S 25S 25S 25S 25S 25S 25S 25S 25S 25S 2				Terminal Color Of Signal Name [Specification]	Wire	4	_	367 B -	g	8	5/5 DR	+	BG	376 V	>	378 B		×	380 R	9	_	384 GR -	H	-		400 V																																															4	_	_	,	1				1	0.				25
							'	1	1				_	-			_	1						1	-			M28		PCB HARNESS	T T T T T T T T T T T T T T T T T T T	I H40FW-NH					338597 338531 530 338 521 521 521 521 521	340 (356 (356) 1 (357 (357) 1 (350) 345) 1 (346) 355) 344 (351)				Simal Name [Snecification]		1			_			_	-				-	1																																											•				-			1					-				
	$\overline{}$	+	۵ ۵	+	+	+	4	4	_	ŀ	0	4	В	^	ŀ	+	_	H	H	ł	t	20	+	4	>			tor No.		Connector Name		tor Type				ń	ı				-	lerminal Color Of	Wire	>	>	╀	١	1	4	_	Ь	L	Ļ	4	4	>	L	1																							1	4	4	_	L	L	L	Ļ	Ļ	Ļ	Ļ	Ļ	ļ	ļ	4	4	_	_	_	_	ŀ	4	_	_	4	_	_	ļ		_	_	_	ļ	_	_
	291	263	294	295	307	67	230	299	300	301	000	3005	303	306	207	ò	308	309	310	3	9	312	5 5	319	320			Connector No		Connec	ļ	Conne	ģ		•	?						l ermir.	Š	321	322	224	\$70	352	326	327	328	330	331	3	332	337	338]	3	999	338	338	338	220	000	1	1	1	1					3	3	337	227			335	000		23	,00		3	250	330	000		070	328
피	175 B = =	1 0	1	-	, .	1001 F. St. 1001	ž į	œ	σ	>		1	^	ď	-	_		L	>		5 1	m	98	BR	4	œ	В	200 SB -	1		TOW	1	Connector Name PCB HARNESS	-	Connector Type TH40FB-NH				<u></u>	tad sales and less test and an extra proposed and an extra propose	DATE OF THE PARTY				Terminal Color Of	No Wire Signal Name [Specification]		- 0	BG	BG	59	M	: >	- 3	M	~′	8																								1	┚			α.	α.	0	-							Olivero	Olivero	SPIELD	SHIELD	CHED	CUIDIO	0 100110	:	_			_	>		=	×	>	**		200	

JREWC0648GB

Ρ

Α

В

С

D

G

Н

K

L

M

Ν

0

TIRE PR	TIRE PRESSURE MONITORING SYSTEM	Σ						
Connector No.	M43	Connector No.	M53	Connector No.	M82	0	Signal Name [Specification]	_
Connector Name	LOW TIRE PRESSURE WARNING CONTROL UNIT	Connector Name	COMBINATION METER	Connector Name	AV CONTROL UNIT	No. Wire	AV COMM (L)	_
Connector Type	TH32FW-NH	Connector Type	TH40FW-NH	Connector Type	TH24FW-NH	┝	AV COMM (H)	_
[ľ		<u>.</u>		78 SB	(H) WWOO AV	_
E		E		E		79 LG	(T) WWO AV	_
ł		· ·		· ·		80 P	CAN-L	_
2	112246679040	Ş	1 2 3 4 5 6 7 8 9 10 11 12 14 15 16	Ŕ	36 37 38 39 40 41 42 43 44 45 46 47	+	CAN-H	_
	2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		23 24 25 25 27 28 29 29 32 34 35 36 37 38 39 40		27 20 20 20 20 20 20 20 20 20 20 20 20 20	+	SW GND	_
	95				42 00 01 07 D	86 SHIELD	TEL VOICE SIGNAL (+)	_
						88	TEL VOICE SIGNAL (-)	_
Terminal Color Of	,	Terminal Color Of		Terminal Color Of		92 R	VEHICLE SPEED (8-PULSE)	_
No. Wire		No. Wire	,	No. Wire	Signal Name [Specification]	93 ^	PARKING BRAKE	_
η.	CAN-L	1 W	BATTERY POWER SUPPLY	36 BG	SIGNAL VCC	94 BG	REVERSE	_
2 L	CAN-H	2 BG	IGNITION SIGNAL	37 B	SIGNAL GND	95 W	NOILINDI	_
3 B	RR TUNER (SIG)	3 GR	VEHICLE SPEED SIGNAL (2-PULSE)	38 G	HP	96 SB	DISK EJECT SIGNAL	_
4 B		4 R	VEHICLE SPEED SIGNAL (8-PULSE)	39 →	COMM (DISP->CONT)			
2 B		2 B	ILLUMINATION CONTROL SIGNAL	40 R	RGB AREA (YS) SIGNAL			
9	FL TUNER (SIG)	9 9	METER CONTROL SWITCH GROUND	41 SHIELD	SHIELD	Connector No.	M117	_
7 R		7 SB	ENTER SWITCH SIGNAL	42 W	RGB SYNC	Connector Name	WIRE TO WIRE	
8		8 FG	SELECT SWITCH SIGNAL	43 R	RGB (R:RED) SIGNAL	П		_
M 6		5	╗	44 B	RGB (G:GREEN) SIGNAL	Connector Type	TH80FW-CS16-TM4	_
10 W	FL TUP	10 GR	ILLUMIN	45 W	RGB (B:BLUE) SIGNAL	4		
15 Y	IGN	11	TRIP RESET SWITCH SIGNAL	\dashv	COMPOSITE IMAGE GND	E		
19 G		12 B	GROUND	47 SB	COMPOSITE IMAGE SIGNAL	· ·	9 9 8	
20 G		14	CAN-H	48 L	INVERTER VCC	Š.		
21 G		15 P	CAN-L	49 LG	INVERTER GND			
22 R		16 R	AIR BAG SIGNAL	50 B	Ν		2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	
23 W	RR TUNER (GND)	23 B	GROUND	51 BR	COMM (CONT->DISP)			
24 R		24 B	FUEL LEVEL SENSOR GROUND	52 SHIELD				
25 R		25 W	ALTERNATOR SIGNAL	57 SHIELD		la C	Signal Name [Specification]	
26 B		26 V	PARKING BRAKE SWITCH SIGNAL	58 SHIELD	SHIELD	No. Wire	Dispersional acceptance of the control of the contr	_
30 G	BCM	27 V	BRAKE FLUID LEVEL SWITCH SIGNAL			3	-	_
32 B	GND	28 G	SECURITY SIGNAL			9 R	ı	_
		Z9 L	WASHER LEVEL SWITCH SIGNAL	Connector No.	M84	13 W	-	_
		+	PADDLE SHIFTER SHIFT DOWN SIGNAL	Connector Name	AV CONTROL UNIT	_	-	_
		33 BG	PADDLE SHIFTER SHIFT UP SIGNAL			18 P		_
		34 G	FUEL LEVEL SENSOR SIGNAL	Connector Type	TH32FW-NH	\dashv	1	_
		35 W	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)	(20 GR	1	_
		36 G	PASSENGER SEAT BELT WARNING SIGNAL	E		21 Y	-	_
		37 G	NON-MANUAL MODE SIGNAL			22 LG	-	_
		38 ^	MANUAL MODE SHIFT DOWN SIGNAL	H.S.		23 R	1	_
		39 L	MANUAL MODE SHIFT UP SIGNAL		76 77 78 79 80 81 82 86 87 88	24 BG	-	_
		40 W	MANUAL MODE SIGNAL		92 83 94 95 96	25 BG	-	_
						26 W	-	_
						27 R	-	_
						28 V	-	_
						29 P	-	_

JREWC0649GB

TIRE PRESSURE MONITORING SYSTEM

Corrector No. MZ10 Corrector Name AV CONTROL UNIT Corrector Type TRESEW-NH	嗜	\(\frac{1}{2}\)	31 SC 15 62 63 63 63 64 64 64 64 64		lar C	Wire	65 V PARKING BRAKE SIGNAL 67 D COMPOSITE IMAGE SIGNAL GND	r 3		a	SHIELD	+	_	74 P CAN-L	2 2	2 %	3 >	╀	ж	SHIELD	+	æ	†	· -	91 SB AV COMM (H)	SB											
LG COMBLSW OUTPUT 1 R P POSITION L CANH-H C	1770	9					02 68 69 20	11		Solor Of Street	Wire	INT ROC	R BAI (FUSE)	C DASS DOOD IN K OFFBUT		V TIBN SIG BH OLITBILT	V STEP I AMP CONT	L ROOM LAMP TIMER CONT	V ALL DOOR, FL LID LOCK OUTPUT			O PW PWR SPLY (IGN)	T PW PWR SPLY (BA1)														
36 37 39 40		Connector No.	Connecto	Ą.	事	Š				Terminal	No.	26	2 5	8 8	60 09	9 19	69	8	65	99	67	89 8	20 6	2													
	55 >-		or No. M120 or Name BCM (BODY CONTROL MODULE)	Т	1			1 2 3 4 5 6 8 9 11 14 16 17 18 19 20	3 30 31 32 33 34			0	,	BC COMBISM INDITE	SB COMBISW INFOLD		C COMBI SW INPI 7	P COMBI SW INPUT 1	V POWER WINDOW SW COMM		RAI	W OPTICAL SENSOR		P SENSOR PWR SPLY	R RECEIVER PWR SPLY	BR KYLS ENT RECEIVER COMM		GR KYLS ENT RECEIVER RSSI	G SECURITY IND CONT	+	_	G I-RET IDENTIFICATION		W DR DOOR UNLK SENSOR		R COMBI SW OUTPUT 4	V COMBI SW OUTPUT 3
	100		Connector No. Connector Name	Connector	(F) 	4				Terminal	ġ,		٠,	4	ur.	9		6	Ξ	4 5	۽ ء	- 0	9	50	21	22	23	54	ç, 2	07	98	31	32	33	34
TIRE PRESSURE MONITORING SYSTEM 3		- [With heated seat]	- [With climate controlled seat] - [With climate controlled seat]	- [With heated seat]	-	1			1	1	1	1			1 1	1	1	1	1			1			1	1		1	1		11 1			1	-	1	- [With heated seat]
PRES SHIELD	> > 8	B B	ی و	5 >	. BG	Ρ	g >	> 3		g	ď	>	9 ;	> 0	-	,	g,		œ	BR	В	_ 0	SHELD SHELD	5 0	1	ı	BG	ı	- 1	- 1			£ >-				υ <u>3</u>
1IRE 31 32 40 40	44	46	46	48	49	20	5	25	92	22	28	29	19	63	3 99	67	89	69	70	7.1	74	75	9 1	2	79	80	18	82	83	\$	8 8	80	88	88	80	91	93

JREWC0650GB

Revision: 2013 November WT-25 2014 Q70

Α

В

С

D

W

G

Н

ı

J

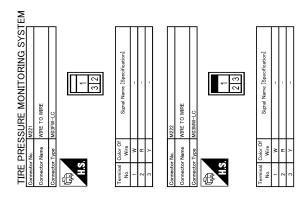
Κ

L

M

Ν

0



JREWC0651GB

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow INFOID:0000000010100070

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 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.

>> 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-71, "Tire Air Pressure".

Is the inspection result normal?

YES >> GO TO 3.

NO >> Inspect or repair the tires or wheels.

3.CHECK LOW TIRE PRESSURE WARNING LAMP STATUS

Check low tire pressure warning lamp display.

Does not low tire pressure warning lamp turn OFF?

>> GO TO 4. YES

>> GO TO 8. NO

f 4 .CHECK DTC WITH LOW TIRE PRESSURE WARNING CONTROL UNIT

(P)With CONSULT

Perform the self-diagnosis.

Is any DTC detected?

YES >> Record or print DTC and freeze frame data (FFD). GO TO 5.

NO >> GO TO 8.

$5.\mathsf{erase}$ DTC MEMORY

(P)With CONSULT

- Record DTC.
- Erase DTC once.

After erasing DTC record, currently occurred DTC can be detected by reading out DTC again.

>> GO TO 6.

6. PERFORM DTC CONFIRMATION PROCEDURE

(P)With CONSULT

Perform "DTC CONFIRMATION PROCEDURE" (self-diagnosis) with recorded DTC.

If two or more DTCs are detected, refer to WT-16, "DTC Inspection Priority Chart" and determine trouble diagnosis order.

Is any malfunction detected by self-diagnosis?

YES >> GO TO 7.

WT-27 Revision: 2013 November 2014 Q70

WT

D

Α

В

Н

K

M

N

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

NO >> GO TO 8.

7.DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

Perform the diagnosis applicable to the displayed DTC. Refer to WT-17, "DTC Index".

>> GO TO 10.

8. CRUISE FOR SYMPTOM CHECK

- 1. Start the engine.
- 2. Drive for several minutes at a speed of 40 km/h (25 MPH) or more, then stop the vehicle.

>> GO TO 9.

9. PERFORM DIAGNOSIS BY SYMPTOM

Perform trouble diagnosis or repair applicable to the symptom. Refer to WT-54. "Symptom Table".

>> GO TO 11.

10. FINAL CHECK (WHEN DTC WAS DETECTED)

(P)With CONSULT

Perform "DTC CONFIRMATION PROCEDURE" (self-diagnosis) with applicable DTC.

Is any malfunction detected by self-diagnosis?

YES >> GO TO 7.

NO >> INSPECTION END

11. FINAL CHECK (WHEN SYMPTOM OCCURRED)

Make sure that the symptom is not detected.

Does symptom remain?

YES >> GO TO 9.

NO >> INSPECTION END

ADDITIONAL SERVICE WHEN REPLACING LOW TIRE PRESSURE WARNING CONTROL UNIT

< BASIC INSPECTION >

ADDITIONAL SERVICE WHEN REPLACING LOW TIRE PRESSURE WARNING CONTROL UNIT

Description INFOID:000000010100071

When replacing low tire pressure warning control unit, tire pressure sensor ID registration is required.

Work Procedure

ADJUST THE NEUTRAL POSITION OF STEERING ANGLE SENSOR

1. PERFORM TIRE PRESSURE SENSOR ID REGISTRATION

Perform tire pressure sensor ID registration.

>> Refer to WT-31, "Work Procedure".

WT

D

Α

В

Н

ı

J

K

L

M

Ν

0

TIRE PRESSURE SENSOR WAKE UP OPERATION

< BASIC INSPECTION >

TIRE PRESSURE SENSOR WAKE UP OPERATION

Description INFOID:0000000010100073

When replacing tire pressure sensor, always tire pressure sensor wake-up is required.

Work Procedure INFOID:0000000010100074

1. TIRE PRESSURE SENSOR WAKE-UP PROCEDURE

Turn the ignition switch ON.

CAUTION:

Never start the engine.

NOTE:

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

Low tire pressure warning lamp blin	king 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 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

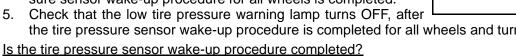
NNEIC0020ZZ

- 2. Contact the tire pressure sensor activation tool (J-45295) (1) to the side of the tire at the location to the tire pressure sensor.
- Press and hold the tire pressure sensor 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.

- Check that the turn signal lamps blink twice when the tire pressure sensor wake-up procedure for all wheels is completed.
- the tire pressure sensor wake-up procedure is completed for all wheels and turns OFF.



>> Perform the tire pressure sensor ID registration procedure. Refer to WT-31, "Work Procedure". YES

NO >> Perform trouble diagnosis for the tire pressure sensor. Refer to WT-34, "Diagnosis Procedure".

ID REGISTRATION

Description INFOID:0000000010100075

When replacing or rotating wheels, replacing tire pressure sensor or low tire pressure warning control unit, always tire pressure sensor ID registration is required.

Work Procedure

1. TIRE PRESSURE SENSOR ID REGISTRATION PROCEDURE

CAUTION

To perform ID registration, observe the following points:

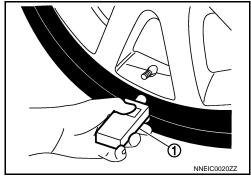
- Never register ID in a place where radio waves are interfered (e.g. radio tower).
- Never register ID in a place close to vehicles including TPMS.

(P)With CONSULT.

- Turn the ignition switch ON.
- 2. Display the "WORK SUPPORT" screen and select "ID REGIST".
- 3. Select the start button on the "ID REGIST" screen.
- 4. Contact the tire pressure sensor activation tool (J-45295) (1) to the side of the tire at the location to the tire pressure sensor.
- 5. Press and hold the tire pressure sensor tire pressure sensor 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.



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

Sequence	ID registration position	Turn signal lamp	CONSULT
1	Front left wheel		
2	Front right wheel	2 blinks	"Red"
3	Rear right wheel	2 DIII IKS	"Green"
4	Rear left wheel		

7. 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 >> Refer to WT-60, "Diagnosis Procedure".

WT

D

Α

F

G

Н

ī

N /

Ν

0

DTC/CIRCUIT DIAGNOSIS

C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

DTC Logic

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes			
C1704	LOW PRESSURE FL	Front LH wheel pressure drops to 182 kPa (1.86 kg/cm ² , 26.4 psi)) or less				
C1705	LOW PRESSURE FR	Front RH wheel pressure drops to 182 kPa (1.86 kg/cm ² , 26.4 psi)) or less				
C1706	LOW PRESSURE RR	Rear RH wheel pressure drops to 182 kPa (1.86 kg/cm ² , 26.4 psi)) or less	Low tire pressure			
C1707	LOW PRESSURE RL	Rear LH wheel pressure drops to 182 kPa (1.86 kg/cm ² , 26.4 psi)) or less				

DTC CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION

(P)With CONSULT

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-71, "Tire Air Pressure"</u>.
- 3. Perform self-diagnosis for "AIR PRESSURE MONITOR".

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

YES >> Proceed to WT-32, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010100078

1. CHECK TIRE PRESSURE

Check the air pressure of all wheels. Refer to WT-71, "Tire Air Pressure".

Is the inspection result normal?

YES >> Replace the DTC-detected malfunctioning tire pressure sensor. Refer to <u>WT-68, "Removal and Installation"</u>.

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

2.CHECK TIRE PRESSURE SIGNAL

(I) With CONSULT

- 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.
- 4. 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?

C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

< DTC/CIRCUIT DIAGNOSIS >

NO >> Repair or replace error-detected parts.

А

В

С

D

WT

F

G

Н

ī

J

Κ

L

M

Ν

0

Ρ

C1708, C1709, C1710, C1711 TIRE PRESSURE SENSOR

< DTC/CIRCUIT DIAGNOSIS >

C1708, C1709, C1710, C1711 TIRE PRESSURE SENSOR

DTC Logic

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes	
C1708	[NO DATA] FL	Tire pressure data signal from the front LH wheel tire pressure sensor cannot be detected.	Harness or connector connection malfunction	
C1709	[NO DATA] FR	Tire pressure data signal from the front RH wheel tire pressure sensor cannot be detected.	(Tire pressure receiver, low tire pressure warning control unit) Tire Pressure Sensor ID regis-	
C1710	[NO DATA] RR	Tire pressure data signal from the rear RH wheel tire pressure sensor cannot be detected.	tration incomplete Tire Pressure Sensor malfunc-	
C1711	[NO DATA] RL	Tire pressure data signal from the rear LH wheel tire pressure sensor cannot be detected.	tionTire pressure sensor battery voltage	

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION

(P)With CONSULT

- 1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- 2. Stop the vehicle.
- 3. Perform self-diagnosis for "AIR PRESSURE MONITOR".

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

YES >> Proceed to WT-34, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010100080

1. CHECK TIRE PRESSURE SIGNAL

(I) With CONSULT

- 1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- 2. Stop the vehicle.
- Select "DATA MONITOR" for "AIR PRESSURE MONITOR" with CONSULT.
- Within 5 minutes after vehicle stopped, read the values that are displayed for "AIR PRESS FL", "AIR PRESS FR", "AIR PRESS RR", and "AIR PRESS RL".

Are all tire pressures displayed 0 kPa (psi)?

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

2. CHECK RECEIVER CIRCUIT

- Turn the ignition switch OFF.
- Disconnect low tire pressure warning control unit harness connector and tire pressure receiver harness connector.
- Check the continuity between low tire pressure warning control unit harness connector and tire pressure receiver harness connector.

CHECK RECEIVER POWER CIRCUIT

Low tire pressure	warning control unit	Tire pressu	Continuity		
Connector	Terminal	Connector	Terminal	Continuity	
	10	E58 (Front LH)			
M43	9	E28 (Front RH)	4	Existed	
IVI43	8	B13 (Rear LH)	ı	Existed	
	7	B213 (Rear RH)			

C1708, C1709, C1710, C1711 TIRE PRESSURE SENSOR

< DTC/CIRCUIT DIAGNOSIS >

arning control unit		Tire press	ure receiver	0
Terminal	Conne	ector	Terminal	Continuity
6	E58 (Fro	ont LH)		
5	E28 (Fro	nt RH)		
4	B13 (Re	ar LH)	3	Existed
3	B213 (Re	ear RH)		
SNAL (SENSITIVITY) CIRCU	JIT			
		Tire press	ure receiver	O and in the
Terminal	Conne	ector	Terminal	Continuity
22	E58 (Fro	ont LH)		
21	E28 (Fro	nt RH)	_	
20	B13 (Re	ar LH)	_ 2	Existed
19	B213 (Re	ear RH)		
OUND CIRCUIT	<u>. </u>		ı	I
		Tire press	ure receiver	0.00
Terminal	Conne	ector	Terminal	Continuity
26	E58 (Fro	ont LH)		
25	E28 (Fro	nt RH)	1 .	
24	B13 (Re	ar LH)	4	Existed
23	B213 (Re	ear RH)		
ssure warning control unit			_	Continuity
	al			
10				
9			Ground	Not existed
9			Ground	Not existed
			Ground	Not existed
8 7 SNAL CIRCUIT			Ground	Not existed
8 7 SNAL CIRCUIT ssure warning control unit			Ground 	Not existed Continuity
8 7 SNAL CIRCUIT	al		Ground —	
8 7 SNAL CIRCUIT ssure warning control unit	al		Ground	
8 7 SNAL CIRCUIT ssure warning control unit Termina	al		_	Continuity
8 7 GNAL CIRCUIT ssure warning control unit Termina 6 5 4	al		Ground Ground	
8 7 SNAL CIRCUIT ssure warning control unit Termina 6 5	al		_	Continuity
8 7 GNAL CIRCUIT source warning control unit Termina 6 5 4 3 GNAL (SENSITIVITY) CIRCU			_	Continuity
8 7 SNAL CIRCUIT sure warning control unit Termina 6 5 4 3 SNAL (SENSITIVITY) CIRCUSTURE CONTROL Unit	UIT		_	Continuity Not existed
8 7 GNAL CIRCUIT sture warning control unit Termina 6 5 4 3 GNAL (SENSITIVITY) CIRCUIT STURE WARNING CONTROL Unit Termina	UIT		_	Continuity
8 7 SNAL CIRCUIT Soure warning control unit Termina 6 5 4 3 SNAL (SENSITIVITY) CIRCU Soure warning control unit Termina 22	UIT		_	Continuity Not existed
8 7 GNAL CIRCUIT sture warning control unit Termina 6 5 4 3 GNAL (SENSITIVITY) CIRCUIT STURE WARNING CONTROL Unit Termina	UIT		_	Continuity Not existed
	6 5 4 3 GNAL (SENSITIVITY) CIRCUlarating control unit Terminal 22 21 20 19 COUND CIRCUIT Varning control unit Terminal 26 25 24 23 ity between low tire power circularating control unit Terminal Country control unit Terminal	6 E58 (Fro. 5 E28 (Fro. 4 B13 (Re. 3 B213 (Re. 3 B213 (Re. 3 B213 (Re. 4 B13	6 E58 (Front LH) 5 E28 (Front RH) 4 B13 (Rear LH) 3 B213 (Rear RH) GNAL (SENSITIVITY) CIRCUIT Varning control unit Tire press Terminal Connector 22 E58 (Front LH) 21 E28 (Front RH) 20 B13 (Rear LH) 19 B213 (Rear RH) COUND CIRCUIT Varning control unit Tire press Terminal Connector 25 E58 (Front LH) 26 E58 (Front LH) 27 E28 (Front LH) 28 E28 (Front LH) 29 E28 (Front LH) 20 E28 (Front LH) 21 E28 (Front LH) 22 E28 (Front LH) 23 E28 (Front RH) 24 E28 (Front RH) 25 E28 (Front RH) 26 E28 (Front RH) 27 E28 (Front RH) 28 E28 (Front RH) 29 E28 (Front RH) 20 E28 (Front RH) 21 E28 (Front RH) 22 E28 (Front RH) 23 E28 (Front RH) 24 E28 (Front RH) 25 E28 (Front RH) 26 E28 (Front RH) 27 E28 (Front RH) 28 E28 (Front RH) 29 E28 (Front RH) 20 E28 (Front RH) 20 E28 (Front RH) 21 E28 (Front RH) 22 E28 (Front RH) 23 E28 (Front RH) 24 E28 (Front RH) 25 E28 (Front RH) 26 E28 (Front RH) 27 E28 (Front RH) 28 E28 (Front RH) 29 E28 (Front RH) 29 E28 (Front RH) 29 E28 (Front RH) 29 E28 (Front RH) 20 E28 (Front RH) 20 E28 (Front RH) 21 E28 (Front RH) 22 E28 (Front RH) 23 E28 (Front RH) 24 E28 (Front RH) 25 E28 (Front RH) 26 E28 (Front RH) 27 E28 (Front RH) 28 E28 (Front RH) 29 E28 (Front RH) 20 E28 (Front RH)	6 E58 (Front LH) 5 E28 (Front RH) 4 B13 (Rear LH) 3 B213 (Rear RH) SNAL (SENSITIVITY) CIRCUIT varning control unit Tire pressure receiver Terminal Connector Terminal 22 E58 (Front LH) 21 E28 (Front RH) 20 B13 (Rear LH) 19 B213 (Rear RH) COUND CIRCUIT varning control unit Tire pressure receiver Terminal Connector Terminal Connector Terminal Connector Terminal Connector Terminal Connector Terminal And Connector Terminal Connector Terminal And Connector

C1708, C1709, C1710, C1711 TIRE PRESSURE SENSOR

< DTC/CIRCUIT DIAGNOSIS >

CHECK RECEIVER GROUN	ID CIRCUIT				
Low tire pressure	e warning control unit		Continuity		
Connector	Terminal	_	Continuity		
	26				
M43	25	Ground	Not existed		
IVI43	24	Giouna	Not existed		
	23				

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

3.check tire pressure receiver power supply circuit

- 1. Connect low tire pressure warning control unit harness connector.
- 2. Turn the ignition switch ON.

CAUTION:

Never start the engine.

3. Check the voltage between tire pressure receiver harness connector and ground.

Tire pressu	ure receiver		Voltage	
Connector	Terminal	_	voltage	
E58 (Front LH)				
E28 (Front RH)	1	Ground	Approx. 7 - 16 V	
B13 (Rear LH)	I I	Giodila	Арргох. 7 - 10 V	
B213 (Rear RH)				

Is the inspection result normal?

YES >> GO TO 4.

NO >> Replace the low tire pressure warning control unit. Refer to WT-67, "Removal and Installation".

4. TIRE PRESSURE RECEIVER SIGNAL

Check tire pressure receiver signal. Refer to WT-43, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Repair or replace error-detected parts.

${f 5}.$ tire pressure sensor id registration

Perform tire pressure sensor ID registration. Refer to WT-31, "Work Procedure".

Is tire pressure sensor ID registration completed?

YES >> GO TO 6.

NO >> Replace applicable tire pressure sensor. Refer to <u>WT-68, "Removal and Installation"</u>.

6.CHECK TIRE PRESSURE SIGNAL

(R) With CONSULT

- 1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- 2. Stop the vehicle.
- 3. Select "DATA MONITOR" for "AIR PRESSURE MONITOR" with CONSULT.
- 4. Within 15 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?

C1708, C1709, C1710, C1711 TIRE PRESSURE SENSOR

< DTC/CIRCUIT DIAGNOSIS >

YES	>> INSPECTION END	
115	>> INSELCTION EIND	

NO >> Replace the low tire pressure warning control unit. Refer to <u>WT-67, "Removal and Installation"</u>.

В

Α

С

D

WT

G

Н

J

Κ

L

M

Ν

0

C1716, C1717, C1718, C1719 TIRE PRESSURE SENSOR

< DTC/CIRCUIT DIAGNOSIS >

C1716, C1717, C1718, C1719 TIRE PRESSURE SENSOR

DTC Logic

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1716	[PRESSDATA ERR] FL	Malfunction in the tire pressure data from the front LH wheel tire pressure sensor. NOTE: In this case the low tire pressure warning control unit judges that the tire pressure is 438.60 kPa (4.47 kg/cm², 63.60 psi).	
C1717	[PRESSDATA ERR] FR	Malfunction in the tire pressure data from the front RH wheel tire pressure sensor. NOTE: In this case the low tire pressure warning control unit judges that the tire pressure is 438.60 kPa (4.47 kg/cm², 63.60 psi).	Tire pressure sensor ID registration incomplete
C1718	[PRESSDATA ERR] RR	Malfunction in the tire pressure data from the rear RH wheel tire pressure sensor. NOTE: In this case the low tire pressure warning control unit judges that the tire pressure is 438.60 kPa (4.47 kg/cm², 63.60 psi).	Tire pressure sensor mal- function
C1719	[PRESSDATA ERR] RL	Malfunction in the tire pressure data from the rear LH wheel tire pressure sensor. NOTE: In this case the low tire pressure warning control unit judges that the tire pressure is 438.60 kPa (4.47 kg/cm², 63.60 psi).	

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION

(P)With CONSULT

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 <u>WT-71, "Tire Air Pressure"</u>.
- 3. Perform self-diagnosis for "AIR PRESSURE MONITOR".

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

YES >> Proceed to WT-38, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010100082

1. CHECK TIRE PRESSURE

Check the air pressure of all wheels. Refer to WT-71, "Tire Air Pressure".

Is the inspection result normal?

YES >> Replace the DTC-detected malfunctioning tire pressure sensor. Refer to <u>WT-68, "Removal and Installation"</u>.

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

2.CHECK TIRE PRESSURE SIGNAL

(I) With CONSULT

C1716, C1717, C1718, C1719 TIRE PRESSURE SENSOR

< DTC/CIRCUIT DIAGNOSIS >

- 1. Check the tire pressure for all wheels and adjust to the specified value. Refer to <u>WT-71, "Tire Air Pressure"</u>.
- Perform tire pressure sensor ID registration for all wheels. Refer to WT-31, "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. Stop the vehicle.
- 5. Select "DATA MONITOR" for "AIR PRESSURE MONITOR" with CONSULT.
- Within 15 minutes after vehicle stopped, read the values that are displayed for "AIR PRESS FL", "AIR PRESS FR", "AIR PRESS RR", and "AIR PRESS RL".

Which tire pressures is displayed as 438.60 kPa (4.47 kg/cm², 63.60 psi)?

- YES >> Replace tire pressure sensor the tire pressure as 438.60 kPa (4.47 kg/cm², 63.60 psi) displayed. Refer to WT-68, "Removal and Installation".
- NO >> Perform "DTC CONFIRMATION PROCEDURE" (self-diagnosis) again. Refer to <u>WT-38, "DTC Logic"</u>.

WT

Α

В

C

D

Н

Κ

M

L

Ν

0

C1728 RECEIVER ID

DTC Logic

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1728	RECEIVER ID NO REG	Receiver ID registration cannot be performed.	Tire pressure receiver malfunction Low tire pressure warning control unit malfunction

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION

(P)With CONSULT

- 1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- 2. Stop the vehicle.
- 3. Perform self-diagnosis for "AIR PRESSURE MONITOR".

Is DTC "C1728" detected?

YES >> Proceed to WT-40, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010100084

1. CHECK TIRE PRESSURE RECEIVER INPUT SIGNAL

1. Turn the ignition switch ON.

CAUTION:

Never start engine.

2. Use an oscilloscope and check the input signal waveform between the low tire pressure warning control unit harness connector and ground.

STANDBY STATUS

Low tire pressure	Low tire pressure warning control unit		Value (Approx.)	
Connector	Terminal	_	value (Applox.)	
	3			
	4		(V)	
	5		4 2	
M43	6	Ground	0 	

WHEN SIGNAL IS RECEIVED

Low tire pressure warning control unit			Value (Approx.)
Connector	Terminal	_	Value (Approx.)
	3		
4 5	4		(V)
	5		4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
M43	6	Ground	0 0.2s
			OCC3880D Approx. 4.5 V

Is the inspection result normal?

C1728 RECEIVER ID

< DTC/CIRCUIT DIAGNOSIS >

YES >> Check connector for loose connection and then perform "DTC CONFIRMATION PROCEDURE" (self-diagnosis) again. Refer to <u>WT-40</u>, "<u>DTC Logic</u>".

NO >> GO TO 2.

2.CHECK TIRE PRESSURE RECEIVER POWER SUPPLY CIRCUIT

1. Disconnect the tire pressure receiver harness connector.

2. Turn the ignition switch ON.

CAUTION:

Never start the engine.

3. Check the voltage between tire pressure receiver harness connector and ground.

Tire press	ure receiver		Voltage	
Connector	Terminal	_	vollage	
E58 (Front LH)				
E28 (Front RH)	1	Ground	Approx 7 16 V	
B13 (Rear LH)	'	Ground	Approx. 7 - 16 V	
B213 (Rear RH)				

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

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

Turn the ignition switch OFF.

Disconnect low tire pressure warning control unit harness connector and tire pressure receiver harness connector.

Check the continuity between low tire pressure warning control unit harness connector and tire pressure receiver harness connector.

Low tire pressure	warning control unit	Tire pressure receiver		Continuity
Connector	Terminal	Connector Terminal		Continuity
	26	E58 (Front LH)	4	
M43	25	E28 (Front RH)		Existed
	24	B13 (Rear LH)	4	EXISTEC
	23	B213 (Rear RH)		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning harness or connector.

f 4.CHECK LOW TIRE PRESSURE WARNING CONTROL UNIT CIRCUIT

Check the low tire pressure warning control unit circuit. Refer to WT-46, "Diagnosis Procedure".

Is the low tire pressure warning control unit circuit normal?

YES >> Replace the tire pressure receiver. Refer to <u>WT-70, "FRONT TIRE PRESSURE RECEIVER: Removal and Installation"</u> (Front), <u>WT-70, "REAR TIRE PRESSURE RECEIVER: Removal and Installation"</u> (Rear).

NO >> Repair or replace error-detected parts.

Revision: 2013 November WT-41 2014 Q70

Α

В

D

VVI

.

K

M

Ν

 \circ

C1729 VEHICLE SPEED SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

C1729 VEHICLE SPEED SIGNAL

DTC Logic

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1729	VHCL SPEED SIG ERR	Vehicle speed signal not detected.	CAN communication malfunction Low tire pressure warning control unit malfunction ABS actuator and electric unit (control unit) malfunction

DTC CONFIRMATION PROCEDURE

1.DTC CONFIRMATION PROCEDURE

(F)With CONSULT

- 1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more without stopping.
- 2. Stop the vehicle.
- 3. Perform self-diagnosis for "AIR PRESSURE MONITOR".

Is DTC "C1729" detected?

YES >> Proceed to WT-42, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010100086

${f 1.}$ PERFORM ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) SELF-DIAGNOSIS

(P)With CONSULT

Perform self-diagnosis for "ABS".

Is any DTC detected?

YES >> Check malfunctioning circuit.

NO >> GO TO 2.

2.CHECK LOW TIRE PRESSURE WARNING CONTROL UNIT INPUT/OUTPUT SIGNAL

Check the low tire pressure warning control unit input/output signal values. Refer to <u>WT-13, "Reference Value"</u>.

Is the inspection result normal?

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

NO >> Replace the low tire pressure warning control unit. Refer to WT-67, "Removal and Installation".

C1750, C1751, C1752, C1753 RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

C1750, C1751, C1752, C1753 RECEIVER

DTC Logic

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1750	[RECEIVER ERR] FL	The front LH tire pressure receiver dose not receive a signal.	
C1751	[RECEIVER ERR] FR	The front RH tire pressure receiver dose not receive a signal.	Tire pressure receiver mal-
C1752	[RECEIVER ERR] RR	The rear RH tire pressure receiver dose not receive a signal.	function
C1753	[RECEIVER ERR] RL	The rear LH tire pressure receiver dose not receive a signal.	

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION

(P)With CONSULT

- 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.
- Perform self-diagnosis for "AIR PRESSURE MONITOR".

Is DTC "C1750", "C1751", "C1752", or "C1753" detected?

YES >> Proceed to WT-43, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK TIRE PRESSURE RECEIVER INPUT SIGNAL

1. Turn the ignition switch ON.

CAUTION:

Never start engine.

2. Use an oscilloscope and check the input signal waveform between the low tire pressure warning control unit harness connector and ground.

STANDBY STATUS

Low tire pressure warning control unit			Value (Approx.)	
Connector	Terminal	_	Value (Approx.)	
	3			1
	4	7	(V) 6	ľ
	5	1	4 2	
M43		Ground	0	
	6		* + 0.2s	
			оссзв79D Арргох. 4.5 V	(

Revision: 2013 November WT-43 2014 Q70

Р

Α

В

D

Н

INFOID:0000000010100088

C1750, C1751, C1752, C1753 RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

WHEN SIGNAL IS RECE	IVED		
Low tire pressure warning control unit Connector Terminal			Value (Approx.)
			value (Applox.)
	3		
	4		(V) 6
	5		4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
M43	6	Ground	0 0.2s OCC3880D
			Approx. 4.5 V

Is the inspection result normal?

YES >> Check connector for loose connection and then perform "DTC CONFIRMATION PROCEDURE" (self-diagnosis) again. Refer to <u>WT-43</u>, "<u>DTC Logic"</u>.

NO >> GO TO 2.

2.CHECK TIRE PRESSURE RECEIVER POWER SUPPLY CIRCUIT

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

CAUTION:

Never start the engine.

3. Check the voltage between tire pressure receiver harness connector and ground.

Tire pressi	ure receiver		Voltage	
Connector	Terminal	_	vollage	
E58 (Front LH)				
E28 (Front RH)	4	Ground	Approx 7 16 V	
B13 (Rear LH)	I I	Giodila	Approx. 7 - 16 V	
B213 (Rear RH)				

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

3. CHECK TIRE PRESSURE RECEIVER GROUND CIRCUIT

- 1. Turn the ignition switch OFF.
- 2. Disconnect low tire pressure warning control unit harness connector and tire pressure receiver harness connector.
- Check the continuity between low tire pressure warning control unit harness connector and tire pressure receiver harness connector.

Low tire pressure warning control unit		Tire pressure receiver		Continuity
Connector	Terminal	Connector Terminal		Continuity
M43 26 25 24 23	26	E58 (Front LH)		4 Existed
	25	E28 (Front RH)	4	
	B13 (Rear LH)	4	Existed	
	23	B213 (Rear RH)		

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace the malfunctioning harness or connector.

4.CHECK FOR CHANGE TO THE TIRE PRESSURE RECEIVER INSTALLATION POSITION (EXAMPLE: FRONT LH RECEIVER OK/NG JUDGMENT)

NOTE:

Example: Front LH tire pressure receiver OK/NG judgment when DTC "C1750" is detected.

C1750, C1751, C1752, C1753 RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

(P)With CONSULT

- 1. Exchange the positions of the front LH tire pressure receiver and the front RH tire pressure receiver.
- 2. Perform "DTC CONFIRMATION PROCEDURE" (self-diagnosis) again. Refer to WT-43, "DTC Logic".

Is DTC "C1751" detected?

- YES >> Replace the exchanged front RH tire pressure receiver.
- NO >> Check the low tire pressure warning control unit circuit. Refer to <u>WT-46, "Diagnosis Procedure"</u>.

Α

В

С

D

WT

Н

J

K

M

Ν

0

C1754 LOW TIRE PRESSURE WARNING CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

C1754 LOW TIRE PRESSURE WARNING CONTROL UNIT

DTC Logic

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1754	CONT UNIT (EEPROM)	Memory (EEPROM) system malfunction is detected in the low tire pressure warning control unit	Low tire pressure warning control unit malfunction

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION

(P)With CONSULT

- 1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more without stopping.
- Stop the vehicle.
- 3. Perform self-diagnosis for "AIR PRESSURE MONITOR".

Is DTC "C1754" detected?

YES >> Proceed to WT-46, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

 ${f 1}$.CHECK LOW TIRE PRESSURE WARNING CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

INFOID:0000000010100090

Perform the trouble diagnosis for power supply and ground circuit. Refer to <u>WT-52, "Diagnosis Procedure"</u>. <u>Is the inspection result normal?</u>

YES >> GO TO 2.

NO >> Repair or replace error-detected parts.

2.check tire pressure receiver circuit

- 1. Disconnect the tire pressure receiver harness connector.
- Check the continuity between the low tire pressure warning control unit harness connector and tire pressure receiver harness connector.

Low tire pressure	warning control unit	Tire pressure	e receiver	Continuity
Connector	Terminal	Connector	Terminal	Continuity
	6		3	
	22	F50 (Front III)	2	
	10	E58 (Front LH)	1	
	26		4	
	5		3	
	21	E28 (Front RH)	2	
	9	E20 (FIOIIL KIT)	1	Existed
M43	25		4	
IVI43	4		3	Existed
	20	B13 (Rear LH)	2	
	8	Bis (Real Ln)	1	
	24		4	
	3		3	
	19	B213 (Rear RH)	2	
	7	DZ 13 (IXEdI KII)	1	
	23		4	

C1754 LOW TIRE PRESSURE WARNING CONTROL UNIT

< DTC/CIRCUIT DIAGNOSIS >

3. Check the continuity between the low tire pressure warning control unit harness connector and ground.

Low tire pressure w	arning control unit		Continuity	
Connector	Terminal	_	Continuity	
	6			
	22			
	10			
	26			
	5			
	21			
	9	- Ground Not exi	Net evieted	
M43	25			V
IVI43	4		Not existed	V
	20			
	8			
	24			
	3			
	19			(
	7			
	23			

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace the malfunctioning harness or connector.

3. PERFORM SELF-DIAGNOSIS AGAIN

(P)With CONSULT

- 1. Check the tire pressure for all wheels and adjust to the specified value. Refer to <u>WT-71, "Tire Air Pressure"</u>.
- Perform tire pressure sensor ID registration for all wheels. Refer to <u>WT-31, "Work Procedure"</u>.
- Perform "DTC CONFIRMATION PROCEDURE" (self-diagnosis) again. Refer to WT-46, "DTC Logic".

Is DTC "C1754" detected?

- YES >> Replace the low tire pressure warning control unit. Refer to WT-67, "Removal and Installation".
- NO >> Check for looseness or damage at the harness connector pins of the low tire pressure warning control unit. Repair or replace if necessary.

Revision: 2013 November WT-47 2014 Q70

D

Α

В

Н

K

M

Ν

0

C1755, C1756, C1757, C1758 POOR RECEIVING CONDITIONS

< DTC/CIRCUIT DIAGNOSIS >

C1755, C1756, C1757, C1758 POOR RECEIVING CONDITIONS

DTC Logic

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1755	PR RECEIV COND FL	The data signal from the front LH wheel tire pressure sensor cannot be detected due to external electromagnetic interference for 10 minutes or more. (DTC C1708 is displayed at the same time.)	
C1756	PR RECEIV COND FR	The data signal from the front RH wheel tire pressure sensor cannot be detected due to external electromagnetic interference for 10 minutes or more. (DTC C1709 is displayed at the same time.)	External electromagnetic
C1757	PR RECEIV COND RR	The data signal from the rear RH wheel tire pressure sensor cannot be detected due to external electromagnetic interference for 10 minutes or more. (DTC C1710 is displayed at the same time.)	interference
C1758	PR RECEIV COND RL	The data signal from the rear LH wheel tire pressure sensor cannot be detected due to external electromagnetic interference for 10 minutes or more. (DTC C1711 is displayed at the same time.)	

CAUTION:

If DTC C1755, C1756, C1757, or C1758 is detected along with, C1708, C1709, C1710, or C1711 first diagnose C1755, C1756, C1757, or C1758.

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION

(P)With CONSULT

- 1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- 2. Stop the vehicle.
- 3. Perform self-diagnosis for "AIR PRESSURE MONITOR".

Is DTC "C1755", "C1756", "C1757", or "C1758" detected?

YES >> Proceed to WT-48, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010100092

1. TIRE PRESSURE SENSOR ID REGISTRATION

Perform tire pressure sensor ID registration. Refer to WT-31, "Work Procedure".

Is tire pressure sensor ID registration completed?

YES >> GO TO 2.

NO >> Change the work location and perform ID registration again, then proceed to <u>WT-60</u>, "Diagnosis Procedure".

2. CHECK TIRE PRESSURE SIGNAL

(P)With CONSULT

- 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.
- 4. 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

C1755, C1756, C1757, C1758 POOR RECEIVING CONDITIONS

< DTC/CIRCUIT DIAGNOSIS >

Monitor item	Displayed value
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 >> GO TO 3.

NO >> Change the work location, then GO TO 1.

3. CHECK SELF-DIAGNOSIS RESULTS

(I) With CONSULT

- 1. Erase the self-diagnosis memory for the low tire pressure warning control unit.
- 2. Turn ignition switch OFF, and wait for 10 seconds or more.
- 3. Perform "DTC CONFIRMATION PROCEDURE" (self-diagnosis) again. Refer to WT-48, "DTC Logic".

Are DTC "C1755", "C1756", "C1757", or "C1758" and "C1708", "C1709", "C1710", or "C1711" detected?

YES >> Change the work location, then GO TO 1.

NO >> Check the input/output signal values. Refer to WT-13, "Reference Value".

WT

Α

В

C

D

F

G

Н

Κ

L

M

Ν

0

U1000 CAN COMM CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

U1000 CAN COMM CIRCUIT

Description INFOID:000000010100093

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN-H line, CAN-L line) allowing a high rate of information transmission with less wiring. Each control unit communicates data but selectively reads required data only.

DTC Logic

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible cause
U1000	CAN COMM CIRCUIT	Low tire pressure warning control unit is not communicating CAN communication signal for 2 seconds or more.	CAN communication malfunction Malfunction of low tire pressure warning control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION

(P)With CONSULT

- 1. Drive for several minutes at a speed of 40 km/h (25 MPH) or more.
- 2. Stop the vehicle.
- 3. Perform self-diagnosis for "AIR PRESSURE MONITOR".

Is DTC "U1000" detected?

YES >> Proceed to WT-50, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000010100095

Proceed to LAN-33, "CAN COMMUNICATION SYSTEM: CAN System Specification Chart".

U1010 CONTROL UNIT (CAN)

< DTC/CIRCUIT DIAGNOSIS >

U1010 CONTROL UNIT (CAN)

Description INFOID:000000010100096

CAN (Controller Area Network) is a serial communication line for real time application. It is an on-vehicle multiplex communication line with high data communication speed and excellent error detection ability. Many electronic control units are equipped onto a vehicle, and each control unit shares information and links with other control units during operation (not independent). In CAN communication, control units are connected with 2 communication lines (CAN-H line, CAN-L line) allowing a high rate of information transmission with less wiring. Each control unit communicates data but selectively reads required data only.

DTC Logic

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible cause
U1010	CONTROL UNIT (CAN)	Detecting error during the initial diagnosis of CAN controller of low tire pressure warning control unit.	Malfunction of low tire pressure warning control unit

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION

(P)With CONSULT

- 1. Drive for several minutes at a speed of 40 km/h (25 MPH) or more.
- 2. Stop the vehicle.
- 3. Perform self-diagnosis for "AIR PRESSURE MONITOR".

Is DTC "U1010" detected?

YES >> Proceed to WT-51, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK LOW TIRE PRESSURE WARNING CONTROL UNIT

Check low tire pressure warning control unit harness connector for disconnection or deformation. <u>Is the inspection result normal?</u>

YES >> Replace low tire pressure warning control unit. Refer to WT-67, "Removal and Installation".

NO >> Repair or replace error-detected parts.

WT

D

Α

Н

INFOID:0000000010100098

M

Ν

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000010100099

1. CHECK FUSE/FUSIBLE LINK

- 1. Turn the ignition switch OFF.
- 2. Check for fusing of the fuse and fusible link at the low tire pressure warning control unit.
- Check the 10A fuse [No. 3 in fuse block (J/B)]

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace error-detected parts.

2.CHECK LOW TIRE PRESSURE WARNING CONTROL UNIT POWER SUPPLY CIRCUIT

- 1. Disconnect the low tire pressure warning control unit harness connector.
- 2. Turn the ignition switch ON.

CAUTION:

Never start engine.

3. Check the voltage between the low tire pressure warning control unit and ground.

Low tire pressure warning control unit		_	Voltage
Connector	Terminal	_	vollage
M43	15	Ground	Battery voltage

- 4. Turn the ignition switch OFF.
- Check the voltage between the low tire pressure warning control unit and ground.

Low tire pressure warning control unit			Voltage (Approx.)
Connector	Connector Terminal		voltage (Approx.)
M43	15	Ground	0 V

Is the inspection result normal?

YES >> GO TO 3.

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

- Harness for short or open between ignition switch and low tire pressure warning control unit harness connector
- · Ignition voltage.

3. CHECK LOW TIRE PRESSURE WARNING CONTROL UNIT GROUND CIRCUIT

- 1. Turn the ignition switch OFF.
- Check the continuity between the low tire pressure warning control unit harness connector and ground.

Low tire pressure warning control unit			Continuity
Connector	Terminal		Continuity
M43	32	Ground	Existed

Also check harness for short to ground and short to power.

Is the inspection result normal?

YES >> INSPECTION END

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

LOW TIRE PRESSURE WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP

Component Function Check

INFOID:0000000010100100

1. CHECK LOW TIRE PRESSURE WARNING LAMP OPERATION

В

Α

D

WT

F

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Proceed to WT-53, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000010100101

${f 1}$.CHECK LOW TIRE PRESSURE WARNING CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Perform the trouble diagnosis for power supply and ground circuit. Refer to WT-52, "Diagnosis Procedure". Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace error-detected parts.

2.PERFORM LOW TIRE PRESSURE WARNING CONTROL UNIT SELF-DIAGNOSIS

(P)With CONSULT

Н

- Drive for several minutes at a speed of 40 km/h (25 MPH) or more.
- Stop the vehicle.
- Perform self-diagnosis for "AIR PRESSURE MONITOR".

Is any DTC detected?

YES >> Perform trouble diagnosis for detected DTC. Refer to WT-17, "DTC Index".

NO >> GO TO 3.

3.CHECK LOW TIRE PRESSURE WARNING LAMP SIGNAL

(P)With CONSULT

Turn the ignition switch ON.

CAUTION:

Never start engine.

K

- Select "DATA MONITOR" for "AIR PRESSURE MONITOR" with CONSULT.
- 3. Read out the value of "WARNING LAMP". For low tire pressure warning lamp condition, refer to "LOW TIRE PRESSURE WARNING LAMP CONTROL CONDITION" in WT-9, "System Description".

Does the data monitor display change normal?

YES >> GO TO 4.

>> Replace the low tire pressure warning control unit. Refer to WT-67, "Removal and Installation". NO

f 4 .CHECK COMBINATION METER POWER SUPPLY CIRCUIT

Perform the trouble diagnosis for combination meter power supply circuit. Refer to MWI-72, "COMBINATION METER: Diagnosis Procedure".

Is the inspection result normal?

YES >> INSPECTION END

NO >> Repair or replace error-detected parts. N

M

TPMS SYMPTOMS

SYMPTOM DIAGNOSIS

TPMS SYMPTOMS

Symptom Table

LOW TIRE PRESSURE WARNING LAMP SYMPTOM CHART

TPMS SYMPTOMS

Diagnosis items	Symptom (Ignition switch ON)	Low tire pressure warning lamp	Cause	Action	А
Low tire pressure warning lamp	The low tire pressure warning lamp illuminates for 1 second, then turns OFF.	ON 1 sec > stays OFF	Wake-up operation for all tire pressure sensors at wheels is completed.	No procedure. (No system malfunctions)	В
	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 tire pressure sensors at wheels is not completed.	Perform the wake-up operation for all tire pressure sensors at wheels. Refer to WT-30, "Work Procedure".	D WT
	The low tire pressure warning lamp blinks once.	Blinks 1 time ON 0.3 sec > OFF 1.0 sec	The front LH wheel tire pressure sensor is not activated.	Perform the wake-up operation for the tire pressure sensor at front LH wheel. Refer to WT-30, "Work Procedure".	G
	The low tire pressure warning lamp repeats blinking twice.	Blinks 2 times ON 0.3 sec > OFF 0.3 sec SEIA0595E	The front right wheel tire pressure sensor is not activated.	Perform the wake-up operation for the tire pressure sensor at front right wheel. Refer to WT-30, "Work Procedure".	J
	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 wheel tire pressure sensor is not activated.	Perform the wake-up operation for the tire pressure sensor at rear right wheel. Refer to WT-30, "Work Procedure".	K L M
	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 LH wheel tire pressure sensor is not activated.	Perform the wake-up operation for the tire pressure sensor at rear LH wheel. Refer to WT-30, "Work Procedure".	N O
	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-71, "Tire Air Pressure".	Р

TPMS SYMPTOMS

< SYMPTOM DIAGNOSIS >

Diagnosis items	Symptom (Ignition switch ON)	Low tire pressure warning lamp	Cause	Action	
Low tire The low tire pressure pressure warning lamp repeats blinking at 0.5-second		The combination meter fuse is open or removed (or pulled out).	Check and install the combination meter fuse. If necessary, replace the fuse.		
lamp	and then stays illumi-	The low tire pressure warning control unit harness connector is removed.	Check the connection conditions of the low tire pressure warning control unit harness connector, and repair if necessary.		
			Tire Pressure Monitoring System (TPMS) malfunction.	Perform self-diagnosis. If necessary, perform tire pressure sensor ID registration. Refer to <u>WT-31</u> , <u>"Work Procedure"</u> .	
Hazard The hazard warning lamp does not blink twice when the tire pressure sensor is activated. Or the buzzer does not sound.		The tire pressure sensor activation tool does not activate.	Replace the battery in the tire pressure sensor acti- vation tool.		
	The ignition switch is OFF when the tire pres- sure sensor wake-up op- eration is performed.	Turn the ignition switch ON when performing the tire pressure sensor wake-up operation.			
			The tire pressure sensor activation tool is not used in the correct position.	Operate the tire pressure sensor activation tool in the correct position when performing the wake-up operation.	
			The tire pressure sensor is already waked up.	No procedure.	

NOTE:

If tire pressure sensor wake-up operation is not completed for two or more tire pressure sensors, 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 LH wheel and rear RH wheel tire pressure sensors.)

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:0000000010100104

1. CHECK LOW TIRE PRESSURE WARNING LAMP

Perform trouble diagnosis for the low tire pressure warning lamp. Refer to <u>WT-53, "Diagnosis Procedure"</u>. <u>Is the inspection result normal?</u>

YES >> Check each harness connector pin terminal for malfunction or disconnection.

NO >> Repair or replace error-detected parts.

WT

D

Α

В

F

Н

J

K

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 INFOID:000000010100105

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

Diagnosis Procedure

INFOID:0000000010100106

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-71, "Tire Air Pressure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Inspect or repair the tires or wheels.

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 DTC WITH LOW TIRE PRESSURE WARNING CONTROL UNIT

(P)With CONSULT

Perform self-diagnosis for "AIR PRESSURE MONITOR".

Is any DTC detected?

YES >> Perform the diagnosis applicable to the displayed DTC. Refer to WT-17, "DTC Index".

NO >> GO TO 4.

4.CHECK LOW TIRE PRESSURE WARNING CONTROL UNIT POWER SUPPLY AND GROUND CIRCUIT

Perform the trouble diagnosis for power supply and ground circuit. Refer to <u>WT-52</u>, <u>"Diagnosis Procedure"</u>. <u>Is the inspection result normal?</u>

YES >> Replace low tire pressure warning control unit. Refer to WT-67, "Removal and Installation".

NO >> Repair or replace error-detected parts.

LOW TIRE PRESSURE WARNING LAMP BLINKS

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP BLINKS

Description INFOID:0000000010100107

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

NOTE:

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

Low tire pressure warning lamp blinkin	g timing	Activation tire position
ON a b	a : 0.3 sec. b : 1.0 sec.	Front LH
ON a a b 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

INFOID:0000000010100108

Diagnosis Procedure

1. TIRE PRESSURE SENSOR WAKE-UP OPERATION

Perform the tire pressure sensor wake-up. Refer to WT-30, "Work Procedure".

Is the tire pressure sensor wake-up completed?

YES >> GO TO 2.

NO >> Perform trouble diagnosis for the tire pressure sensor. Refer to WT-34, "Diagnosis Procedure".

2. TIRE PRESSURE SENSOR ID REGISTRATION

Perform tire pressure sensor ID registration. Refer to WT-31, "Work Procedure".

Is tire pressure sensor ID registration completed?

YES >> INSPECTION END

NO >> Perform the self-diagnosis for "AIR PRESSURE MONITOR". Refer to WT-17, "DTC Index".

WT-59

2014 Q70

Revision: 2013 November

В

Α

С

D

WT

G

K

M

Ν

0

ID REGISTRATION CANNOT BE COMPLETED

< SYMPTOM DIAGNOSIS >

ID REGISTRATION CANNOT BE COMPLETED

Description INFOID:0000000010100109

The ID of the tire pressure sensor installed in each wheel cannot be registered in the tire pressure monitoring system.

Inspect the tire pressure sensor or the tire pressure monitoring system circuit.

Diagnosis Procedure

INFOID:0000000010100110

1. TIRE PRESSURE SENSOR WAKE-UP

Perform the tire pressure sensor wake-up. Refer to WT-30, "Work Procedure".

Is the tire pressure sensor wake-up completed?

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

2.CHECK TIRE PRESSURE SENSOR ACTIVATION TOOL

Check tire pressure sensor activation tool.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Replace the battery of tire pressure sensor activation tool or repair/replace the tire pressure sensor activation tool.

3. TIRE PRESSURE SENSOR ID REGISTRATION

Perform tire pressure sensor ID registration. Refer to <u>WT-31, "Work Procedure"</u>. CAUTION:

To perform ID registration, observe the following points:

- Never register ID in a place where radio waves are interfered (e.g. radio tower).
- Never register ID in a place close to vehicles including TPMS.

Is tire pressure sensor ID registration completed?

YES >> INSPECTION END

NO >> GO TO 4.

4. CHECK TIRE PRESSURE SIGNAL

Change the work location and perform ID registration again.

NOTE:

Depending on the tire pressure sensor position*, a blind spot exists, and the tire pressure receiver gets a poor reception. If an ID registration is performed under this condition, the registration may not be completed. In such case, follow the instructions below to improve the radio wave receiving environment.

- Rotate tire by 90°, 180°, or 270°. (This Step is to change tire pressure sensor position.)
- Open the door close to the tire of which ID registration is ongoing.
- *: Radio wave reception condition depends on vehicle architecture (e.g. body harness layout, tire wheel design) or environment.

When ID registration is performed, which wheels do not react?

All wheels react and ID registration is possible.>>INSPECTION END

Only certain wheel(s) do not react.>>Replace applicable tire pressure sensor. Refer to <u>WT-68</u>, "Removal and <u>Installation"</u>.

All wheels do not react.>>Check the tire pressure receiver. Refer to WT-43, "Diagnosis Procedure".

HAZARD WARNING LAMP REMAINS ON

< SYMPTOM DIAGNOSIS >

HAZARD WARNING LAMP REMAINS ON

Description INFOID:0000000010100111

The hazard warning lamp remains on.

Diagnosis Procedure

INFOID:0000000010100112

1. CHECK HAZARD WARNING LAMP OPERATION

Check hazard warning lamp operation with hazard switch.

Is the operation normal?

YES >> GO TO 2.

NO >> Perform trouble diagnosis for the hazard warning lamp. Refer to EXL-109, "Diagnosis Procedure".

2. CHECK HAZARD REQUEST SIGNAL CIRCUIT

Turn the ignition switch OFF.

- Disconnect the low tire pressure warning control unit connector, hazard warning lamp switch connector, and BCM connector.
- 3. Check the continuity between the low tire pressure warning control unit connector and the ground.

Low tire pressure	warning control unit		Continuity		
Connector	Terminal	_	Continuity		
M43 30		Ground	Not existed		

Is the inspection result normal?

YES >> Repair or replace the malfunctioning harness or connector.

NO >> Replace the low tire pressure warning control unit. Refer to WT-67, "Removal and Installation".

A / T

Α

В

C

D

WT

F

Н

K

L

M

Ν

0

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

< SYMPTOM DIAGNOSIS >

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NVH Troubleshooting Chart

INFOID:0000000010100113

Use the cha	Use the chart below to find the cause of the symptom. If necessary, repair or replace these parts.																		
Reference		WT-65, "Exploded View"	WT-65, "Inspection"	WT-63, "Adjustment"	WT-71, "Tire Air Pressure"	WT-65, "Inspection"	I	I	WT-71, "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 cause and SUSPECTED 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	Shimmy	×	×	×	×	×	×	×	×			×	×		×		×	×
Symp- tom		Judder	×	×	×	×	×	×		×			×	×		×		×	×
		Poor quality ride or handling	×	×	×	×	×	×		×			×		×	×			
	ROAD WHEEL	Noise	×	×	×			×			×	×	×	×	×		×	×	×
		Shake	×	×	×			×			×		×	×	×		×	×	×
		Shimmy, Judder	×	×	×			×					×	×	×			×	×
		Poor quality ride or handling	×	×	×			×					×	×	×				

^{×:} Applicable

PERIODIC MAINTENANCE

ROAD WHEEL

Adjustment INFOID:000000010100114

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

- The details of the adjustment procedure are different for each model of wheel balancer. Therefore, refer to each instruction manual.
- 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:

- Never install the inner balance weight before installing the outer balance weight.
- Before installing the balance weight, always to clean the mating surface of the road wheel.
- a. Indicated unbalance value \times 5/3 = balance weight to be installed **Calculation example:**

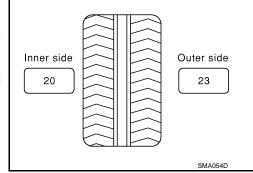
23 g (0.81 oz) \times 5/3 = 38.33 g (1.35 oz) \Rightarrow 37.5 g (1.32 oz) balance weight (closer to calculated balance weight value)

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.

WT

D

Α

В

Н

|

J

K

N

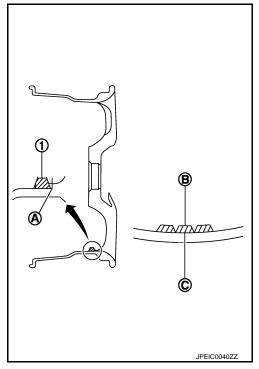
0

< 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.
- · Never install three or more 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:

Never install one balance weight sheet on top of another.

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

CAUTION:

Never install three or more balance weight.

Start the tire balance machine. Check that the inner and outer residual unbalance value is within the allowable unbalance value.

CAUTION:

If either residual unbalance value exceeds limit, repeat installation procedures.



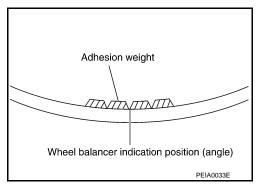
Dynamic (At flange) : Refer to <u>WT-71, "Road Wheel"</u>. Static (At flange) : Refer to <u>WT-71, "Road Wheel"</u>.

TIRE ROTATION

- Follow the maintenance schedule for tire rotation service intervals.
 Refer to MA-5, "FOR NORTH AMERICA: Explanation of General Maintenance".
- When installing the wheel, tighten wheel nuts to the specified torque. Refer to <u>WT-65</u>, "Exploded View".

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.
- Use NISSAN genuine wheel nuts for aluminum wheels.
- Perform the ID registration, after tire rotation. Refer to WT-31, "Work Procedure".



FRONT

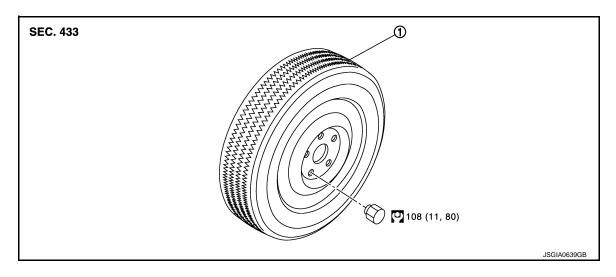
4 wheels

SMA829C

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.
- 2. 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 <u>WT-31. "Work Procedure"</u>.

Inspection

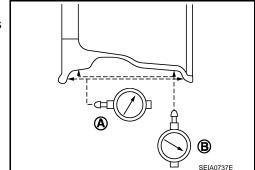
ALUMINUM WHEEL

- 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. Check runout, if the axial runout (A) or radial runout (B) exceeds the limit, replace aluminum wheel.

Limit

Axial runout (A) : Refer to <u>WT-71, "Road Wheel"</u>.

Radial runout (B) : Refer to <u>WT-71, "Road Wheel"</u>.



Α

В

D

WT

K

L

Ν

Р

INFOID:0000000010100116

STEEL WHEEL

1. Check tires for wear and improper inflation.

Revision: 2013 November WT-65 2014 Q70

ROAD WHEEL TIRE ASSEMBLY

< REMOVAL AND INSTALLATION >

- 2. 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 figure.
- 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.

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

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

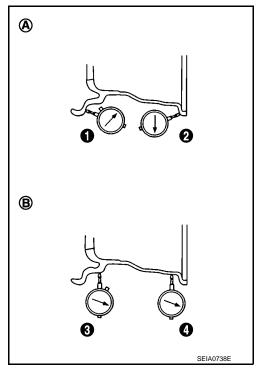
In case a positive or negative value is not available, use the maximum value (negative or positive) for total runout.

Limit

A : Refer to <u>WT-71, "Road Wheel"</u>.

B : Refer to <u>WT-71, "Road Wheel"</u>.

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

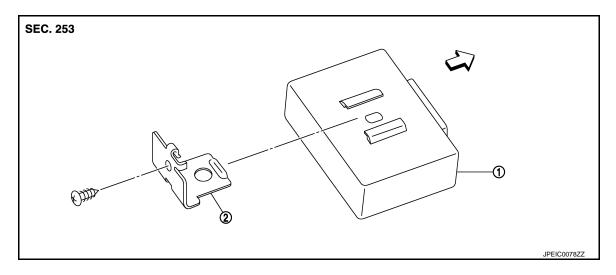


LOW TIRE PRESSURE WARNING CONTROL UNIT

< REMOVAL AND INSTALLATION >

LOW TIRE PRESSURE WARNING CONTROL UNIT

Exploded View



1. Low tire pressure warning control unit 2. Bracket

∀
 : Vehicle front

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

Removal and Installation

REMOVAL

- 1. Remove the glove box assembly. Refer to IP-13, "Removal and Installation".
- 2. Remove the instrument lower panel RH. Refer to IP-13, "Removal and Installation".
- 3. Disconnect low tire pressure warning control unit connector.
- 4. Remove the low tire pressure warning control unit control unit.

INSTALLATION

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

• Perform ID registration after replacing low tire pressure warning control unit. Refer to <u>WT-31, "Work Procedure".</u>

WT

D

Α

В

G

Н

INFOID:0000000010100119

J

K

M

L

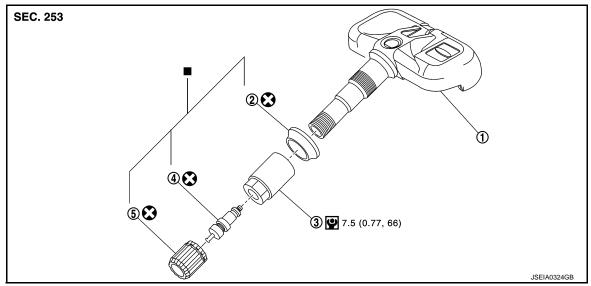
Ν

0

TIRE PRESSURE SENSOR

Exploded View

INFOID:0000000010100120



- 1. Tire pressure sensor
- 2. Grommet seal

3. Valve nut

Valve core

- 5. Valve cap
- : Parts that are replaced as a set when the tire is replaced.

Refer to GI-4, "Components" for symbols not described above.

Removal and Installation

INFOID:0000000010100121

REMOVAL

- Remove tire assembly. Refer to <u>WT-65, "Removal and Installation"</u>.
- 2. Remove valve cap, valve core and then deflate tire.

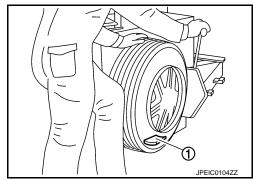
NOTE:

If the tire is reused, apply a matching mark to the position of the tire road wheel valve hole for the purpose of wheel balance adjustment after installation.

- 3. Remove valve nut retaining tire pressure sensor and allow tire pressure sensor to fall into tire.
- 4. Use the tire changer and disengage the tire beads.

CAUTION:

- Verify that the tire pressure sensor (1) is at the bottom of the tire while performing the above.
- Be sure not to damage the road wheel or tire pressure sensor.
- 5. Apply bead cream or an equivalent to the tire beads.
- Set tire onto the tire changer turntable so that the tire pressure sensor inside the tire is located close to the road wheel valve hole.



TIRE PRESSURE SENSOR

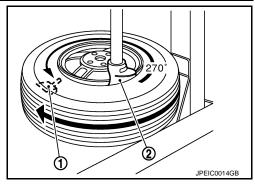
< REMOVAL AND INSTALLATION >

Turn tire so that valve hole is at bottom and bounce so that tire
pressure sensor (1) is near valve hole. Carefully lift tire onto
turntable and position valve hole (and tire pressure sensor) 270
degree from mounting/dismounting head (2).

CAUTION:

Be sure not to damage the road wheel and tire pressure sensor.

- 8. Remove tire pressure sensor from tire.
- 9. Remove the grommet seal.

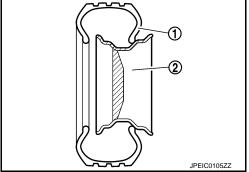


INSTALLATION

- 1. Apply bead cream or an equivalent to the tire beads.
- 2. Install the tire inside beads (1) onto the road wheel (2) in the position shown in the figure.
- 3. Install grommet seal to the tire pressure sensor.

CAUTION:

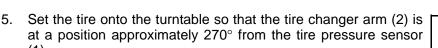
- Never reuse grommet seal.
- Insert grommet seal all the way to the base.



4. Hold tire pressure sensor as shown in the figure, and press the sensor in the direction shown by arrow (←) to bring it into absolute contact with valve hole. After this, tighten valve nut to the specified torque.

CAUTION:

- Never reuse valve core and valve cap.
- Check that grommet seal is free of foreign matter.
- Check that grommet seal contacts horizontally with road wheel.
- Manually tighten valve nut all the way to the wheel. (Never use a power tool to avoid impact.)



(1). CAUTION:

Be sure that the arm does not contact the tire pressure sensor

Install the tire outer side beads onto the road wheel.

CAUTION:

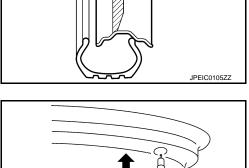
When installing, check that the tire does not turn together with the road wheel.

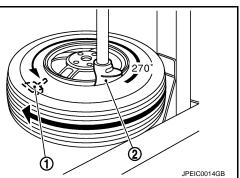
7. Check the tire pressure for all wheels and adjust to the specified value. Refer to <u>WT-71</u>, "Tire Air Pressure".

NOTE:

Before adding air, align the tire with the position of the matching mark applied at the time of removal.

- 8. Install tire to the vehicle. Refer to WT-65, "Removal and Installation".
- 9. Perform tire pressure sensor ID registration. Refer to WT-31, "Work Procedure".





WT

D

Α

В

F

G

Н

.

K

JSEIA0466GB

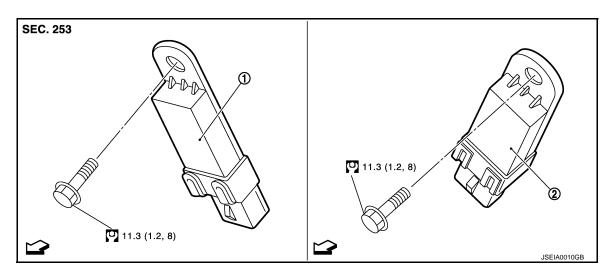
M

Ν

C

TIRE PRESSURE RECEIVER

Exploded View



- 1. Front tire pressure receiver
- Rear tire pressure receiver

∀
 : Vehicle front

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

FRONT TIRE PRESSURE RECEIVER

FRONT TIRE PRESSURE RECEIVER: Removal and Installation

INFOID:0000000010100123

REMOVAL

- 1. Remove fender protector (rear). Refer to EXT-26, "FENDER PROTECTOR: Removal and Installation".
- 2. Remove mounting bolt for the front tire pressure receiver.
- 3. Disconnect front tire pressure receiver harness connector.
- 4. Remove front tire pressure receiver.

INSTALLATION

Installation is the reverse order of removal.

REAR TIRE PRESSURE RECEIVER

REAR TIRE PRESSURE RECEIVER: Removal and Installation

INFOID:0000000010100124

REMOVAL

- 1. Remove rear wheel house protector. Refer to <u>EXT-27</u>, "<u>REAR WHEEL HOUSE PROTECTOR</u>: Removal and Installation".
- 2. Remove mounting bolt for the rear tire pressure receiver.
- 3. Disconnect rear tire pressure receiver harness connector.
- 4. Remove rear tire pressure receiver.

INSTALLATION

Installation 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

CONVENTIONAL

Item		Limit			
Runout	Axial runout	Less than 0.3 mm (0.012 in)			
Kundu	Radial runout	- Less man 0.3 mm (0.012 m)			
Allowable unbalance	Dynamic (At flange)	Less than 5 g (0.17 oz) (one side)			
Allowable ulibalatice	Static (At flange)	Less than 10 g (0.35 oz)			

EMERGENCY (ALUMINUM WHEEL)

Item		Limit		
Runout	Axial runout	Less than 1.5 mm (0.059 in)		
Kundu	Radial runout	Less than 1.5 min (0.009 in)		

EMERGENCY (STEEL WHEEL)

Item		Limit		
Runout	Axial runout (Average)	Less than 1.5 mm (0.059 in)		
Kunout	Radial runout (Average)	Less than 1.5 min (0.009 in)		

Tire Air Pressure

Unit: kPa (kg/cm², psi)

Tire size	Air pressure						
1116 3126	Front	Rear					
P245/50R18 99V	230 (2.3, 33)						
245/40R20 95V	230 (2.3, 33)						
245/40R20 95W	230 (2.3, 33)						
T165/80D17 104M	420 (4.2, 60)						
T155/80D18 102M	420 (4.2, 60)						

Ρ

Revision: 2013 November WT-71 2014 Q70

M

Α

C

D

WT

Н

J

K

Ν

0