SECTION WT
ROAD WHEELS & TIRES

CONTENTS

PRECAUTION

PRECAUTIONS

Precaution for Technicians Using Medical Electric

INFOID:0000000009347485

OPERATION PROHIBITION

WARNING:

- **Parts with strong magnet is used in this vehicle.**
- **Technicians using a medical electric device such as pacemaker must never perform operation on the vehicle, as magnetic field can affect the device function by approaching to such parts.**

NORMAL CHARGE PRECAUTION

WARNING:

- **If a technician uses a medical electric device such as an implantable cardiac pacemaker or an implantable cardioverter defibrillator, the possible effects on the devices must be checked with the device manufacturer before starting the charge operation.**
- **As radiated electromagnetic wave generated by PDM (Power Delivery Module) at normal charge operation may affect medical electric devices, a technician using a medical electric device such as implantable cardiac pacemaker or an implantable cardioverter defibrillator must not approach motor room [PDM (Power Delivery Module)] at the hood-opened condition during normal charge operation.**

PRECAUTION AT TELEMATICS SYSTEM OPERATION

WARNING:

- **If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.**
- **The electromagnetic wave of TCU might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), when using the service, etc.**
- **If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of TCU might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before TCU use.**

PRECAUTION AT INTELLIGENT KEY SYSTEM OPERATION

WARNING:

- **If a technician uses implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), avoid the device implanted part from approaching within approximately 220 mm (8.66 in) from interior/exterior antenna.**
- **The electromagnetic wave of Intelligent Key might affect the function of the implantable cardiac pacemaker or the implantable cardioverter defibrillator (ICD), at door operation, at each request switch operation, or at engine starting.**
- **If a technician uses other medical electric devices than implantable cardiac pacemaker or implantable cardioverter defibrillator (ICD), the electromagnetic wave of Intelligent Key might affect the function of the device. The possible effects on the devices must be checked with the device manufacturer before Intelligent Key use.**

Point to Be Checked Before Starting Maintenance Work

INFOID:0000000008746098

The high voltage system may starts automatically. It is required to check that the timer air conditioner and timer charge (during EVSE connection) are not set before starting maintenance work.
NOTE:
If the timer air conditioner or timer charge (during EVSE connection) is set, the high voltage system starts automatically even when the power switch is in OFF state.

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

INFOID:0000000009314840

The Supplemental Restraint System such as “AIR BAG” and “SEAT BELT PRE-TENSIONER”, used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS

system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the SR and SB section of this Service Manual.

WARNING:

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

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

WARNING:

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

Precaution for Removing 12V Battery

INFOID:0000000008746100

1. Check that EVSE is not connected.
   NOTE:
   If EVSE is connected, the air conditioning system may be automatically activated by the timer A/C function.
2. Turn the power switch OFF → ON → OFF. Get out of the vehicle. Close all doors (including back door).
3. Check that the charge status indicator lamp does not blink and wait for 5 minutes or more.
   NOTE:
   If the battery is removed within 5 minutes after the power switch is turned OFF, plural DTCs may be detected.
4. Remove 12V battery within 1 hour after turning the power switch OFF → ON → OFF.
   NOTE:
   - The 12V battery automatic charge control may start automatically even when the power switch is in OFF state.
   - Once the power switch is turned ON → OFF, the 12V battery automatic charge control does not start for approximately 1 hour.

   CAUTION:

   - **After all doors (including back door) are closed, if a door (including back door) is opened before battery terminals are disconnected, start over from Step 1.**
   - **After turning the power switch OFF, if "Remote A/C" is activated by user operation, stop the air conditioner and start over from Step 1.**

Service Notice and Precautions for TPMS

INFOID:0000000008746101

WARNING:

Radio waves could adversely affect electric medical equipment. Those who use a pacemaker should contact the electrical medical equipment manufacturer for the possible influences before use.

- Low tire pressure warning lamp blinks for 1min, then turns ON when any malfunction occurs except low tire pressure. Erase the self-diagnosis memories for Tire Pressure Monitoring System (TPMS), or register the ID to turn low tire pressure warning lamp OFF. For ID registration, refer to WT-25, "Work Procedure".
- ID registration is required when replacing or rotating wheels, replacing tire pressure sensor or BCM. Refer to WT-25, "Work Procedure".
- Replace grommet seal, valve core and valve cap of tire pressure sensor in TPMS, when replacing each tire by reaching the wear limit. Refer to WT-51, "Exploded View".
- For easy fill tire alert function, refer to the following.

- When inflating the tires, park the vehicle in the safe area and ensure the safety of the working area.
- Read and understand the easy fill tire alert function prior to use.
- Inflate the tires one at a time.
- If there is no response for approximately 15 seconds or more after inflating the tires, cancel the use of the easy fill tire alert function or move the vehicle approximately 1 m (3.2 ft) backward or forward to try again. The air filler pressure may be weak or out of service area.
- Despite the high-precision TPMS pressure sensor, an indicated value may differ from that of the pressure gauge.
- Air pressure is measured rather high due to the rise in tire air temperature after driving.
- If TPMS is malfunctioning, the easy fill tire alert is unusable.

• Because the tire pressure sensor conforms to North America radio law, the following items must be observed.

- The sensor may be used only in North America.
- It may not be used in any method other than the specified method.
- It must not be disassembled or modified.

Service Notice and Precautions for Road Wheel

INFOID:0000000008746102

• Genuine NISSAN aluminum wheel is designed for each type of vehicle. Use it on the specified vehicle only.
• Use Genuine NISSAN parts for the road wheels, valve caps and 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.
• When tightening the valve cap there is a risk of damaging the valve cap if a tool is used. Tighten by hand.

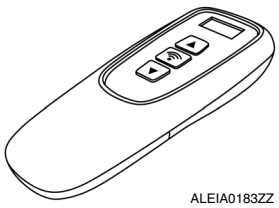
PREPARATION

PREPARATION

Special Service Tool

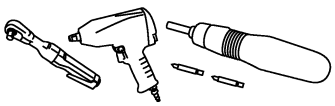
INFOID:0000000008746103

The actual shape of the tools may differ from those illustrated here.

Tool number (TechMate No.) Tool name	Description
— (J-50190) Signal Tech II  ALEIA0131ZZ	• Activate and display TPMS transmitter IDs • Display tire pressure reported by the TPMS transmitter • Read TPMS DTCs • Register TPMS transmitter IDs • Test remote keyless entry keyfob relative signal strength • Check Intelligent Key relative signal strength • Confirm vehicle Intelligent Key antenna signal strength • Compatible with future sensors • Equipped with a display
KV48105501 (J-45295-A) Transmitter activation tool  ALEIA0183ZZ	• Activate TPMS transmitter IDs • Compatible with future sensors • Equipped with a display (KV48105501 only)

Commercial Service Tool

INFOID:0000000008746104

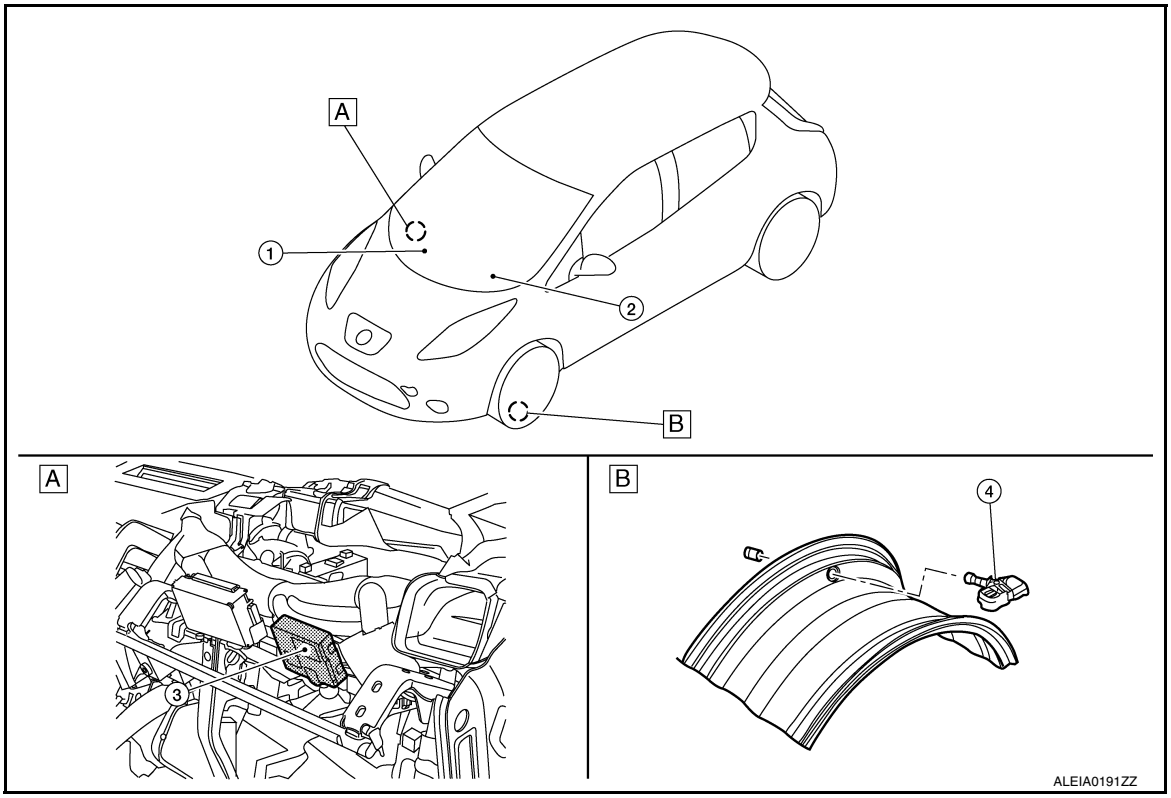
Tool name	Description
Power tool  PIIB1407E	Loosening nuts, screws and bolts.

SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:0000000008746105



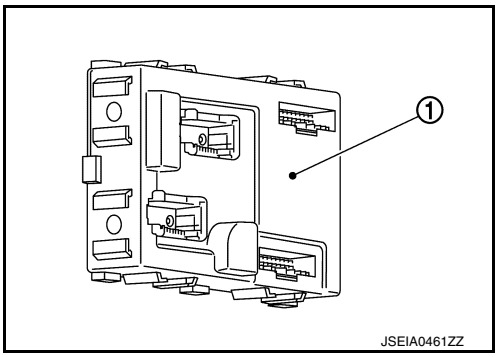
A. View with instrument panel removed B. View with tire removed

No.	Component parts	Function
1.	BCM	• Refer to WT-8, "BCM". • Refer to BCS-5, "BODY CONTROL SYSTEM : Component Parts Location" for detailed installation location.
2.	Low tire pressure warning lamp (In combination meter)	Refer to WT-10, "System Description".
	Information display (In combination meter)	Refer to WT-8, "Information Display".
3.	Remote keyless entry receiver (Tire pressure receiver)	Refer to WT-8, "Tire Pressure Receiver".
4.	Tire pressure sensor	Refer to WT-8, "Tire Pressure Sensor".

BCM

INFOID:0000000008746106

- The BCM (1) reads the air pressure signal received by the tire pressure receiver, controls the low tire pressure warning lamp, hazard warning lamp, and horn operation. It also has a judgment function to detect a system malfunction.
- Controls easy fill tire alert function. Refer to WT-11, "Easy Fill Tire Alert Function".

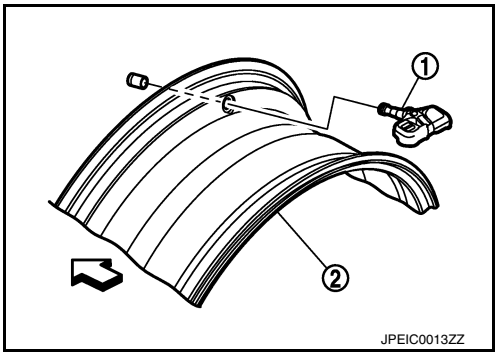


Tire Pressure Sensor

INFOID:0000000008746107

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

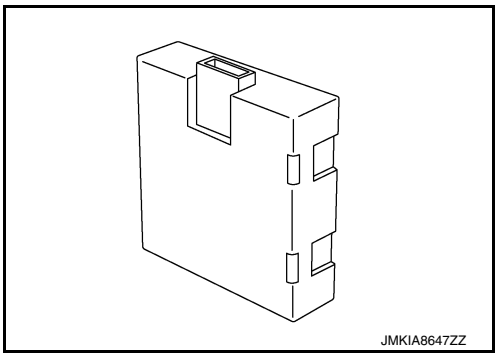
⇦ : Outside



Tire Pressure Receiver

INFOID:0000000008746108

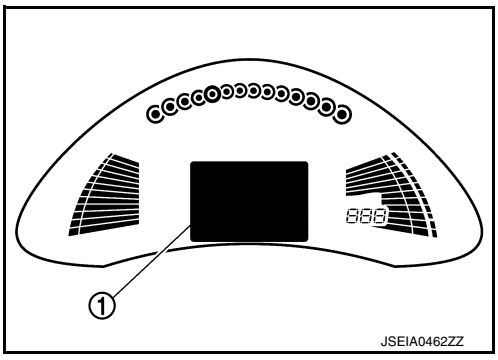
- Tire pressure receiver is incorporated into remote keyless entry receiver.
- The tire pressure receiver receives the air pressure signal transmitted by the tire pressure sensor in each wheel.



Information Display

INFOID:0000000008746109

The vehicle information display (1) is shown when a low tire pressure warning lamp signal is transmitted from BCM to combination meter via CAN communication.



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

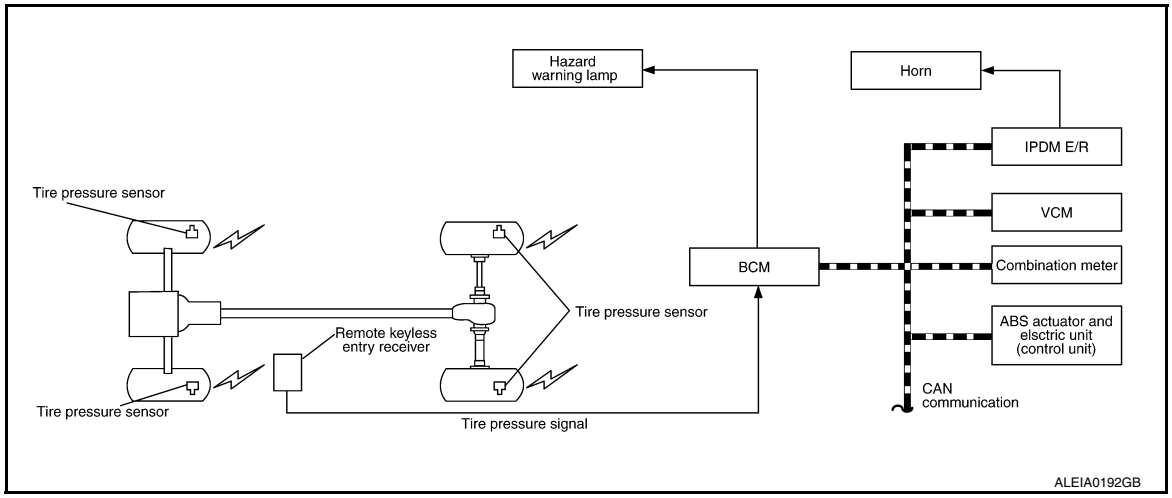
SYSTEM

System Description

INFOID:0000000008746110

When the vehicle has reached a speed of 40 km/h (25 MPH) or greater, the BCM receives a signal transmitted from the tire pressure sensors/transmitters installed in each wheel. If the BCM detects low inflation pressure or a system malfunction, it sends a signal to the combination meter via CAN communication to illuminate the low tire pressure warning lamp. Refer to the Owner's Manual for additional information.
The tire pressure monitoring system (TPMS) has Easy fill tire alert function to aid in tire inflation. Refer to WT-11, "Easy Fill Tire Alert Function".

SYSTEM DIAGRAM



INPUT/OUTPUT SIGNAL

Major signal transmission between each unit via communication lines is shown in the following table.

Component parts	Signal item
Combination meter	Mainly receives the following signals from BCM via CAN communication. • Low tire pressure warning lamp signal • TPMS malfunction warning lamp signal
ABS actuator and electric unit (control unit)	Mainly transmits the following signals to BCM via CAN communication. • Vehicle speed signal (ABS)
VCM (Vehicle Control Module)	Mainly transmits the following signals to BCM via CAN communication. • Shift position signal (P range signal)
IPDM E/R	Mainly transmits the following signals to BCM via CAN communication. • Horn reminder signal

LOW TIRE PRESSURE WARNING LAMP INDICATION CONDITION

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

Condition	Low tire pressure warning lamp
Power switch OFF	OFF
Power 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	
Tire pressure monitoring system malfunction (Other diagnostic item)	Warning lamp blinks 1 min, then turns on.

HAZARD WARNING LAMP INDICATION CONDITION

The hazard warning lamp blinks under the following conditions.
- When ID registration is completed. Refer to WT-25, "Work Procedure".
- During the use of the easy fill tire alert function.

HORN CONTROL CONDITION
During the use of easy fill tire alert function.

Easy Fill Tire Alert Function

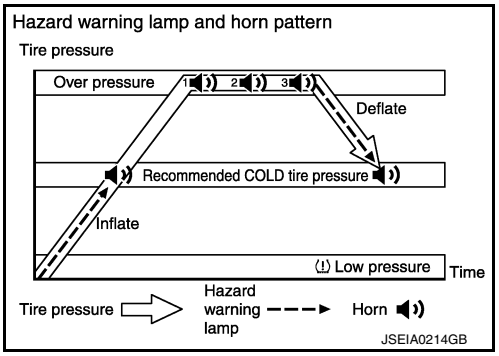
INFOID:0000000008746112

- This function operates only when the select lever position is in P-range with the power switch ON or with the vehicle set to READY.

NOTE:
The easy fill tire alert function is recommended to use with the power switch ON.

NOTE:
When beginning tire inflation, it takes a few seconds for the Easy fill tire alert to function. If there is no response for approximately 15 seconds or more, cancel the Easy fill tire alert function and move the vehicle approximately 1 m (3.2 ft) backward or forward to try again.

- The Easy fill tire alert function operates only when the select lever position is in P-range with the ignition switch ON.
- This function informs the driver with a visual and audible indication that the recommended COLD tire pressure has been reached.
- The hazard warning lamps blink when the recommended COLD tire pressure has been reached. After the recommended COLD tire pressure has been reached, the horn sounds once and the hazard warning lamps stop blinking.
- If the tire pressure value is equal to or greater than 30 kPa (0.31 kg/cm^2, 4 psi) more than the recommended COLD tire pressure, the hazard warning lamps flash and horn sounds three times.
- To return the tire to the recommended COLD tire pressure, deflate the tire until the horn sounds once and the hazard warning lamps stop blinking.



DIAGNOSIS SYSTEM (BCM)
COMMON ITEM
COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000009345114

APPLICATION ITEM
CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
Ecu Identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	• The vehicle specification can be read and saved. • The vehicle specification can be written when replacing BCM.
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication is displayed.

SYSTEM APPLICATION
BCM can perform the following functions.

System	Sub System	Direct Diagnostic Mode						
		Ecu Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN Diag Support Mntr
Door lock	DOOR LOCK		×	×	×	×		
Rear window defogger	REAR DEFOGGER			×	×	×		
Warning chime	BUZZER			×	×			
Interior room lamp timer	INT LAMP			×	×	×		
Exterior lamp	HEADLAMP			×	×	×		
Wiper and washer	WIPER			×	×	×		
Turn signal and hazard warning lamps	FLASHER			×	×			
Air conditioner	AIR CONDITIONER			×				
Intelligent Key system	INTELLIGENT KEY		×	×	×	×		
Combination switch	COMB SW			×				
BCM	BCM	×	×			×	×	×
Immobilizer	IMMU		×	×	×			
Interior room lamp battery saver	BATTERY SAVER			×	×			
Trunk open	TRUNK			×				
Vehicle security system	THEFT ALM			×	×	×		
RAP system	RETAINED PWR			×				
Signal buffer system	SIGNAL BUFFER			×				
TPMS	AIR PRESSURE MONITOR		×	×	×	×		

AIR PRESSURE MONITOR

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

INFOID:0000000009345115

NOTE:
The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs
- Check Intelligent Key relative signal strength
- Confirm vehicle Intelligent Key antenna signal strength

SELF DIAGNOSTIC RESULT

NOTE:
Before performing Self Diagnostic Result, be sure to register the transmitter ID or the actual malfunction may be different from that displayed on CONSULT.
Refer to BCS-48, "DTC Index".

DATA MONITOR

Monitor Item [Unit]	Description
AIR PRESS FL [kPa, kg/cm^2 or Psi]	Indicates air pressure of front LH tire.
AIR PRESS FR [kPa, kg/cm^2 or Psi]	Indicates air pressure of front RH tire.
AIR PRESS RR [kPa, kg/cm^2 or Psi]	Indicates air pressure of rear RH tire.
AIR PRESS RL [kPa, kg/cm^2 or Psi]	Indicates air pressure of rear LH tire.
ID REGST FL1 [Done/Yet]	Indicates ID registration status of front LH transmitter.
ID REGST FR1 [Done/Yet]	Indicates ID registration status of front RH transmitter.
ID REGST RR1 [Done/Yet]	Indicates ID registration status of rear RH transmitter.
ID REGST RL1 [Done/Yet]	Indicates ID registration status of rear LH transmitter.
WARNING LAMP [Off/On]	Indicates condition of low tire pressure warning lamp in combination meter.

ACTIVE TEST

Test Item	Description
HORN	This test is able to check horn operation [On].
FLASHER	This test is able to check turn signal lamp operation [RH/LH/Off].
WARNING LAMP	This test is able to check tire pressure warning lamp operation [Off/On].

WORK SUPPORT

Support Item	Description
ID READ	Registered ID number of the wheel transmitters is displayed.
ID REGIST	Wheel transmitter ID registration procedure. Refer to WT-25, "Description".

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000008746115

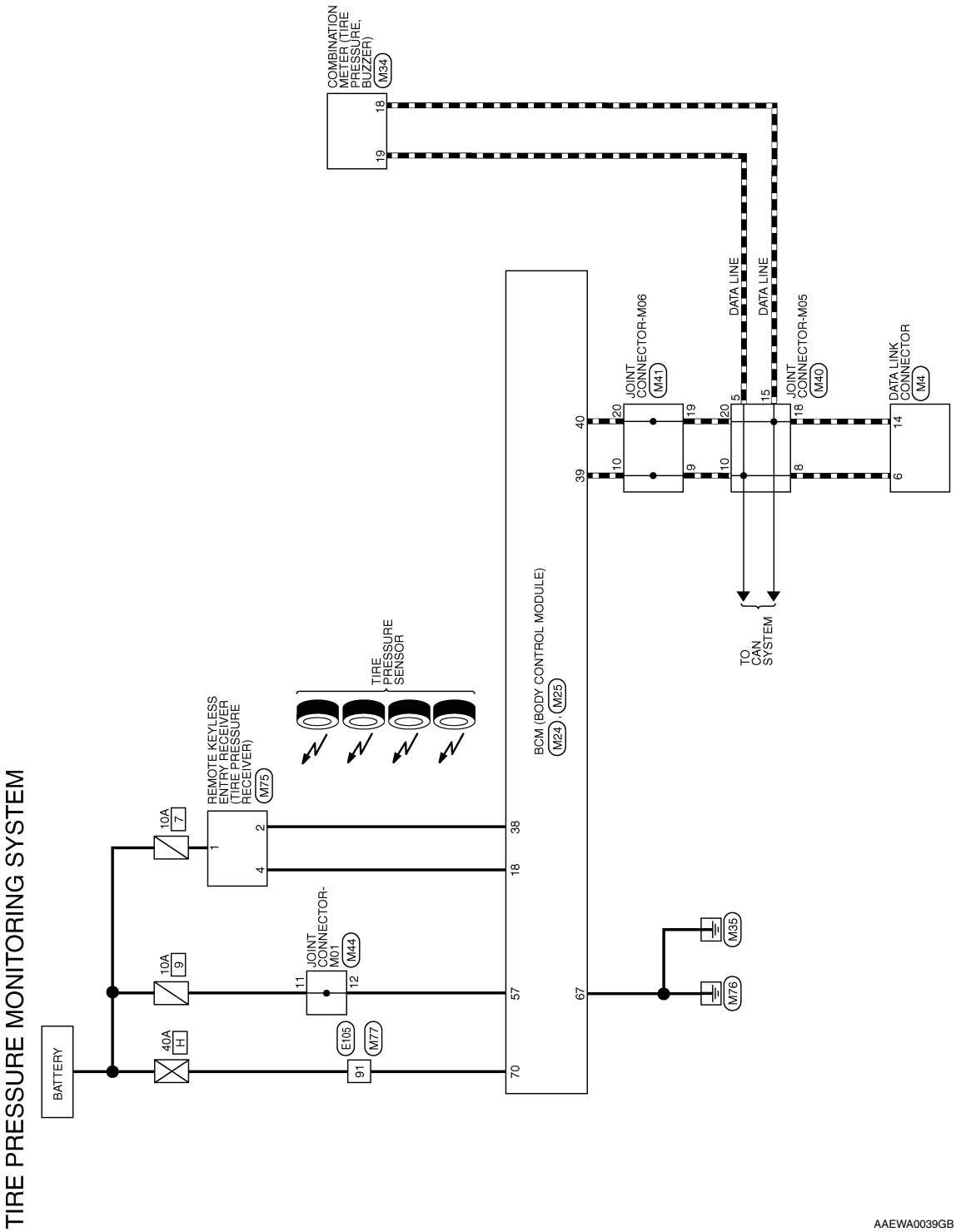
ECU	Reference
BCM	BCS-28, "Reference Value"
	BCS-46, "Fail-safe"
	BCS-47, "DTC Inspection Priority Chart"
	BCS-48, "DTC Index"

WIRING DIAGRAM

TIRE PRESSURE MONITORING SYSTEM

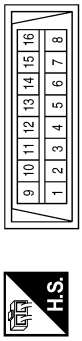
Wiring Diagram

INFOID:0000000008746116



TIRE PRESSURE MONITORING SYSTEM - CONNECTORS

Connector No.	M4
Connector Name	DATA LINK CONNECTOR
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	–	–
2	–	–
3	LG	–
4	B	–
5	B	–
6	L	–
7	GR	–
8	G	–
9	–	–
10	–	–
11	SB	–
12	G	–
13	L	–
14	P	–
15	–	–
16	Y	–

AAEIA0096GB

Connector No.	M24
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

Terminal No.	Color of Wire	Signal Name
1	–	–
2	L	COMBINATION SW INPUT 5
3	GR	COMBINATION SW INPUT 4
4	BR	COMBINATION SW INPUT 3
5	G	COMBINATION SW INPUT 2
6	V	COMBINATION SW INPUT 1
7	GR	KEY CYLINDER UNLOCK SW
8	R	KEY CYLINDER LOCK SW
9	BR	BRAKE SW1
10	–	–
11	–	–
12	Y	CENTRAL DOOR LOCK SW
13	BR	CENTRAL DOOR UNLOCK SW
14	G	AUTO LIGHT SENSOR INPUT
15	W	REAR DEFOGGER SW
16	R	MR OUTPUT
17	Y	AUTO LIGHT SENSOR POWER SUPPLY OUTPUT
18	L	KEYLESS TUNER, AUTO LIGHT SENSOR GND
19	–	–
20	–	–
21	P	IMMOBILIZER ONE WAY COMMUNICATION (CLOCK)
22	–	–
23	R	SECURITY INDICATOR OUTPUT
24	SB	DONGLE LINK
25	LG	IMMOBILIZER TWO WAY COMMUNICATION
26	–	–
27	–	–
28	–	–
29	G	HAZARD SW
30	V	TRUNK/BACK DOOR OPENER SW
31	W	DOOR LOCK STATUS SW (DR)
32	GR	COMBINATION SW OUTPUT 5
33	Y	COMBINATION SW OUTPUT 4
34	W	COMBINATION SW OUTPUT 3
35	BG	COMBINATION SW OUTPUT 2
36	P	COMBINATION SW OUTPUT 1
37	V	SHIFT P POSITION, PARKING POSITION SW
38	SB	INTELLIGENT TUNER
39	L	CAN–H
40	P	CAN–L

AAEIA0097GB

Connector No.	M25
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE

H.S.

56	57	58	59	60	61	62	63	64
65	66	67	68	69	70			

Terminal No.	Color of Wire	Signal Name
56	P	BATTERY SAVER OUTPUT
57	P	BATTERY (FUSE)
58	–	–
59	LG	DOOR UNLOCK OUTPUT (AS)
60	V	FLASHER OUTPUT (LEFT)
61	R	FLASHER OUTPUT (RIGHT)
62	–	–
63	BR	ROOM LAMP OUTPUT
64	–	–
65	V	DOOR LOCK OUTPUT
66	G	DOOR UNLOCK COMMON (DR)
67	B	GND
68	L	POWER WINDOW POWER SUPPLY (RAP)
69	R	POWER WINDOW POWER SUPPLY (BATTERY)
70	Y	BATTERY (F/L)

Connector No.	M34
Connector Name	COMBINATION METER
Connector Color	WHITE

H.S.

20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1
40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21

Terminal No.	Color of Wire	Signal Name
1	LG	–
2	Y	–
3	GR	–
4	BG	–
5	B	–
6	B	–
7	–	–
8	Y	–
9	BR	–
10	–	–
11	–	–
12	V	–
13	G	–
14	Y	–
15	BR	–
16	P	–
17	G	–
18	P	–
19	L	–
20	LG	–

Terminal No.	Color of Wire	Signal Name
21	–	–
22	GR	–
23	–	–
24	BG	–
25	SB	–
26	B	–
27	R	–
28	R	–
29	–	–
30	GR	–
31	–	–
32	W	–
33	G	–
34	L	–
35	–	–
36	–	–
37	–	–
38	V	–
39	LG	–
40	W	–

AAEIA0098GB

Connector No.	M40
Connector Name	JOINT CONNECTOR-M05
Connector Color	BLUE

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
1	L	–
2	L	–
3	BR	–
4	GR	–
5	L	–
6	L	–
7	L	–
8	L	–
9	L	–
10	L	–
11	LG	–
12	LG	–
13	L	–
14	R	–
15	P	–
16	P	–
17	P	–
18	P	–
19	P	–
20	P	–

Connector No.	M41
Connector Name	JOINT CONNECTOR-M06
Connector Color	BLUE

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
1	SB	–
2	SB	–
3	SB	–
4	SB	–
5	L	–
6	L	–
7	L	–
8	L	–
9	L	–
10	L	–
11	LG	–
12	LG	–
13	LG	–
14	LG	–
15	P	–
16	P	–
17	P	–
18	P	–
19	P	–
20	P	–

Connector No.	M44
Connector Name	JOINT CONNECTOR-M01
Connector Color	GRAY

H.S.

10	9	8	7	6	5	4	3	2	1
20	19	18	17	16	15	14	13	12	11

Terminal No.	Color of Wire	Signal Name
1	P	–
2	–	–
3	–	–
4	–	–
5	–	–
6	–	–
7	–	–
8	B	–
9	B	–
10	B	–
11	P	–
12	P	–
13	W	–
14	W	–
15	LG	–
16	R	–
17	R	–
18	W	–
19	W	–
20	W	–

AAEIA0099GB

Connector No.	M75
Connector Name	REMOTE KEYLESS ENTRY RECEIVER
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	G	–
2	SB	–
3	–	–
4	L	–

AAEIA0100GB

Terminal No.	Color of Wire	Signal Name
60	Y	–
61	GR	–
62	W	–
63	BR	–
64	SHIELD	–
65	W	–
66	LG	–
67	R	–
68	G	–
69	BG	–
70	GR	–
71	R	–
72	R	–
73	B	–
74	W	–
76	L	–
80	W	–
81	LG	–
83	GR	–
84	L	–
85	Y	–
86	SB	–
88	R	–
89	G	–
90	SHIELD	–
91	Y	–
92	BR	–
93	W	–
94	P	–
95	L	–
96	P	–
97	G	–
98	V	–
99	LG	–
100	R	–

Terminal No.	Color of Wire	Signal Name
22	B	–
23	BG	–
24	B	–
25	W	–
26	G	–
27	B	–
28	B	–
29	R	–
31	R	–
32	W	–
33	GR	–
34	BR	–
35	BR	–
36	W	–
37	L	–
38	LG	–
39	SB	–
40	V	–
41	P	–
42	SB	–
43	G	–
44	LG	–
45	Y	–
46	R	–
47	W	–
48	L	–
49	G	–
50	L	–
51	SB	–
52	L	–
54	B	–
55	R	–
56	V	–
57	Y	–
58	L	–

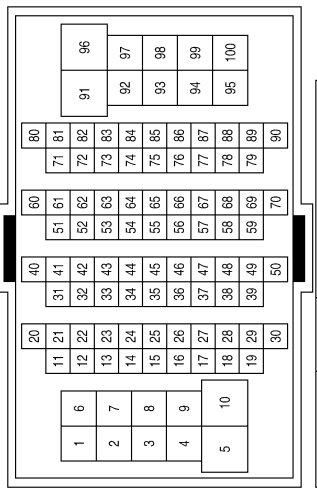
Connector No.	M77
Connector Name	WIRE TO WIRE
Connector Color	WHITE

Terminal No.	Color of Wire	Signal Name
1	R	–
2	L	–
3	V	–
4	LG	–
6	P	–
7	GR	–
9	G	–
10	L	–
11	L	–
12	Y	–
13	V	–
14	R	–
15	G	–
16	W	–
17	R	–
18	G	–
19	W	–
20	GR	–
21	P	–

AAEIA0101GB

Connector No.	E105
Connector Name	WIRE TO WIRE
Connector Color	WHITE

H.S.



Terminal No.	Color of Wire	Signal Name
1	R	–
2	L	–
3	BW	– (WITHOUT FRONT FOG LAMPS)
3	R	– (WITH LED HEADLAMPS)
4	LG	– (WITH LED HEADLAMPS)
4	B/W	– (WITHOUT FRONT FOG LAMPS)
6	B/R	–
7	W	–
9	G	–
10	R	–
11	L	–
12	Y	–
13	W	–
14	R	–
15	G	–
16	G	–
17	R	–
18	O	–
19	W/L	–
20	BR	–
21	R	–
22	B	–
23	LG	–
24	B	–
25	W	–
26	W	–
27	B	–
28	O/L	–
29	W	–
31	R	–
32	W	–
33	G	–
34	BR	–
35	V	–
36	O	–
37	L	–
38	SB	–
39	P	–
40	V	–
41	O	–
42	Y	–
43	BR	–
44	W	–
45	G	–
46	P	–
47	LG	–
47	R	–
48	B	–
49	L	–
50	G	–
51	W	–
52	O	–
54	B	–
55	R	–
56	Y	–
57	Y	–
58	L	–
60	LG	–
61	GR	–
62	W	–
63	SB	–
64	SHIELD	–
65	W	–
66	G	–
67	V	–
68	R	–
69	B	–
70	BR	–
71	LG	–
72	R	–
73	B	–
74	O	–
76	L	–
77	Y	–
80	P	–
81	SB	–
83	GR	–
84	L	–
85	O	–
86	BR	–
88	B	–
89	W	–
90	SHIELD	–
91	Y	–
92	BR	–
93	O	–
94	R	–
95	V	–
96	P	–
97	G	–
98	W	–
99	O	–
100	SB	–

AAEIA0121GB

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000008746117

NOTE:
The Signal Tech II Tool (J-50190) can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.
- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

1.COLLECT INFORMATION FROM CUSTOMER

Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurred).

>> GO TO 2.

2.TIRE PRESSURE INSPECTION

1. Turn the power switch ON.
   CAUTION:
   Never set the vehicle to READY.
2. Check the tire pressure for all wheels and adjust to the specified value. Refer to WT-55, "Tire Air Pressure".

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace tire(s) or wheel(s).

3.CHECK LOW TIRE PRESSURE WARNING LAMP

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

Does the low tire pressure warning lamp turn OFF?

YES >> Inspection End.
NO >> GO TO 4.

4.PERFORM SELF DIAGNOSTIC RESULT

Perform self diagnostic result. Refer to WT-13, "AIR PRESSURE MONITOR : CONSULT Function (BCM - AIR PRESSURE MONITOR)".

Are any DTCs displayed?

YES >> Refer to BCS-48, "DTC Index". If two or more DTCs are displayed, refer to BCS-47, "DTC Inspection Priority Chart".
NO >> GO TO 5.

5.PERFORM DIAGNOSIS APPLICABLE TO THE SYMPTOM

Perform diagnosis applicable to the symptom. Refer to WT-37, "Symptom Table".

>> GO TO 6.

6.FINAL CHECK

Perform self diagnostic result again, and check that the malfunction is repaired. After checking, erase the self diagnosis memory. Refer to WT-13, "AIR PRESSURE MONITOR : CONSULT Function (BCM - AIR PRESSURE MONITOR)".

>> Inspection End.

ADDITIONAL SERVICE WHEN REPLACING BCM

Description

INFOID:0000000008746118

When replacing BCM, tire pressure sensor ID registration is required.

Work Procedure

INFOID:0000000008746119

1.PERFORM TIRE PRESSURE SENSOR ID REGISTRATION

Perform tire pressure sensor ID registration.

>> Refer to WT-25, "Work Procedure".

TIRE PRESSURE SENSOR ID REGISTRATION

Description

INFOID:0000000008746120

This procedure must be done after replacing or rotating wheels, replacing tire pressure sensor or BCM.

Work Procedure

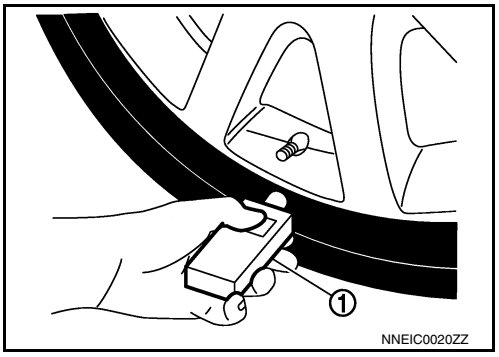
INFOID:0000000008746121

TPMS ID registration can be performed using one of the following procedures:
- Transmitter Activation tool (J-45295-A) with CONSULT (preferred method)
- Signal Tech II tool (J-50190) with CONSULT (preferred method)
- Signal Tech II tool (J-50190) without CONSULT
- CONSULT only

TPMS REGISTRATION WITH TRANSMITTER ACTIVATION TOOL (J-45295-A)

With CONSULT

1. Turn the ignition switch ON.
2. Using CONSULT, select “WORK SUPPORT” in BCM (AIR PRESSURE MONITOR). Then, select “ID REGIST.”
3. Select “Start” on “ID REGIST” screen.
4. Hold the transmitter activation tool (J-45295-A) (1) against the side of the left front tire, near the valve stem.
5. With the tool held at a 0 to 15 degree angle to the tire, press and hold the transmitter activation tool button until the indicator lamp turns OFF (approximately 5 seconds).
6. Repeat steps 4 and 5 for the remaining tires in this order: right front, right rear and left rear.



7. When ID registration is complete, check the following pattern at each wheel.

Sequence	ID registration position	Turn signal lamp	CONSULT
1	Front LH	2 blinks	“Yet (red)” ↓ “Done (green)”
2	Front RH		
3	Rear RH		
4	Rear LH		

8. After the ID registration procedure for all wheels is complete, press “End” on the CONSULT to finish ID registration.
9. Test drive the vehicle to ensure that the TPMS lamp is OFF and no warning messages are present.

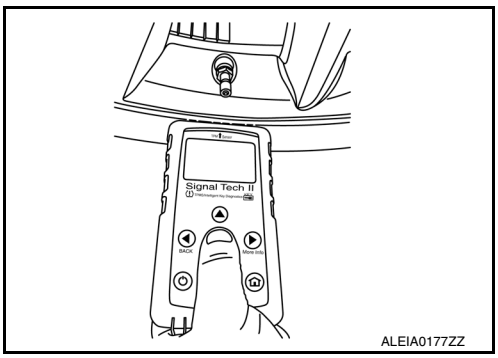
TPMS REGISTRATION WITH SIGNAL TECH II TOOL (J-50190)

NOTE:
The Signal Tech II must be updated with software version 1.1.48 or newer in order to perform the below procedures. The Signal Tech II software updates can only be downloaded from a CONSULT unit with ASIST. Other versions of ASIST will not show the updates.

With CONSULT

1. Adjust the tire pressure for all tires to the recommended value. Refer to WT-55, "Tire Air Pressure".
2. Turn the ignition switch ON.
3. Using CONSULT, select “WORK SUPPORT” in BCM (AIR PRESSURE MONITOR). Then, select “ID REGIST.”
4. Select “Start” on “ID REGIST” screen.
5. Turn on the Signal Tech II tool (J-50190).

6. Hold the Signal Tech II against the side of the left front tire, near the valve stem.
7. With the tool held at a 0 to 15 degree angle to the tire, select “Activate Sensor” from the main menu, then press and release the “OK” button to activate the sensor. Once the sensor is activated, the vehicle parking lamps will flash and the sensor ID will appear on the CONSULT screen.
8. Repeat steps 6 and 7 for the remaining tires in this order: right front, right rear and left rear.
9. When ID registration is complete, check the following pattern at each wheel.

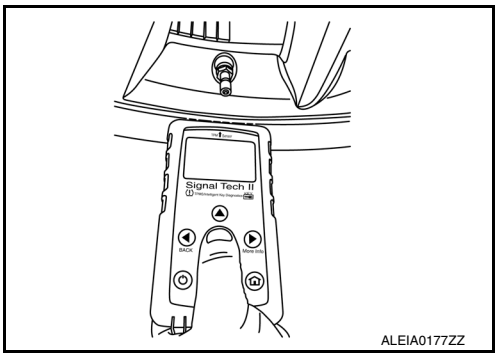


Sequence	ID registration position	Turn signal lamp	CONSULT
1	Front LH	2 blinks	“Yet (red)” ↓ “Done (green)”
2	Front RH		
3	Rear RH		
4	Rear LH		

10. Once all sensors have been activated, select “End” on the CONSULT to finish ID registration.
11. Test drive the vehicle to ensure that the TPMS lamp is OFF and no warning messages are present.

Without CONSULT

1. Adjust the tire pressure for all tires to the recommended value. Refer to WT-55, "Tire Air Pressure".
2. Turn on the Signal Tech II tool (J-50190) and select “TPMS Check” from the main menu.
3. Select vehicle model and year.
4. When prompted, hold the Signal Tech II against the side of the left front tire, near the valve stem.
5. With the tool held at a 0 to 15 degree angle to the tire, press and release the “OK” button to activate the sensor. Once the sensor is activated, the tool will sound a tone and the tire pressure will be displayed.
6. Repeat steps 4 and 5 for the remaining tires in this order: right front, right rear and left rear.
7. When prompted, connect the tool to the data link connector. The tool will connect to the BCM, read the VIN, read sensor IDs and check for TPMS DTCs. Along with DTCs detected, one of the following will be displayed next to each wheel:



- N/A - Not applicable because no ID found by the tool
- OK - Wheel and sensor are in original position
- NEW - New ID found compared to BCM
- RT - Wheel has been rotated
- Low Press - Low tire pressure

8. If no DTC is present or the repair has been completed, press the “OK” button to register the IDs and clear DTCs.
9. Test drive the vehicle to ensure that the TPMS lamp is OFF and no warning messages are present.
10. Print a Signal Tech II Audit Report for your records. Refer to the Signal Tech II User Guide for instructions.

TPMS REGISTRATION WITH CONSULT ONLY

With CONSULT

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

Tire position	Tire pressure kPa (kg/cm^2, psi)
Front LH	240 (2.4, 35)
Front RH	220 (2.2, 32)
Rear RH	200 (2.0, 29)
Rear LH	180 (1.8, 26)

2. Turn the ignition switch ON.
3. Using CONSULT, select “WORK SUPPORT” in BCM (AIR PRESSURE MONITOR). Then, select “ID REGIST.”
4. Select “Start” on “ID REGIST” screen.
5. Drive the vehicle at a speed greater than 40 km/h (25 MPH) for 3 minutes or more.
6. After ID registration for all wheels is complete, press “End” on the CONSULT to finish ID registration.

ID registration position	CONSULT
Front LH	“Yet (red)” ↓ “Done (green)”
Front RH	
Rear RH	
Rear LH	

7. Adjust the tire pressures for all tires to the recommended value. Refer to WT-55, "Tire Air Pressure".
8. Test drive the vehicle to ensure that the TPMS lamp is OFF and no warning messages are present.

DTC/CIRCUIT DIAGNOSIS

C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

DTC Logic

INFOID:0000000008746122

DTC DETECTION LOGIC

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

*:196.5 kPa (2.0 kg/cm^2, 28 psi) [Standard air pressure is for 250 kPa (2.5 kg/cm^2,36 psi) vehicles.]

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION

With CONSULT

1. Turn the power switch ON.
   CAUTION:
   Never set the vehicle to READY.
2. Check the tire pressure for all wheels and adjust to the specified value. Refer to WT-55, "Tire Air Pressure".
3. Perform self-diagnosis for “AIR PRESSURE MONITOR” of “BCM”.

Is DTC “C1704”, “C1705”, “C1706”, or “C1707” detected?

YES >> Proceed to WT-28, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008746123

1.TIRE PRESSURE SENSOR ID REGISTRATION

Perform tire pressure sensor ID registration. Refer to WT-25, "Work Procedure".

Is tire pressure sensor ID registration completed?

YES >> GO TO 2.
NO >> Replace applicable tire pressure sensor. Refer to WT-51, "Removal and Installation".

2.CHECK TIRE PRESSURE

Check the air pressure of all wheels. Refer to WT-55, "Tire Air Pressure".

CAUTION:
If the checked value is close to the standard, reduce the tire pressure, and then with the power switch ON, adjust the tire pressure again so that it is within the standard.

Is the inspection result normal?

YES >> Perform “DTC CONFIRMATION PROCEDURE” again. Refer to WT-28, "DTC Logic".
NO >> Adjust the tire air pressure, then GO TO 3.

3.CHECK TIRE PRESSURE SIGNAL

With CONSULT

1. Select “DATA MONITOR” in “AIR PRESSURE MONITOR” of “BCM”.
2. 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

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 >> Inspection End.
NO >> Repair or replace malfunctioning components.

C1708, C1709, C1710, C1711 TIRE PRESSURE SENSOR

DTC Logic

INFOID:0000000008746124

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 (Tire pressure receiver, BCM) • Tire pressure sensor ID registration incomplete • Tire pressure sensor • Tire pressure sensor battery voltage • Driving in area where radio wave cannot be transmitted/received.
C1709	[NO DATA] FR	Tire pressure data signal from the front RH wheel tire pressure sensor cannot be detected.	
C1710	[NO DATA] RR	Tire pressure data signal from the rear RH wheel tire pressure sensor cannot be detected.	
C1711	[NO DATA] RL	Tire pressure data signal from the rear LH wheel tire pressure sensor cannot be detected.	

DTC CONFIRMATION PROCEDURE

1.TIRE PRESSURE SENSOR ID REGISTRATION

Perform tire pressure sensor ID registration. Refer to WT-25, "Work Procedure".

>> GO TO 2.

2.PERFORM DTC CONFIRMATION

With CONSULT

1. Drive the vehicle at 40 km/h (25 MPH) or more for 10 minutes.
   CAUTION:
   Total time driving at a speed of 40 km/h (25 MPH) or more must be 10 minutes.
   NOTE:
   Avoid driving in area where radio wave cannot be transmitted/received.
2. Stop the vehicle.
3. Perform self-diagnosis for “AIR PRESSURE MONITOR” of “BCM”.

Is DTC “C1708”, “C1709”, “C1710” or “C1711” detected?

YES >> Proceed to WT-30, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008746125

1.CHECK TIRE PRESSURE SIGNAL

With CONSULT

1. Select “DATA MONITOR” in “AIR PRESSURE MONITOR” of “BCM”.
2. Check 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 (kg/cm^2, psi)?

YES >> GO TO 2.
NO >> Replace applicable tire pressure sensor. Refer to WT-51, "Removal and Installation".

2.CHECK KEYLESS ENTRY RECEIVER POWER SUPPLY CIRCUIT

1. Connect keyless entry receiver harness connector.
2. Check the voltage between keyless entry receiver harness connector and ground when the power switch is turned ON and OFF.
   CAUTION:
   Never set the vehicle to READY.

Keyless entry receiver		—	Voltage (Approx.)
Connector	Terminal		
M75	1	Ground	Battery voltage

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness or connectors.

3. CHECK REMOTE KEYLESS ENTRY RECEIVER SIGNAL CIRCUIT

1. Turn the power switch OFF.
2. Check 10A fuse (No. 7).
   CAUTION:
   Check that the fuse is not blown, that there are no other abnormalities, and that the fuse is of the specified capacity.
3. Disconnect BCM harness connector and keyless entry receiver harness connector.
4. Check the continuity between BCM harness connector and keyless entry receiver harness connector.

BCM		Keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M24	38	M75	2	Yes

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

BCM		—	Continuity
Connector	Terminal		
M24	38	Ground	No

Is the inspection result normal?

YES >> GO TO 4.
NO >> Repair or replace malfunctioning components.

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

Check continuity between BCM and remote keyless entry receiver connectors.

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M24	18	M75	4	Yes

Is the inspection result normal?

YES >> GO TO 5.
NO >> Repair or replace the malfunctioning harness or connector.

5. CHECK TIRE PRESSURE SIGNAL

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. On “DATA MONITOR” select “AIR PRESS FL”, “AIR PRESS FR”, “AIR PRESS RR” and “AIR PRESS RL”.
4. Within 5 minutes after vehicle stopped, check that the tire pressures are within specification. Refer to WT-55, "Tire Air Pressure".

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

Is the inspection result normal?

YES >> Inspection End.
NO >> Replace the BCM. Refer to BCS-86, "Removal and Installation".

C1716, C1717, C1718, C1719 TIRE PRESSURE SENSOR

DTC Logic

INFOID:0000000008746126

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.	• Excessive tire pressure • Tire pressure sensor ID registration incomplete • Tire pressure sensor
C1717	[PRESSDATA ERR] FR	Malfunction in the tire pressure data from the front RH wheel tire pressure sensor.	
C1718	[PRESSDATA ERR] RR	Malfunction in the tire pressure data from the rear RH wheel tire pressure sensor.	
C1719	[PRESSDATA ERR] RL	Malfunction in the tire pressure data from the rear LH wheel tire pressure sensor.	

DTC CONFIRMATION PROCEDURE

1.PERFORM DTC CONFIRMATION

With CONSULT

1. Turn the power switch ON.
   CAUTION:
   Never set the vehicle to READY.
2. Check the tire pressure for all wheels and adjust to the specified value. Refer to WT-55, "Tire Air Pressure".
   CAUTION:
   If the tire pressure before adjustment is close to the standard, reduce the tire pressure, and then with the power switch ON, adjust the tire pressure again so that it is within the standard.
3. Perform self-diagnosis in “AIR PRESSURE MONITOR” of “BCM”.

Is DTC “C1716”, “C1717”, “C1718”, or “C1719” detected?

YES >> GO TO 2.
NO >> Inspection End.

2.CHECK LOW TIRE PRESSURE WARNING LAMP

Check that after the power switch is turned ON, the low tire pressure warning lamp illuminates for approximately 1 second and then turns OFF.

Is the inspection result normal?

YES >> Inspection End.
NO >> Leave the power switch ON and proceed to WT-33, "Diagnosis Procedure".

Diagnosis Procedure

INFOID:0000000008746127

1.PERFORM TIRE PRESSURE SENSOR ID REGISTRATION

Perform tire pressure sensor ID registration for all wheels. Refer to WT-25, "Work Procedure".

Is tire pressure sensor ID registration completed?

YES >> GO TO 2.
NO >> Replace applicable tire pressure sensor. Refer to WT-51, "Removal and Installation".

2.CHECK TIRE PRESSURE SIGNAL

With CONSULT

1. Check the air pressure for all wheels and adjust to the specified value. Refer to WT-55, "Tire Air Pressure".
2. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
3. Stop the vehicle.
4. Select “DATA MONITOR” in “AIR PRESSURE MONITOR” of “BCM”.
5. 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”.

Are tire pressures displayed as 438.60 kPa (4.47 kg/cm^2, 63.6 psi)?

YES >> Replace tire pressure sensor for the tire that displayed pressure as 438.6 kPa (4.47 kg/cm^2, 63.6 psi). Refer to WT-51, "Removal and Installation".

NO >> Perform “DTC CONFIRMATION PROCEDURE” again. Refer to WT-33, "DTC Logic".

C1729 VEHICLE SPEED SIGNAL

DTC Logic

INFOID:0000000008746128

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.DTC CONFIRMATION PROCEDURE

With CONSULT

1. Drive the vehicle.
2. Stop the vehicle.
3. Perform self-diagnosis in “AIR PRESSURE MONITOR” of “BCM”.

Is DTC “C1729” detected?

YES >> Proceed to WT-35, "Diagnosis Procedure".
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000008746129

1.PERFORM ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) SELF-DIAGNOSIS

With CONSULT

Perform self-diagnosis for “ABS”.

Are any DTCs detected?

YES >> Refer to BRC-57, "DTC Index".
NO >> GO TO 2.

2.CHECK BCM INPUT/OUTPUT SIGNAL

Check the BCM input/output signal values. Refer to BCS-28, "Reference Value".

Is the inspection result normal?

YES >> Check pin terminal and connection of each harness connector for malfunctioning conditions.
NO >> Replace the BCM. Refer to BCS-86, "Removal and Installation".

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000009345116

1.CHECK FUSE AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuse and fusible link No.
57	Battery power supply	9 (10A)
70		H (40A)

Is the fuse or fusible link blown?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit.
NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M25.
2. Check voltage between BCM connector M25 and ground.

BCM		Ground	Voltage (Approx.)
Connector	Terminal		
M25	57	—	Battery voltage
	70		

Is the inspection result normal?

YES >> GO TO 3.
NO >> Repair or replace harness or connectors.

3.CHECK GROUND CIRCUIT

Check continuity between BCM connector M25 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M25	67	—	Yes

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace harness or connectors.

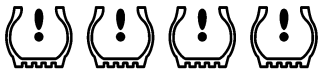
SYMPTOM DIAGNOSIS

TPMS

Symptom Table

INFOID:0000000008746131

LOW TIRE PRESSURE WARNING LAMP SYMPTOM CHART

Diagnosis items	Symptom (Power switch ON)	Low tire pressure warning lamp	Cause	Action
Low tire pressure warning lamp	The low tire pressure warning lamp illuminates for 1 second, then turns OFF.	 ON 1 sec > stays OFF SEIA0592E	Wake-up operation for all tire pressure sensors at wheels is completed.	No system malfunctions
	The low tire pressure warning lamp repeats blinking ON for 2 seconds and OFF for 0.2 seconds.	 Blinks: ON 2 sec > OFF 0.2 sec SEIA0593E	Wake-up operation for all tire pressure sensors at wheels is not completed.	Perform the ID registration for all tire pressure sensors at wheels. Refer to WT-25, "Work Procedure".
	The low tire pressure warning lamp blinks once.	 Blinks 1 time ON 0.3 sec > OFF 1.0 sec JPEIC0090GB	The front left tire pressure sensor is not activated.	Perform the ID registration for the tire pressure sensor at front left wheel. Refer to WT-25, "Work Procedure".
	The low tire pressure warning lamp repeats blinking twice.	 Blinks 2 times ON 0.3 sec > OFF 0.3 sec SEIA0595E	The front right tire pressure sensor is not activated.	Perform the ID registration for the tire pressure sensor at front right wheel. Refer to WT-25, "Work Procedure".
	The low tire pressure warning lamp repeats blinking for 3 times.	 Blinks 3 times ON 0.3 sec > OFF 0.3 sec SEIA0596E	The rear right tire pressure sensor is not activated.	Perform the ID registration for the tire pressure sensor at rear right wheel. Refer to WT-25, "Work Procedure".
	The low tire pressure warning lamp repeats blinking for 4 times.	 Blinks 4 times ON 0.3 sec > OFF 0.3 sec SEIA0597E	The rear left tire pressure sensor is not activated.	Perform the ID registration for the tire pressure sensor at rear left wheel. Refer to WT-25, "Work Procedure".
	The low tire pressure warning lamp turns ON and stays illuminated.	 Comes ON and stays ON SEIA0598E	Low tire pressure	Check the tire pressure for all wheels and adjust to the specified value. Refer to WT-55, "Tire Air Pressure".

Diagnosis items	Symptom (Power switch ON)	Low tire pressure warning lamp	Cause	Action
Low tire pressure warning lamp	The low tire pressure warning lamp repeats blinking at 0.5-second intervals for 1 minute, and then stays illuminated.	 Blinks 1 min ON 0.5 sec > OFF 0.5 sec and stays ON SEIA0788E	The combination meter fuse is open or removed (or pulled out).	Check and install the combination meter fuse. If necessary, replace the fuse.
			The BCM harness connector is removed.	Check the connection conditions of the BCM harness connector, and repair if necessary.
			Tire Pressure Monitoring System (TPMS) malfunction.	• Perform CONSULT self-diagnosis. Refer to WT-13, "AIR PRESSURE MONITOR : CONSULT Function (BCM - AIR PRESSURE MONITOR)". • If necessary, perform tire pressure sensor ID registration. Refer to WT-25, "Work 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 left wheel and rear right wheel tire pressure sensors.)

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN ON

Description

INFOID:0000000008746132

The low tire pressure warning lamp does not illuminate when the power switch is turned ON.

NOTE:
The low tire pressure warning lamp illuminates for approximately 1 second and then turns OFF when the power 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 power switch is turned ON.

Diagnosis Procedure

INFOID:0000000008746133

1.CHECK LOW TIRE PRESSURE WARNING LAMP SIGNAL

With CONSULT
1. Turn the power switch ON.
   CAUTION:
   Never set the vehicle to READY.
2. Select “ACTIVE TEST” in “AIR PRESSURE MONITOR” of “BCM”.
3. Touch “WARNING LAMP” to turn ON the low tire pressure warning lamp.

When “ACTIVE TEST” is performed, does the low tire pressure warning lamp in the combination meter turn ON?

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

2.CHECK LOW TIRE PRESSURE WARNING LAMP OPERATION

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

Is the inspection result normal?

YES >> Check intermittent incident. Refer to GI-53, "Intermittent Incident".
NO >> Replace the BCM. Refer to BCS-86, "Removal and Installation".

3.CHECK COMBINATION METER POWER SUPPLY CIRCUIT

Perform the diagnosis for combination meter power supply circuit. Refer to MWI-92, "COMBINATION METER : Diagnosis Procedure".

Is the inspection result normal?

YES >> Inspection End.
NO >> Repair or replace malfunctioning components.

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF

Description

INFOID:0000000008746134

The low tire pressure warning lamp does not turn OFF after several seconds have passed after the vehicle is set to READY.

Diagnosis Procedure

INFOID:0000000008746135

1.CHECK TIRE PRESSURE

1. Turn the power switch ON.
   CAUTION:
   Never set the vehicle to READY.
2. Check the tire pressure for all wheels.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Adjust tire pressure to the specified value. Refer to WT-55, "Tire Air Pressure"

2.CHECK LOW TIRE PRESSURE WARNING LAMP

Check low tire pressure warning lamp. Refer to WT-10, "System Description"

Does low tire pressure warning lamp turn OFF?

YES >> Inspection End.
NO >> GO TO 3.

3.CHECK BCM

With CONSULT

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

Is any DTC detected?

YES >> Check the DTC. Refer to BCS-48, "DTC Index".
NO >> GO TO 4.

4.CHECK BCM POWER SUPPLY AND GROUND CIRCUIT

Perform the diagnosis for BCM power supply and ground circuit. Refer to WT-36, "Diagnosis Procedure".

Is the inspection result normal?

YES >> Replace the BCM. Refer to BCS-86, "Removal and Installation".
NO >> Repair or replace malfunctioning components.

LOW TIRE PRESSURE WARNING LAMP BLINKS

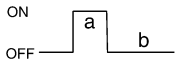
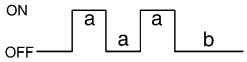
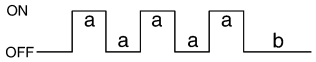
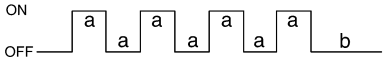
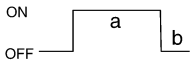
Description

INFOID:0000000008746136

The low tire pressure warning lamp blinks when the power 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 blinking timing	Activation tire position
 a : 0.3 sec. b : 1.0 sec.	Front LH
 a : 0.3 sec. b : 1.0 sec.	Front RH
 a : 0.3 sec. b : 1.0 sec.	Rear RH
 a : 0.3 sec. b : 1.0 sec.	Rear LH
 a : 2 sec. b : 0.2 sec.	All tires

JPEIC0089GB

Diagnosis Procedure

INFOID:0000000008746137

1.TIRE PRESSURE SENSOR ID REGISTRATION

Perform tire pressure sensor ID registration. Refer to WT-25, "Work Procedure".

Is tire pressure sensor ID registration completed?

YES >> Inspection End.

NO >> Perform the self-diagnosis for “AIR PRESSURE MONITOR” of “BCM”. Refer to BCS-48, "DTC Index".

ID REGISTRATION CANNOT BE COMPLETED

Description

INFOID:0000000008746140

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:0000000008746141

1.CHECK TIRE PRESSURE SENSOR ACTIVATION TOOL

Check tire pressure sensor activation tool.

Is the inspection result normal?

YES >> GO TO 2.
NO >> Replace the battery of tire pressure sensor activation tool or repair/replace the tire pressure sensor activation tool.

2.TIRE PRESSURE SENSOR ID REGISTRATION

Perform tire pressure sensor ID registration. Refer to WT-25, "Work 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.**

Is tire pressure sensor ID registration completed?

YES >> Inspection End.
NO >> GO TO 3.

3.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 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 WT-51, "Removal and Installation".
All wheels do not react.>>Check the tire pressure receiver. Refer to DLK-124, "Component Function Check".

EASY FILL TIRE ALERT DOES NOT ACTIVATE

Description

INFOID:0000000008746138

The easy fill tire alert does not function while inflating a tire when the select lever position is in P-range with the power switch ON or with the vehicle set to READY.

NOTE:

- After starting to inflate the tire, it takes a few seconds for the easy fill tire alert to function.
- If there is no response for approximately 15 seconds or more after inflating the tires, cancel the use of the easy fill tire alert function or move the vehicle approximately 1 m (3.2 ft) backward or forward to try again. The air filler pressure may be weak or out of service area.
- For easy fill tire alert, Refer to WT-11, "Easy Fill Tire Alert Function".

Diagnosis Procedure

INFOID:0000000008746139

1. LOCATION CHANGE

Move the vehicle to other area and repeat the procedure of the easy fill tire alert function. Refer to WT-11, "Easy Fill Tire Alert Function".

Is the function normal?

YES >> Normal (the easy fill tire alert may not operate, depending on reception condition.)
NO >> GO TO 2.

2. PERFORM BCM SELF-DIAGNOSIS

With CONSULT

Perform self-diagnosis for “AIR PRESSURE MONITOR” of “BCM”.

Is any DTC detected?

YES >> Perform diagnosis for detected DTC. Refer to BCS-48, "DTC Index".
NO >> GO TO 3.

3. CHECK HAZARD WARNING LAMP OPERATION

Check hazard warning lamp operation with hazard switch.

Does the hazard warning lamp blink?

YES >> GO TO 4.
NO >> Perform diagnosis for the hazard warning lamp. Refer to EXL-88, "Diagnosis Procedure".

4. PERFORM ELECTRIC SHIFT CONTROL MODULE SELF-DIAGNOSIS

With CONSULT

Perform self-diagnosis for “SHIFT”.

Is any DTC detected?

YES >> Perform diagnosis for detected DTC. Refer to TM-50, "DTC Index".
NO >> GO TO 5.

5. CHECK HORN OPERATION

Check horn operation. Refer to SEC-107, "Component Function Check".

Is the operation normal?

YES >> GO TO 6.
NO >> Repair or replace malfunctioning components.

6. PERFORM SELF-DIAGNOSIS

With CONSULT

1. Drive for 10 minutes at a speed of 40 km/h (25 MPH) or more.
   CAUTION:
   Total time driving at a speed of 40 km/h (25 MPH) or more must be 10 minutes.
2. Stop the vehicle.
3. Perform self-diagnosis for “AIR PRESSURE MONITOR” of “BCM”.

Is any DTC detected?

YES >> Perform diagnosis for detected DTC. Refer to BCS-48, "DTC Index".

NO >> Replace BCM. Refer to BCS-86, "Removal and Installation".

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NVH Troubleshooting Chart

INFOID:0000000008746142

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

Reference			WT-49, "Exploded View"	WT-49, "Inspection"	WT-47, "Wheel Balance Adjustment"	WT-55, "Tire Air Pressure"	WT-47, "Inspection"	—	—	WT-55, "Tire Air Pressure"	FAX-6 and FSU-9	RAX-5 and RSU-5	—	—	FAX-6	BR-503	ST-32 (with heated steering wheel)
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	FRONT AXLE AND FRONT SUSPENSION	REAR AXLE AND REAR SUSPENSION	TIRE	ROAD WHEELS	DRIVE SHAFT	BRAKE	STEERING
Symptom	TIRE	Noise	×	×	×	×	×	×	×		×	×		×	×	×	×
		Shake	×	×	×	×	×	×		×	×	×		×	×	×	×
		Vibration				×				×	×	×			×		×
		Shimmy	×	×	×	×	×	×	×	×	×	×		×		×	×
		Judder	×	×	×	×	×	×		×	×	×		×		×	×
		Poor quality ride or handling	×	×	×	×	×	×		×	×		×	×			
	ROAD WHEEL	Noise	×	×	×			×			×	×	×		×	×	×
		Shake	×	×	×			×			×	×	×		×	×	×
		Shimmy, Judder	×	×	×			×			×	×	×			×	×
		Poor quality ride or handling	×	×	×			×			×	×	×				

×: Applicable

PERIODIC MAINTENANCE

ROAD WHEEL

Inspection

INFOID:0000000008746143

APPEARANCE

Check the road wheel for bend, damage, crack or wear.

Wheel Balance Adjustment

INFOID:0000000008746144

BALANCING WHEELS (ADHESIVE WEIGHT TYPE)

Preparation Before Adjustment

Remove inner and outer balance weights from the road wheel. 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 all traces of releasing agent from the road wheel.**

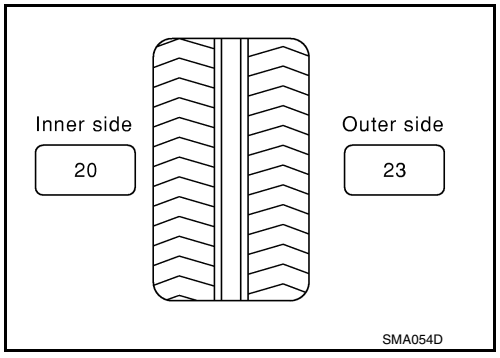
Wheel Balance Adjustment

CAUTION:

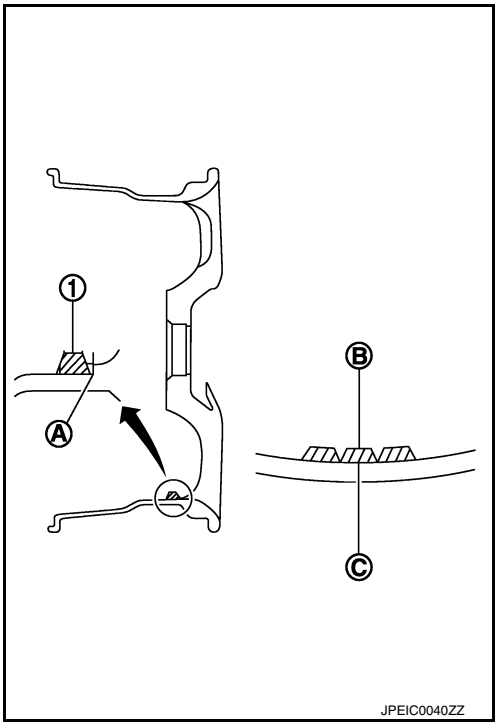
- **DO NOT use center hole cone-type clamping machines to hold the wheel assembly during tire removal/installation or balancing or damage to the wheel paint, cladding or chrome may result. Use only rim-type or universal lug-type clamping machines to hold the wheel assembly during servicing.**
- If a balancer machine has an adhesive weight mode setting, select the adhesive weight mode setting and skip Step 2 below. If a balancer machine only has the clip-on (rim flange) weight mode setting, follow Step 2 to calculate the correct size adhesive weight.

1. Set road wheel on balancer machine using the center hole as a guide. Start the balancer machine.
2. For balancer machines that only have a clip-on (rim flange) weight mode setting, follow this step to calculate the correct size adhesive weight to use. When inner and outer imbalance values are shown on the balancer machine indicator, multiply outer imbalance value by 5/3 (1.67) to determine balance weight that should be used. Select the outer balance weight with a value closest to the calculated value above and install in to the designated outer position of or at the designated angle in relation to the road wheel.

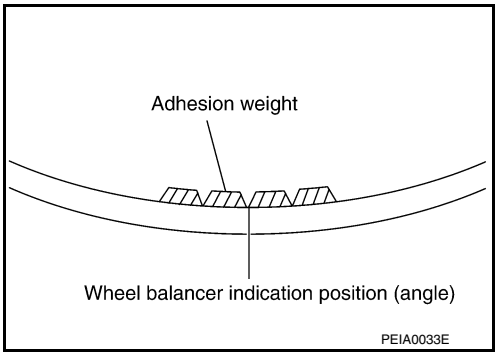
a. Indicated imbalance value × 5/3 = balance weight to be installed
Calculation example:
23 g (0.81 oz) × 5/3 (1.67) = 38.33 g (1.35 oz) ⇒ 40 g (1.41 oz) balance weight (closer to calculated balance weight value)
NOTE:
Note that balance weight value must be closer to the calculated balance weight value.
Example:
37.4 ⇒ 35 g (1.23 oz)
37.5 ⇒ 40 g (1.41 oz)



3. Install balance weight in the position shown.
   CAUTION:
   - **Do not install the inner balance weight before installing the outer balance weight.**
   - **Before installing the balance weight, be sure to clean the mating surface of the road wheel.**
   - When installing balance weight (1) to road wheel, set it into the grooved area (A) on the inner wall of the road wheel as shown so that the balance weight center (B) is aligned with the balancer machine indication position (angle) (C).
     CAUTION:
     - **Always use Genuine NISSAN adhesive balance weights.**
     - **Balance weights are non-reusable; always replace with new ones.**
     - **Do not install more than three sheets of balance weights.**



4. If calculated balance weight value exceeds 50 g (1.76 oz), install two balance weight sheets in line with each other as shown.
   CAUTION:
   Do not install one balance weight sheet on top of another.
5. Start balancer machine again.
6. Install balance weight on inner side of road wheel in the balancer machine indication position (angle).
   CAUTION:
   Do not install more than two balance weights.
7. Start balancer machine. Make sure that inner and outer residual imbalance values are 5 g (0.17 oz) each or below.



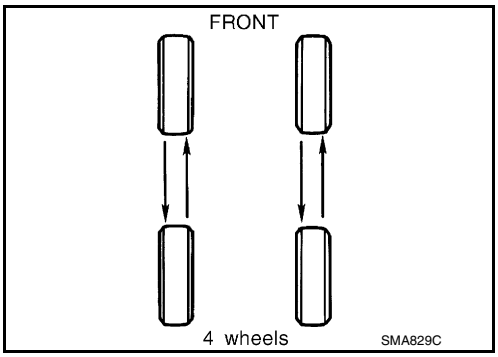
8. If either residual imbalance value exceeds 5 g (0.17 oz), repeat installation procedures.

Wheel balance	Dynamic (At flange)	Static (At flange)
Maximum allowable imbalance	Refer to WT-55, "Road Wheel".	

Tire Rotation

INFOID:0000000008746145

- Follow the maintenance schedule for tire rotation service intervals. Refer to MA-7, "Explanation of General Maintenance".
- When installing the wheel, tighten wheel nuts to the specified torque. Refer to WT-49, "Exploded View".
  CAUTION:
  - **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 nut.**
- Perform the ID registration, after tire rotation. Refer to WT-25, "Work Procedure".

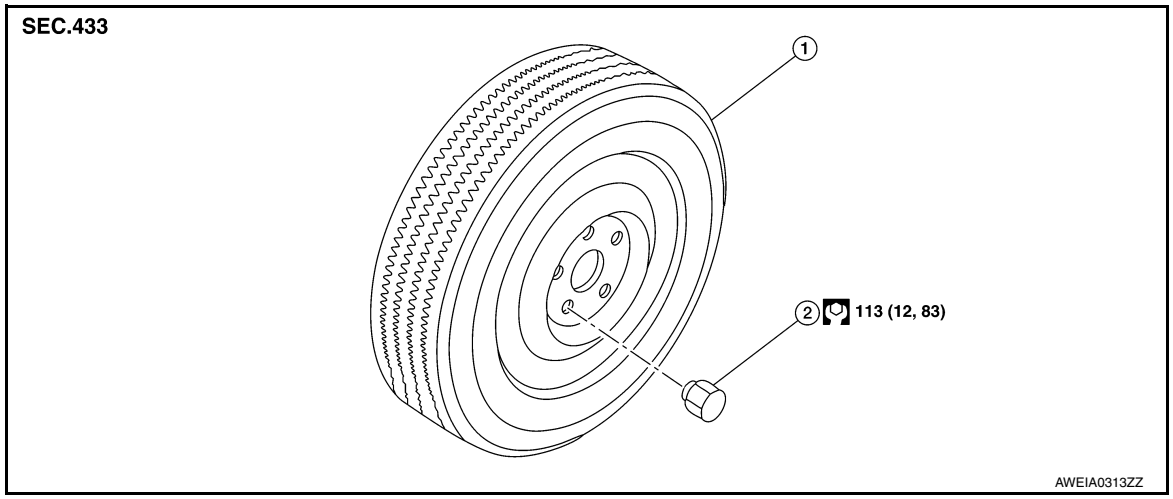


REMOVAL AND INSTALLATION

ROAD WHEEL TIRE ASSEMBLY

Exploded View

INFOID:0000000008746146



1. Tire assembly

Removal and Installation

INFOID:0000000008746147

REMOVAL

1. Remove wheel nuts.
2. Remove tire assembly.

INSTALLATION

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

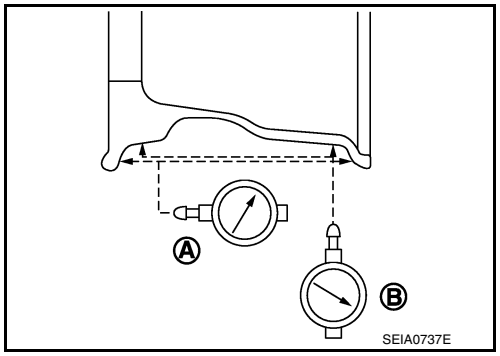
- When replacing or rotating wheels, perform the ID registration. Refer to WT-25, "Work Procedure".

Inspection

INFOID:0000000008746148

1. Check tires for wear and improper inflation.
2. Check wheels for deformation, cracks and other damage. If deformed, remove wheel and check wheel runout.

a. Remove tire from aluminum wheel and mount on a tire balance machine.
b. Set dial indicator as shown in the figure.
c. Check runout, if the axial runout (A) or radial runout (B) exceeds the limit, replace aluminum wheel.



Limit

Axial runout (A)	**: Refer to WT-55, "Road Wheel".**
Radial runout (B)	**: Refer to WT-55, "Road Wheel".**

How to Handle Puncture Repair Agent

INFOID:0000000008746149

CAUTION:

- **Never spill the sealant in the tire during repair.**
- **If the sealant spills, wipe it out with a waste cloth.**

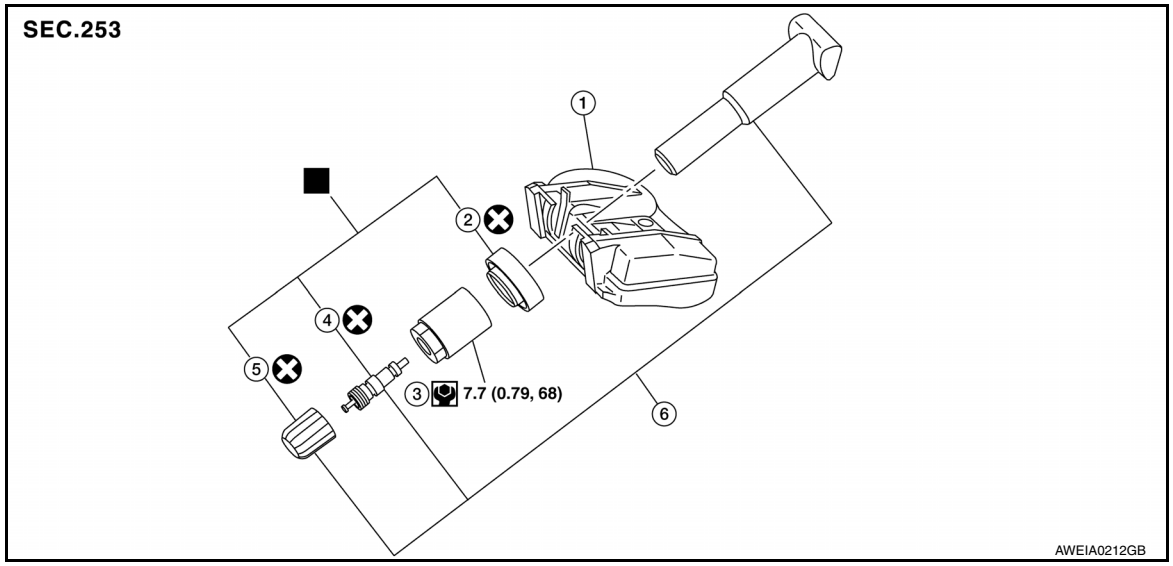
- **Never reuse the repair kit hose used for a temporary repair of a flat tire because some of the puncture repair agent remains in the hose.**
- **After using a puncture repair agent, replace tire pressure sensor with a new one.**

1. Remove tires from the vehicle.
2. Remove tire from road wheel, using a tire changer.
   CAUTION:
   - **When deflating a tire, cover the tire pressure sensor with a waste cloth to prevent the sealant from splattering.**
   - **Never spill the sealant in the tire during repair.**
3. Dispose of sealant in the removed tire.
   CAUTION:
   - **Wipe out sealant spilled on the road wheel, tire, tire changer, and floor with a waste cloth.**
   - **Drained sealant or expired sealant returned by the customer must be disposed according to the law and local regulations.**
   - Fix a tire blowout, if repairable.
     NOTE:
     Sealant blocks holes caused by blowouts. These holes may not be found and repaired, depending on the level of blowout. Therefore, it is necessary to check tire air pressure frequently and replace tire with a new one, if the air pressure is decreasing.
   - Replace tire with a new one, if not repairable.
     CAUTION:
     Never dispose of tires with the sealant contained.

TRANSMITTER

Exploded View

INFOID:0000000008746150



1. Transmitter (tire pressure sensor)
2. O-ring
3. Valve stem nut
4. Valve core
5. Valve cap
6. Valve stem assembly

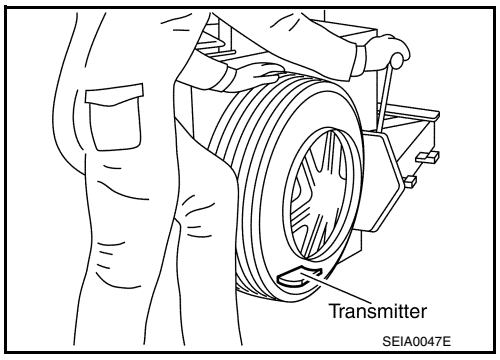
■: Parts that are replaced as a set when the tire is replaced.

Removal and Installation

INFOID:0000000008746151

REMOVAL

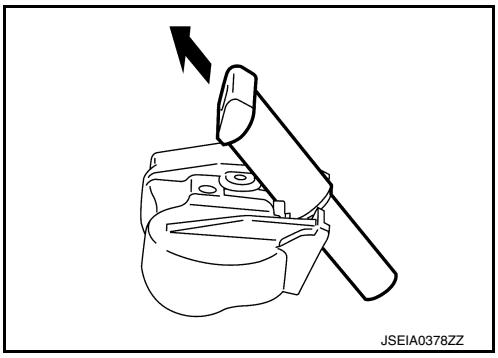
1. Remove wheel and tire using power tool. Refer to WT-49, "Removal and Installation".
2. Remove valve cap and valve core to deflate the tire.
   NOTE:
   If the tire is to be reused, apply a matching mark on the tire in line with the position of the valve stem assembly for the purpose of wheel and tire balance adjustment after installation.
3. Remove the valve stem nut and allow transmitter to fall into tire.



4. Lubricate the tire outside bead well with a suitable non-silicone lubricant, and remove outside of tire from the wheel. Reach inside the tire and remove the transmitter.
   CAUTION:
   - **Do not use silicone lubricant. Use of silicone lubricant will deteriorate the tire and wheel.**
   - **Be sure not to damage the wheel or transmitter.**
   - **Do not allow lubricant to make contact with transmitter.**
5. Lubricate the tire inside bead well with a suitable non-silicone lubricant, and remove inside of tire from the wheel.
   CAUTION:
   - **Do not use silicone lubricant. Use of silicone lubricant will deteriorate the tire and wheel.**

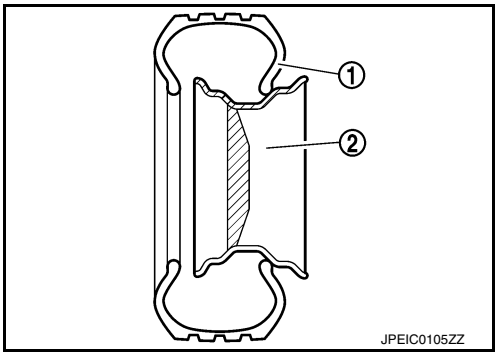
- **Be sure not to damage the wheel.**

6. Remove the valve stem from the transmitter as shown.

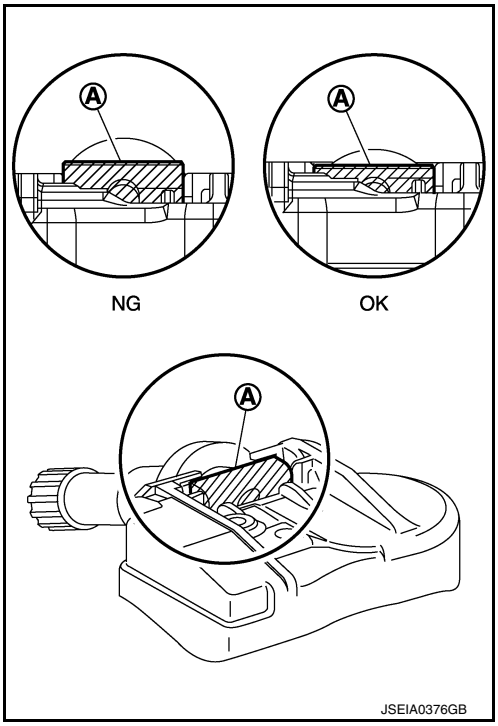


INSTALLATION

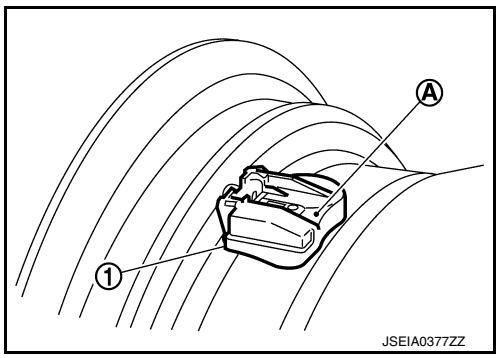
1. Apply a suitable non-silicone lubricant to the tire inside bead.
   CAUTION:
   Do not use silicone lubricant. Use of silicone lubricant will deteriorate the tire and wheel.
2. Install the tire inside bead (1) onto the wheel (2) in the position shown.



3. Install the valve stem to the transmitter.
4. Install the O-ring to the transmitter.
   CAUTION:
   - **Do not reuse O-ring**
   - **Insert O-ring to the base of the transmitter.**
   - **The base of the valve stem (A) must be positioned in the groove of the metal plate as shown.**



5. Install transmitter (1) to wheel while pressing at position (A).
CAUTION:
- **Check that O-ring contacts horizontally with wheel.**
- **Check that the base of the valve stem is positioned in the groove of the metal plate.**

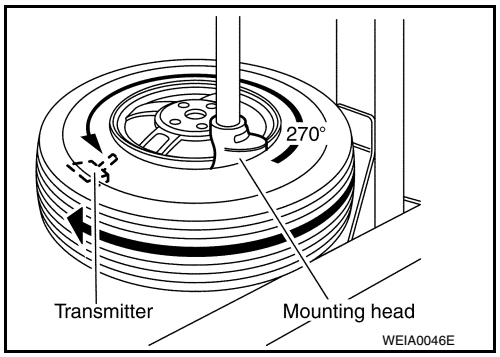


6. Install and tighten the valve stem nut to the specified torque.

Valve stem nut tightening torque : Refer to WT-55, "Road Wheel".

CAUTION:
Do not use power tool for installation.

7. Place wheel on turntable of tire machine. Ensure that transmitter is 270 degrees from mounting/dismounting head.
NOTE:
Do not touch transmitter with mounting head.
8. Apply a suitable non-silicone lubricant to the tire outside bead.
CAUTION:
- **Do not use silicone lubricant. Use of silicone lubricant will deteriorate the tire and wheel.**
- **Do not allow lubricant to make contact with transmitter.**
9. Install the tire outside bead onto the wheel as normal.
NOTE:
If the tire is being reused, align the matching mark applied on the tire with the position of the wheel valve stem assembly for the purpose of wheel and tire balance adjustment after installation. Make sure that the tire does not rotate relative to wheel.



10. Install the valve core and inflate tire.
CAUTION:
Do not reuse valve core.
11. Install the valve cap.
CAUTION:
Do not reuse valve cap.
12. Balance the wheel and tire. Refer to WT-47, "Wheel Balance Adjustment".
13. Install wheel and tire in appropriate wheel position on vehicle. Refer to WT-49, "Removal and Installation".
NOTE:
If replacing the transmitter, then transmitter ID registration procedure must be performed. Refer to WT-25, "Work Procedure".
14. Adjust neutral position of steering angle sensor. Refer to BRC-80, "Work Procedure".

TIRE PRESSURE RECEIVER

Removal and Installation

INFOID:0000000008746152

REMOVAL

1. Remove the remote keyless entry receiver. (The tire pressure receiver is incorporated into remote keyless entry receiver.) Refer to DLK-223, "Removal and Installation".

INSTALLATION

Install in the reverse order of removal.

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Road Wheel

INFOID:0000000008746153

Item		Limit
Runout	Axial runout	Less than 0.3 mm (0.012 in)
	Radial runout	
Allowable imbalance	Dynamic (At flange)	Less than 5 g (0.17 oz) (one side)
	Static (At flange)	Less than 10 g (0.35 oz)

Tire Air Pressure

INFOID:0000000008746154

Unit: kPa (kgf/cm^2, psi)

Item	Standard	
	Front	Rear
P205/55R16 89H	250 (2.55, 36)	
P215/50R17 90V		