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PRECAUTIONS

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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:

- 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 "SRS AIR BAG".
- 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 Air Bag Diagnosis Sensor Unit or other Air Bag 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 3 minutes before performing any service.

Precaution Necessary for Steering Wheel Rotation after Battery Disconnect

NOTE:

- Before removing and installing any control units, first turn the push-button ignition switch to the LOCK position, then disconnect both battery cables.
- After finishing work, confirm that all control unit connectors are connected properly, then re-connect both battery cables.
- Always use CONSULT-III to perform self-diagnosis as a part of each function inspection after finishing work.
 If a DTC is detected, perform trouble diagnosis according to self-diagnosis results.

For vehicle with steering lock unit, if the battery is disconnected or discharged, the steering wheel will lock and cannot be turned.

If turning the steering wheel is required with the battery disconnected or discharged, follow the operation procedure below before starting the repair operation.

OPERATION PROCEDURE

Connect both battery cables.

NOTE:

Supply power using jumper cables if battery is discharged.

- 2. Turn the push-button ignition switch to ACC position. (At this time, the steering lock will be released.)
- 3. Disconnect both battery cables. The steering lock will remain released with both battery cables disconnected and the steering wheel can be turned.
- 4. Perform the necessary repair operation.

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- 5. When the repair work is completed, re-connect both battery cables. With the brake pedal released, turn the push-button ignition switch from ACC position to ON position, then to LOCK position. (The steering wheel will lock when the push-button ignition switch is turned to LOCK position.)
- Perform self-diagnosis check of all control units using CONSULT-III.

Service Procedure Precautions for Models with a Pop-up Roll Bar

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WARNING:

- Risk of passenger injury or death may increase if the pop-up roll bar does not deploy during a roll
 over collision. In order to reduce the chance of an incident where the pop-up roll bar is inoperative,
 all maintenance must be performed by a NISSAN or INFINITI dealer.
- Before removing and installing the pop-up roll bar component parts and harness, always turn the
 ignition switch OFF, disconnect the battery negative terminal, and wait for 3 minutes or more. (The
 purpose of this operation is to discharge electricity that is accumulated in the auxiliary power supply
 circuit in the air bag diagnosis sensor unit.)
- When repairing, removing, and installing a pop-up roll bar, always refer to SRS AIR BAG and SRS AIR BAG CONTROL warnings in the Service Manual.

Precaution for Battery Service

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Before disconnecting the battery, lower both the driver and passenger windows. This will prevent any interference between the window edge and the vehicle when the door is opened/closed. During normal operation, the window slightly raises and lowers automatically to prevent any window to vehicle interference. The automatic window function will not work with the battery disconnected.

Service Notice or Precautions

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- Low tire pressure warning lamp blinks for 1min, then turns ON when occurring any malfunction except low
 tire pressure. Delete the memory with CONSULT-III, or register the ID to turn low tire pressure warning lamp
 OFF. Refer to <u>WT-12</u>. "AIR <u>PRESSURE MONITOR</u>: <u>Diagnosis Description</u>", <u>WT-23</u>. "ID <u>REGISTRATION</u>
 <u>PROCEDURE</u>: <u>Special Repair Requirement</u>".
- ID registration is required when replacing or rotating wheels, replacing transmitter or BCM. Refer to <u>BCS-79</u>, "Exploded View".
- Replace grommet seal, valve core and cap of transmitter in TPMS every tire replacement by reaching wear limit of tire. Refer to <u>WT-58</u>, "<u>Exploded View</u>".

PREPARATION

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PREPARATION

PREPARATION

Special Service Tool

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

Tool number (Kent-Moore No.) Tool name		Description	
– (J-45295) Transmitter activation tool		ID registration	
	SEIA0462E		V

Commercial Service Tool

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Tool name		Description	
Power tool		Loosening wheel nuts	
	PBIC0190E		

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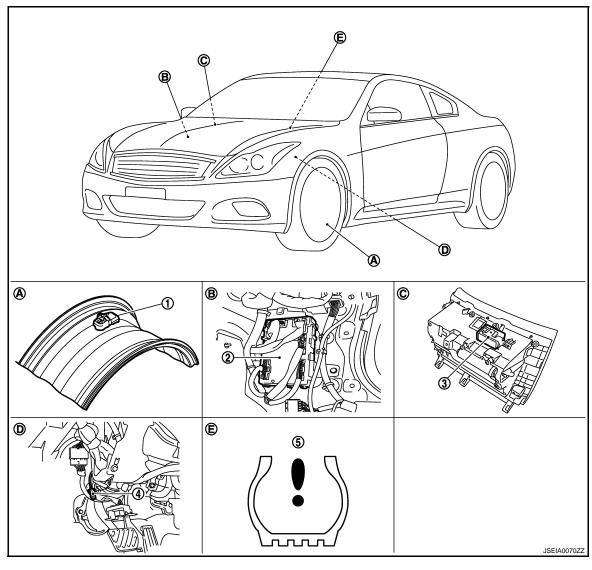
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SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

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- 1. Transmitter
- 4. Tire pressure warning check switch
- A. Wheel
- D. Behind instrument lower panel LH
- 2. BCM
- 5. Low tire pressure warning lamp
- B. Dash side lower (passenger side)
- E. Inside combination meter
- 3. Tire pressure receiver
- C. Instrument lower panel RH

Component Description

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Component parts	Function
BCM (Body Control Module)	<u>WT-7, "BCM"</u> .
Transmitter	WT-7, "Transmitter".
Tire pressure receiver	WT-7, "Tire pressure receiver".
Tire pressure warning check switch	WT-7, "Tire pressure warning check switch".
Turn signal lamp	ID registration of each wheel has been completed, turn signal lamp flashes.

COMPONENT PARTS

< SYSTEM DESCRIPTION >

Component parts	Function	
	Transmits the vehicle speed signal via CAN communication to BCM.	
Unified meter and A/C amp.	Receives the following signals via CAN communication for BCM. • Low tire pressure warning lamp signal • Hazard lamp signal • Buzzer signal	
Low tire pressure warning lamp	WT-7, "Low tire pressure warning lamp"	

BCM

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

Transmitter

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

Tire pressure receiver

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

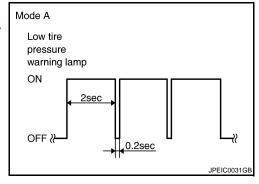
Tire pressure warning check switch

Self-diagnosis can be performed by short-circuiting the tire pressure warning check switch to the ground.(Self-diagnosis indicates the location of the malfunction by the blinking of the low tire pressure warning lamp on the combination meter.)

NOTE:

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

This mode shows transmitter status is in OFF-mode.
 Perform transmitter wake up operation. Refer to <u>WT-23, "TRANS-MITTER WAKE UP OPERATION: Special Repair Requirement".</u>



Low tire pressure warning lamp

The combination meter receives tire pressure status from the unified meter and A/C amp. via CAN communication.

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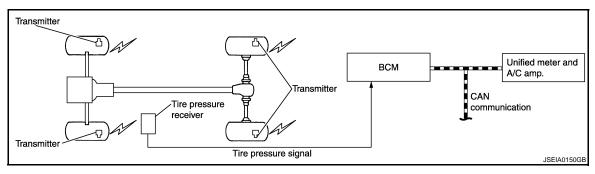
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TPMS

System Diagram

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System Description

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DESCRIPTION

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

LOW TIRE PRESSURE WARNING LAMP

The combination meter receives tire pressure status from the unified meter and A/C amp. via CAN communication. When BCM judges from a transmitter signal that tire pressure is insufficient, BCM transmits a signal to unified meter and A/C amp. via CAN communication. unified meter and A/C amp. turns on the low tire pressure warning lamp mounted on the combination meter.

Condition	Low tire pressure warning lamp
Ignition switch OFF	OFF
Ignition switch ON	Warning lamp turns on for 1second, then turns off.
Less than * kPa (* kg/cm ² , * psi) [NOTE]	ON
Tire pressure monitoring system malfunction [Other diagnostic item]	Warning lamp blinks 1 min, then turns on.

- 205.1 kPa (2.1 kg/cm², 30 psi): Standard air pressure is for 260 kPa (2.6 kg/cm²,38 psi) vehicles.
- 212.0 kPa (2.2 kg/cm², 31 psi): Standard air pressure is for 270 kPa (2.7 kg/cm², 39 psi) vehicles.

Fail-safe

FAIL-SAFE CONTROL BY DTC

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

B2013: ID DISCORD BCM-S/L Inhibit engine cranking Erase DTC B2014: CHAIN OF S/L-BCM Inhibit engine cranking Erase DTC B2190: NATS ANTENNA AMP Inhibit engine cranking Erase DTC B2191: DIFFERENCE OF KEY Inhibit engine cranking Erase DTC B2192: ID DISCORD BCM-ECM Inhibit engine cranking Erase DTC B2193: CHAIN OF BCM-ECM Inhibit engine cranking Erase DTC B2195: ANTI SCANNING Inhibit engine cranking Ignition switch ON → OFF When normal vehicle speed signals are received from ABS actuator and electric unit (control unit) for 500 ms	Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP Inhibit engine cranking Erase DTC B2191: DIFFERENCE OF KEY Inhibit engine cranking Erase DTC B2192: ID DISCORD BCM-ECM Inhibit engine cranking Erase DTC B2193: CHAIN OF BCM-ECM Inhibit engine cranking Erase DTC B2195: ANTI SCANNING Inhibit engine cranking Ignition switch ON → OFF B2557: VEHICLE SPEED Inhibit steering lock When normal vehicle speed signals are received from ABS actua-	B2013: ID DISCORD BCM-S/L	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY Inhibit engine cranking Erase DTC B2192: ID DISCORD BCM-ECM Inhibit engine cranking Erase DTC B2193: CHAIN OF BCM-ECM Inhibit engine cranking Erase DTC B2195: ANTI SCANNING Inhibit engine cranking Ignition switch ON → OFF B2557: VEHICLE SPEED Inhibit steering lock When normal vehicle speed signals are received from ABS actua-	B2014: CHAIN OF S/L-BCM	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM Inhibit engine cranking Erase DTC B2193: CHAIN OF BCM-ECM Inhibit engine cranking Erase DTC B2195: ANTI SCANNING Inhibit engine cranking Ignition switch ON → OFF B2557: VEHICLE SPEED Inhibit steering lock When normal vehicle speed signals are received from ABS actua-	B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM Inhibit engine cranking Erase DTC B2195: ANTI SCANNING Inhibit engine cranking Ignition switch ON → OFF B2557: VEHICLE SPEED Inhibit steering lock When normal vehicle speed signals are received from ABS actua-	B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING Inhibit engine cranking Ignition switch ON → OFF B2557: VEHICLE SPEED Inhibit steering lock When normal vehicle speed signals are received from ABS actua-	B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2557: VEHICLE SPEED Inhibit steering lock When normal vehicle speed signals are received from ABS actua-	B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B/55/: VEHILLE SPEELI INDIDIT STEATING INCK	B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
	B2557: VEHICLE SPEED	Inhibit steering lock	·

TPMS

< SYSTEM DESCRIPTION >

Display contents of CONSULT	Fail-safe	Cancellation
B2560: STARTER CONT RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent Starter control relay signal Starter relay status signal
B2601: SHIFT POSITION	Inhibit steering lock	500 ms after the following signal reception status becomes consistent • Selector lever P position switch signal • P range signal (CAN)
B2602: SHIFT POSITION	Inhibit steering lock	 5 seconds after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Vehicle speed: 4 km/h (2.5 MPH) or more
B2603: SHIFT POSI STATUS	Inhibit steering lock	 500 ms after the following BCM recognition conditions are fulfilled Ignition switch is in the ON position Selector lever P position switch signal: Except P position (battery voltage) Selector lever P/N position signal: Except P and N positions (0 V)
B2604: PNP SW	Inhibit steering lock	 500 ms after any of the following BCM recognition conditions are fulfilled Status 1 Ignition switch is in the ON position Selector lever P/N position signal: P and N position (battery voltage) P range signal or N range signal (CAN): ON Status 2 Ignition switch is in the ON position Selector lever P/N position signal: Except P and N positions (0 V) P range signal and N range signal (CAN): OFF
B2605: PNP SW	Inhibit steering lock	500 ms after any of the following BCM recognition conditions are fulfilled • Status 1 - Ignition switch is in the ON position - Selector lever P/N position signal: Except P and N positions (0 V) - Interlock/PNP switch signal (CAN): OFF • Status 2 - Ignition switch is in the ON position - Selector lever P/N position signal: P or N position (battery voltage) - PNP switch signal (CAN): ON
B2606: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)
B2607: S/L RELAY	Inhibit engine cranking	500 ms after the following CAN signal communication status has becomes consistent • Steering lock relay signal (Request signal) • Steering lock relay signal (Condition signal)
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent • Starter motor relay control signal • Starter relay status signal (CAN)
B2609: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When the following steering lock conditions agree • BCM steering lock control status • Steering lock condition No. 1 signal status • Steering lock condition No. 2 signal status

TPMS

< SYSTEM DESCRIPTION >

Display contents of CONSULT	Fail-safe	Cancellation
B260A: IGNITION RELAY	Inhibit engine cranking	 500 ms after the following conditions are fulfilled IGN relay (IPDM E/R) control signal: OFF (Battery voltage) Ignition ON signal (CAN to IPDM E/R): OFF (Request signal) Ignition ON signal (CAN from IPDM E/R): OFF (Condition signal)
B260F: ENG STATE SIG LOST	Maintains the power supply position attained at the time of DTC detection	When any of the following conditions are fulfilled Power position changes to ACC Receives engine status signal (CAN)
B2612: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When any of the following conditions are fulfilled Steering lock unit status signal (CAN) is received normally The BCM steering lock control status matches the steering lock status recognized by the steering lock unit status signal (CAN from IPDM E/R)
B2617: STARTER RELAY CIRC	Inhibit engine cranking	1 second after the starter motor relay control inside BCM becomes normal
B2618: BCM	Inhibit engine cranking	1 second after the ignition relay (IPDM E/R) control inside BCM becomes normal
B2619: BCM	Inhibit engine cranking	1 second after the steering lock unit power supply output control inside BCM becomes normal
B261E: VEHICLE TYPE	Inhibit engine cranking	BCM initialization
B26E8: CLUTCH SW	Inhibit engine cranking	When any of the following BCM recognition conditions are fulfilled • Status 1 - Clutch switch signal (CAN from ECM): ON - Clutch interlock switch signal: OFF (0 V) • Status 2 - Clutch switch signal (CAN from ECM): OFF - Clutch interlock switch signal: ON (Battery voltage)
B26E9: S/L STATUS	Inhibit engine cranking Inhibit steering lock	When BCM transmits the LOCK request signal to steering lock unit, and receives LOCK response signal from steering lock unit, the following conditions are fulfilled • Steering condition No. 1 signal: LOCK (0 V) • Steering condition No. 2 signal: LOCK (Battery voltage)

HIGH FLASHER OPERATION

BCM detects the turn signal lamp circuit status by the current value.

BCM increases the turn signal lamp blinking speed if the bulb or harness open is detected with the turn signal lamp operating.

NOTE:

The blinking speed is normal while activating the hazard warning lamp.

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM)

COMMON ITEM

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

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x: Applicable item

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APPLICATION ITEM

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

Diagnosis mode	Function Description	
Work Support	Changes the setting for each system function.	
Self Diagnostic Result	Displays the diagnosis results judged by BCM.	
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM. Refer to CONSULT-III operation manual.	,
Data Monitor	The BCM input/output signals are displayed.	V
Active Test	The signals used to activate each device are forcibly supplied from BCM.	
Ecu Identification	The BCM part number is displayed.	
Configuration	This function is not used even though it is displayed.	

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

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

Diagnosis mode System Sub system selection item Work Support **Data Monitor Active Test** Door lock DOOR LOCK X X × REAR DEFOGGER Rear window defogger X \times BUZZER Warning chime X × Interior room lamp timer INT LAMP × × × MULTI REMOTE ENT*1 Exterior lamp **HEAD LAMP** × × ×*2 Wiper and washer **WIPER** × X Turn signal and hazard warning lamps **FLASHER** × × X AIR CONDITONER*1 Intelligent Key system INTELLIGENT KEY · Engine start system Combination switch COMB SW Body control system **BCM** X **IVIS - NATS IMMU** X × BATTERY SAVER Interior room lamp battery saver × X × Trunk lid open **TRUNK** × X THEFT ALM Vehicle security system × × × RAP system **RETAINED PWR** ×

NOTE:

TPMS

Signal buffer system

- *1: This item is displayed, but is not used.
- *2: At models with rain sensor this mode is displayed, but is not used.

SIGNAL BUFFER

TPMS (AIR PRESSURE MONITOR)

FREEZE FRAME DATA (FFD)

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< SYSTEM DESCRIPTION >

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

CONSULT screen item	Indication/Unit		Description				
Vehicle Speed	km/h	Vehicle speed of the mo	ment a particular DTC is detected				
Odo/Trip Meter	km	Total mileage (Odometer	r value) of the moment a particular DTC is detected				
	SLEEP>LOCK		While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK".)				
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)				
	LOCK>ACC		While turning power supply position from "LOCK" to "ACC"				
	ACC>ON		While turning power supply position from "ACC" to "IGN"				
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)				
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)				
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)				
	ACC>OFF		While turning power supply position from "ACC" to "OFF"				
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"				
Vehicle Condition	OFF>ACC	Power position status of the moment a particular	While turning power supply position from "OFF" to "ACC"				
Tomoro Comunicin	ON>CRANK	DTC is detected	While turning power supply position from "IGN" to "CRANKING"				
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode				
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK".) to low power consumption mode				
	LOCK		Power supply position is "LOCK" (Ignition switch OFF with steering is locked.)				
	OFF		Power supply position is "OFF" (Ignition switch OFF with steel is unlocked.)				
	ACC		Power supply position is "ACC" (Ignition switch ACC)				
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)				
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)				
	CRANKING		Power supply position is "CRANKING" (At engine cranking)				
IGN Counter	0 - 39	The number is 0 whenThe number increases whenever ignition swit	t ignition switch is turned ON after DTC is detected a malfunction is detected now. like $1 \rightarrow 2 \rightarrow 338 \rightarrow 39$ after returning to the normal condition				

AIR PRESSURE MONITOR

AIR PRESSURE MONITOR: Diagnosis Description

INFOID:0000000005632773

DESCRIPTION

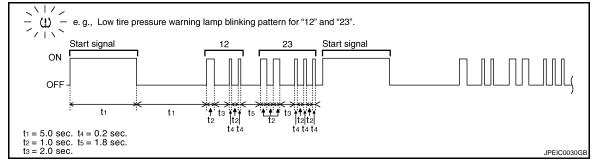
During driving, the transmitter installed at each road wheel transmits the tire pressure information signal to the receiver. The receiver receives the tire pressure signal and transmits it to the BCM. The BCM judges whether or not the tire pressure is OK based on the tire pressure information signal, and if it judges that the tire pressure is low, it transmits the information via CAN communication to the combination meter.

After receiving the tire pressure information via CAN communication from the BCM, the combination meter illuminates the low tire pressure warning lamp and displays.

SELF DIAGNOSTIC PROCEDURE

< SYSTEM DESCRIPTION >

- Initiate diagnosis mode by short-circuiting the low tire pressure warning check switch to the ground.
- The blinking pattern of the low tire pressure warning lamp indicates the conditions of the malfunction.



NOTE:

If the low tire pressure warning lamp is blinking repeatedly at 5 Hz, there is no malfunction occurring in the system.

Blinking pattern	Items	Diagnostic items detected when	Check item
15	Tire pressure value (Front LH)	Front LH tire pressure drops to * kPa (* kg/cm², * psi) or less. [NOTE]	
16	Tire pressure value (Front RH)	Front RH tire pressure drops to * kPa (* kg/cm², * psi) or less. [NOTE]	MT OC
17	Tire pressure value (Rear RH)	Rear RH tire pressure drops to * kPa (* kg/cm², * psi) or less. [NOTE]	<u>WT-26</u>
18	Tire pressure value (Rear LH)	Rear LH tire pressure drops to * kPa (* kg/cm², * psi) or less. [NOTE]	
21	Transmitter no data (Front LH)	Data from front LH transmitter cannot be received.	
22	Transmitter no data (Front RH)	Data from front RH transmitter cannot be received.	WT-28
23	Transmitter no data (Rear RH)	Data from rear RH transmitter cannot be received.	<u> </u>
24	Transmitter no data (Rear LH)	Data from rear LH transmitter cannot be received.	=
35	Transmitter pressure data error (Front LH)	Air pressure data from front LH transmitter is malfunction.	
36	Transmitter pressure data error (Front RH)	Air pressure data from front RH transmitter is malfunction.	WT 04
37	Transmitter pressure data error (Rear RH)	Air pressure data from rear RH transmitter is malfunction.	- <u>WT-31</u>
38	Transmitter pressure data error (Rear LH)	Air pressure data from rear LH transmitter is malfunction.	
52	Vehicle speed signal error	Vehicle speed signal error.	<u>WT-33</u>
53	Control unit	Tire pressure monitoring system malfunction in BCM.	<u>WT-35</u>
No blinking	Tire pressure warning check switch	Tire pressure warning switch circuit is open.	-

NOTE:

- 205.1 kPa (2.1 kg/cm², 30 psi): Standard air pressure is for 260 kPa (2.6 kg/cm²,38 psi) vehicles.
- 212.0 kPa (2.2 kg/cm², 31 psi): Standard air pressure is for 270 kPa (2.7 kg/cm², 39 psi) vehicles.

ERASE SELF-DIAGNOSIS

After performing self-diagnosis by short-circuiting the tire pressure warning check switch to the body, turn the ignition switch OFF.

AIR PRESSURE MONITOR: CONSULT-III Function

FUNCTION

The diagnosis functions (main functions) include the following: "WORK SUPPORT", "SELF DIAGNOSTIC RESULT", "DATA MONITOR" and "ACTIVE TEST".

WT-13 Revision: 2009 Novemver 2010 G37 Convertible

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INFOID:0000000005632774

< SYSTEM DESCRIPTION >

Diagnostic test mode	Function
Work support	In this mode, it is possible to make quick and accurate adjustments by following the instructions on the CONSULT-III display.
Self diagnostic result	Receives self-diagnosis results from the low tire pressure warning control unit, and indicates DTCs and the number of malfunctions.
Data monitor	Receives input/output signals from the low tire pressure warning control unit and indicates and stores them to facilitate locating the causes of malfunctions.
Active test	Transmits command to the low tire pressure warning control unit to change output signals and check operation of output system.

WORK SUPPORT MODE

Refer to WT-23, "ID REGISTRATION PROCEDURE: Special Repair Requirement".

SELF-DIAG RESULTS MODE

Refer to BCS-74, "DTC Index".

DATA MONITOR MODE

Screen of data monitor mode is displayed.

NOTE:

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

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

Monitor item (Unit)	Remark						
AIR PRESS FL (kPa), (kg/cm ²), (Psi)							
AIR PRESS FR (kPa), (kg/cm ²), (Psi)	Air pressure of tires						
AIR PRESS RR (kPa), (kg/cm ²), (Psi)	All pressure of thes						
AIR PRESS RL (kPa), (kg/cm²), (Psi)							
ID REGST FL1							
ID REGST FR1	ID is registered: Done						
ID REGST RR1	ID is not registered: Yet						
ID REGST RL1							
WARNING LAMP	Low tire pressure warning lamp ON: On Low tire pressure warning lamp OFF: Off						
BUZZER	Combination meter buzzer ON: On Combination meter buzzer OFF: Off						

NOTE:

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

ACTIVE TEST MODE

NOTE:

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

TEST ITEM LIST

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

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

ECU	Reference
	BCS-43, "Reference Value"
BCM	BCS-71, "Fail-safe"
BCIVI	BCS-73, "DTC Inspection Priority Chart"
	BCS-74, "DTC Index"

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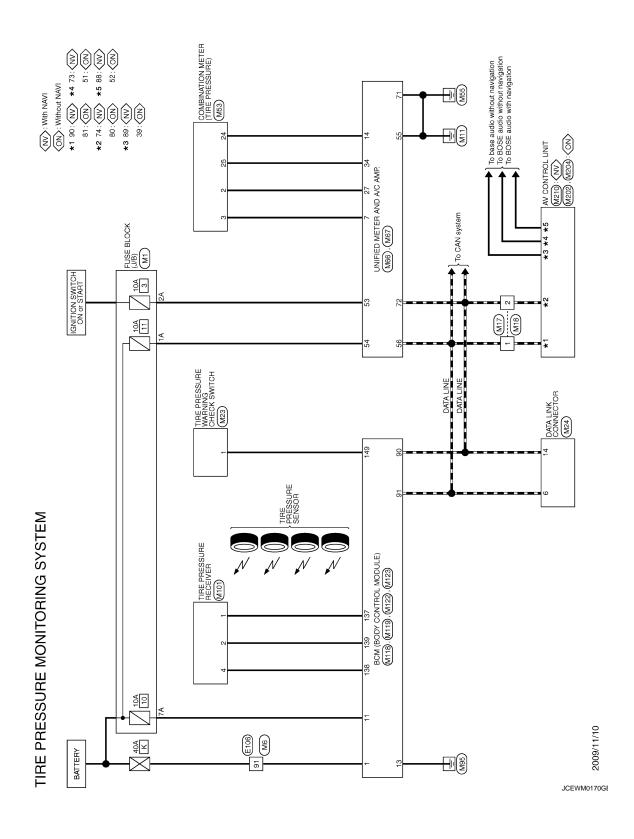
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WIRING DIAGRAM

TIRE PRESSURE MONITORING SYSTEM

Wiring Diagram



TIRE PRESSURE MONITORING SYSTEM

< WIRING DIAGRAM >

[logi	А
WIRE Signal Name [Specification]	В
	С
199 Commetter Name (Virginal Color Name (Late Name (Lat	D
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WIRE TO WIRE THEOMWICSIG-TM4 THEOMY THEOMRIP THEOMY THEOMRIP THEOMY THEOMRIP THEOM	F
1 1 2 3 3 3 3 3 3 3 3 3	G
Connector No. Connector No	Н
Cox (J/B) M2	I
	J
Color Colo	К
	L
NI S SNI	_
WINE CSI6-TM4 CSI6-TM4 Signal Name (Specification)	M
TIRE PRESSURE MONITORING SYS Jonnector Name Wife To Wife TH80PW-CSIG-TM4 TH80PW-CSIG-TM	N
TIRE PRES Connector Name Connector	0
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TIRE PRESSURE MONITORING SYSTEM

Connector No. MIS Connector Name WIRE TO WIRE	•							Consider the second second second	
	ا ۵	-		Connector No.	Mbb	40	20 0	SUNLOAD SENSOR SIGNAL	_
	, ,	> (Connector Name	UNIFIED METER AND A/C AMP.	4/	9 :	GAS SENSOR SIGNAL	_
┪	8	- 5				23	*	IGNITION POWER SUPPLY	_
Connector Type TK02MW	Ξ	- SB		Connector Type	TH40FW-NH	54	BG	BATTERY POWER SUPPLY	_
q	14	п п		þ		55	<u>_</u>	GROUND	_
医	91			ほ		56	٦	CAN-H	
				Ě		22	FG	BRAKE FLUID LEVEL SWITCH SIGNAL	
				2		58	Υ	FUEL LEVEL SENSOR SIGNAL GROUND	
1 2	Connector No.	o. M53		2 2 3	4 5 6 7 8 9 10 11 14 15 16 20	59	GR	INTAKE SENSOR GROUND	
7	omely response	COMBINATION METER		21 22 23	25 26 27 28 30 34 36 38 40	09	7	IN-VEHICLE SENSOR GROUND	
	N IODGE IN					19	ч	AMBIENT SENSOR GROUND	
	Connector Type	rpe SAB40FW				62	SB	SUNLOAD SENSOR GROUND	
Terminal Color Simol Name [Sanation]	4			Terminal Color	Cimed Name Consideration	63	7	ION CONTROL MODE OUTPUT SIGNAL	
	肾			No. of Wire		65	BG	ECV SIGNAL	
1 L -	Ę			4 G	STOP LAMP SWITCH	69	٦	A/C LAN SIGNAL	
2 P –			I I E	2 F	MANUAL MODE SHIFT UP SIGNAL	70	ч	EACH DOOR MOTOR POWER SUPPLY	
	10	2 3 5 6 7 10111	15 16 18 19 20	6 BG	PADDLE SHIFTER UP SIGNAL	71	GR	GROUND	
	2	se esterated to tertended on our or our	Delegio delegio	7 GR	COMMUNICATION SIGNAL (AMP>METER)	72	Ь	CAN-L	
Connector No. M23				8 F	VEHICLE SPEED (2-PULSE)				ı
LICTURE MOTIFIC CHIRDRING MARKING MARKING				BS 6	SEAT BELT BUCKLE SWITCH SIGNAL (DRIVER SIDE)				
Connector Name The Pressure Warring Check SWITCH	Terminal (Color		10 W	MANUAL MODE SIGNAL	Connector No.		M101	_
Connector Type TK02FW	No.	of Wire	cincation	11	NON-MANUAL MODE SIGNAL		Г	01/310101001001001001	_
	-	V BATTERY POWER SUPPLY	3 SUPPLY	14 SB	COMMUNICATION SIGNAL (LCD->AMP.)	Connector Name		LINE PRESSURE RECEIVER	
	2	LG COMMUNICATION SIGNAL (METER->AMP.	L (METER->AMP.)	20 G	ION ON / OFF SIGNAL	Connector Type	Г	TK04FW	_
	e	GR COMMUNICATION SIGNAL (AMP>METER)	L (AMP>METER)	25 V	MANUAL MODE SHIFT DOWN SIGNAL				1
	2	B GROUND		26 G	PADDLE SHIFTER DOWN SIGNAL	E			
<u></u>	9	W ALTERNATOR SIGNAL	SIGNAL	F	COMMUNICATION SIGNAL (METER->AMP.)	\\			
	7	LG AIR BAG SIGNAL	SNAL	H	VEHICLE SPEED (8-PULSE)	2			
	10	R SECURITY SIGNAL	GNAL	30 ^	PARKING BRAKE SWITCH SIGNAL			0	
	12			34 B	COMMUNICATION SIGNAL (AMP>LCD)			1 2 4	
nal Color	91	METER CONT	TCH GROUND	┞	BLOWER MOTOR CONTROL SIGNAL				
No. of Wire Signal Name [Specification]	18	L							
- M	19	B ITT GND				Terminal	Color	:	_
	20			Connector No.	M67	No	of Wire	Signal Name [Specification]	
	2.1	R IGNITION SIGNAL	SNAI			-	>	GNB	_
Connector No. M24	22			Connector Name	UNIFIED METER AND A/C AMP.	6	-	SIGNAL	_
_	24	COMMUNICATI	AL (LCD->AMP.)	Connector Type	TH32FW-NH	4	ä	BATTERY	_
Connector Name DATA LINK CONNECTOR	25	H	AL (AMP>LCD)						1
Connector Type BD16FW	56	H	IAL (8-PULSE)	修					
ſ	27	V PARKING BRAKE SWITCH SIGNAL	ITCH SIGNAL	Ę					
	28	SB BRAKE FLUID LEVEL SWITCH SIGNAL	WITCH SIGNAL	-	7				
_	59	L SEAT BELT BUCKLE SW SIGNAL (DRIVER SIDE	INAL (DRIVER SIDE)	41 45	43 44 45 46 47 53 54 55 56				
(1)	30	G SEAT BELT BUCKLE SWITCH SIGNAL (PASSENGER SIDE	VAL (PASSENGER SIDE)	27 58 59	59 60 61 62 63 65 66 69 70 71 72				
lĿ	31	L WASHER LEVEL SWITCH SIGNAL	TCH SIGNAL						
12345618	33	R ILLUMINATION CONTROL SIGNAL	TROL SIGNAL						
	36	LG SELECT SWITCH SIGNAL	I SIGNAL	la	Signal Name [Specification]				
	37	SB ENTER SWITCH SIGNAL	SIGNAL	ъ					
Terminal Color Signal Name [Specification]	38	\dashv	ITCH SIGNAL	\dashv	ACC POWER SUPPLY				
	39	+	OL SWITCH (-)	-	FUEL LEVEL SENSOR SIGNAL				
3 LG	40	BG ILLUMINATION CONTROL SWITCH (+)	OL SWITCH (+)	+	INTAKE SENSOR SIGNAL				
+				4	IN-VEHICLE SENSOR SIGNAL				
5 BR				45 \	AMBIENT SENSOR SIGNAL				

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TIRE PRESSURE MONITORING SYSTEM

< WIRING DIAGRAM >

			45 46 47 57 58 59	(a) (b) (b) (c) (c) (c) (c) (c) (c) (c) (c) (c) (c	А
	MZUZ AV CONTROL UNIT	HN	36 37 88 39 40 41 42 43 44 45 48 49 50 51 52 53 54 55 56 57	Signal Name (Specification) SIGNAL VOC SIGNAL OND SIGNAL OND COMM (DISP->CONT) ROB SYNC ROB (GAPEN) SIGNAL ROB (CAPEN) SIGNAL R	В
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	IODULE)		图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图图	esfection] ERAL LINK WISCR LOCK SW 2 SW 1 SW 2	WT
	BCM (BODY CONTROL MODULE)	TH40FG-NH	(2) (2) (2) (3) (3) (3) (4) (4) (5) (4) (4) (5) (5) (4) (5) (5) (6) (6) (6) (6) (6) (6) (6) (6) (6) (6	Signal Name (Specification) RAIN SENSOR SERAL, LINK OPTICAL, SENSOR CLUTCH NITERLOCK SW STOP LAMP SW 1 STOP LAMP SW 2 DR DOOR UNLOCK SENSOR REY SLOT SW REY SW SW 2 INNELLD POWER SW PW SW & BHT CAU COMM PUSH-BUTTON IGNITION SW ILL POWER LOCK NO DRESPECTOR / SENSOR GND RECEIVER / SENSOR DW SECURITY MICHATOR COMBIS SW OUTPUT 1 COMBIS SW OUTPUT 1 COMBIS SW OUTPUT 3 COMBIS SW DUTPUT 3 COMBIS SW OUTPUT 3 COMBIS SW DUTPUT 4 COMBIS S	F
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	CM (BODY COI	TH40FB-NH	77 66 85 64 83 82 81 [20]	F F F F F F F F F F	J
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SYSTEM	FG	PI	79 L ILLUMINATION	5	BG	GR VEHICLE	SHIELD	MICKO	<u>n</u> -	COMIN	90 L CAN-H	98 88	3													T		ſ												
RE MONITORING	M204	AV CONTROL UNIT		TH32FW-NH				79 70 80 81 82 83 84 85 86 87 89 80 00 001	04 05 06 07 08 00 101 101 101 101 101 101 101 101 1	24 22 20 21 20 22 100 101 104 104 104 104 104		L	Signal Name [Specification]	AV COMM (L)	AV COMM (H)	AV COMM (L)	TNAC	CAN-H	SW GND	D SHIELD	TEL VOICE SIGNAL (+)	TEL VOICE SIGNAL (-)	VEHICLE SPEED (8-PULSE)	PARKING BRAKE	REVERSE	IGNIIION	DISK EJECT SIGNAL		M210	AV CONTROL UNIT	TH32FW-NH		RS 64 65 66 67 68 69 70 71 72 73 74 75 76 76 79 80 81 81 82 83 90 91 92		Signal Name [Specification]	PARKING BRAKE	COMPOSITE IMAGE GND	၁၁		D MICROPHONE SHIELD MICROPHONE VCC
	r No.	r Name		r Type				7 77 27	: 8	3		Color	of Wire	ΓC	SB	5 8	3 a	_	BR	SHIELD	٦	Д	GR	SB	BG	5	9		r No.	r Name	r Type		61 62 6	rolo	of Wire	SB	۵.	_	SHIFLD	SHIELD
TIRE	Connector No.	Connector Name		Connector Type	q	手	H.S.					Terminal	No.	9/	77	8/	80	81	82	86	87	88	92	93	94	95	96		Connector No.	Connector Name	Connector Type	心 HS.		Terminal	No.	65	67	88	7	71

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

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DETAILED FLOW

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

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-61, "Tire Air Pressure"</u>.

Is the inspection result normal?

YES >> GO TO 3.

NO >> Inspect or repair the tires or wheels.

3.CHECK LOW TIRE PRESSURE WARNING LAMP

Check low tire pressure warning lamp display.

Does not low tire pressure warning lamp turn OFF?

YES >> GO TO 4.

NO >> INSPECTION END

4.CRUISE TEST

Start the engine and drive the vehicle.

>> GO TO 5.

PERFORM SELF-DIAGNOSIS

(P)With CONSULT-III

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

Is any DTC detected?

YES >> GO TO 7.

NO >> GO TO 6.

6.CHECK SYMPTOM

Perform trouble diagnosis for the applicable symptom. Refer to WT-42, "Symptom Table".

Is the cause of the malfunction detected?

YES >> GO TO 8.

NO >> GO TO 10.

.CIRCUIT DIAGNOSIS

Inspect the malfunctioning system indicated by the DTC code that is detected during self-diagnosis. Refer to BCS-74, "DTC Index".

>> GO TO 8.

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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

8. REPAIR WORK

Repair or replace the malfunctioning part.

>> GO TO 9.

9. PERFORM SELF-DIAGNOSIS

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

Is any DTC detected?

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

10. FINAL CHECK

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

Dose the tire pressure warning lamp turn OFF?

YES >> INSPECTION END

NO >> GO TO 2.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT TRANSMITTER WAKE UP OPERATION

TRANSMITTER WAKE UP OPERATION: Description

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

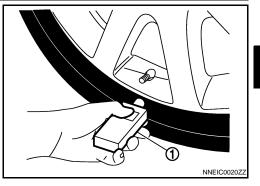
TRANSMITTER WAKE UP OPERATION: Special Repair Requirement

INFOID:0000000005632765

1. TRANSMITTER WAKE-UP PROCEDURE

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

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



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

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

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

Is the transmitter wake-up procedure completed?

- YES >> Perform the transmitter ID registration procedure. Refer to WT-23, "ID REGISTRATION PROCE-**DURE**: Special Repair Requirement".
- NO >> Perform trouble diagnosis for the transmitter. Refer to WT-12, "AIR PRESSURE MONITOR: Diagnosis Description".

ID REGISTRATION PROCEDURE

ID REGISTRATION PROCEDURE: Description

INFOID:0000000005632766

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

ID REGISTRATION PROCEDURE: Special Repair Requirement

INFOID:0000000005632767

${f 1}$. TRANSMITTER ID REGISTRATION PROCEDURE

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INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

(P)With CONSULT-III.

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

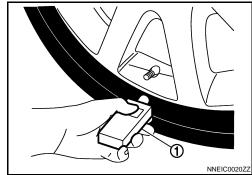
Is the transmitter activation tool (J-45295) used for the transmitter ID registration procedure?

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

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

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

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



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

Se- quence	ID registration position	Turn signal lamp	CONSULT-III
1	Front left wheel		
2	Front right wheel	2 blinks	"Red"
3	Rear right wheel	2 Dill IK3	"Green"
4	Rear left wheel		

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

Is the check result normal?

YES >> ID registration END.

NO >> Performs trouble-diagnosis of the Tire Pressure Monitoring System (TPMS). Refer to <u>WT-12, "AIR PRESSURE MONITOR: Diagnosis Description"</u>.

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

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

Tire position	Tire pressure kPa (kg/cm², 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)

- Drive the vehicle at a speed at more than 40 km/h (25 MPH) for 3 minutes or more, then perform the transmitter ID registration procedure.
- 3. After ID registration for all wheels is completed, press "END" to end ID registration.

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

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

4. Adjust the tire pressures for all wheels to the specified value. Refer to <u>WT-61, "Tire Air Pressure"</u>. <u>Is ID registrations for all wheels completed?</u>

YES >> ID registration END.

NO >> Performs trouble-diagnosis of the Tire Pressure Monitoring System (TPMS). Refer to <u>WT-12, "AIR PRESSURE MONITOR: Diagnosis Description"</u>.

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C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

Description INFOID:0000000005853903

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

DTC Logic

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible cause
C1704	LOW PRESSURE FL	Front LH tire pressure drops to * kPa (* kg/cm², * psi) or less. [NOTE]	
C1705	LOW PRESSURE FR	Front RH tire pressure drops to * kPa (* kg/cm², * psi) or less. [NOTE]	Low tire pressure
C1706	LOW PRESSURE RR	Rear RH tire pressure drops to * kPa (* kg/cm ² , * psi) or less. [NOTE]	Low the pressure
C1707	LOW PRESSURE RL	Rear LH tire pressure drops to * kPa (* kg/cm², * psi) or less. [NOTE]	

- 205.1 kPa (2.1 kg/cm², 30 psi): Standard air pressure is for 260 kPa (2.6 kg/cm²,38 psi) vehicles.
- 212.0 kPa (2.2 kg/cm², 31 psi): Standard air pressure is for 270 kPa (2.7 kg/cm², 39 psi) vehicles.

DTC CONFIRMATION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(E)With CONSULT-III

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-61, "Tire Air Pressure"</u>.
- Perform "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM".

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

YES >> Perform trouble diagnosis. Refer to WT-26, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005853905

1. CHECK TIRE PRESSURE

Check the internal pressure of all wheels. Refer to WT-61, "Tire Air Pressure".

Is the inspection result normal?

YES >> Replace the DTC-detected malfunctioning transmitter. Refer to WT-58, "Exploded View".

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

2.CHECK TIRE PRESSURE SIGNAL

(I) With CONSULT-III

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

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

C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

< DTC/CIRCUIT DIAGNOSIS >

CAUTION:

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

Is the inspection result normal?

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

NO >> GO TO 1.

Special Repair Requirement

INFOID:0000000005853906

1. CHECK TIRE AIR PRESSURE

Check all tire air pressures. Refer to WT-61, "Tire Air Pressure".

Does all tire pressure data meet the specification?

YES >> GO TO 2.

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

2.PERFORM ID REGISTRATION

Perform ID registration. Refer to WT-23, "ID REGISTRATION PROCEDURE: Special Repair Requirement".

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C1708, C1709, C1710, C1711 TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

C1708, C1709, C1710, C1711 TRANSMITTER

DTC Logic

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1. DTC REPRODUCTION PROCEDURE

(II) With CONSULT-III

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

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

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

NO >> INSPECTION END

Diagnosis Procedure

INFOID:0000000005853908

1. CHECK TIRE PRESSURE SIGNAL

(P)With CONSULT-III

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

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

CAUTION:

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

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

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

2.CHECK HARNESS BETWEEN BCM AND TIRE PRESSURE RECEIVER

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

C1708, C1709, C1710, C1711 TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

BCM		Tire pressure receiver		Otiit
Connector	Terminal	Connector	Terminal	Continuity
	137		1	
M123	138	M101	4	Existed
	139	=	2	

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

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

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace damaged parts.

3.CHECK TIRE PRESSURE RECEIVER POWER SUPPLY CIRCUIT

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

CAUTION:

Never start the engine.

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

BO	CM		Voltage
Connector	Terminal		
M123	138	Ground	5 V

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace damaged parts.

4. CHECK TIRE PRESSURE RECEIVER

Check tire pressure receiver. Refer to WT-37, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 5.

NO >> Replace tire pressure receiver. Refer to WT-60, "Exploded View".

5.CHECK ID REGISTRATION

Perform ID registration of all transmitters. Refer to WT-23, "ID REGISTRATION PROCEDURE: Special Repair Requirement".

Can ID registration of all transmitters be completed?

YES >> GO TO 6.

NO >> Replace transmitter. Refer to WT-58, "Exploded View".

6. CHECK TIRE PRESSURE MONITORING SYSTEM

(P)With CONSULT-III

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

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C1708, C1709, C1710, C1711 TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

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

CAUTION:

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

Is the inspection result normal?

YES >> Replace the DTC-detected malfunctioning transmitter. Refer to <u>WT-58</u>, "Exploded View".

NO >> Replace BCM. Refer to BCS-79, "Exploded View".

Special Repair Requirement

INFOID:0000000005857211

1. CHECK TIRE AIR PRESSURE

Check all tire air pressures. Refer to WT-61, "Tire Air Pressure".

Does all tire pressure data meet the specification?

YES >> GO TO 2.

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

2. PERFORM ID REGISTRATION

Perform ID registration. Refer to WT-23, "ID REGISTRATION PROCEDURE: Special Repair Requirement".

>> END

C1716, C1717, C1718, C1719 TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

C1716, C1717, C1718, C1719 TRANSMITTER

Α DTC Logic INFOID:0000000005853910

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

DTC REPRODUCTION PROCEDURE

(P)With CONSULT-III

Turn the ignition switch ON.

CAUTION:

Never start the engine.

- 2. Check the tire pressure for all wheels and adjust to the specified value. Refer to WT-61, "Tire Air Pressure".
- Perform "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM".

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

>> Perform trouble diagnosis. Refer to WT-31, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1. CHECK TIRE PRESSURE

Check the internal pressure of all wheels. Refer to WT-61, "Tire Air Pressure".

Is the inspection result normal?

YES >> Replace the DTC-detected malfunctioning transmitter. Refer to WT-58, "Exploded View".

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

2.CHECK TIRE PRESSURE SIGNAL

(P)With CONSULT-III

- 1. Check and adjust the tire pressure for all wheels. Refer to WT-61, "Tire Air Pressure".
- 2. Perform transmitter ID registration for all wheels. Refer to WT-23, "ID REGISTRATION PROCEDURE: Special Repair Requirement".
- 3. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- 4. Perform "DATA MONITOR" in "AIR PRESSURE MONITOR" of "BCM".
- Select "BCM" in "DATA MONITOR", and check that the tire pressures match the standard value. CAUTION:

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

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

Is the inspection 438.60 kPa $(4.47 \text{ kg/cm}^2, 63.60 \text{ Psi})$?

YES >> Replace transmitter the tire pressure 438.60 kPa (4.47 kg/cm², 63.60 Psi) displayed. Refer to WT-58, "Exploded View".

NO >> GO TO 1.

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C1716, C1717, C1718, C1719 TRANSMITTER

< DTC/CIRCUIT DIAGNOSIS >

Special Repair Requirement

INFOID:0000000005857215

1. CHECK TIRE AIR PRESSURE

Check all tire air pressures. Refer to WT-61, "Tire Air Pressure".

Does all tire pressure data meet the specification?

YES >> GO TO 2.

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

2. PERFORM ID REGISTRATION

Perform ID registration. Refer to WT-23, "ID REGISTRATION PROCEDURE: Special Repair Requirement".

>> END

C1729 VEHICLE SPEED SIGNAL

< DTC/CIRCUIT DIAGNOSIS > C1729 VEHICLE SPEED SIGNAL Α Description INFOID:0000000005853913 BCM detects no vehicle speed signal. В DTC Logic INFOID:0000000005853914 DTC DETECTION LOGIC DTC Trouble diagnosis name DTC detecting condition Possible case number D · CAN communication error C1729 VHCL SPEED SIG ERR Vehicle speed signal not detected. Unified meter and A/C amp, malfunction WT DTC CONFIRMATION PROCEDURE 1.DTC REPRODUCTION PROCEDURE (P)With CONSULT-III Drive for several minutes at a speed of 40 km/h (25 MPH) or more, then stop the vehicle. Perform "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM". Is DTC "C1729" detected? >> Perform trouble diagnosis. Refer to WT-33, "Diagnosis Procedure". NO >> INSPECTION END Н Diagnosis Procedure INFOID:0000000005853915 ${f 1}$.PERFORM UNIFIED METER AND A/C AMP. SELF-DIAGNOSIS (P)With CONSULT-III Perform "SELF-DIAG RESULTS" of "METER/M&A". Is any DTC detected? YES >> Check the DTC. Refer to MWI-102, "DTC Index". NO >> GO TO 2. 2.PERFORM SELF-DIAGNOSIS (P)With CONSULT-III Perform "SELF-DIAG RESULTS" in "AIR PRESSURE MONITOR" of "BCM". Is DTC "C1729" detected? >> Replace BCM. Refer to WT-11, "COMMON ITEM: CONSULT-III Function (BCM - COMMON YES ITEM)". NO >> GO TO 3. 3.CHECK INFORMATION (P)With CONSULT-III Perform "DATA MONITOR" in "AIR PRESSURE MONITOR" of "BCM". Select "BCM" in "DATA MONITOR", and check the input/output values. Refer to BCS-43, "Reference Value". Is the inspection result normal?

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

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INFOID:0000000005857217

NO >> Replace BCM. Refer to BCS-79, "Exploded View".

Special Repair Requirement

1.CHECK TIRE AIR PRESSURE

Check all tire air pressures. Refer to WT-61, "Tire Air Pressure".

Does all tire pressure data meet the specification?

C1729 VEHICLE SPEED SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

YES >> GO TO 2.

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

2.PERFORM ID REGISTRATION

Perform ID registration. Refer to WT-23, "ID REGISTRATION PROCEDURE: Special Repair Requirement".

>> END

C1734 BCM

DTC Logic INFOID:0000000005853917

DTC DETECTION LOGIC

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

DTC CONFIRMATION PROCEDURE

1.DTC REPRODUCTION PROCEDURE

(P)With CONSULT-III

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

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

Perform within 15 minutes after stop the vehicle.

Is DTC "C1734" detected?

>> Perform trouble diagnosis. Refer to WT-35, "Diagnosis Procedure".

NO >> INSPECTION END

Diagnosis Procedure

1.CHECK BCM POWER SUPPLY

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

В	CM	_	Voltage
Connector	Terminal	_	
M118	1	Ground	Battery voltage
M119	11	Giouna	

Is the power supply normal?

YES >> GO TO 2.

NO

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

- 40 A fusible link [No. K located in the fuse block]. Refer to PG-122, "Fuse and Fusible Link Arrangement".
- 10 A fuse [No. 10 located in the fuse block (J/B)]. Refer to PG-121, "Fuse, Connector and Termi-
- Harness for short or open between battery and BCM harness connector M118 terminal 1.
- Harness for short or open between battery and BCM harness connector M119 terminal 11.
- Check the Battery voltage.

2.CHECK BCM GROUND

Check the continuity between BCM harness connector and ground.

В	CM		Continuity
Connector	Terminal	_	
M119	13	Ground	Existed

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace damaged parts.

3.CHECK HARNESS BETWEEN BCM AND TIRE PRESSURE RECEIVER

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

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ВСМ		Tire pressure receiver		
Connector	Terminal	Connector	Terminal	Continuity
	137		1	
M123	138	M101	4	Existed
	139		2	

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

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

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace damaged parts.

4. CHECK BCM

NO

Check the BCM input/output signal. Refer to BCS-43, "Reference Value".

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 5.

5. CHECK BCM HARNESS CONNECTOR

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

Is the inspection result normal?

YES >> Replace BCM. Refer to BCS-79, "Exploded View".

>> Check for looseness or damage at the harness connector pins of the low tire pressure warning control unit. Repair or replace if necessary.

Special Repair Requirement

INFOID:0000000005857218

1. CHECK TIRE AIR PRESSURE

Check all tire air pressures. Refer to WT-61, "Tire Air Pressure".

Does all tire pressure data meet the specification?

YES >> GO TO 2.

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

2.PERFORM ID REGISTRATION

Perform ID registration. Refer to WT-23, "ID REGISTRATION PROCEDURE: Special Repair Requirement".

>> END

TIRE PRESSURE RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

TIRE PRESSURE RECEIVER

Component Function Check

INFOID:0000000005853921

1. TIRE PRESSURE MONITORING SYSTEM OPERATION

IID.000000000003833921

(P)With CONSULT-III

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

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

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CAUTION:

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Perform trouble diagnosis. Refer to <u>WT-37</u>, "<u>Diagnosis Procedure</u>".

Diagnosis Procedure

INFOID:0000000005853922

1. CHECK TIRE PRESSURE RECEIVER SIGNAL

1. Turn the ignition switch ON.

CAUTION:

Never start the engine.

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

Tire pressure receiver			Condition	Voltage (Approx.)
Connector	Terminal	_	Condition	Voltage (Approx.)
M101	2	Ground	Stand by state	(V) 6 4 2 0 + 0.2s
WITOT	2	Clound	When receiving the signal from the transmitter	(V) 6 4 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2. CHECK TIRE PRESSURE RECEIVER INPUT VOLTAGE

- 1. Disconnect tire pressure receiver connector.
- Check voltage between tire pressure receiver connector and ground.

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TIRE PRESSURE RECEIVER

< DTC/CIRCUIT DIAGNOSIS >

Tire pressure receiver			Voltage (Approx.)
Connector	Connector Terminal		voltage (Approx.)
M101	4	Ground	5.0 V

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace damaged parts.

3.check tire pressure receiver ground circuit

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

ВСМ		Tire pressure receiver		Continuity
Connector	Terminal	Connector	Terminal	Continuity
M123	137	M101	1	Existed

3. Check continuity between BCM harness connector and ground.

ВСМ		_	Continuity
Connector	Connector Terminal		Continuity
M123	137	Ground	Not existed

Is the inspection result normal?

YES >> GO TO 4.

NO >> Repair or replace damaged parts.

4. CHECK BCM CIRCUIT

Inspect the BCM circuit. Refer to WT-35, "Diagnosis Procedure".

Is the BCM circuit normal?

YES >> Replace tire pressure receiver. Refer to WT-60, "Exploded View".

NO >> Replace BCM. Refer to BCS-79, "Exploded View".

TIRE PRESSURE WARNING CHECK SWITCH

< DTC/CIRCUIT DIAGNOSIS > TIRE PRESSURE WARNING CHECK SWITCH Α Component Function Check INFOID:0000000005853925 ${f 1}$.CHECK THE ILLUMINATION OF THE LOW TIRE PRESSURE WARNING LAMP В Turn the ignition switch ON. CAUTION: Never start the engine. Short-circuit the tire pressure warning check switch connector terminal to the ground. 3. Check that the low tire pressure warning lamp blinking. Is inspection result normal? D YES >> INSPECTION END NO >> Perform diagnosis. Refer to WT-39, "Diagnosis Procedure". WT Diagnosis Procedure INFOID:0000000005853926 1. CHECK TIRE PRESSURE WARNING CHECK SWITCH SIGNAL Turn the ignition switch ON. CAUTION: Never start the engine. Check the voltage between tire pressure warning check switch connector and ground. Tire pressure warning check switch Voltage (Approx.) Н Connector Terminal M23 1 Ground 5 V Is the inspection result normal? YES >> Replace BCM. Refer to BCS-79, "Exploded View". NO >> GO TO 2. 2.CHECK TIRE PRESSURE WARNING CHECK SWITCH CIRCUIT 1. Turn the ignition switch OFF. 2. Disconnect BCM harness connector Check the continuity between BCM harness connector and tire pressure warning check switch connector. **BCM** Tire pressure warning check switch Continuity Terminal Connector **Terminal** Connector Existed M123 149 M23 Check the continuity between BCM harness connector and ground. M **BCM** Continuity Connector **Terminal** Ν M123 149 Ground Not existed Is the inspection result normal? YES >> Check BCM pin terminals for damage or loose connection with harness connector. If any items

ES >> Check BCM pin terminals for damage or loose connection with harness connector. If any items are damaged, repair or replace damaged parts. Replace BCM. Refer to <u>BCS-79</u>, "Exploded View".

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NO >> Repair or replace damaged parts.

LOW TIRE PRESSURE WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP

Component Function Check

INFOID:0000000005853928

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

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> Perform trouble diagnosis. Refer to <u>WT-40, "Diagnosis Procedure"</u>.

Diagnosis Procedure

INFOID:0000000005853929

1. POWER SUPPLY AND GROUND CIRCUIT

Check power supply and ground circuit. Refer to WT-41, "Diagnosis Procedure".

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace damaged parts.

2.PERFORM SELF-DIAGNOSIS

(P)With CONSULT-III

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

Is any DTC detected?

YES >> Check the DTC. Refer to BCS-74, "DTC Index".

NO >> GO TO 3.

3.check low tire pressure warning lamp signal

(P)With CONSULT-III

Turn the ignition switch ON.

CAUTION:

Never start the engine.

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

Is the inspection result normal?

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

NO >> Replace the BCM. Refer to BCS-79, "Exploded View".

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

Diagnosis Procedure

INFOID:0000000005853930

1. POWER SUPPLY SYSTEM CHECK

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

CAUTION:

Never start the engine.

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

ВСМ			Voltage	
Connector	Connector Terminal		Voltage	
M118	1	Ground	Pattory voltage	
M119	11	Giodila	Battery voltage	

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace damaged parts.

2.GROUND SYSTEM INSPECTION

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

BCM		_	Continuity
Connector Terminal			Continuity
M119	13	Ground	Existed

Is the inspection result normal?

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

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

NO >> Repair or replace damaged parts.

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SYMPTOM DIAGNOSIS

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Symptom Table

LOW TIRE PRESSURE WARNING LAMP SYMPTOM CHART

Diagnosis items	Symptom (Ignition switch ON)	Low tire pressure warning lamp	Cause	Action
	The low tire pressure warning lamp illuminates for 1 second, then turns OFF.	ON 1 sec > stays OFF SEIA0592E	Wake-up operation for all transmitters at wheels is completed.	No system malfunctions
	The low tire pressure warning lamp repeats blinking ON for 2 seconds and OFF for 0.2 seconds.	Blinks: ON 2 sec > OFF 0.2 sec SEIA0593E	Wake-up operation for all transmitters at wheels is not completed.	Perform the wake-up operation for all transmitters at wheels. Refer to WT-23, "TRANSMITTER WAKE UP OPERATION: Special Repair Requirement".
Low tire pressure warning lamp	The low tire pressure warning lamp blinks once.	Blinks 1 time ON 0.3 sec > OFF 1.3 sec SEIA0594E	The front left transmitter is not activated.	Perform the wake-up operation for the transmitter at front left wheel. Refer to WT-23, "TRANSMITTER WAKE UP OPERATION: Special Repair Requirement".
	The low tire pressure warning lamp repeats blinking twice.	Blinks 2 times ON 0.3 sec > OFF 0.3 sec SEIA0595E	The front right transmitter is not activated.	Perform the wake-up operation for the transmitter at front right wheel. Refer to WT-23, "TRANSMITTER WAKE UP OPERATION: Special Repair Requirement".
	The low tire pressure warning lamp repeats blinking for 3 times.	Blinks 3 times ON 0.3 sec > OFF 0.3 sec SEIA0596E	The rear right transmitter is not activated.	Perform the wake-up operation for the transmitter at rear right wheel. Refer to WT-23, "TRANSMITTER WAKE UP OPERATION: Special Repair Requirement".
	The low tire pressure warning lamp repeats blinking for 4 times.	Blinks 4 times ON 0.3 sec > OFF 0.3 sec SEIA0597E	The rear left transmitter is not activated.	Perform the wake-up operation for the transmitter at rear left wheel. Refer to WT-23, "TRANSMITTER WAKE UP OPERATION: Special Repair Requirement".
	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-61, "Tire Air Pressure".

Diagnosis items	Symptom (Ignition switch ON)	Low tire pressure warning lamp	Cause	Action
			The combination meter fuse is open or removed (or pulled out).	Check and install the combination meter fuse. If necessary, replace the fuse.
	The low tire pressure warning lamp		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.
Low tire pressure warning lamp	Low tire pressure warning repeats blinking at 0.5-second inter-	Blinks 1 min ON 0.5 sec > OFF 0.5 sec and stays ON SEIA0788E	Tire Pressure Monitoring System (TPMS) malfunction.	Perform CONSULT-III self-diagnosis. Refer to WT-11, "COMMONITEM : CONSULT-III Function (BCM - COMMON ITEM)". If necessary, perform transmitter ID registration. Refer to WT-23, "ID REGISTRATION PROCEDURE: Special Repair Requirement".
Turn signal lamp	The turn signal lamps do not blink twice when the transmitter is activated. Or the buzzer does not sound.	_	 The transmitter activation tool (J-45295) does not activate. The ignition switch is OFF when the transmitter wake-up operation is performed. The transmitter activation tool (J-45295) is not used in the correct position. The transmitter is already waked up. 	 Replace the battery in the transmitter activation tool (J-45295). Turn the ignition switch ON when performing the transmitter wake-up operation. Operate the transmitter activation tool (J-45295) in the correct position when performing the wake-up operation. No procedure.

NOTE:

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

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

LOW TIRE PRESSURE WARNING LAMP DOES NOT BLINKS

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP DOES NOT BLINKS

Description INFOID:000000005853932

DESCRIPTION

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

1. CHECK LOW TIRE PRESSURE WARNING LAMP

Perform trouble diagnosis of the low tire pressure warning lamp. Refer to <u>WT-40, "Diagnosis Procedure"</u>. <u>Is the inspection result normal?</u>

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

NO >> Repair or replace damaged parts.

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LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF

Description INFOID:000000005853934

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

Diagnosis Procedure

INFOID:0000000005853935

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-61, "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 BCM

(P)With CONSULT-III

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

Is any DTC detected?

YES >> Check the DTC. Refer to BCS-74, "DTC Index".

NO >> GO TO 4.

4. CHECK BCM POWER SUPPLY AND GROUND

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

CAUTION:

Never start the engine.

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

ВСМ			Voltago	
Connector Terminal		_	Voltage	
M118	1	Ground	Battery voltage	
M119	11	Giouria	ballery vollage	

Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-79</u>. "Exploded View".

NO >> Repair or replace damaged parts.

LOW TIRE PRESSURE WARNING LAMP BLINKS

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP BLINKS

Description

DESCRIPTION

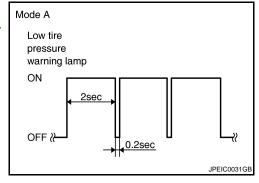
The low tire pressure warning lamp illuminates or blinks.

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

NOTE:

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

This mode shows transmitter status is in OFF- mode.
 Perform transmitter wake up operation. Refer to <u>WT-23, "TRANS-MITTER WAKE UP OPERATION: Special Repair Requirement".</u>



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INFOID:0000000005853937

Diagnosis Procedure

1. CHECK TIRE PRESSURE WARNING CHECK SWITCH POWER SUPPLY

1. Turn the ignition switch ON.

CAUTION:

Never start the engine.

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

Tire pressure warning check switch			Voltage (Approx.)
Connector Terminal		_	voltage (Approx.)
M23	1	Ground	5 V

Is the inspection result normal?

YES >> GO TO 2.

NO >> Riper or replace error-detected damaged parts.

2. CHECK TIRE PRESSURE WARNING CHECK SWITCH CIRCUIT

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

BCM		Tire pressure warning check switch		Continuity
Connector	Connector Terminal		Terminal	Continuity
M123	149	M23	1	Existed

Check the continuity between BCM harness connector and ground.

В	CM	_	Continuity		
Connector	Terminal		Continuity		
M123	149	Ground	Not existed		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Riper or replace error-detected damaged parts.

LOW TIRE PRESSURE WARNING LAMP BLINKS

< SYMPTOM DIAGNOSIS >

3.CHECK BCM

Check the BCM input/output signal. Refer to <u>BCS-43</u>, "Reference Value". <u>Is the inspection result normal?</u>

YES >> Check the tire pressure warning check switch. Refer to WT-39, "Diagnosis Procedure".

NO >> Repair or replace the BCM.

TURN SIGNAL LAMP BLINKS

< SYMPTOM DIAGNOSIS >

TURN SIGNAL LAMP BLINKS

Description

DESCRIPTION

The turn signal lamp blinks when the ignition switch is turned ON.

The BCM connector or circuit may have a malfunction.

Diagnosis Procedure

1. CHECK TIRE PRESSURE WARNING CHECK SWITCH POWER SUPPLY CIRCUIT

 Turn the ignition switch ON. CAUTION:

Never start the engine.

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

Tire pressure wa	rning check switch	_	Voltage (Approx.)		
Connector	Terminal		voltage (Approx.)		
M23	1	Ground	5 V		

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace damaged parts.

2.check tire pressure warning check switch circuit

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

В	CM	Tire pressure wa	Continuity	
Connector	Terminal	Connector	Existed	
M123	149	M23	1	Existed

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

В	CM	_	Continuity
Connector	Terminal		Continuity
M123	149	Ground	Not existed

Is the inspection result normal?

YES >> Check the turn signal lamp operation. Refer to <u>BCS-32, "SIGNAL BUFFER : CONSULT-III Function (BCM - SIGNAL BUFFER)"</u>.

NO >> Repair or replace damaged parts.

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ID REGISTRATION CANNOT BE COMPLETED

< SYMPTOM DIAGNOSIS >

ID REGISTRATION CANNOT BE COMPLETED

Description INFOID:000000005853940

DESCRIPTION

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

Diagnosis Procedure

INFOID:0000000005853941

1. CHECK TRANSMITTER ID REGISTRATION

- 1. Perform transmitter ID registration for all wheels. Refer to WT-23, "ID REGISTRATION PROCEDURE: Special Repair Requirement".
- 2. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
- 3. Perform "DATA MONITOR" in "AIR PRESSURE MONITOR" of "BCM".
- 4. Select "BCM" in "DATA MONITOR", and check that the tire pressures match the standard value.

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

CAUTION:

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

Is the inspection result normal?

YES >> INSPECTION END

NO >> GO TO 2.

2. CHECK TRANSMITTERS

- 1. Perform trouble diagnosis for the transmitter. Refer to WT-28, "Diagnosis Procedure".
- 2. Perform transmitter ID registration for all wheels. Refer to WT-23, "ID REGISTRATION PROCEDURE: Special Repair Requirement".
- 3. Check that transmitter ID registration is completed for all wheels.

Is transmitter ID registration for all wheels been completed?

YES >> INSPECTION END

NO >> Replace the transmitter. Refer to <u>WT-58</u>, "Exploded View".

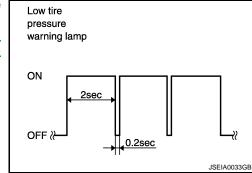
NORMAL OPERATING CONDITION

NORMAL OPERATING CONDITION

Description INFOID.0000000005853942

LOW TIRE PRESSURE WARNING LAMP BLINKS

If the low tire pressure warning lamp blinks as shown in the figure after the ignition switch is turned ON, the transmitter is not waked up. Perform the transmitter wake-up operation. Refer to <u>WT-23.</u>
"TRANSMITTER WAKE UP OPERATION: Special Repair Requirement".



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NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

< SYMPTOM DIAGNOSIS >

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NVH Troubleshooting Chart

INFOID:0000000005853943

Jse chart belov	e chart below to find the cause of the symptom. If necessary, repair or replace these parts.																		
Reference	Reference page		FSU-8, FSU-11	WT-57, "Inspection"	WT-53, "Adjustment"	WT-61, "Tire Air Pressure"	WT-53, "Adjustment"	I	I	WT-61, "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 RAX section.	NVH in BR section.	NVH in ST section.
Possible ca	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	×	×	×	×	×	×	×	×			×	×		×		×	×
	Symptom	Judder	×	×	×	×	×	×		×			×	×		×		×	×
Symptom		Poor quality ride or handling	×	×	×	×	×	×		×			×		×	×			
		Noise	×	×	×			×			×	×	×	×	×		×	×	×
	ROAD	Shake	×	×	×			×			×		×	×	×		×	×	×
	WHEEL	Shimmy, Judder	×	×	×			×					×	×	×			×	×
		Poor quality ride or handling	×	×	×			×					×	×	×				

^{×:} Applicable

PERIODIC MAINTENANCE

ROAD WHEEL

Adjustment INFOID:000000005632847

BALANCING WHEELS (BONDING WEIGHT TYPE)

Preparation Before Adjustment

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

CAUTION:

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

Wheel Balance Adjustment

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

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

CAUTION:

- Do not install the inner balance weight before installing the outer balance weight.
- Before installing the balance weight, be sure to clean the mating surface of the road wheel.
- a. Indicated unbalance value \times 5/3 = balance weight to be installed **Calculation example:**

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

NOTE:

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

Example:

 $36.2 \Rightarrow 35 \text{ g } (1.23 \text{ oz})$ $36.3 \Rightarrow 37.5 \text{ g } (1.32 \text{ oz})$ Inner side
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b. Installed balance weight in the position.

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Revision: 2009 Novemver WT-53 2010 G37 Convertible

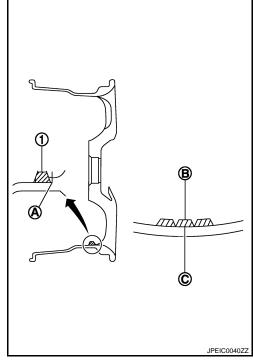
ROAD WHEEL

< PERIODIC MAINTENANCE >

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

CAUTION:

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



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

CAUTION:

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

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

Do not install more than two balance weight.

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



Dynamic (At flange) : Refer to WT-61, "Road Wheel".

Static (At flange) : Refer to WT-61, "Road Wheel".

TIRE ROTATION

Tire cannot be rotated in vehicle, as front tire are different size from rear tire and the direction of wheel rotation is fixed in each tire.

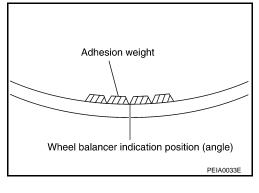
Wheel nuts tighting torque : Refer to WT-61, "Road Wheel".

CAUTION:

- Never include the T-type spare tire when rotating the tires.
- Use NISSAN genuine wheel nuts for aluminum wheels.

Safety Device Preventing from Being Incorrectly installed

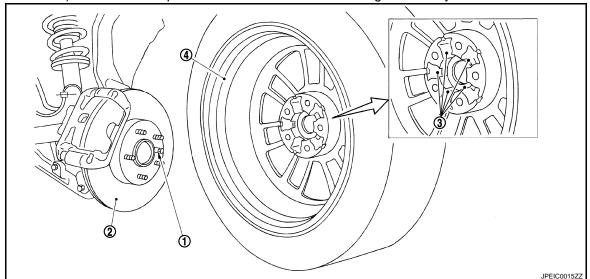
FRONT BRAKE DISC ROTOR AND FRONT WHEEL



ROAD WHEEL

< PERIODIC MAINTENANCE >

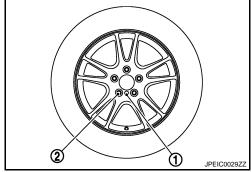
• Front and rear wheel size for this model differs, therefore special pin (1) is adopted to the front brake disc rotor (2). And a hole (3) that matches to this pin is adopted to the front wheel (4) (the rear wheel does not have this wheel). This structure prevents the rear wheel from being mistakenly installed on the front.



T-TYPE SPARE TIRE WHEEL

Regarding spare tire (for emergency) wheel, wrong assembly protection pin through hole (1) has been set in addition to regular bolt holes (2) in order to enable installation to front wheel.
 NOTE:

Protection pin through hole of 18 inch spare wheel is non-through type.



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TIRE

EMERGENCY TIRE PUNCTURE REPAIR KIT

EMERGENCY TIRE PUNCTURE REPAIR KIT: Description

INFOID:0000000005632843

Treat the sealant drained or the expired sealant collected from the customer as waste oil.

EMERGENCY TIRE PUNCTURE REPAIR KIT : Draining

INFOID:0000000005632844

DRAINING

CAUTION:

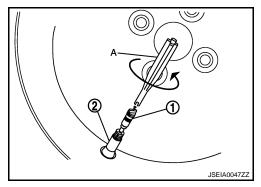
Never spill the sealant in the tire.

- 1. Remove tires.
- 2. Remove the valve core (1) from the transmitter (2) using a core wrench (A), and then bleed air.

CAUTION:

Cover the valve using a waste cloth to prevent the sealant from being splashed.

3. Separate transmitter from wheel.

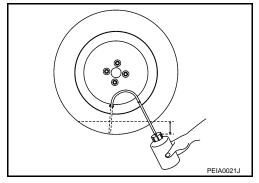


- 4. Install the filling hose to the empty bottle, and then insert the extension hose for draining into the end of filling hose.
- 5. Insert the hose through the hole, and then prop the tire and further insert the hose until the end of hose sinks under the sealant level.
- 6. Suck out the sealant by compressing the bottle.

NOTE:

Place the tire on the proper workbench and hold it higher than the bottle to suck the sealant out easily.

7. Repeat the procedure until the sealant cannot be sucked out while changing the position of hose end.



AFTER DRAINING

NOTE:

The aerosol-type sealant closes off the blowout hole. Therefore, the blowout hole may not be discovered according to the extent of damage, resulting the difficulty of blow out repair. In this case, check the tire pressure thoroughly, and then replace with new tire if the tire pressure decreases.

- Remove the tire from the wheel, and then wipe out the sealant on the tire and wheel.
- Replace transmitter. Refer to WT-58, "Exploded View".

CAUTION:

Never reuse the transmitter.

• Perform the blowout repair if it is possible. Replace with new tire if the blowout repair is impossible.

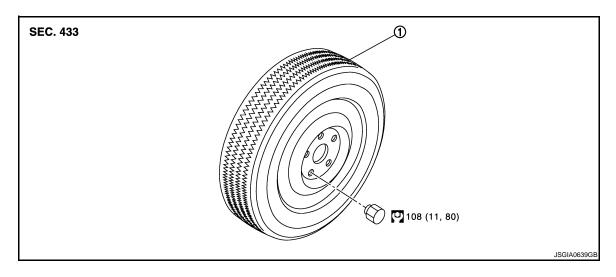
Never discard the tire with the sealant applied.

• Treat the sealant drained as waste oil.

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

Install in the reverse order of removal.

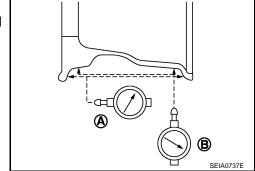
Inspection INFOID:000000005632842

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

Limit

A: Refer to <u>WT-61, "Road Wheel"</u>.

B: Refer to <u>WT-61, "Road Wheel"</u>.



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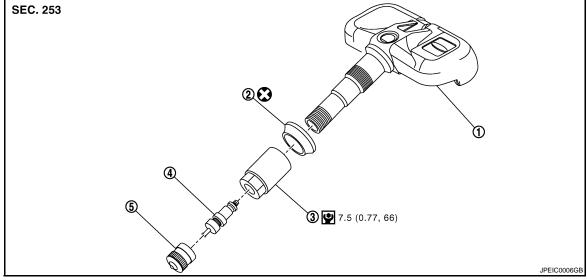
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TRANSMITTER

Exploded View

INFOID:0000000005632848



1. Transmitter

- 2. Grommet seal
- 5. Cap

4. Valve core

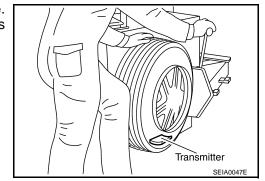
Refer to GI-4, "Components" for symbols in figure.

Removal and Installation

INFOID:0000000005632849

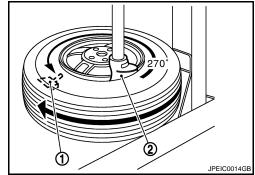
REMOVAL

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



3. Valve nut

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

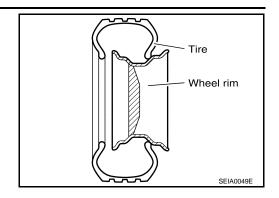


INSTALLATION

TRANSMITTER

< REMOVAL AND INSTALLATION >

1. Put first side of tire onto rim.



2. Mount transmitter on rim and tighten nut.

CAUTION:

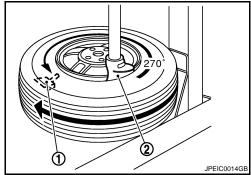
Speed for tightening nut should be less than 10 rpm.

3. Place wheel on turntable of tire machine. Ensure that transmitter (1) is 270 degree from mounting head (2) when second side of tire is fitted.

NOTE:

Do not touch transmitter at mounting head.

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



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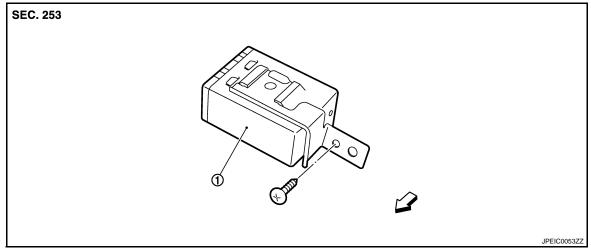
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TIRE PRESSURE RECEIVER

Exploded View

INFOID:0000000005632850



1. Tire pressure receiver

Removal and Installation

INFOID:0000000005632851

REMOVAL

- 1. Remove the glove box assembly. Refer to IP-12, "A/T MODELS: Exploded View" (A/T) or IP-22, "M/T MODELS: Exploded View" (M/T).
- Remove the instrument lower panel RH. Refer to <u>IP-12, "A/T MODELS: Exploded View"</u> (A/T) or <u>IP-22, "M/T MODELS: Exploded View"</u> (M/T).
- 3. Disconnect tire pressure receiver harness connector.
- 4. Remove tire pressure receiver mounting screw.
- 5. Remove tire pressure receiver.

INSTALLATION

Install is the reverse order of removal.

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Road Wheel

CONVENTIONAL

Item		Limit		
Radial runout	Lateral deflection	Less than 0.3 mm (0.012 in)		
	Vertical deflection	Less than 0.5 mm (0.012 m)		
Allowable unbalance	Dynamic (At flange)	Less than 5 g (0.17 oz) (one side)		
Allowable unbalance	Static (At flange)	Less than 10 g (0.35 oz)		

EMERGENCY

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

Tire Air Pressure

Unit: kPa (kg/cm², psi)

Tire size	Air pressure					
The Size	Front	Rear				
P225/50R18 94V	260 (2.6, 38)	-				
P245/45R18 96V	-	260 (2.6, 38)				
225/45R19 96W XL*	270 (2.7, 39)	-				
245/40R19 98W XL*	-	270 (2.7, 39)				
T145/70D18 107M	420 (4.2, 60)	420 (4.2, 60)				

^{*:} XL indicates Extra Load (Reinforced) Tire.

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