

WT
SECTION
ROAD WHEELS & TIRES

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PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000012787284

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

WARNING:

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

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

WARNING:

- When working near the 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 or batteries, and wait at least three minutes before performing any service.

Service Notice and Precautions for TPMS

INFOID:000000012787285

WARNING:

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

- Low tire pressure warning lamp blinks for 1 minute, then turns ON when occurring any malfunction except low tire pressure. Erase the self-diagnosis memories for Tire Pressure Monitoring System (TPMS), or register the ID to turn low tire pressure warning lamp OFF. For ID registration, refer to [WT-22, "Description"](#).
- ID registration is required when replacing or rotating wheels, replacing tire pressure sensor or BCM. Refer to [WT-22, "Description"](#).
- Replace grommet seal, valve core and valve cap of tire pressure sensor in TPMS, when replacing each tire by reaching the wear limit. Refer to [WT-50, "Removal and Installation"](#).
- Because the tire pressure sensor conforms to North America radio law, the following items must be observed.
 - The sensor may be used only in North America.
 - It may not be used in any method other than the specified method.
 - It must not be disassembled or modified.

Service Notice and Precautions for Road Wheel

INFOID:000000012787286

- Genuine NISSAN aluminum wheel is designed for each type of vehicle. Use it on the specified vehicle only.
- Use Genuine NISSAN parts for the road wheels, valve caps and wheel nuts.
- Always use them after adjusting the wheel balance. For the balance weights, use Genuine NISSAN aluminum wheel weights.
- Use caution when handling the aluminum wheels, because they can be easily scratched. When removing dirt, do not use any abrasives, a wire brush, or other items that may scratch the coating. Use a neutral detergent if a detergent is needed.
- After driving on roads scattered with anti-icing salts, wash off the wheels completely.
- When installing road wheels onto the vehicle, always wipe off any dirt or foreign substances to prevent them from being trapped between the contact surfaces of wheel.

PRECAUTIONS

< PRECAUTION >

- Do not apply oil to nut and bolt threads.
- When tightening the valve cap there is a risk of damaging the valve cap if a tool is used. Tighten by hand.

PREPARATION

< PREPARATION >

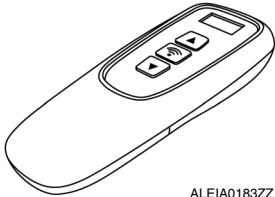

PREPARATION

PREPARATION

Special Service Tool


INFOID:000000012787287

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

Tool number (TechMate No.) Tool name	Description
KV48105501 (J-45295-A) Transmitter activation tool  <p style="text-align: right;">ALEIA0183ZZ</p>	<ul style="list-style-type: none"> • Activate TPMS transmitter IDs • Compatible with future sensors • Equipped with a display (KV48105501 only)
— (J-50190) Signal Tech II  <p style="text-align: right;">ALEIA0131ZZ</p>	<ul style="list-style-type: none"> • Activate and display TPMS transmitter IDs • Display tire pressure reported by the TPMS transmitter • Read TPMS DTCs • Register TPMS transmitter IDs • Test remote keyless entry keyfob relative signal strength • Check Intelligent Key relative signal strength • Confirm vehicle Intelligent Key antenna signal strength • Compatible with future sensors • Equipped with a display

Commercial Service Tool

INFOID:000000012787288

Tool name	Description
Power tool  <p style="text-align: right;">PIIB1407E</p>	Loosening nuts, screws and bolts

COMPONENT PARTS

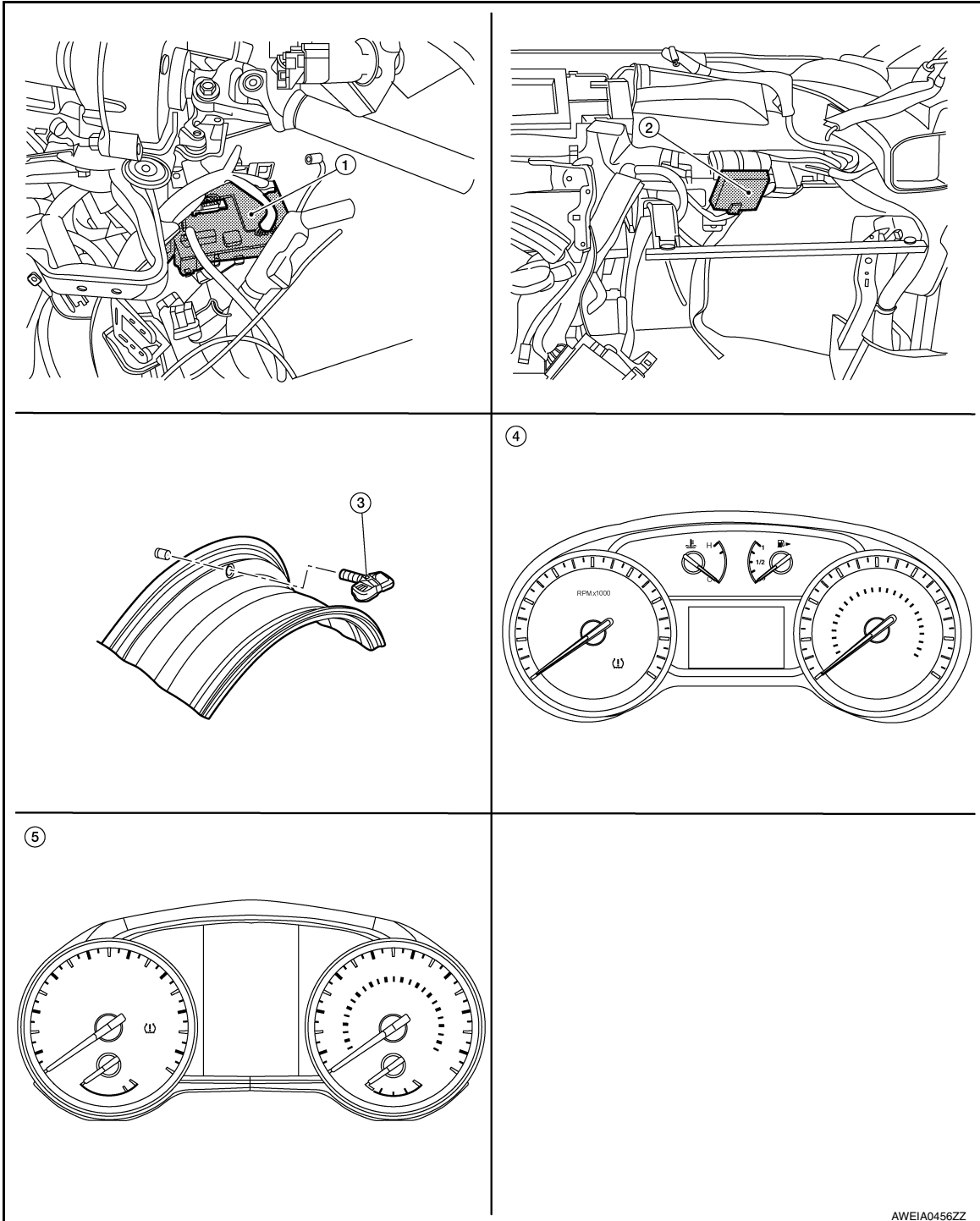
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SYSTEM DESCRIPTION

COMPONENT PARTS

Component Parts Location

INFOID:000000012787289



AWEIA0456ZZ

1 BCM (view with instrument panel removed)

2 Remote keyless entry receiver (view with instrument panel removed)

3 Transmitter

4 Combination meter (type A)

5 Combination Meter (type B)

COMPONENT PARTS

< SYSTEM DESCRIPTION >

Component Description

INFOID:0000000012787290

Component parts	Function
BCM	WT-7. "BCM" .
Remote keyless entry receiver	WT-7. "Remote Keyless Entry Receiver" .
Transmitter	WT-7. "Transmitter" .
Low tire pressure warning lamp	WT-8. "TIRE PRESSURE MONITORING SYSTEM : System Description"
Combination meter	Transmits the vehicle speed signal via CAN communication to BCM.
	Receives the low tire pressure warning lamp signal via CAN communication from BCM.

BCM

INFOID:0000000012787291

The BCM reads the tire pressure signal received by the remote keyless entry receiver, and controls the low tire pressure warning lamp and the buzzer operations. It also has a self-diagnosis function to detect a system malfunction.

Remote Keyless Entry Receiver

INFOID:0000000012787292

The remote keyless entry receiver receives the tire pressure signal transmitted by the transmitter in each wheel.

Transmitter

INFOID:0000000012787293

A sensor-transmitter integrated with a valve is installed in each wheel, and transmits a detected tire pressure signal in the form of a radio wave. The radio signal is received by the remote keyless entry receiver.

Low Tire Pressure Warning Lamp

INFOID:0000000012787294

The combination meter receives tire pressure status from the BCM using CAN communication. When a low tire pressure condition is sensed by the BCM, the combination meter low tire pressure warning lamp is activated.

Combination Meter

INFOID:0000000012787295

The combination meter receives tire pressure status from the BCM via CAN communication. The combination meter will display the low tire pressure warning lamp when a low tire pressure or system malfunction is detected by the BCM. A warning message will also be displayed in the vehicle information display. Refer to the Owner's Manual for additional information.

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SYSTEM

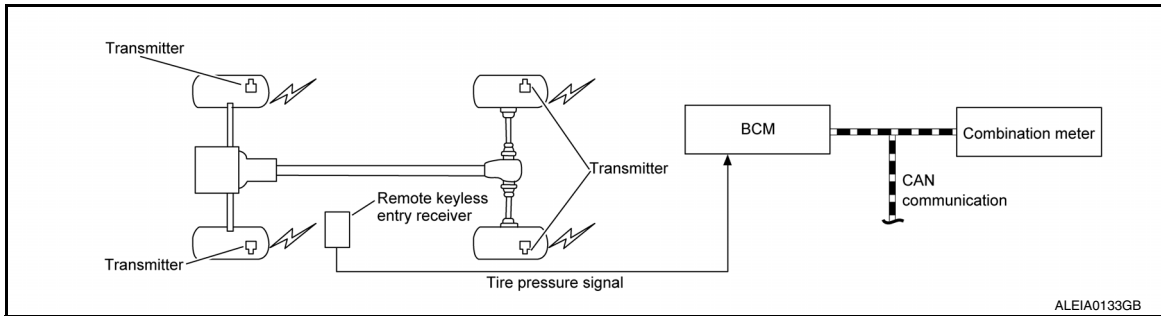
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SYSTEM

TIRE PRESSURE MONITORING SYSTEM

TIRE PRESSURE MONITORING SYSTEM : System Diagram

INFOID:000000012787296



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TIRE PRESSURE MONITORING SYSTEM : System Description

INFOID:000000012787297

- The BCM has pressure judgment and trouble diagnosis functions. When the BCM detects low inflation pressure or another unusual symptom, the low tire pressure warning lamp in the combination meter is illuminated.
- If the tire pressure is less than the specified value, the low tire pressure warning lamp illuminates.
- The TPMS (Tire Pressure Monitoring System) is activated when vehicle speed is 40 km/h (25 MPH) or more.

INPUT/OUTPUT SIGNAL

Component	Signal Description
BCM	Transmits the low tire pressure warning lamp signal via CAN communication to combination meter.
Combination meter	Transmits the vehicle speed signal via CAN communication to BCM.

LOW TIRE PRESSURE WARNING LAMP CONTROL CONDITION

The BCM uses CAN communication to illuminate the low tire pressure warning lamp in the combination meter.

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

TIRE PRESSURE MONITORING SYSTEM : Easy Fill Tire Alert Function

INFOID:000000012787298

NOTE:

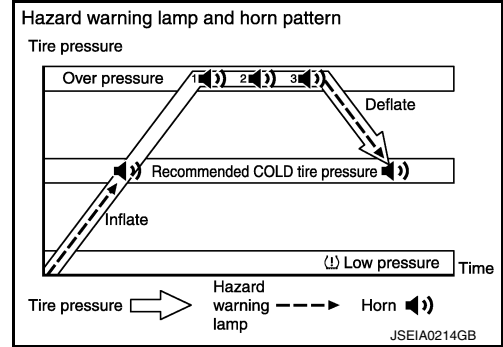
When beginning tire inflation, it takes a few seconds for the Easy fill tire alert to function. If there is no response for approximately 15 seconds or more, cancel the Easy fill tire alert function and move the vehicle approximately 1 m (3.2 ft) backward or forward to try again.

- The Easy fill tire alert function operates only when the select lever position is in P-range with the ignition switch ON.
- This function informs the driver with a visual and audible indication that the recommended COLD tire pressure has been reached.

SYSTEM

< SYSTEM DESCRIPTION >

- The hazard warning lamps blink when the recommended COLD tire pressure has been reached. After the recommended COLD tire pressure has been reached, the horn sounds once and the hazard warning lamps stop blinking.
- If the tire pressure value is equal to or greater than 30 kPa (0.31 kg/cm², 4 psi) more than the recommended COLD tire pressure, the hazard warning lamps flash and horn sounds three times.
- To return the tire to the recommended COLD tire pressure, deflate the tire until the horn sounds once and the hazard warning lamps stop blinking.



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DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000013370994

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
ECU Identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	<ul style="list-style-type: none"> The vehicle specification can be read and saved. The vehicle specification can be written when replacing BCM.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication is displayed.

SYSTEM APPLICATION

BCM can perform the following functions.

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

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

AIR PRESSURE MONITOR

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

INFOID:000000013370997

NOTE:

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

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

SELF DIAGNOSTIC RESULT

NOTE:

Before performing self diagnostic result, be sure to register the ID, or else the actual malfunction may be different from that displayed on CONSULT.

Refer to [BCS-50, "DTC Index"](#).

DATA MONITOR

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

ACTIVE TEST

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

WORK SUPPORT

Support Item	Description
ID READ	The registered ID number is displayed.
ID REGIST	Refer to WT-22, "Description" .

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000013371005

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Direct Diagnostic Mode	Description
ECU Identification	The BCM part number is displayed.
Self Diagnostic Result	The BCM self diagnostic results are displayed.
Data Monitor	The BCM input/output data is displayed in real time.
Active Test	The BCM activates outputs to test components.
Work support	The settings for BCM functions can be changed.
Configuration	<ul style="list-style-type: none"> The vehicle specification can be read and saved. The vehicle specification can be written when replacing BCM.
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication is displayed.

SYSTEM APPLICATION

BCM can perform the following functions.

System	Sub System	Direct Diagnostic Mode						
		ECU Identification	Self Diagnostic Result	Data Monitor	Active Test	Work support	Configuration	CAN DIAG SUPPORT MNTR
Door lock	DOOR LOCK			x	x	x		
Rear window defogger	REAR DEFOGGER			x	x			
Warning chime	BUZZER			x	x			
Interior room lamp timer	INT LAMP			x	x	x		
Remote keyless entry system	MULTI REMOTE ENT			x	x	x		
Exterior lamp	HEAD LAMP			x	x	x		
Wiper and washer	WIPER			x	x	x		
Turn signal and hazard warning lamps	FLASHER			x	x			
Air conditioner	AIR CONDITIONER			x				
Combination switch	COMB SW			x				
BCM	BCM	x	x			x	x	x
Immobilizer	IMMU		x		x	x		
Interior room lamp battery saver	BATTERY SAVER			x	x	x		
Trunk open	TRUNK			x				
RAP system	RETAINED PWR			x		x		
Signal buffer system	SIGNAL BUFFER			x				
TPMS	AIR PRESSURE MONITOR		x	x	x	x		
Panic alarm system	PANIC ALARM				x			

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

AIR PRESSURE MONITOR

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

INFOID:000000013371014

NOTE:

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

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

SELF DIAGNOSTIC RESULT

NOTE:

Before performing self diagnostic result, be sure to register the ID, or else the actual malfunction may be different from that displayed on CONSULT.

Refer to [BCS-115, "DTC Index"](#).

DATA MONITOR

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

ACTIVE TEST

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

WORK SUPPORT

Support Item	Description
ID READ	The registered ID number is displayed.
ID REGIST	Refer to WT-22, "Description" .

BCM

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM

List of ECU Reference

INFOID:0000000012787303

ECU	Reference
BCM (with Intelligent Key system)	BCS-30, "Reference Value"
	BCS-48, "Fail-safe"
	BCS-49, "DTC Inspection Priority Chart"
	BCS-50, "DTC Index"
BCM (without Intelligent Key system)	BCS-103, "Reference Value"
	BCS-114, "Fail-safe"
	BCS-115, "DTC Inspection Priority Chart"
	BCS-115, "DTC Index"

TIRE PRESSURE MONITORING SYSTEM

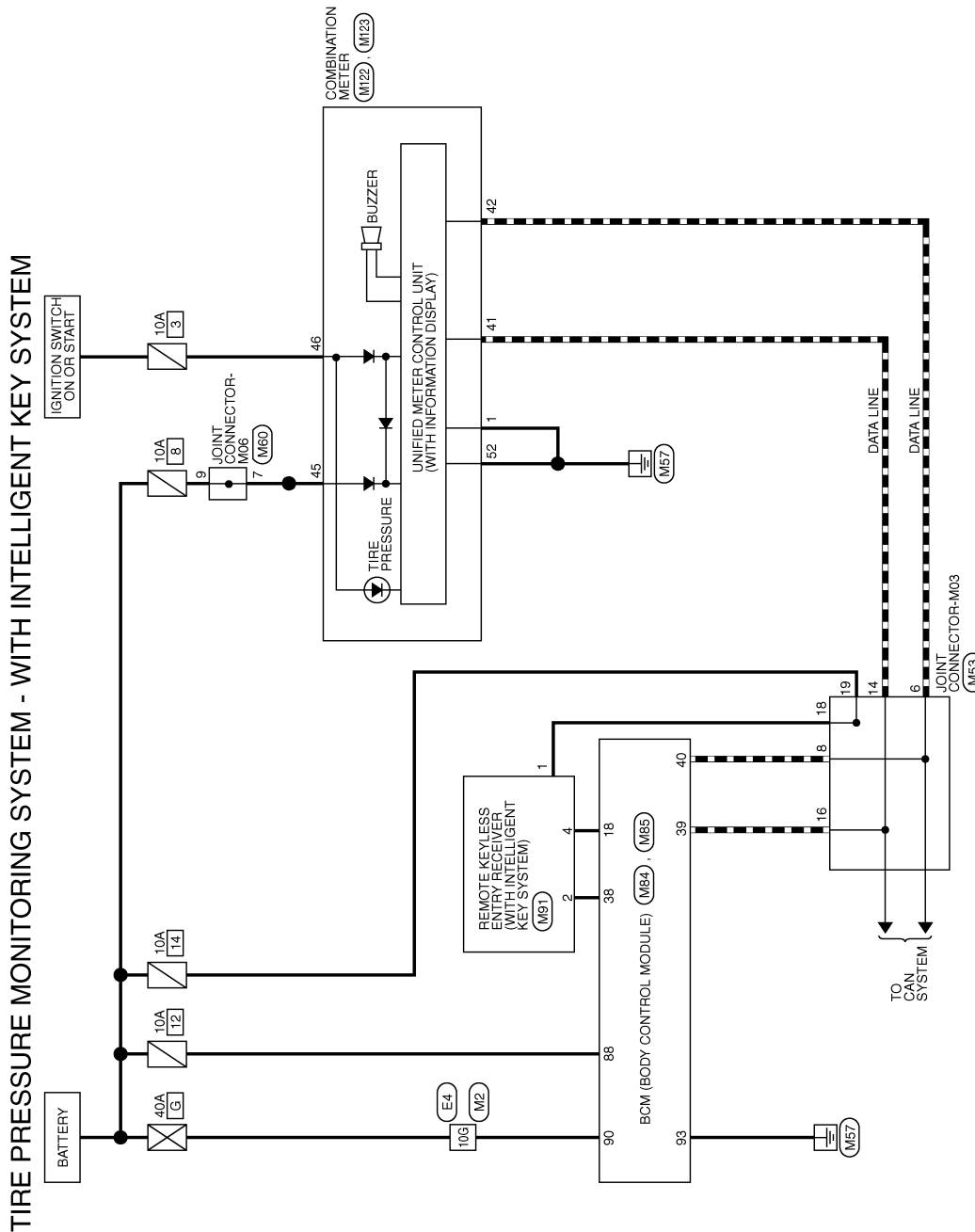
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WIRING DIAGRAM

TIRE PRESSURE MONITORING SYSTEM
WITH INTELLIGENT KEY

WITH INTELLIGENT KEY : Wiring Diagram

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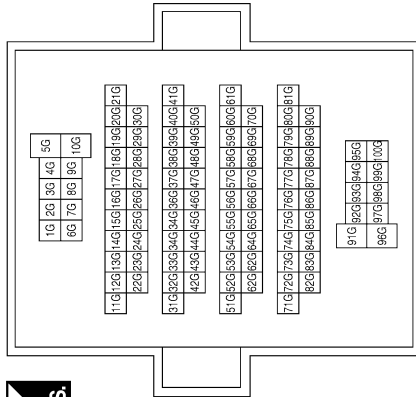
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TIRE PRESSURE MONITORING SYSTEM

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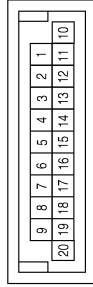
TIRE PRESSURE MONITORING SYSTEM - WITH INTELLIGENT KEY SYSTEM CONNECTORS

Connector No.	M2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



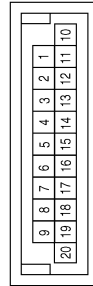
Terminal No.	Color of Wire	Signal Name
10G	Y	-

Connector No.	M53
Connector Name	JOINT CONNECTOR-M03
Connector Color	BLUE



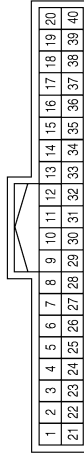
Terminal No.	Color of Wire	Signal Name
6	P	-
8	P	-
14	L	-
16	L	-
18	SB	-
19	SB	-

Connector No.	M60
Connector Name	JOINT CONNECTOR-M06
Connector Color	WHITE



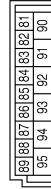
Terminal No.	Color of Wire	Signal Name
7	W	-
9	W	-

Connector No.	M84
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
18	V	KEYLESS TUNER, AUTO LIGHT SENSOR GND
38	LG	INTELLIGENT TUNER
39	L	CAN-H
40	P	CAN-L

Connector No.	M85
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color	WHITE

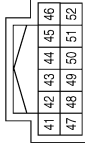


Terminal No.	Color of Wire	Signal Name
88	BG	BATTERY (FUSE)
90	Y	BATTERY (F/L)
93	B	POWER GND

TIRE PRESSURE MONITORING SYSTEM

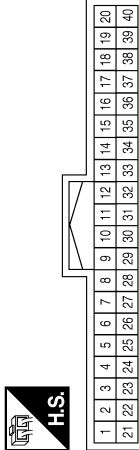
< WIRING DIAGRAM >

Connector No.	M123
Connector Name	COMBINATION METER (WITH TYPE B)
Connector Color	WHITE



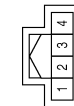
Terminal No.	Color of Wire	Signal Name
41	L	CAN-H
42	P	CAN-L
45	LG	BAT
46	GR	IGN
52	B	GND

Connector No.	M122
Connector Name	COMBINATION METER (WITH TYPE B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	B	GND

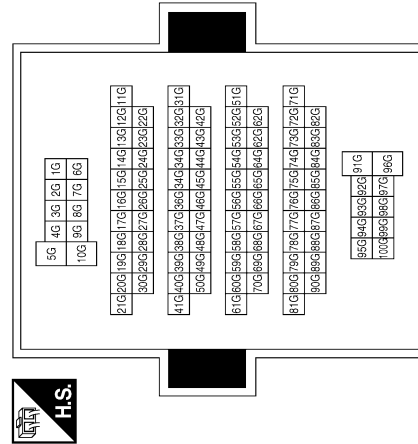
Connector No.	M91
Connector Name	REMOTE KEYLESS ENTRY RECEIVER (WITH INTELLIGENT KEY SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	SB	-
2	LG	-
4	V	-

Terminal No.	10G	Color of Wire	G	Signal Name	-
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Connector No.	E4
Connector Name	WIRE TO WIRE
Connector Color	WHITE



ABE1A0349GB

WITHOUT INTELLIGENT KEY

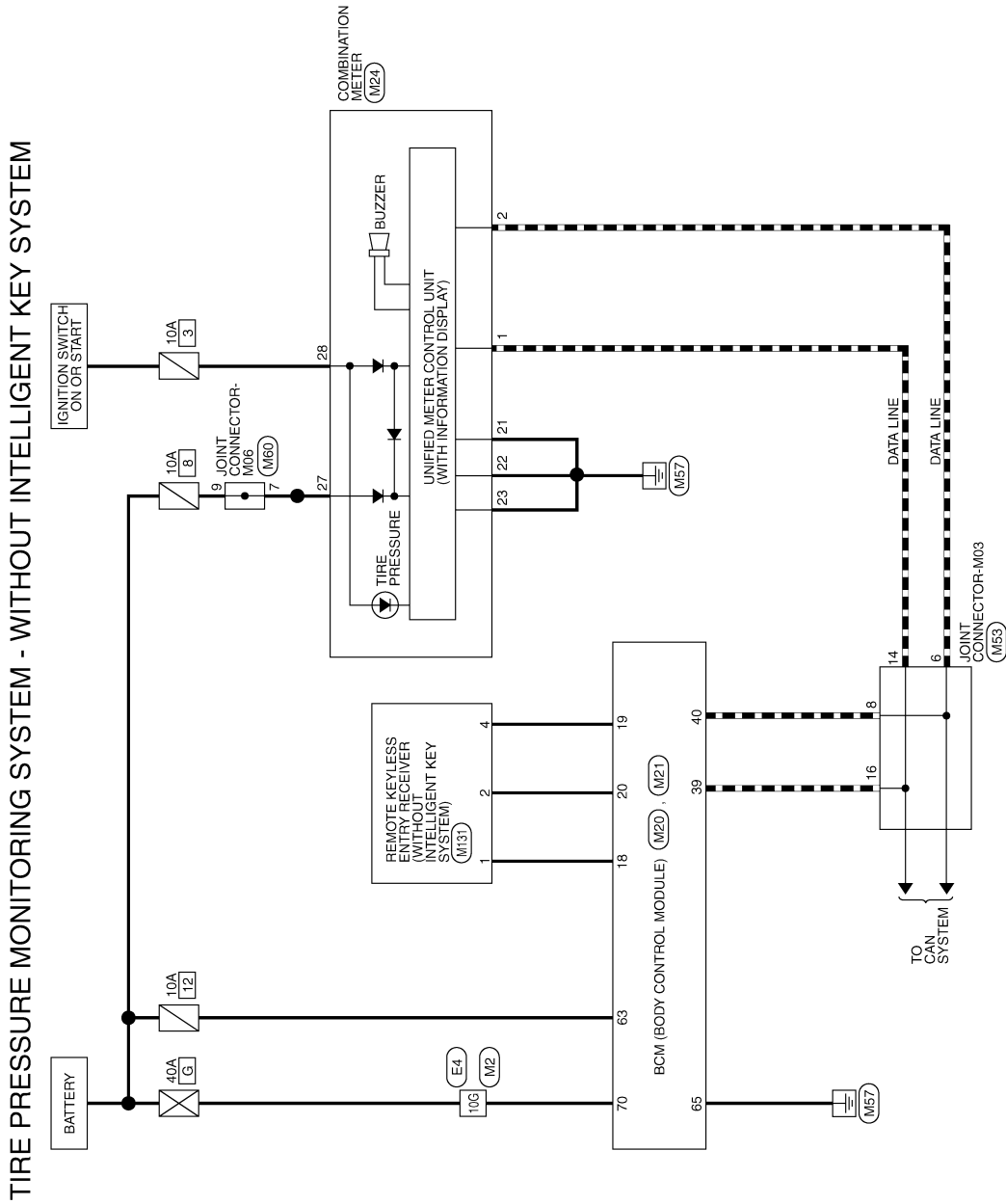
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TIRE PRESSURE MONITORING SYSTEM

< WIRING DIAGRAM >

WITHOUT INTELLIGENT KEY : Wiring Diagram

INFOID:000000012787305



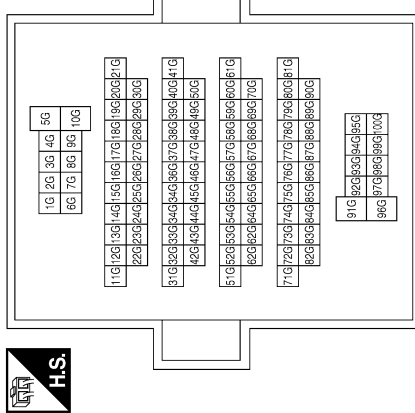
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TIRE PRESSURE MONITORING SYSTEM

< WIRING DIAGRAM >

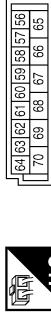
TIRE PRESSURE MONITORING SYSTEM CONNECTORS - WITHOUT INTELLIGENT KEY SYSTEM

Connector No.	M2
Connector Name	WIRE TO WIRE
Connector Color	WHITE



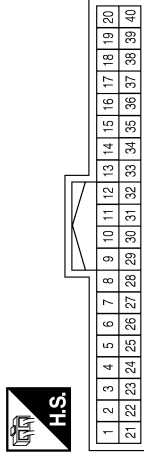
Terminal No.	Color of Wire	Signal Name
10G	Y	-

Connector No.	M20
Connector Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	WHITE



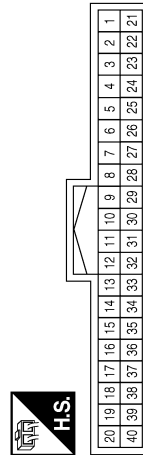
Terminal No.	Color of Wire	Signal Name
63	BG	BATTERY (FUSE)
65	B	GND
70	Y	BATTERY (FL)

Connector No.	M21
Connector Name	BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
18	V	KEYLESS & AUTO LIGHT SENSOR GND
19	BR	KEYLESS TUNER POWER SUPPLY
20	LG	KEYLESS TUNER SIGNAL
39	L	CAN-H
40	P	CAN-L

Connector No.	M24
Connector Name	COMBINATION METER (WITH TYPE A)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	L	CAN-H
2	P	CAN-L
21	B	GND (ILLUMINATION)
22	B	GND (POWER)
23	B	GND (CIRCUIT)
27	LG	BAT
28	GR	IGN

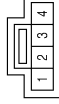
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TIRE PRESSURE MONITORING SYSTEM

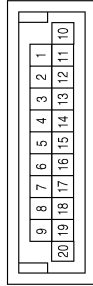
< WIRING DIAGRAM >

Connector No.	M131
Connector Name	REMOTE KEYLESS ENTRY RECEIVER (WITHOUT INTELLIGENT KEY SYSTEM)
Connector Color	WHITE



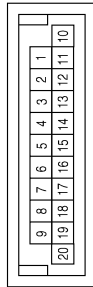
Terminal No.	Color of Wire	Signal Name
1	V	-
2	LG	-
4	BR	-

Connector No.	M60
Connector Name	JOINT CONNECTOR-M06
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
7	W	-
9	W	-

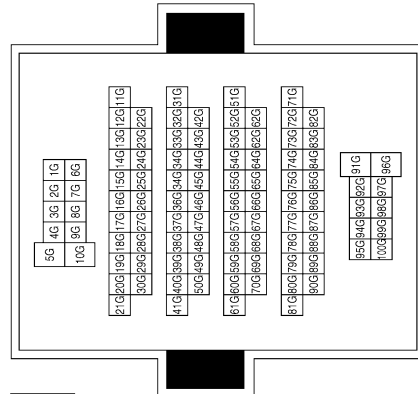
Connector No.	M53
Connector Name	JOINT CONNECTOR-M03
Connector Color	BLUE



Terminal No.	Color of Wire	Signal Name
6	P	-
8	P	-
14	L	-
16	L	-

Terminal No.	10G	Color of Wire	G	Signal Name	-
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Connector No.	E4
Connector Name	WIRE TO WIRE
Connector Color	WHITE



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DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:0000000012787306

NOTE:

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

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

1. COLLECT INFORMATION FROM CUSTOMER

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

>> GO TO 2.

2. TIRE PRESSURE INSPECTION

Check the tire pressure for all wheels. Refer to [WT-55, "Tire Air Pressure"](#).

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace tire(s) or wheel(s).

3. CHECK LOW TIRE PRESSURE WARNING LAMP

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

Does the low tire pressure warning lamp turn OFF?

YES >> Inspection End.

NO >> GO TO 4.

4. PERFORM SELF DIAGNOSTIC RESULT

Perform self diagnostic result. Refer to [WT-11, "AIR PRESSURE MONITOR : CONSULT Function \(BCM - AIR PRESSURE MONITOR\)"](#) (with Intelligent Key system) or [WT-13, "AIR PRESSURE MONITOR : CONSULT Function \(BCM - AIR PRESSURE MONITOR\)"](#) (without Intelligent Key system).

Are any DTCs displayed?

YES >> Refer to [BCS-50, "DTC Index"](#) (with Intelligent Key system) or [BCS-115, "DTC Index"](#) (without Intelligent Key system). If two or more DTCs are displayed, refer to [BCS-49, "DTC Inspection Priority Chart"](#) (with Intelligent Key system) or [BCS-115, "DTC Inspection Priority Chart"](#) (without Intelligent Key system).

NO >> GO TO 5.

5. PERFORM DIAGNOSIS APPLICABLE TO THE SYMPTOM

Perform diagnosis applicable to the symptom. Refer to [WT-36, "Symptom Table"](#).

>> GO TO 6.

6. FINAL CHECK

Perform self diagnostic result again, and check that the malfunction is repaired. After checking, erase the self diagnosis memory. Refer to [WT-11, "AIR PRESSURE MONITOR : CONSULT Function \(BCM - AIR PRESSURE MONITOR\)"](#) (with Intelligent Key system) or [WT-13, "AIR PRESSURE MONITOR : CONSULT Function \(BCM - AIR PRESSURE MONITOR\)"](#) (without Intelligent Key system).

>> Inspection End.

ID REGISTRATION PROCEDURE

< BASIC INSPECTION >

ID REGISTRATION PROCEDURE

Description

INFOID:000000012787307

This procedure must be performed after replacing wheels, transmitters or the BCM, or rotating wheels.

Work Procedure

INFOID:000000012787308

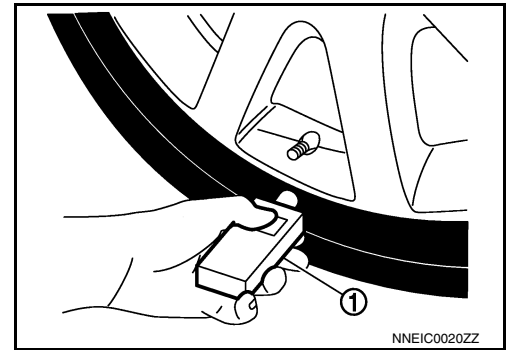
TPMS ID registration can be performed using one of the following procedures:

- Transmitter Activation tool [KV48105501 (J-45295-A)] with CONSULT (preferred method)
- Signal Tech II tool [- (J-50190)] with CONSULT (preferred method)
- Signal Tech II tool [- (J-50190)] without CONSULT
- CONSULT only

TPMS REGISTRATION WITH TRANSMITTER ACTIVATION TOOL [KV48105501 (J-45295-A)]

With CONSULT

1. Turn the ignition switch ON.
2. Using CONSULT, select "WORK SUPPORT" in BCM (AIR PRESSURE MONITOR). Then, select "ID REGIST."
3. Select "Start" on "ID REGIST" screen.
4. Hold the transmitter activation tool [KV48105501 (J-45295-A)] (1) against the side of the left front tire, near the valve stem.
5. With the tool held at a 0 to 15 degree angle to the tire, press and hold the transmitter activation tool button until the indicator lamp turns OFF (approximately 5 seconds).
6. Repeat steps 4 and 5 for the remaining tires in this order: right front, right rear and left rear.



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

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

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

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

NOTE:

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

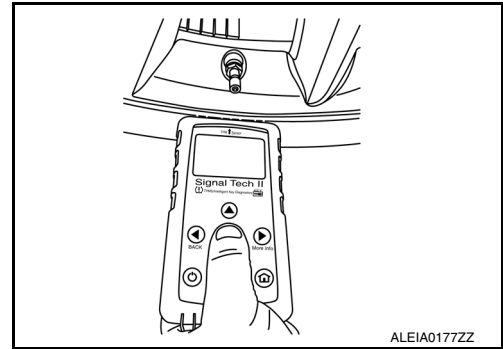
With CONSULT

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

ID REGISTRATION PROCEDURE

< BASIC INSPECTION >

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

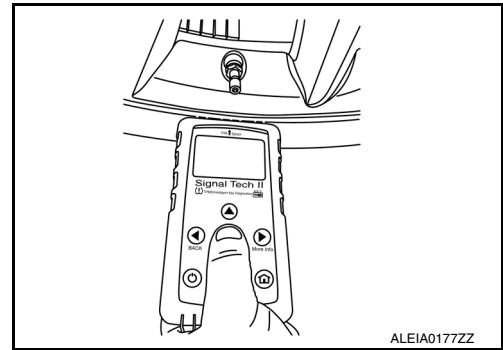


Sequence	ID registration position	Turn signal lamp	CONSULT
1	Front LH	2 blinks	"Yet (red)" ↓ "Done (green)"
2	Front RH		
3	Rear RH		
4	Rear LH		

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

⊗ Without CONSULT

1. Adjust the tire pressure for all tires to the recommended value. Refer to [WT-55, "Tire Air Pressure"](#).
2. Turn on the Signal Tech II tool [- (J-50190)] and select "TPMS Check" from the main menu.
3. Select vehicle model and year.
4. When prompted, hold the Signal Tech II against the side of the left front tire, near the valve stem.
5. With the tool held at a 0 to 15 degree angle to the tire, press and release the "OK" button to activate the sensor. Once the sensor is activated, the tool will sound a tone and the tire pressure will be displayed.
6. Repeat steps 4 and 5 for the remaining tires in this order: right front, right rear and left rear.
7. When prompted, connect the tool to the data link connector. The tool will connect to the BCM, read the VIN, read sensor IDs and check for TPMS DTCs. Along with DTCs detected, one of the following will be displayed next to each wheel:
 - N/A - Not applicable because no ID found by the tool
 - OK - Wheel and sensor are in original position
 - NEW - New ID found compared to BCM
 - RT - Wheel has been rotated
 - Low Press - Low tire pressure
8. If no DTC is present or the repair has been completed, press the "OK" button to register the IDs and clear DTCs.
9. Test drive the vehicle to ensure that the TPMS lamp is OFF and no warning messages are present.
10. Print a Signal Tech II Audit Report for your records. Refer to the Signal Tech II User Guide for instructions.



TPMS REGISTRATION WITH CONSULT ONLY

Ⓟ With CONSULT

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

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

ID REGISTRATION PROCEDURE

< BASIC INSPECTION >

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

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

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

C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

DTC Logic

INFOID:0000000012787309

NOTE:

The Signal Tech II tool [– (J-50190)] can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

DTC DETECTION LOGIC

DTC	Display item	Malfunction detected condition	Possible causes
C1704	LOW PRESSURE FL	Front LH tire pressure drops to 182.7 kPa (1.9 kg/cm ² , 26 psi) or less.	Low tire pressure
C1705	LOW PRESSURE FR	Front RH tire pressure drops to 182.7 kPa (1.9 kg/cm ² , 26 psi) or less.	
C1706	LOW PRESSURE RR	Rear RH tire pressure drops to 182.7 kPa (1.9 kg/cm ² , 26 psi) or less.	
C1707	LOW PRESSURE RL	Rear LH tire pressure drops to 182.7 kPa (1.9 kg/cm ² , 26 psi) or less.	

DTC CONFIRMATION PROCEDURE

1. PERFORM SELF DIAGNOSTIC RESULT

With CONSULT

1. Turn the ignition switch ON.
2. Check the tire pressure for all wheels and adjust to the specified value. Refer to [WT-55, "Tire Air Pressure"](#).
3. Perform "SELF DIAGNOSTIC RESULT".

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

- YES >> Proceed to [WT-25, "Diagnosis Procedure"](#).
 NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012787310

NOTE:

The Signal Tech II tool [– (J-50190)] can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

1. CHECK DATA MONITOR

With CONSULT

1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
2. Stop the vehicle.
3. On "DATA MONITOR" select "AIR PRESS FL", "AIR PRESS FR", "AIR PRESS RR" and "AIR PRESS RL".
4. Within 5 minutes after vehicle stopped, check that the tire pressures are within specification. Refer to [WT-55, "Tire Air Pressure"](#).

Monitor item	Displayed value
AIR PRESS FL	Approximately equal to value indicated on tire gauge for front LH tire
AIR PRESS FR	Approximately equal to value indicated on tire gauge for front RH tire

C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

< DTC/CIRCUIT DIAGNOSIS >

Monitor item	Displayed value
AIR PRESS RR	Approximately equal to value indicated on tire gauge for rear RH tire
AIR PRESS RL	Approximately equal to value indicated on tire gauge for rear LH tire

Is the inspection result normal?

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

C1708, C1709, C1710, C1711 TRANSMITTER (NO DATA)

< DTC/CIRCUIT DIAGNOSIS >

C1708, C1709, C1710, C1711 TRANSMITTER (NO DATA)

DTC Logic

INFOID:0000000012787311

NOTE:

The Signal Tech II tool [– (J-50190)] can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1708	[NO DATA] FL	Tire pressure data signal from the front LH wheel transmitter cannot be detected.	<ul style="list-style-type: none">• Harness or connector connection malfunction• Transmitter ID registration incomplete• Transmitter malfunction
C1709	[NO DATA] FR	Tire pressure data signal from the front RH wheel transmitter cannot be detected.	
C1710	[NO DATA] RR	Tire pressure data signal from the rear RH wheel transmitter cannot be detected.	
C1711	[NO DATA] RL	Tire pressure data signal from the rear LH wheel transmitter cannot be detected.	

DTC CONFIRMATION PROCEDURE

1. PERFORM SELF DIAGNOSTIC RESULT

With CONSULT

1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
2. Stop the vehicle.
3. Perform “SELF DIAGNOSTIC RESULT”.

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

- YES >> Proceed to [WT-27, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:0000000012787312

NOTE:

The Signal Tech II tool [– (J-50190)] can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

Regarding Wiring Diagram information, refer to [WT-15, "WITH INTELLIGENT KEY : Wiring Diagram"](#) or [WT-18, "WITHOUT INTELLIGENT KEY : Wiring Diagram"](#).

1. CHECK DATA MONITOR

With CONSULT

1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
2. Stop the vehicle.
3. On “DATA MONITOR” select “AIR PRESS FL”, “AIR PRESS FR”, “AIR PRESS RR” and “AIR PRESS RL”.
4. Within 5 minutes after vehicle is stopped, read the values displayed on CONSULT.

Are all tire pressures displayed 0 kPa (psi)?

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

C1708, C1709, C1710, C1711 TRANSMITTER (NO DATA)

< DTC/CIRCUIT DIAGNOSIS >

2. CHECK REMOTE KEYLESS ENTRY RECEIVER POWER CIRCUIT

Check voltage between remote keyless entry receiver connector and ground.

Remote keyless entry receiver		Ground	Voltage (Approx.)
Connector	Terminal		
M91 (with Intelligent Key system)	1	—	Battery voltage
M131 (without Intelligent Key system)	4		5V

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connectors.

3. CHECK REMOTE KEYLESS ENTRY RECEIVER SIGNAL CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect BCM and remote keyless entry receiver connectors.
3. Check continuity between BCM and remote keyless entry receiver connectors.

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M84 (with Intelligent Key system)	38	M91 (with Intelligent Key system)	2	Yes
M21 (without Intelligent Key system)	20	M131 (without Intelligent Key system)		

4. Check continuity between BCM connector and ground.

BCM		—	Continuity
Connector	Terminal		
M84 (with Intelligent Key system)	38	Ground	No
M21 (without Intelligent Key system)	20		

Is the inspection result normal?

YES >> GO TO 4.

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

4. CHECK REMOTE KEYLESS ENTRY RECEIVER GROUND CIRCUIT

Check continuity between BCM and remote keyless entry receiver connectors.

BCM		Remote keyless entry receiver		Continuity
Connector	Terminal	Connector	Terminal	
M84 (with Intelligent Key system)	18	M91 (with Intelligent Key system)	4	Yes
M21 (without Intelligent Key system)		M131 (without Intelligent Key system)	1	

Is the inspection result normal?

YES >> GO TO 5.

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

5. TRANSMITTER ID REGISTRATION

Perform transmitter ID registration. Refer to [WT-22, "Work Procedure"](#).

Can the tire pressure sensor ID registration be completed?

YES >> GO TO 6.

NO >> Replace applicable transmitter. Refer to [WT-50, "Removal and Installation"](#).

6. CHECK TIRE PRESSURE SIGNAL

 **With CONSULT**

1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.
2. Stop the vehicle.
3. On "DATA MONITOR" select "AIR PRESS FL", "AIR PRESS FR", "AIR PRESS RR" and "AIR PRESS RL".

C1708, C1709, C1710, C1711 TRANSMITTER (NO DATA)

< DTC/CIRCUIT DIAGNOSIS >

4. Within 5 minutes after vehicle stopped, check that the tire pressures are within specification. Refer to [WT-55, "Tire Air Pressure"](#).

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

Is the inspection result normal?

- YES >> Inspection End.
NO >> Replace the BCM. Refer to [BCS-78, "Removal and Installation"](#) (with Intelligent Key system) or [BCS-135, "Removal and Installation"](#) (without Intelligent Key system).

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C1716, C1717, C1718, C1719 TRANSMITTER (PRESSURE DATA)

< DTC/CIRCUIT DIAGNOSIS >

C1716, C1717, C1718, C1719 TRANSMITTER (PRESSURE DATA)

DTC Logic

INFOID:000000012787313

NOTE:

The Signal Tech II tool [– (J-50190)] can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1716	[PRESSDATA ERR] FL	Malfunction in the tire pressure data from the front LH wheel transmitter.	<ul style="list-style-type: none">• Transmitter ID registration incomplete• Transmitter malfunction
C1717	[PRESSDATA ERR] FR	Malfunction in the tire pressure data from the front RH wheel transmitter.	
C1718	[PRESSDATA ERR] RR	Malfunction in the tire pressure data from the rear RH wheel transmitter.	
C1719	[PRESSDATA ERR] RL	Malfunction in the tire pressure data from the rear LH wheel transmitter.	

DTC CONFIRMATION PROCEDURE

1. PERFORM SELF DIAGNOSTIC RESULT

Ⓜ With CONSULT

1. Turn the ignition switch ON.
2. Check the tire pressure for all wheels and adjust to the specified value. Refer to [WT-55, "Tire Air Pressure"](#).
3. Perform "SELF DIAGNOSTIC RESULT".

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

YES >> Proceed to [WT-30, "Diagnosis Procedure"](#).

NO >> Inspection End.

Diagnosis Procedure

INFOID:000000012787314

NOTE:

The Signal Tech II tool [– (J-50190)] can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

1. CHECK TIRE PRESSURE

Check the air pressure of all wheels. Refer to pressure observed during "DTC CONFIRMATION PROCEDURE".

Is the inspection result normal?

YES >> Replace the DTC-detected malfunctioning transmitter. Refer to [WT-50, "Removal and Installation"](#).

NO >> GO TO 2.

2. CHECK TIRE PRESSURE SIGNAL

Ⓜ With CONSULT

1. Perform transmitter ID registration for all wheels. Refer to [WT-22, "Work Procedure"](#).
2. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more, then drive normally for 10 minutes.

C1716, C1717, C1718, C1719 TRANSMITTER (PRESSURE DATA)

< DTC/CIRCUIT DIAGNOSIS >

3. Stop the vehicle.
4. On "DATA MONITOR" select "AIR PRESS FL", "AIR PRESS FR", "AIR PRESS RR" and "AIR PRESS RL".
5. Within 5 minutes after vehicle is stopped, read the values displayed on CONSULT.

Are tire pressures displayed as 438.6 kPa (4.47 kg/cm², 63.6 psi)?

- YES >> Replace transmitter for the tire that displayed pressure as 438.6 kPa (4.47 kg/cm², 63.6 psi).
Refer to [WT-50, "Removal and Installation"](#).
- NO >> Perform "DTC CONFIRMATION PROCEDURE" again. Refer to [WT-30, "DTC Logic"](#).

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C1729 VEHICLE SPEED SIGNAL

< DTC/CIRCUIT DIAGNOSIS >

C1729 VEHICLE SPEED SIGNAL

DTC Logic

INFOID:000000012787315

NOTE:

The Signal Tech II tool [– (J-50190)] can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

DTC DETECTION LOGIC

DTC	Display Item	Malfunction detected condition	Possible causes
C1729	VHCL SPEED SIG ERR	Vehicle speed signal not detected.	<ul style="list-style-type: none">• CAN communication malfunction• BCM• Combination meter

DTC CONFIRMATION PROCEDURE

1. PERFORM SELF DIAGNOSTIC RESULT

Ⓟ With CONSULT

1. Drive for 3 minutes at a speed of 40 km/h (25 MPH) or more without stopping.
2. Stop the vehicle.
3. Perform "SELF DIAGNOSTIC RESULT".

Is DTC "C1729" detected?

- YES >> Proceed to [WT-32, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:000000012787316

NOTE:

The Signal Tech II tool [– (J-50190)] can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

1. PERFORM COMBINATION METER SELF DIAGNOSTIC RESULT

Ⓟ With CONSULT

Perform "SELF DIAGNOSTIC RESULT" for "METER/M&A". Refer to [MWI-18, "CONSULT Function \(METER/M&A\)"](#) (type A) or [MWI-92, "CONSULT Function \(METER/M&A\)"](#) (type B).

Are any DTCs detected?

- YES >> Refer to [MWI-26, "DTC Index"](#) (type A) or [MWI-100, "DTC Index"](#) (type B).
NO >> GO TO 2.

2. CHECK BCM INPUT/OUTPUT SIGNAL

Check the BCM input/output signal values. Refer to [BCS-30, "Reference Value"](#) (with Intelligent Key system) or [BCS-103, "Reference Value"](#) (without Intelligent Key system).

Is the inspection result normal?

- YES >> Check pin terminal and connection of each harness connector for malfunctioning conditions.
NO >> Replace the BCM. Refer to [BCS-78, "Removal and Installation"](#) (with Intelligent Key system) or [BCS-135, "Removal and Installation"](#) (without Intelligent Key system).

LOW TIRE PRESSURE WARNING LAMP

< DTC/CIRCUIT DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP

Component Function Check

INFOID:000000012787317

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 [WT-33, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000012787318

1. PERFORM SELF DIAGNOSTIC RESULT

With CONSULT

1. Turn the ignition switch ON.
2. Perform "SELF DIAGNOSTIC RESULT".

Are any DTCs detected?

- YES >> Refer to [BCS-50, "DTC Index"](#) (with Intelligent Key system) or [BCS-115, "DTC Index"](#) (without Intelligent Key system).
- NO >> GO TO 3.

2. CHECK LOW TIRE PRESSURE WARNING LAMP SIGNAL

With CONSULT

1. Turn the ignition switch ON.
2. On "DATA MONITOR" select "WARNING LAMP."
3. 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-18, "CONSULT Function \(METER/M&A\)"](#) (type A) or [MWI-92, "CONSULT Function \(METER/M&A\)"](#) (type B).
- NO >> Replace the BCM. Refer to [BCS-78, "Removal and Installation"](#) (with Intelligent Key system) or [BCS-135, "Removal and Installation"](#) (without Intelligent Key system).

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POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

POWER SUPPLY AND GROUND CIRCUIT

BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM)

BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

INFOID:000000013371552

Regarding Wiring Diagram information, refer to [BCS-53, "Wiring Diagram"](#).

1. CHECK FUSES AND FUSIBLE LINK

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

Terminal No.	Signal name	Fuses and fusible link No.
88	Battery power supply	12 (10A)
90		G (40A)

Is the fuse blown?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit.

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

1. Disconnect BCM connector M85.
2. Check voltage between BCM connector M85 and ground.

BCM		Ground	Voltage
Connector	Terminal		
M85	88	—	Battery voltage
	90		

Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK GROUND CIRCUIT

Check continuity between BCM connector M85 and ground.

BCM		Ground	Continuity
Connector	Terminal		
M85	93	—	Yes

Is the inspection result normal?

YES >> Inspection End.

NO >> Repair harness or connector.

BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM)

BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

INFOID:000000013371554

Regarding Wiring Diagram information, refer to [BCS-117, "Wiring Diagram"](#).

1. CHECK FUSES AND FUSIBLE LINK

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

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

Terminal No.	Signal name	Fuses and fusible link No.
63	Battery power supply	12 (10A)
70		G (40A)
11	Ignition switch ACC or ON	18 (10A)
38	Ignition switch ON or START	4 (10A)

Is the fuse blown?

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

2.CHECK POWER SUPPLY CIRCUIT

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

BCM		Ground	Ignition switch position		
Connector	Terminal		OFF	ACC	ON
M20	63	—	Battery voltage	Battery voltage	Battery voltage
	70				
M21	11		0 V	0 V	
	38				

Is the inspection result normal?

- YES >> GO TO 3.
 NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M20	65	—	Yes

Is the inspection result normal?

- YES >> Inspection End.
 NO >> Repair harness or connector.

TPMS SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

TPMS SYMPTOMS

Symptom Table

INFOID:0000000012787321

Symptom	Reference
Low tire pressure warning lamp.	WT-37
Low tire pressure warning lamp does not turn ON.	WT-40
Low tire pressure warning lamp does not turn OFF.	WT-41
Low tire pressure warning lamp blinks.	WT-42
Easy fill tire alert does not activate.	WT-43
ID registration cannot be completed.	WT-44
NVH troubleshooting chart.	WT-45

LOW TIRE PRESSURE WARNING LAMP

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP

Symptom Table

INFOID:000000012787322

LOW TIRE PRESSURE WARNING LAMP SYMPTOM CHART

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LOW TIRE PRESSURE WARNING LAMP

< SYMPTOM DIAGNOSIS >

ID registration Diagnosis items	Symptom (Power 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 <small>SEIA0592E</small>	ID registration for all tire pressure sensors at wheels is completed.	No system malfunctions
	The low tire pressure warning lamp repeats blinking ON for 2 seconds and OFF for 0.2 seconds.	 Blinks:  ON 2 sec > OFF 0.2 sec <small>SEIA0593E</small>	ID registration for all tire pressure sensors at wheels is not completed.	Perform the ID registration for all tire pressure sensors at wheels. Refer to WT-22. "Work Procedure" .
	The low tire pressure warning lamp blinks once.	 Blinks 1 time ON 0.3 sec > OFF 1.0 sec <small>JPEIC0090GB</small>	The front left tire pressure sensor is not activated.	Perform the ID registration for the tire pressure sensor at front left wheel. Refer to WT-22. "Work Procedure" .
Low tire pressure warning lamp	The low tire pressure warning lamp repeats blinking twice.	  Blinks 2 times ON 0.3 sec > OFF 0.3 sec <small>SEIA0595E</small>	The front right tire pressure sensor is not activated.	Perform the ID registration for the tire pressure sensor at front right wheel. Refer to WT-22. "Work Procedure" .
	The low tire pressure warning lamp repeats blinking for 3 times.	   Blinks 3 times ON 0.3 sec > OFF 0.3 sec <small>SEIA0596E</small>	The rear right tire pressure sensor is not activated.	Perform the ID registration for the tire pressure sensor at rear right wheel. Refer to WT-22. "Work Procedure" .
	The low tire pressure warning lamp repeats blinking for 4 times.	    Blinks 4 times ON 0.3 sec > OFF 0.3 sec <small>SEIA0597E</small>	The rear left tire pressure sensor is not activated.	Perform the ID registration for the tire pressure sensor at rear left wheel. Refer to WT-22. "Work Procedure" .
	The low tire pressure warning lamp turns ON and stays illuminated.	 Comes ON and stays ON <small>SEIA0598E</small>	Low tire pressure	Check the tire pressure for all wheels and adjust to the specified value. Refer to WT-55. "Tire Air Pressure" .

LOW TIRE PRESSURE WARNING LAMP

< SYMPTOM DIAGNOSIS >

ID registration Diagnosis items	Symptom (Power switch ON)	Low tire pressure warning lamp	Cause	Action
Low tire pressure warning lamp	The low tire pressure warning lamp repeats blinking at 0.5-second intervals for 1 minute, and then stays illuminated.		The combination meter fuse is open or removed (or pulled out).	Check and install the combination meter fuse. If necessary, replace the fuse.
			The BCM harness connector is removed.	Check the connection conditions of the BCM harness connector, and repair if necessary.
		 <p style="text-align: center;">Blinks 1 min</p> <p style="text-align: center;">ON 0.5 sec > OFF 0.5 sec and stays ON</p> <p style="text-align: center;"><small>SEIA0788E</small></p>	Tire Pressure Monitoring System (TPMS) malfunction.	<ul style="list-style-type: none"> • Perform CONSULT self-diagnosis. Refer to WT-11, "AIR PRESSURE MONITOR : CONSULT Function (BCM - AIR PRESSURE MONITOR)" (with Intelligent Key system) or WT-13, "AIR PRESSURE MONITOR : CONSULT Function (BCM - AIR PRESSURE MONITOR)" (without Intelligent Key system). • If necessary, perform tire pressure sensor ID registration. Refer to WT-22, "Work Procedure".

NOTE:

If tire pressure sensor ID registration is not completed for two or more tire pressure sensors, the applicable low tire pressure warning lamp blinking patterns are displayed continuously.
 (Example: Blinks once/OFF/blinks 3 times = ID registration is not completed at the front left wheel and rear right wheel tire pressure sensors.)

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LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN ON

Low Tire pressure Warning Lamp Does Not Come On When Ignition Switch Is Turned On

INFOID:0000000012787323

NOTE:

The Signal Tech II tool [– (J-50190)] can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

DIAGNOSTIC PROCEDURE

1.PERFORM SELF DIAGNOSTIC RESULT

Perform "SELF DIAGNOSTIC RESULT".

Is DTC "U1000" detected?

- YES >> Malfunction in CAN communication system. Refer to [LAN-17, "Trouble Diagnosis Flow Chart"](#).
NO >> GO TO 2

2.CHECK COMBINATION METER

Check combination meter operation. Refer to [MWI-18, "CONSULT Function \(METER/M&A\)"](#) (type A) or [MWI-92, "CONSULT Function \(METER/M&A\)"](#) (type B).

Is the inspection result normal?

- YES >> GO TO 3
NO >> Replace combination meter. Refer to [MWI-74, "Removal and Installation"](#) (type A) or [MWI-150, "Removal and Installation"](#) (type B).

3.CHECK LOW TIRE PRESSURE WARNING LAMP

Disconnect BCM harness connector.

Does the low tire pressure warning lamp activate?

- YES >> Replace BCM. Refer to [BCS-78, "Removal and Installation"](#) (with Intelligent Key System) or [BCS-135, "Removal and Installation"](#) (without Intelligent Key System).
NO >> Check combination meter operation.

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF

Low Tire Pressure Warning Lamp Stays On When Ignition Switch Is Turned On

INFOID:0000000012787324

DIAGNOSTIC PROCEDURE

1. INSPECT BCM CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect BCM connectors.
3. Check terminals for damage or loose connections.

Is the inspection result normal?

YES >> GO TO 2.

NO >> Repair or replace damaged parts.

2. BCM POWER SUPPLY AND GROUND CIRCUITS

Check BCM power supply and ground circuits. Refer to [BCS-71. "Diagnosis Procedure"](#) (with Intelligent Key system) or [BCS-128. "Diagnosis Procedure"](#) (without Intelligent Key system).

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-78. "Removal and Installation"](#) (with Intelligent Key system) or [BCS-135. "Removal and Installation"](#) (without Intelligent Key system).

NO >> Repair BCM circuits.

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LOW TIRE PRESSURE WARNING LAMP BLINKS

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP BLINKS

Diagnosis Procedure

INFOID:000000012787325

NOTE:

If low tire pressure warning lamp repeats blinking ON for 2 seconds and OFF for 0.2 seconds, ID registration for all transmitters is not complete.

Carry out transmitter ID registration. Refer to [WT-22. "Work Procedure"](#).

1.CHECK BCM CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect BCM connectors.
3. Check terminals for damage or loose connections.

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-78. "Removal and Installation"](#) (with Intelligent Key system) or [BCS-135. "Removal and Installation"](#) (without Intelligent Key system).
- NO >> Repair or replace damaged parts.

EASY FILL TIRE ALERT DOES NOT ACTIVATE

< SYMPTOM DIAGNOSIS >

EASY FILL TIRE ALERT DOES NOT ACTIVATE

Description

INFOID:0000000012787326

The Easy Fill Tire Alert does not function while inflating a tire when the select lever position is in P-range with the ignition switch ON. Refer to [WT-8, "TIRE PRESSURE MONITORING SYSTEM : Easy Fill Tire Alert Function"](#).

Diagnosis Procedure

INFOID:0000000012787327

1. LOCATION CHANGE

Move the vehicle to another area and repeat the procedure of the Easy Fill Tire Alert function. Refer to [WT-8, "TIRE PRESSURE MONITORING SYSTEM : Easy Fill Tire Alert Function"](#).

Is the function normal?

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

2. PERFORM SELF DIAGNOSTIC RESULT

With CONSULT

Perform Self Diagnostic Result.

Are any DTCs detected?

- YES >> Refer to [BCS-50, "DTC Index"](#) (with Intelligent Key system) or [BCS-115, "DTC Index"](#) (without Intelligent Key system).
- NO >> GO TO 3.

3. CHECK HAZARD WARNING LAMP OPERATION

Check hazard warning lamp operation with hazard switch.

Do the hazard warning lamps operate?

- YES >> GO TO 4.
- NO >> Refer to [EXL-113, "Diagnosis Procedure"](#).

4. PERFORM SELF DIAGNOSTIC RESULT FOR TCM

With CONSULT

Perform Self Diagnostic Result for TRANSMISSION.

Are any DTCs detected?

- YES >> Refer to [TM-109, "CONSULT Function"](#).
- NO >> GO TO 5.

5. CHECK HORN OPERATION

Check horn operation.

Is the inspection result normal?

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

6. PERFORM SELF DIAGNOSTIC RESULT

With CONSULT

1. Drive at a speed of 40 km/h (25 MPH) or more for 3 minutes, and then drive the vehicle at any speed for 10 minutes.
2. Perform Self Diagnostic Result.

Are any DTCs detected?

- YES >> Refer to [BCS-50, "DTC Index"](#) (with Intelligent Key system) or [BCS-115, "DTC Index"](#) (without Intelligent Key system).
- NO >> Replace BCM. Refer to [BCS-78, "Removal and Installation"](#) (with Intelligent Key system) or [BCS-135, "Removal and Installation"](#) (without Intelligent Key system).

ID REGISTRATION CANNOT BE COMPLETED

< SYMPTOM DIAGNOSIS >

ID REGISTRATION CANNOT BE COMPLETED

Diagnosis Procedure

INFOID:000000012787328

NOTE:

The Signal Tech II tool [– (J-50190)] can be used to perform the following functions. Refer to the Signal Tech II User Guide for additional information.

- Activate and display TPMS transmitter IDs
- Display tire pressure reported by the TPMS transmitter
- Read TPMS DTCs
- Register TPMS transmitter IDs

1. PERFORM ID REGISTRATION OF ALL TRANSMITTERS

Carry out ID registration of all transmitters. Refer to [WT-22. "Work Procedure"](#).

Can ID registration of all transmitters be completed?

YES >> Inspection End.

NO >> Refer to [WT-27. "Diagnosis Procedure"](#).

ROAD WHEEL

< PERIODIC MAINTENANCE >

PERIODIC MAINTENANCE

ROAD WHEEL

Inspection

INFOID:000000012787330

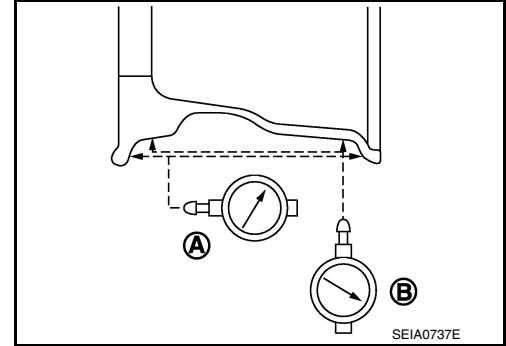
ALUMINUM WHEEL

1. Check tires for wear and improper inflation.
2. Check wheels for deformation, cracks and other damage. If deformed, remove wheel and check wheel runout.
 - a. Remove tire from aluminum wheel and mount wheel on a balancer machine.
 - b. Set dial indicator as shown.
 - c. Check runout, if runout value exceeds the limit, replace aluminum wheel.

Limit

Lateral Deflection (A) Refer to [WT-55, "Road Wheel"](#).

Radial Deflection (B) Refer to [WT-55, "Road Wheel"](#).



STEEL WHEEL

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

$$\text{Lateral deflection (A)} = (W+X)/2$$

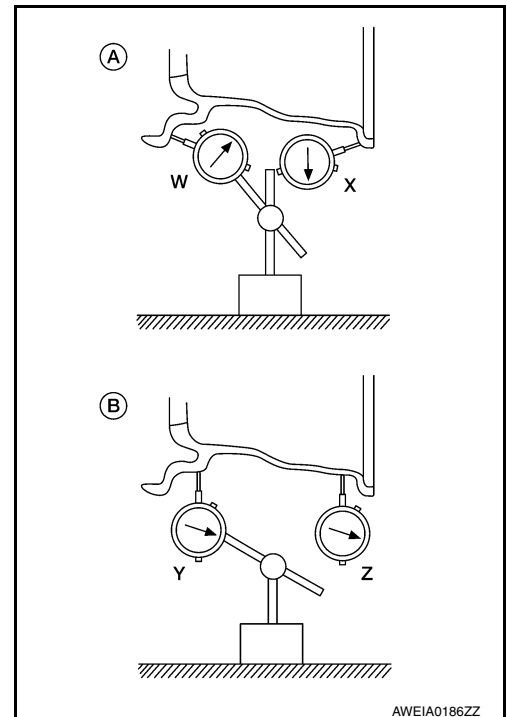
$$\text{Radial deflection (B)} = (Y+Z)/2$$

- f. Select maximum positive runout value and the maximum negative value. Add the two values to determine total runout. In case a positive or negative value is not available, use the maximum value (negative or positive) for total runout. If the total runout value exceeds the limit, replace steel wheel.

Limit

Lateral Deflection (A) Refer to [WT-55, "Road Wheel"](#).

Radial Deflection (B) Refer to [WT-55, "Road Wheel"](#).



ROAD WHEEL TIRE ASSEMBLY

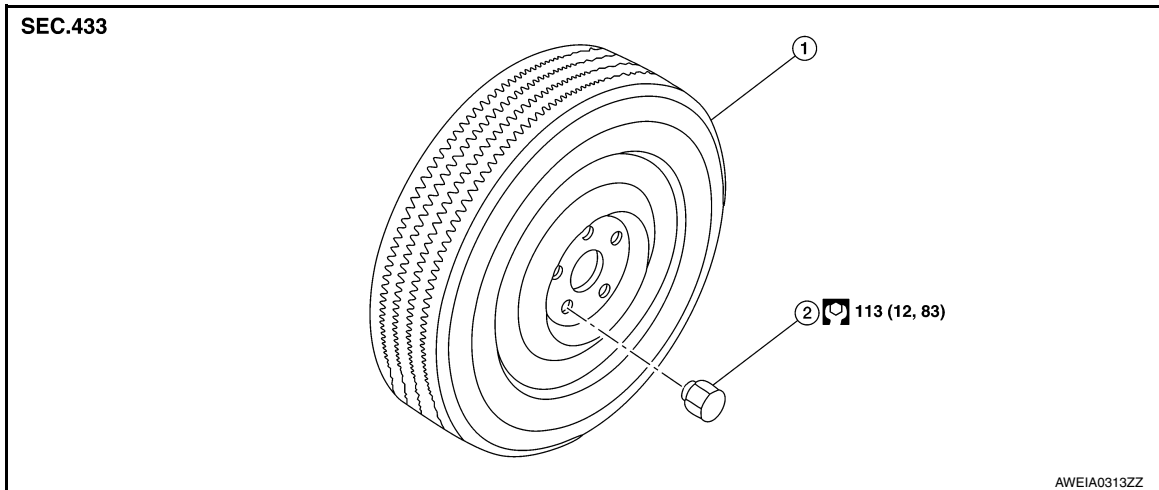
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

ROAD WHEEL TIRE ASSEMBLY

Exploded View

INFOID:0000000012787331



1. Wheel and tire assembly

2. Wheel nut

Removal and Installation

INFOID:0000000012787332

REMOVAL

1. Remove wheel nuts.
2. Remove wheel and tire.

INSTALLATION

Installation is in the reverse order of removal.

Adjustment

INFOID:0000000012787333

BALANCING WHEELS (ADHESIVE WEIGHT TYPE)

Preparation Before Adjustment

Remove inner and outer balance weights from the road wheel. Using releasing agent, remove double-faced adhesive tape from the road wheel.

CAUTION:

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

Wheel Balance Adjustment

- If a balancer machine has an adhesive weight mode setting, select the adhesive weight mode setting and skip Step 2. below. If a balancer machine only has the clip-on (rim flange) weight mode setting, follow Step 2. to calculate the correct size adhesive weight.

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

ROAD WHEEL TIRE ASSEMBLY

< REMOVAL AND INSTALLATION >

- a. Indicated imbalance value $\times 5/3$ (1.67) = balance weight to be installed

Calculation example:

23 g (0.81 oz) $\times 5/3$ (1.67) = 38.33 g (1.35 oz) \Rightarrow 40 g (1.41 oz)
balance weight (closer to calculated balance weight value)

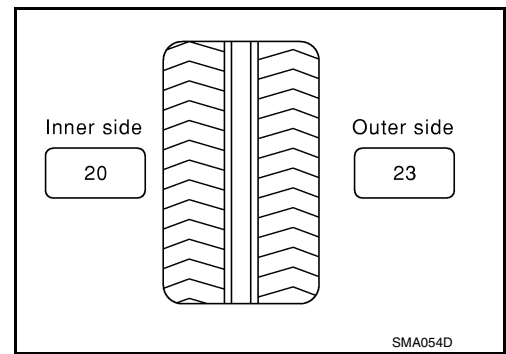
NOTE:

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

Example:

37.4 \Rightarrow 35 g (1.23 oz)

37.5 \Rightarrow 40 g (1.41 oz)



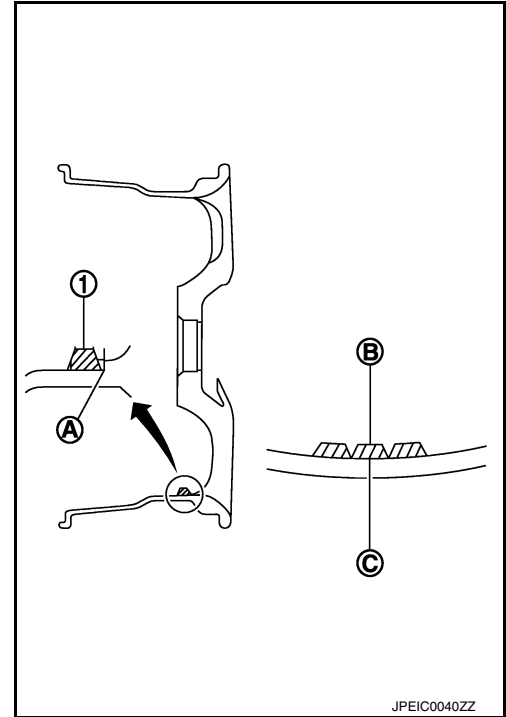
3. Install balance weight in the position shown.

CAUTION:

- Do not install the inner balance weight before installing the outer balance weight.
- Before installing the balance weight, be sure to clean the mating surface of the road wheel.
- When installing balance weight (1) to road wheel, set it into the grooved area (A) on the inner wall of the road wheel as shown so that the balance weight center (B) is aligned with the balancer machine indication position (angle) (C).

CAUTION:

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



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

CAUTION:

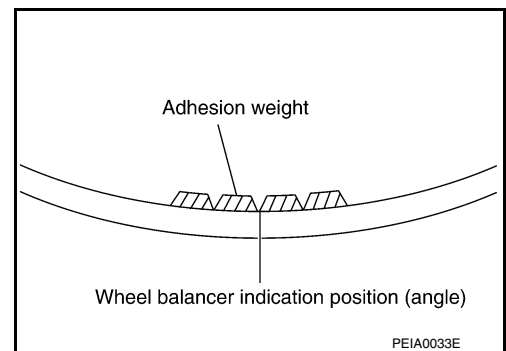
Do not install one balance weight sheet on top of another.

5. Start balancer machine again.
6. Install balance weight on inner side of road wheel in the balancer machine indication position (angle).

CAUTION:

Do not install more than two balance weights.

7. Start balancer machine. Make sure that inner and outer residual imbalance values are 5 g (0.18 oz) each or below.
8. If either residual imbalance value exceeds 5 g (0.18 oz), repeat installation procedures.



Allowable imbalance

Refer to [WT-55, "Road Wheel"](#).

TIRE ROTATION

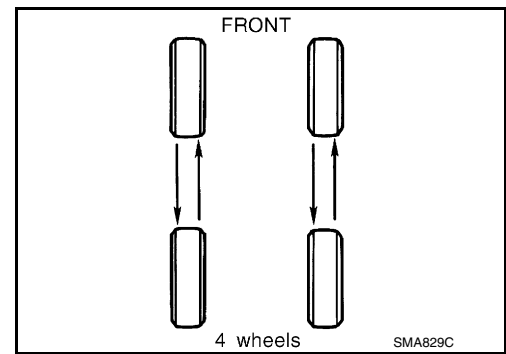
ROAD WHEEL TIRE ASSEMBLY

< REMOVAL AND INSTALLATION >

- Follow the maintenance schedule for tire rotation service intervals. Refer to [MA-6, "Explanation of General Maintenance"](#).
- When installing the wheel, tighten wheel nuts to the specified torque.

CAUTION:

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



Wheel nut tightening torque Refer to [WT-55, "Road Wheel"](#).

A
B
C
D

WT

F
G
H
I
J
K
L
M
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O
P

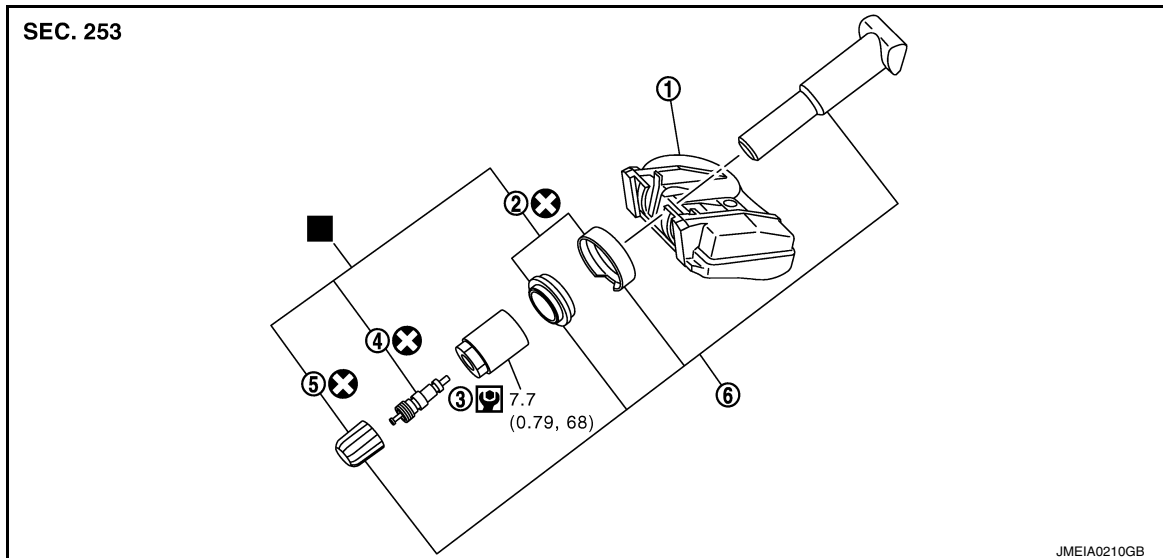
TRANSMITTER

< REMOVAL AND INSTALLATION >

TRANSMITTER

Exploded View

INFOID:000000012787334



- | | | |
|---------------------------------------|-------------------------|------------------------|
| 1. Transmitter (tire pressure sensor) | 2. Washer/ Grommet seal | 3. Valve stem nut |
| 4. Valve core | 5. Valve cap | 6. Valve stem assembly |
- : Parts that are replaced as a set when the tire is replaced.

Removal and Installation

INFOID:000000012787335

REMOVAL

1. Remove wheel and tire using power tool. Refer to [WT-47, "Removal and Installation"](#).
2. Remove valve cap and valve core to deflate the tire.

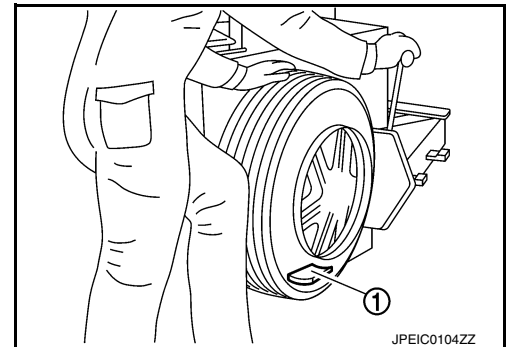
NOTE:

If the tire is to be reused, apply a matching mark on the tire in line with the position of the valve stem assembly for the purpose of wheel and tire balance adjustment after installation.

3. Remove the valve stem nut and allow transmitter (1) to fall into tire.
4. Lubricate the tire outside bead well with a suitable non-silicone lubricant, and remove outside of tire from the wheel.

CAUTION:

- Do not use silicone lubricant. Use of silicone lubricant will deteriorate the tire and wheel.
- Be sure not to damage the wheel or transmitter.
- Do not allow lubricant to make contact with transmitter.
- Verify that the transmitter (1) is at the bottom of the tire while performing the above.



5. Lubricate the tire inside bead well with a suitable non-silicone lubricant, and remove inside of tire from the wheel.

CAUTION:

- Do not use silicone lubricant. Use of silicone lubricant will deteriorate the tire and wheel.
- Be sure not to damage the wheel.

6. Set tire onto the tire changer turntable so that the transmitter inside the tire is located close to the valve stem hole in the wheel.

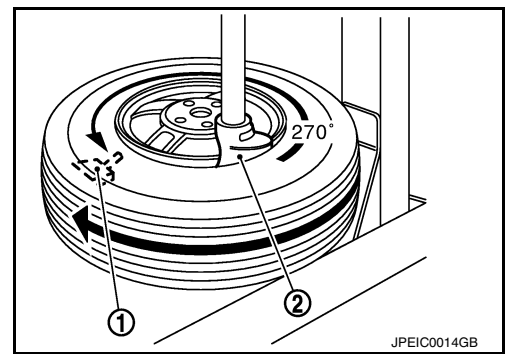
TRANSMITTER

< REMOVAL AND INSTALLATION >

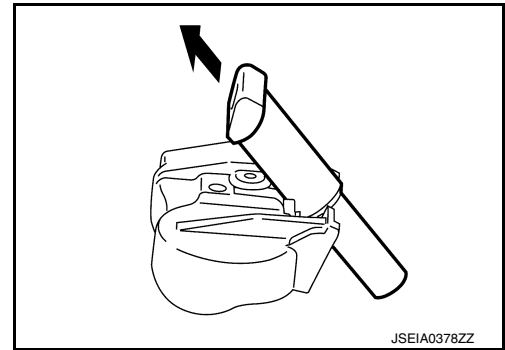
- Turn tire so that the valve stem hole in the wheel is at the bottom and bounce so that the transmitter (1) inside the tire is near the valve stem hole in the wheel. Carefully lift tire onto turn table and position the valve stem hole in the wheel (and transmitter) 270 degrees from mounting/dismounting head (2).

CAUTION:

Do not damage the wheel or transmitter.



- Remove the transmitter from the tire.
- Remove the grommet seal and washer.
- Remove the valve stem in the direction shown by the arrow (←).



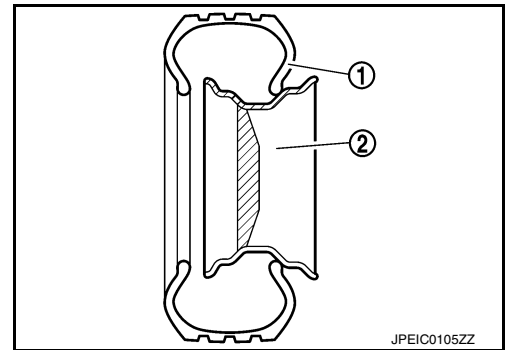
INSTALLATION

- Apply a suitable non-silicone lubricant to the tire inside bead.

CAUTION:

- Replace the valve stem assembly if the valve stem has deformations, cracks, damage, or corrosion.
- Do not use silicone lubricant. Use of silicone lubricant will deteriorate the tire and wheel.
- Do not drop or strike the transmitter. Replace the transmitter if it has been dropped from higher than one meter.

- Install the tire inside bead (1) onto the wheel (2) in the position shown.

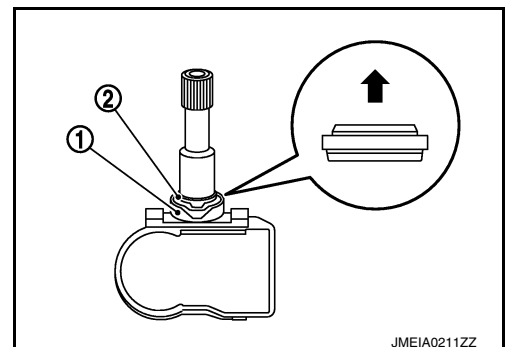


- Install the valve stem to the transmitter.
- Install the washer (1) onto the valve stem, and then install the grommet seal (2) onto the valve stem.

CAUTION:

- Do not reuse grommet seal or washer.
- Check the direction of the grommet seal.
- Insert the grommet seal all the way to the base.

↑ : Outside

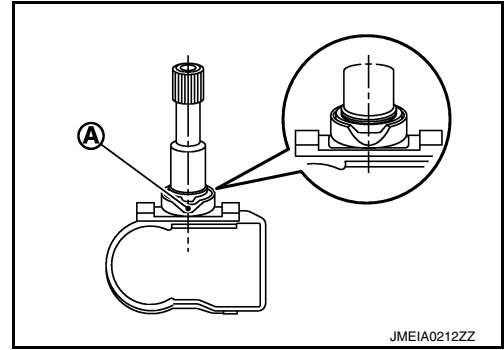


TRANSMITTER

< REMOVAL AND INSTALLATION >

CAUTION:

Direct the cut part (A) of the washer to the center of the valve stem as shown.

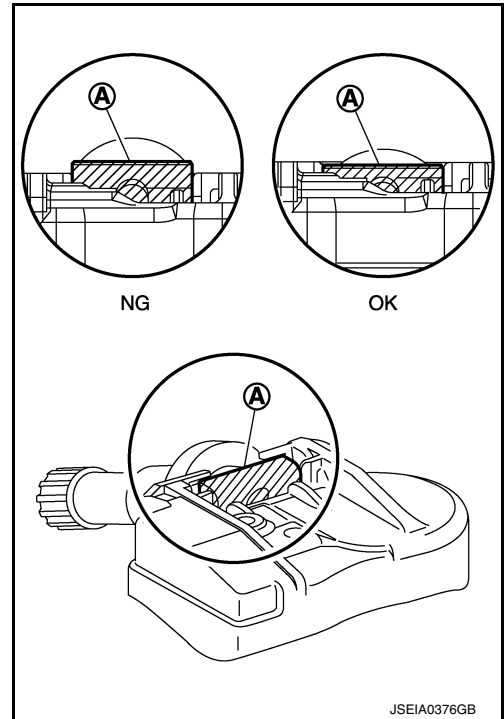


5. Follow the procedure below and install the transmitter to the wheel.

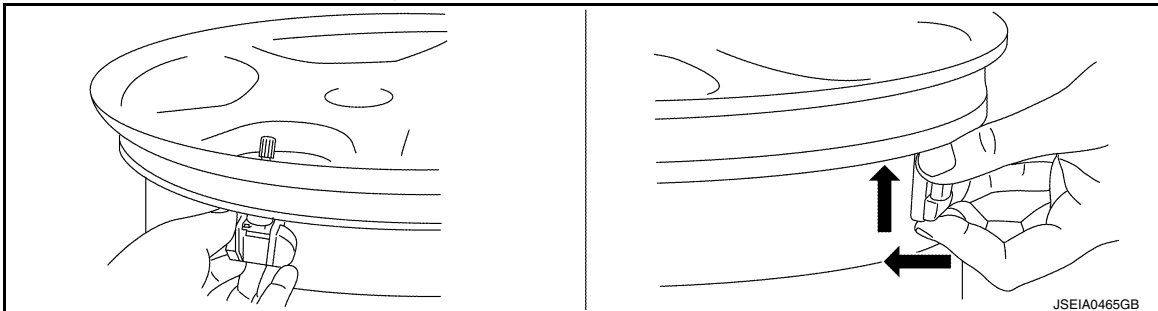
a. Check the position of the valve stem (A) before installing transmitter to the wheel.

CAUTION:

The base of the valve stem must be positioned in the groove of the metal plate as shown.



b. Hold transmitter as shown and press the transmitter in the direction shown by the arrow (←) to bring into absolute contact with the wheel. Tighten the valve stem nut to the specified torque.



Valve stem nut tightening torque : Refer to [WT-50, "Exploded View"](#).

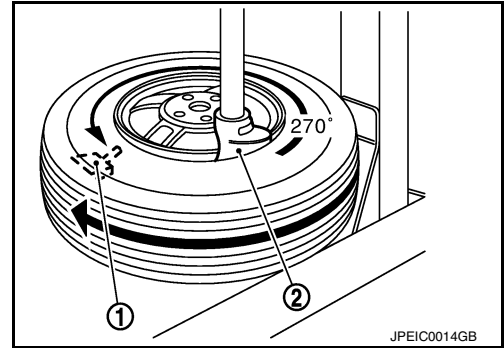
CAUTION:

- Do not reuse valve core and valve cap.
- Check that grommet seal is free of foreign matter.
- Check that grommet seal contacts horizontally with wheel.
- Check again that the base of valve stem is positioned in the groove of the metal plate.
- Manually tighten valve stem nut all the way to the wheel. (Do not use a power tool to avoid impact.)

TRANSMITTER

< REMOVAL AND INSTALLATION >

- Do not tighten valve stem nut to more than the specified torque. It may cause grommet seal damage.
 - Do not tighten valve stem nut to less than the specified torque. It may cause an air leak.
6. Place wheel on turntable of tire machine. Ensure that transmitter (1) is 270 degrees from mounting/dismounting head (2).
CAUTION:
Do not touch transmitter with mounting head.
 7. Apply a suitable non-silicone lubricant to the tire outside bead.
CAUTION:
 - Do not use silicone lubricant. Use of silicone lubricant will deteriorate the tire and wheel.
 - Do not allow lubricant to make contact with transmitter.
 - When installing, check that the tire does not turn together with the wheel.
 8. Install the tire outside bead onto the wheel as normal.
NOTE:
If the tire is being reused, align the matching mark applied on the tire with the position of the valve stem assembly for the purpose of wheel and tire balance adjustment after installation. Make sure that the tire does not rotate relative to wheel.
 9. Install the valve core and inflate tire. Refer to [WT-55, "Tire Air Pressure"](#).
CAUTION:
Do not reuse valve core.
 10. Install the valve cap.
CAUTION:
Do not reuse valve cap.
 11. Balance the wheel and tire. Refer to [WT-47, "Adjustment"](#).
 12. Install the wheel and tire in the appropriate position on the vehicle. Refer to [WT-47, "Removal and Installation"](#).
 13. Perform the ID registration procedure. Refer to [WT-22, "Description"](#).



NOTE:

If replacing the transmitter, then the ID registration procedure must be performed.

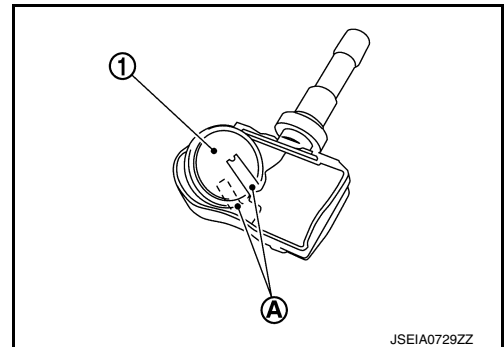
Disposal

INFOID:000000012787336

CAUTION:

- When discarding transmitter, remove battery (1) from transmitter.
- Dispose of battery according to the law and local regulations.

1. Remove battery from transmitter.
NOTE:
The battery is sealed to the transmitter with urethane.
 - a. Remove urethane from transmitter.
 - b. Cut battery terminal (A), then remove battery from transmitter.



TIRE PRESSURE RECEIVER

< REMOVAL AND INSTALLATION >

TIRE PRESSURE RECEIVER

Removal and Installation

INFOID:000000012787337

The tire pressure receiver is integral to the remote keyless entry receiver. Refer to [DLK-193. "Removal and Installation"](#).

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Road Wheel

INFOID:0000000012787338

Standard item		Allowable value		
		Aluminum	Steel	
			Inside	Outside
Radial runout	Lateral deflection	Less than 0.3 mm (0.012 in)	Less than 0.8 mm (0.031 in)	Less than 0.8 mm (0.031 in)
	Radial deflection	Less than 0.3 mm (0.012 in)	Less than 0.5 mm (0.020 in)	Less than 0.5 mm (0.020 in)
Allowable imbalance	Dynamic (At rim flange)	Less than 5 g (0.18 oz) (one side)		
	Static (At rim flange)	Less than 10 g (0.35 oz)		
Wheel nut tightening torque		113 Nm (12 kg-m, 83 ft-lb)		

Tire Air Pressure

INFOID:0000000012787339

Unit: kPa (kg/cm², psi)

Applied model	MT/CVT			CVT					
	S, SV			FE+S			SR, SL		
Tire size	P205/55R16		T125/70D16	P205/55R16		T125/70D16	P205/50R17		T125/70D16
Air pressure	Front	Rear	Spare	Front	Rear	Spare	Front	Rear	Spare
		230 (2.3, 33)		420 (4.2, 60)	250 (2.5, 36)		420 (4.2, 60)	230 (2.3, 33)	