

### WT

D

# **CONTENTS**

PRECAUTION3	WITHOUT INTELLIGENT KEY11 FINAL WITHOUT INTELLIGENT KEY : CONSULT Func-
PRECAUTIONS3	tion (BCM - COMMON ITEM)11
Precaution for Supplemental Restraint System	WITHOUT INTELLIGENT KEY : CONSULT Func-
(SRS) "AIR BAG" and "SEAT BELT PRE-TEN-	tion (BCM - AIR PRESSURE MONITOR)12
SIONER"	ECU DIAGNOSIS INFORMATION14
Service Notice and Precautions for Road Wheel3	Н
PREPARATION5	BCM         14           List of ECU Reference         14
PREPARATION 5	WIRING DIAGRAM15
Special Service Tool5	TIDE DECOLUDE MONITORING OVOTEM
Commercial Service Tool5	TIRE PRESSURE MONITORING SYSTEM15
CVCTEM DECODIDATION	Wiring Diagram - With Intelligent Key
SYSTEM DESCRIPTION6	Wiring Diagram - Without Intelligent Key18
COMPONENT PARTS 6	BASIC INSPECTION21
Component Parts Location6	DIAGNOSIS AND REPAIR WORK FLOW21
Component Description6	Work Flow21
BCM6	L
Remote Keyless Entry Receiver6 Transmitter7	ID REGISTRATION PROCEDURE22
Low Tire Pressure Warning Lamp7	Description22
Low The Flessure Warning Lamp	Work Procedure22
SYSTEM8	DTC/CIRCUIT DIAGNOSIS25
TIRE PRESSURE MONITORING SYSTEM8	C4704 C4705 C4706 C4707 LOW TIPE
TIRE PRESSURE MONITORING SYSTEM: Sys-	C1704, C1705, C1706, C1707 LOW TIRE PRESSURE25
tem Diagram8	DTC Logic25
TIRE PRESSURE MONITORING SYSTEM: Sys-	Diagnosis Procedure25
tem Description8	Diagnosis i roccaire
TIRE PRESSURE MONITORING SYSTEM:	C1708, C1709, C1710, C1711 TRANSMITTER
Easy Fill Tire Alert Function8	(NO DATA)27
DIAGNOSIS SYSTEM (BCM)10	DTC Logic27
. ,	Diagnosis Procedure27
WITH INTELLIGENT KEY10	C4746 C4747 C4740 C4740 TDANSMITTED
WITH INTELLIGENT KEY: CONSULT Function	C1716, C1717, C1718, C1719 TRANSMITTER
(BCM - COMMON ITEM)	(PRESSURE DATA)30
WITH INTELLIGENT KEY: CONSULT Function	DTC Logic30
(BCM - AIR PRESSURE MONITOR)11	Diagnosis Procedure30

C1729 VEHICLE SPEED SIGNAL         32           DTC Logic         32           Diagnosis Procedure         32	ID REGISTRATION CANNOT BE COMPLET- ED	
LOW TIRE PRESSURE WARNING LAMP 33 Component Function Check	NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING	
POWER SUPPLY AND GROUND CIRCUIT 34	PERIODIC MAINTENANCE	44
WITH INTELLIGENT KEY34 WITH INTELLIGENT KEY : Diagnosis Procedure 34	WHEEL	
WITHOUT INTELLIGENT KEY	WHEEL AND TIRE	_
SYMPTOM DIAGNOSIS	REMOVAL AND INSTALLATION	48
TPMS SYMPTOMS         36           Symptom Table         36	WHEEL AND TIRE	48
LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN ON	TRANSMITTER	<b>49</b> 49
LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF	TIRE PRESSURE RECEIVER	53
LOW TIRE PRESSURE WARNING LAMP BLINKS	SERVICE DATA AND SPECIFICATIONS (SDS)	
EASY FILL TIRE ALERT DOES NOT ACTI- VATE	SERVICE DATA AND SPECIFICATIONS (SDS)	54

### **PRECAUTIONS**

### < PRECAUTION >

# **PRECAUTION**

### **PRECAUTIONS**

### Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRF-TFNSIONER"

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, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see the SR section.
- Do not use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

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

### WARNING:

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

Service Notice and Precautions for TPMS

### **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, "Work Procedure".
- ID registration is required when replacing or rotating wheels, replacing tire pressure sensor or BCM. Refer to WT-22, "Work Procedure".
- Replace grommet seal, valve core and valve cap of tire pressure sensor in TPMS, when replacing each tire by reaching the wear limit. Refer to WT-49, "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

- 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.

WT

D

Α

В

INFOID:0000000012432422

Ν

INFOID:0000000012432423

### **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:0000000012432424

Α

В

C

 $\mathsf{D}$ 

Н

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

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

### **Commercial Service Tool**

INFOID:0000000012432425

Tool name		Description	
Power tool		Loosening nuts, screws and bolts	K
			L
	PIIB1407E		M

Ν

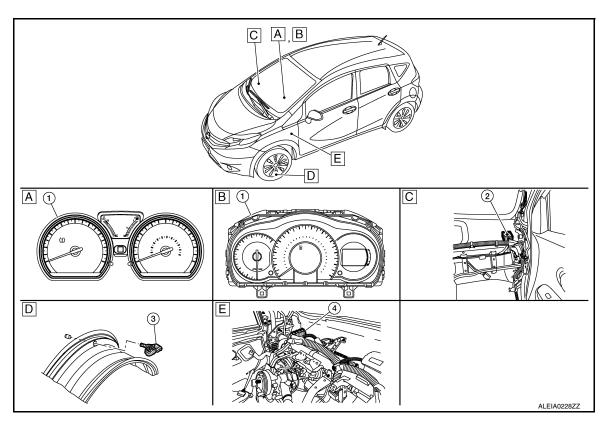
0

# SYSTEM DESCRIPTION

### **COMPONENT PARTS**

# **Component Parts Location**

INFOID:0000000012432426



- A. Combination meter (Type A)
- D. Wheel

- B. Combination Meter (Type B)
- E. View with instrument panel removed
- C. View with instrument panel removed

# **Component Description**

INFOID:0000000012432427

No.	Component parts	Function
		Transmits the vehicle speed signal via CAN communication to BCM.
1.	Combination meter	Receives the low tire pressure warning lamp signal via CAN communication from BCM.
2.	Remote keyless entry receiver	WT-6, "Remote Keyless Entry Receiver".
3.	Transmitter	WT-7, "Transmitter".
4.	BCM	<u>WT-6, "BCM"</u> .

BCM INFOID:000000012432428

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:0000000012432429

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

### **COMPONENT PARTS**

### < SYSTEM DESCRIPTION >

Transmitter INFOID:000000012432430

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:0000000012432431

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.

D

Α

В

WT

C

Н

J

K

L

M

Ν

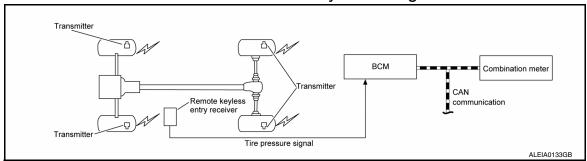
0

### SYSTEM

### TIRE PRESSURE MONITORING SYSTEM

# TIRE PRESSURE MONITORING SYSTEM: System Diagram

INFOID:0000000012432432



# TIRE PRESSURE MONITORING SYSTEM: System Description

INFOID:0000000012432433

- 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
ВСМ	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.	- ON
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:000000012432434

This function operates only when the selector lever position is in P-range with the ignition switch ON.
 CAUTION:

Never start the engine.

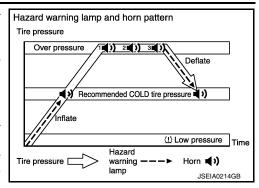
NOTE:

The easy fill tire alert function is recommended to use with the ignition switch ON.

### **SYSTEM**

### < SYSTEM DESCRIPTION >

- This function informs the driver of the satisfaction of the recommended COLD tire pressure.
  - The hazard warning lamp blinks when reaching the recommended COLD tire pressure during radio wave reception. After reaching the recommended COLD tire pressure, the horn sounds once and the hazard warning lamp stops blinking.
- When tire pressure becomes a value equal to or more than 30 kPa (0.31 kg/cm², 4 psi) more than the recommended COLD tire pressure, the hazard warning lamp and the horn operates three times. After deflating the tire and reaching the recommended COLD tire pressure, the horn sounds only once and the hazard warning lamp stops blinking.



### NOTE:

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

WT

D

Α

В

F

Н

K

L

M

Ν

0

### < SYSTEM DESCRIPTION >

# DIAGNOSIS SYSTEM (BCM) WITH INTELLIGENT KEY

WITH INTELLIGENT KEY: CONSULT Function (BCM - COMMON ITEM) INFOID:000000012542957

### **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> <li>The vehicle specification can be read and saved.</li> <li>The vehicle specification can be written when replacing BCM.</li> </ul>
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication is displayed.

### SYSTEM APPLICATION

BCM can perform the following functions.

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

### < SYSTEM DESCRIPTION >

# WITH INTELLIGENT KEY: CONSULT Function (BCM - AIR PRESSURE MONITOR)

NFOID:0000000012542958

### NOTE:

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

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

### SELF DIAGNOSTIC RESULT

### NOTE:

Before performing self diagnostic result, be sure to register the 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 <sup>2</sup> or Psi]	Indicates air pressure of front LH tire.
AIR PRESS FR [kPa, kg/cm <sup>2</sup> or Psi]	Indicates air pressure of front RH tire.
AIR PRESS RR [kPa, kg/cm <sup>2</sup> or Psi]	Indicates air pressure of rear RH tire.
AIR PRESS RL [kPa, kg/cm <sup>2</sup> 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".

### WITHOUT INTELLIGENT KEY

# WITHOUT INTELLIGENT KEY: CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000012542960

### APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Revision: August 2015 WT-11 2016 Versa Note

WT

D

Α

В

F

Н

K

L

M

Ν

0

### < SYSTEM DESCRIPTION >

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> <li>The vehicle specification can be read and saved.</li> <li>The vehicle specification can be written when replacing BCM.</li> </ul>
CAN DIAG SUPPORT MNTR	The result of transmit/receive diagnosis of CAN communication is displayed.

### SYSTEM APPLICATION

BCM can perform the following functions.

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

WITHOUT INTELLIGENT KEY: CONSULT Function (BCM - AIR PRESSURE MONITOR)

### 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

Revision: August 2015 WT-12 2016 Versa Note

### < SYSTEM DESCRIPTION >

- · Read TPMS DTCs
- Register TPMS transmitter IDs
- Test remote keyless entry keyfob relative signal strength

### 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 <sup>2</sup> or Psi]	Indicates air pressure of front LH tire.	_
AIR PRESS FR [kPa, kg/cm <sup>2</sup> or Psi]	Indicates air pressure of front RH tire.	
AIR PRESS RR [kPa, kg/cm <sup>2</sup> or Psi]	Indicates air pressure of rear RH tire.	
AIR PRESS RL [kPa, kg/cm <sup>2</sup> 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].
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".

Revision: August 2015 WT-13 2016 Versa Note

Ν

L

M

Α

В

C

 $\mathsf{D}$ 

Н

0

# **ECU DIAGNOSIS INFORMATION**

# **BCM**

# List of ECU Reference

INFOID:0000000012432439

ECU	Reference
	BCS-30, "Reference Value"
BCM (with Intelligent Key system)	BCS-48, "Fail-safe"
DOM (with intelligent Ney system)	BCS-49, "DTC Inspection Priority Chart"
	BCS-50, "DTC Index"
	BCS-101, "Reference Value"
BCM (without Intelligent Key system)	BCS-115, "Fail-safe"
BOW (without intelligent Key system)	BCS-115, "DTC Inspection Priority Chart"
	BCS-115, "DTC Index"

# **WIRING DIAGRAM**

# TIRE PRESSURE MONITORING SYSTEM

Wiring Diagram - With Intelligent Key

INFOID:0000000012432440

WT

F

Н

J

K

L

M

Ν

0

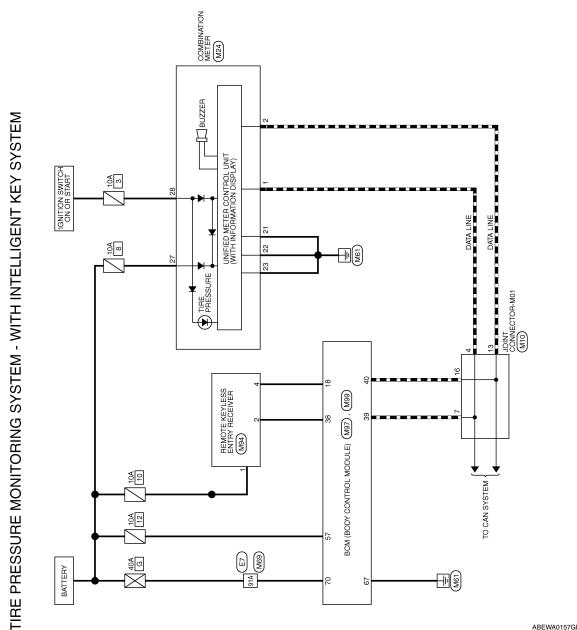
Р

Α

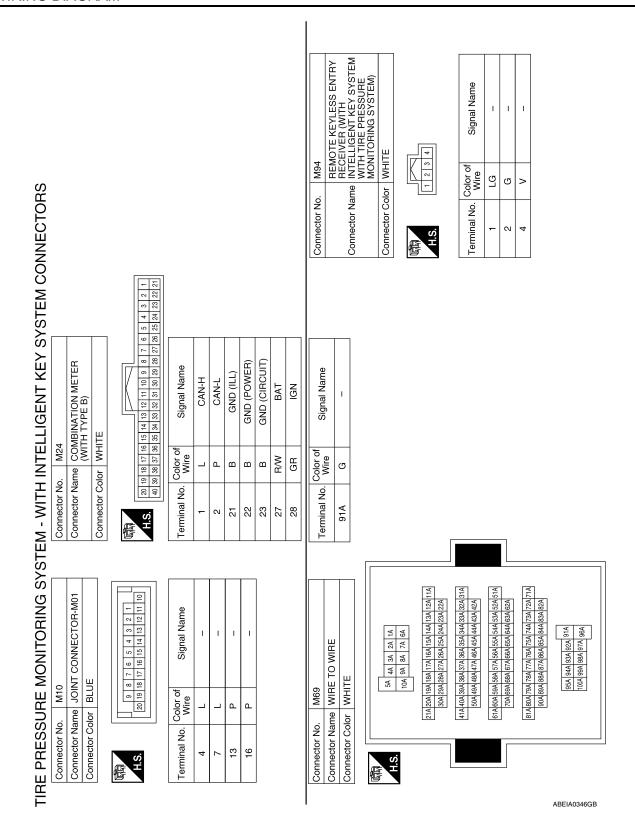
В

C

D

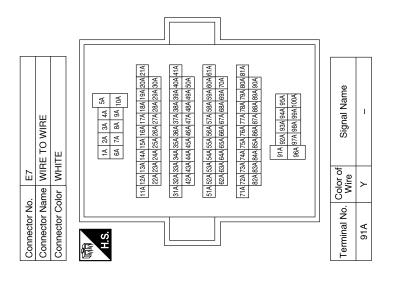


ABEWA0157GB

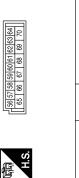


### TIRE PRESSURE MONITORING SYSTEM

### < WIRING DIAGRAM >

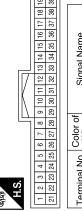


Connector No.	M99
Connector Name	Connector Name MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color WHITE	WHITE



Signal Name	BATTERY (FUSE)	GND	BATTERY (F/L)
Color of Wire	У	В	G
Terminal No.	25	29	70

Connector No.	M97
Connector Name	BCM (BODY CONTROL MODULE) (WITH INTELLIGENT KEY SYSTEM)
Connector Color BLACK	BLACK



	Signal Name	KEYLESS TUNER, AUTO LIGHT SENSOR GND	INTELLIGENT TUNER	CAN-H	CAN-L
1 21	Color of Wire	>	В	٦	Д
2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Terminal No. Wire	18	38	39	40

Α

В

С

D

WT

F

G

Н

-

J

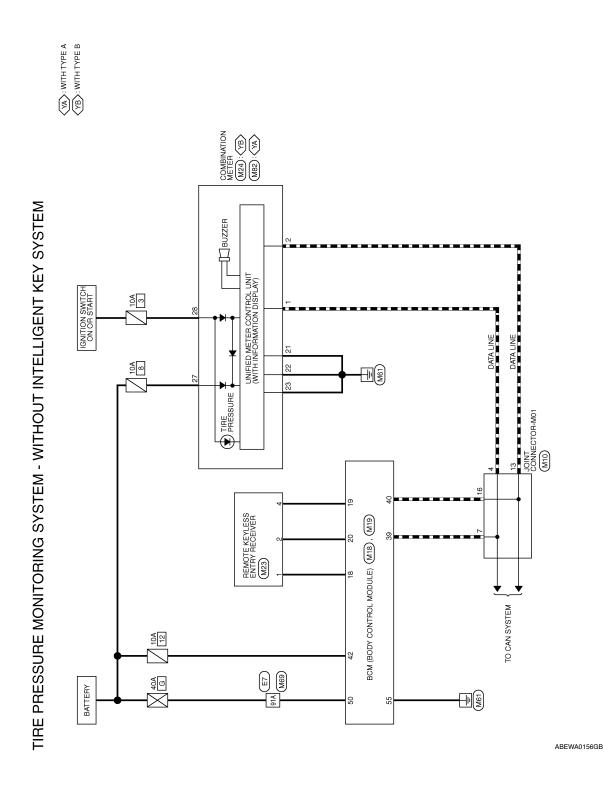
K

M

Ν

0

AAEIA0175GB



# TIRE PRESSURE MONITORING SYSTEM CONNECTORS - WITHOUT INTELLIGENT KEY SYSTEM

Connector No.	Jo. M10	0	Connec	Connector No.	M18		Connector No.	o. M19	
Connector Name Connector Color	Vame JOINT	Connector Name JOINT CONNECTOR-M01 Connector Color BLUE	Connec	Connector Name		BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)	Connector Name		BCM (BODY CONTROL MODULE) (WITHOUT INTELLIGENT KEY SYSTEM)
			Connec	Connector Color	r WHITE	Щ	Connector Color WHITE	olor WHITI	ш
H.S.	20 19 18 17	8 7 6 5 4 3 2 1 18 17 16 15 14 13 12 11 10	SH SH	2	3 4 5 6	7 8 9 10 11 12 13 14 15 16 17 18		41 42 43	41   42   43   44   45   46   47   48   49   50   51   52   53   54   55
				21 22 2	23 24 25 26	5   27   28   29   30   31   32   33   34   35   36   37   38   39   40			
Terminal No.	Color of Wire	Signal Name	Terminal No.		Color of Wire	Signal Name	Terminal No.	Color of Wire	Signal Name
4	۰	1	α.	~	>	KEYLESS & AUTO	42	>	BATTERY (FUSE)
7	_	1		,		LIGHT SENSOR GND	20	g	BATTERY (F/L)
13	۵	1	19		LG	KEYLESS TUNER POWER SUPPLY	55	В	GND
16	۵	1	20		5	KEYLESS TUNER			
			39			CAN-H			
			40		۵	CAN-L			
Connector No.	Jo. M23	6	Connec	Connector No.	M24				
Connector Name		REMOTE KEYLESS ENTRY RECEIVER (WITHOUT	Connec	tor Nam	WITH (WITH	Connector Name COMBINATION METER (WITH TYPE B)			
		TELLIGENT KEY SYSTEM)	Connec	Connector Color	r WHITE	Щ			
Connector Color		WHITE							
<b>[</b>									
FIS.		1 2 3 4	H.S.	20 19 40 39 3	19 18 17 16 15 14 13 39 38 37 36 35 34 33	12 11 10 9 8 7 6 5 4 3 32 31 30 29 28 27 26 25 24 23	22 21		
Terminal No.	Color of Wire	Signal Name	Terminal No.	_	Color of Wire	Signal Name			
-	>	-	-		_	CAN-H			
2	g	ı	2		۵	CAN-L			

ABEIA0342GB

Α

В

C

 $\mathsf{D}$ 

WT

G

Н

K

M

Ν

0

Ρ

GND (ILLUMINATION)

m m

LG

4

GND (POWER) GND (CIRCUIT)

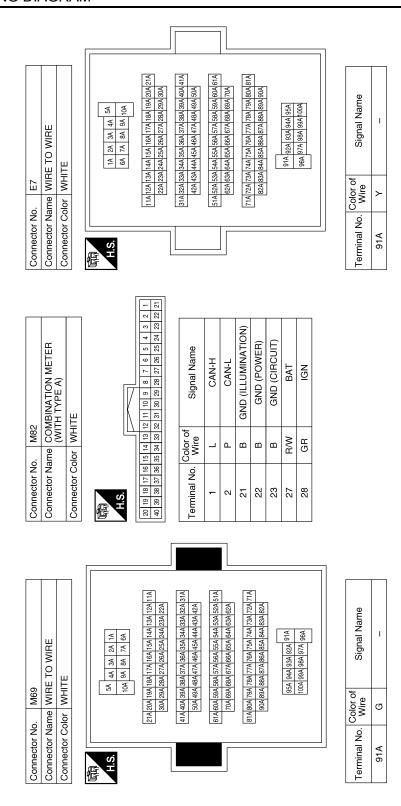
a

22 23

BAT

GR

27



ABEIA0347GB

### DIAGNOSIS AND REPAIR WORK FLOW

### < BASIC INSPECTION >

# BASIC INSPECTION

### DIAGNOSIS AND REPAIR WORK FLOW

Work Flow INFOID:0000000012432442

### 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-54, "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 BCS-28, "AIR PRESSURE MONITOR: CONSULT Function (BCM -AIR PRESSURE MONITOR)" (with Intelligent Key system) or BCS-99, "AIR PRESSURE MONITOR: CON-SULT 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 BCS-49, to "DTC Inspection Priority Chart" (with Intelligent system) BCS-115. "DTC Inspection Priority Chart" (without Intelligent Key system).

>> GO TO 5. NO

### ${f 5}$ .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 BCS-28, "AIR PRESSURE MONITOR: CONSULT Function (BCM - AIR PRESSURE MONITOR)" (with Intelligent Key system) or BCS-99, "AIR PRESSURE MONITOR: CONSULT Function (BCM - AIR PRESSURE MONITOR)" (without Intelligent Key system).

>> Inspection End.

WT

D

Α

Н

K

M

Ν

0

2016 Versa Note

### ID REGISTRATION PROCEDURE

Description INFOID:000000012432443

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

Work Procedure

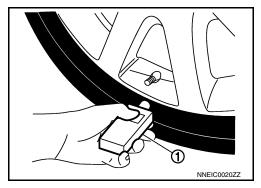
TPMS ID registration can be performed using one of the following procedures:

- 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)]

### (P) With CONSULT

- 1. Turn the ignition switch ON.
- Using CONSULT, select "WORK SUPPORT" in "AIR PRESSURE MONITOR" of "BCM". 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.



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

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

- 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 the newest software version 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.

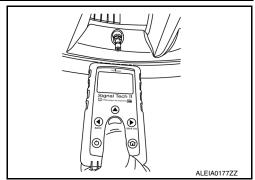
### (P) With CONSULT

- Adjust the tire pressure for all tires to the recommended value. Refer to WT-54, "Tire Air Pressure".
- Turn the ignition switch ON.
- Using CONSULT, select "WORK SUPPORT" in "AIR PRESSURE MONITOR" of "BCM". Then, select "ID REGIST."
- 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.
- When ID registration is complete, check the following pattern at each wheel.



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

### (R) Without CONSULT

- 1. Adjust the tire pressure for all tires to the recommended value. Refer to WT-54, "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.
- 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.
- 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

### (P) With CONSULT

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

Tire position	Tire pressure kPa (kg/cm <sup>2</sup> , 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)



WT

D

Α

В

Н

J

K

M

Ν

0

D

### **ID REGISTRATION PROCEDURE**

### < BASIC INSPECTION >

- Turn the ignition switch ON.
- Using CONSULT, select "WORK SUPPORT" in "AIR PRESSURE MONITOR" of "BCM". 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	
Front RH	"Yet (red)"
Rear RH	"Done (green)"
Rear LH	

- Adjust the tire pressures for all tires to the recommended value. Refer to <u>WT-54, "Tire Air Pressure"</u>.
- 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:0000000012432445

### 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 <sup>2</sup> , 26 psi) or less.	
C1705	LOW PRESSURE FR	Front RH tire pressure drops to 182.7 kPa (1.9 kg/cm², 26 psi) or less.	Low tire pressure
C1706	LOW PRESSURE RR	Rear RH tire pressure drops to 182.7 kPa (1.9 kg/cm², 26 psi) or less.	Low the pressure
C1707	LOW PRESSURE RL	Rear LH tire pressure drops to 182.7 kPa (1.9 kg/cm <sup>2</sup> , 26 psi) or less.	

### DTC CONFIRMATION PROCEDURE

# 1. PERFORM SELF DIAGNOSTIC RESULT

### (P)With CONSULT

- Turn the ignition switch ON.
- Check the tire pressure for all wheels and adjust to the specified value. Refer to WT-54, "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

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

### (P)With CONSULT

- 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".
- Within 5 minutes after vehicle stopped, check that the tire pressures are within specification. Refer to WT-54, "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

**WT-25** Revision: August 2015 2016 Versa Note WT

D

Α

Н

INFOID:0000000012432446

M

N

0

# C1704, C1705, C1706, C1707 LOW TIRE PRESSURE

# < DTC/CIRCUIT DIAGNOSIS >

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

### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair or replace error-detected parts.

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

### < DTC/CIRCUIT DIAGNOSIS >

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

DTC Logic INFOID:0000000012432447

### 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.		
C1709	[NO DATA] FR	Tire pressure data signal from the front RH wheel transmitter cannot be detected.	<ul> <li>Harness or connector connection malfunction</li> <li>Transmitter ID registration in-</li> </ul>	
C1710	[NO DATA] RR	Tire pressure data signal from the rear RH wheel transmitter cannot be detected.	complete Transmitter malfunction	
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

# (P)With CONSULT

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

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

YES >> Proceed to WT-27, "Diagnosis Procedure".

NO >> Inspection End.

# Diagnosis Procedure

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, "Wiring Diagram - With Intelligent Key" or WT-18, "Wiring Diagram - Without Intelligent Key".

# 1.CHECK DATA MONITOR

### (P)With CONSULT

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

WT-27 2016 Versa Note Revision: August 2015

WT

D

Α

Н

INFOID:0000000012432448

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

M

Ν

0

### 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 entr	y receiver	Ground	Voltage	
Connector Terminal		Giodila	(Approx.)	
M94 (with Intelligent Key system) 1			Battery voltage	
M23 (without Intelligent Key system) 4		_	5V	

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair or replace harness or connectors.

# ${f 3}$ .CHECK REMOTE KEYLESS ENTRY RECEIVER SIGNAL CIRCUIT

- 1. Turn the ignition switch OFF.
- 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	Continuity	
M97 (with Intelligent Key system) 38		M94 (with Intelligent Key system)	2	Yes	
M18 (without Intelligent Key system)	20	M23 (without Intelligent Key system)	2	163	

### 4. Check continuity between BCM connector and ground.

BCM			Continuity	
Connector Terminal		_	Continuity	
M97 (with Intelligent Key system) 38		- Ground	No	
M18 (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	
M97 (with Intelligent Key system)	18	M94 (with Intelligent Key system)	4	Yes
M18 (without Intelligent Key system)	10	M23 (without Intelligent Key system)	1	165

### Is the inspection result normal?

YES >> GO TO 5.

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

### TRANSMITTER ID REGISTRATION

Perform transmitter ID registration. Refer to WT-22, "Work Procedure".

### Is transmitter ID registration completed?

YES >> GO TO 6.

NO >> Replace applicable transmitter. Refer to WT-49, "Removal and Installation".

### O.CHECK TIRE PRESSURE SIGNAL

### (II) 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.
- 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 <u>WT-54</u>, "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 <u>BCS-74</u>, "Removal and Installation" (with Intelligent Key system) or <u>BCS-137</u>, "Removal and Installation" (without Intelligent Key system).

WT

V V I

Α

В

С

D

F

J

Н

J

Κ

L

M

Ν

0

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

< DTC/CIRCUIT DIAGNOSIS >

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

DTC Logic

### 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.	
C1717	[PRESSDATA ERR] FR	Malfunction in the tire pressure data from the front RH wheel transmitter.	Transmitter ID registration in- complete
C1718	[PRESSDATA ERR] RR	Malfunction in the tire pressure data from the rear RH wheel transmitter.	Transmitter malfunction
C1719	[PRESSDATA ERR] RL	Malfunction in the tire pressure data from the rear LH wheel transmitter.	

### DTC CONFIRMATION PROCEDURE

# 1. PERFORM SELF DIAGNOSTIC RESULT

### (II) With CONSULT

- 1. Turn the ignition switch ON.
- Check the tire pressure for all wheels and adjust to the specified value. Refer to <u>WT-54, "Tire Air Pressure"</u>.
- Perform "Self Diagnostic Result".

### <u>Is DTC "C1716", "C1717", "C1718", or "C1719" detected?</u>

YES >> Proceed to WT-30, "Diagnosis Procedure".

NO >> Inspection End.

# Diagnosis Procedure

INFOID:0000000012432450

### 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 PROCE-DURE".

### Is the inspection result normal?

YES >> Replace the DTC-detected malfunctioning transmitter. Refer to <u>WT-49, "Removal and Installation"</u>.

NO >> GO TO 2.

# 2.CHECK TIRE PRESSURE SIGNAL

### With CONSULT

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

Revision: August 2015 WT-30 2016 Versa Note

# **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/cm<sup>2</sup>, 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 <u>WT-49, "Removal and Installation"</u>.
- NO >> Perform "DTC CONFIRMATION PROCEDURE" again. Refer to WT-30, "DTC Logic".

WT

В

C

D

Г

Н

K

L

IVI

Ν

0

### C1729 VEHICLE SPEED SIGNAL

### < DTC/CIRCUIT DIAGNOSIS >

### C1729 VEHICLE SPEED SIGNAL

DTC Logic

### 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.	CAN communication malfunction     Combination meter malfunction

### DTC CONFIRMATION PROCEDURE

# 1. PERFORM SELF DIAGNOSTIC RESULT

### (P)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:0000000012432452

### 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

### (P)With CONSULT

Perform "Self Diagnostic Result" for "METER/M&A". Refer to MWI-18, "CONSULT Function (METER/M&A)" (type A) or MWI-71, "CONSULT Function (METER/M&A)" (type B).

### Are any DTCs detected?

YES >> Refer to MWI-24, "DTC Index" (type A) or MWI-77, "DTC Index" (type B).

NO >> GO TO 2.

# 2.CHECK BCM INPUT/OUTPUT SIGNAL

Check the BCM input/output signal values. Refer to <u>BCS-30, "Reference Value"</u> (with Intelligent Key system) or <u>BCS-101, "Reference Value"</u> (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 <u>BCS-74</u>, "Removal and Installation" (with Intelligent Key system) or <u>BCS-137</u>, "Removal and Installation" (without Intelligent Key system).

### LOW TIRE PRESSURE WARNING LAMP

### < DTC/CIRCUIT DIAGNOSIS >

# LOW TIRE PRESSURE WARNING LAMP

# Component Function Check

INFOID:0000000012432453

# 1.CHECK THE ILLUMINATION OF THE LOW TIRE PRESSURE WARNING LAMP

Α

В

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.

>> Perform trouble diagnosis. Refer to WT-33, "Diagnosis Procedure".

# Diagnosis Procedure

INFOID:0000000012432454

# 1.PERFORM SELF DIAGNOSTIC RESULT

# WT

D

### (P)With CONSULT

NO

- Turn the ignition switch ON.
- 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

### (P)With CONSULT

Н

- Turn the ignition switch ON.
- On "DATA MONITOR" select "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 >> Check the combination meter. Refer to MWI-18, "CONSULT Function (METER/M&A)" (type A) or MWI-71, "CONSULT Function (METER/M&A)" (type B).

>> Replace the BCM. Refer to BCS-74, "Removal and Installation" (with Intelligent Key system) or NO BCS-137, "Removal and Installation" (without Intelligent Key system).

L

K

Ν

### POWER SUPPLY AND GROUND CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

# POWER SUPPLY AND GROUND CIRCUIT WITH INTELLIGENT KEY

WITH INTELLIGENT KEY: Diagnosis Procedure

INFOID:0000000012542961

Regarding Wiring Diagram information, refer to BCS-52, "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.
57	Battery power supply	12 (10A)
70	Battery power supply	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

- Disconnect BCM connector M99.
- 2. Check voltage between BCM connector M99 and ground.

В	CM	Ground	Voltago	
Connector Terminal		Giodila	Voltage	
M99	57		Battery voltage	
IVI99	70	_		

### Is the inspection result normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

# 3.CHECK GROUND CIRCUIT

Check continuity between BCM connector M99 and ground.

В	CM	Ground	Continuity	
Connector	Terminal	Ground	Continuity	
M99	67		Yes	

### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair harness or connector.

### WITHOUT INTELLIGENT KEY

### WITHOUT INTELLIGENT KEY: Diagnosis Procedure

INFOID:0000000012542962

Regarding Wiring Diagram information, refer to BCS-117, "Wiring Diagram".

# 1. CHECK FUSES AND FUSIBLE LINK

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

### POWER SUPPLY AND GROUND CIRCUIT

### < DTC/CIRCUIT DIAGNOSIS >

Terminal No.	Signal name	Fuses and fusible link No.
37		8 (10A)
42	Battery power supply	12 (10A)
50		G (40A)
11	Ignition switch ACC or ON	18 (10A)
38	Ignition switch ON or START	2 (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.

ВСМ		Ground	Ground Ignition switch p		
Connector	Terminal		OFF	ACC	ON
	11	<del>-</del>	0 V	Potton, voltogo	
M18	37		Battery voltage	Battery voltage	
	38	_	0 V	0 V	Battery voltage
M19	42	-	Pottor / voltage	Pottory voltage	
	50	1	Battery voltage	Battery voltage	

### 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.

В	CM	Ground	Continuity
Connector Terminal		Giodila	Continuity
M19	55	_	Yes

### Is the inspection result normal?

YES >> Inspection End.

NO >> Repair harness or connector.

WT

Α

В

C

D

F

G

Н

.

L

IV

Ν

0

### **TPMS SYMPTOMS**

# < SYMPTOM DIAGNOSIS >

# SYMPTOM DIAGNOSIS

# **TPMS SYMPTOMS**

Symptom Table

INFOID:0000000012432457

Symptom	Reference
Low tire pressure warning lamp does not turn ON.	<u>WT-37</u>
Low tire pressure warning lamp does not turn OFF.	
Low tire pressure warning lamp blinks.	
ID registration cannot be completed.	
Easy fill alert does not activate.	

## LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

# LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN ON

# Diagnosis Procedure

INFOID:0000000012432458

#### NOTE:

NO

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 SELF DIAGNOSTIC RESULT

D

Α

Perform "SELF DIAGNOSTIC RESULT".

#### Is DTC "U1000" detected?

YES >> Malfunction in CAN communication system. Refer to <u>LAN-56</u>, "<u>Diagnosis Procedure</u>".

NO >> GO TO 2

2. CHECK COMBINATION METER

WT

Check combination meter operation. Refer to <a href="MWI-18">MWI-18</a>, "CONSULT Function (METER/M&A)" (type A) or <a href="MWI-71">MWI-71</a>, "CONSULT Function (METER/M&A)" (type B).

Is the inspection result normal?

G

YES >> Replace BCM. Refer to <u>BCS-74</u>, "Removal and Installation" (with Intelligent Key system) or <u>BCS-137</u>, "Removal and Installation" (without Intelligent Key system).

Н

>> Replace combination meter. Refer to <u>MWI-54</u>, "<u>Removal and Installation</u>" (type A) or <u>MWI-115</u>, "<u>Removal and Installation</u>" (type B).

J

K

L

M

Ν

0

## LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF

## < SYMPTOM DIAGNOSIS >

# LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN OFF

# Diagnosis Procedure

INFOID:0000000012432459

# 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 <u>BCS-67</u>, "<u>Diagnosis Procedure</u>" (with Intelligent Key system) or <u>BCS-129</u>, "<u>Diagnosis Procedure</u>" (without Intelligent Key system).

#### Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-74</u>, "Removal and Installation" (with Intelligent Key system) or <u>BCS-137</u>, "Removal and Installation" (without Intelligent Key system).

NO >> Repair BCM circuits.

## LOW TIRE PRESSURE WARNING LAMP BLINKS

### < SYMPTOM DIAGNOSIS >

# LOW TIRE PRESSURE WARNING LAMP BLINKS

# Diagnosis Procedure

#### INFOID:0000000012432460

#### 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 ID registration. Refer to WT-22, "Work Procedure".

# 1. CHECK BCM CONNECTOR

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

## Is the inspection result normal?

YES >> Replace BCM. Refer to <u>BCS-74</u>, "<u>Removal and Installation</u>" (with Intelligent Key system) or <u>BCS-137</u>, "<u>Removal and Installation</u>" (Intelligent Key system).

NO >> Repair or replace damaged parts.

WT

Α

В

C

D

F

G

Н

Κ

L

M

Ν

0

### EASY FILL TIRE ALERT DOES NOT ACTIVATE

#### < SYMPTOM DIAGNOSIS >

# EASY FILL TIRE ALERT DOES NOT ACTIVATE

Description INFOID:0000000012432461

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.

#### NOTE:

- After starting to inflate the tire, it takes a few seconds for the easy fill tire alert to function.
- If there is no response for approximately 15 seconds or more after inflating the tires, cancel the use of the easy fill tire alert function or move the vehicle approximately 1 m (3.2 ft) backward or forward to try again. The air filler pressure may be weak or out of service area.
- For easy fill tire alert, Refer to <u>WT-8</u>, "<u>TIRE PRESSURE MONITORING SYSTEM</u>: <u>Easy Fill Tire Alert Function</u>".

# Diagnosis Procedure

INFOID:0000000012432462

# 1. LOCATION CHANGE

Move the vehicle to other area and repeat the procedure of the easy fill tire alert function. Refer to <u>WT-8</u>, "TIRE PRESSURE MONITORING SYSTEM: Easy Fill Tire Alert Function".

#### Is the function normal?

YES >> Normal (the easy fill tire alert may not operate, depending on reception condition.)

NO >> GO TO 2.

# 2.PERFORM BCM SELF-DIAGNOSIS

### (P)With CONSULT

Perform self-diagnosis for "AIR PRESSURE MONITOR".

#### Is any DTC detected?

YES >> Perform trouble diagnosis for detected DTC. Refer to <u>BCS-50, "DTC\_Index"</u> (with Intelligent Key system) or <u>BCS-115, "DTC\_Index"</u> (without Intelligent Key system).

NO >> GO TO 3.

# 3.CHECK HAZARD WARNING LAMP OPERATION

Check hazard warning lamp operation with hazard switch.

#### Does the hazard warning lamp blink?

YES >> GO TO 4.

NO >> Perform trouble diagnosis for the hazard warning lamp. Refer to EXL-85. "Diagnosis Procedure".

# 4.PERFORM TCM SELF-DIAGNOSIS

#### (P)With CONSULT

Perform self-diagnosis for "TRANSMISSION".

#### Is any DTC detected?

YES >> Check malfunctioning circuit. Refer to TM-110, "DTC Index".

NO >> GO TO 5.

# 5. CHECK HORN OPERATION

Check horn operation. Refer to HRN-3, "Wiring Diagram".

#### Is the operation normal?

YES >> GO TO 6.

NO >> Repair or replace error-detected parts.

### **6.**PERFORM BCM SELF-DIAGNOSIS

#### (P)With CONSULT

1. Drive for 10 minutes at a speed of 40 km/h (25 MPH) or more.

#### **CAUTION:**

Total time driving at a speed of 40 km/h (25 MPH) or more must be 10 minutes.

- Stop the vehicle.
- 3. Perform self-diagnosis for "AIR PRESSURE MONITOR".

# **EASY FILL TIRE ALERT DOES NOT ACTIVATE**

### < SYMPTOM DIAGNOSIS >

### Is any DTC detected?

- YES >> Check malfunctioning circuit. Refer to <u>BCS-50</u>, "<u>DTC Index"</u> (with Intelligent Key system) or <u>BCS-115</u>, "<u>DTC Index"</u> (without Intelligent Key system).
- NO >> Replace BCM. Refer to <u>BCS-74</u>, "Removal and Installation" (with Intelligent Key system) or <u>BCS-137</u>, "Removal and Installation" (without Intelligent Key system).

В

С

D

WT

F

G

Н

1

J

Κ

L

M

Ν

0

## ID REGISTRATION CANNOT BE COMPLETED

### < SYMPTOM DIAGNOSIS >

# ID REGISTRATION CANNOT BE COMPLETED

# Diagnosis Procedure

INFOID:0000000012432463

#### NOTE:

NO

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.

>> Refer to <u>WT-11</u>, "<u>WITH INTELLIGENT KEY</u>: <u>CONSULT Function (BCM - AIR PRESSURE MON-ITOR)</u>" (with Intelligent Key system) or <u>WT-12</u>, "<u>WITHOUT INTELLIGENT KEY</u>: <u>CONSULT Function (BCM - AIR PRESSURE MONITOR)</u>" (without Intelligent Key system).

# NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

< SYMPTOM DIAGNOSIS >

# NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

# **NVH Troubleshooting Chart**

INFOID:0000000012432464

Α

В

С

 $\mathsf{D}$ 

F

G

Н

J

K

L

Reference page		WT-44	WT-44	WT-45	WT-54	FSU-8	I	1	WT-54	FSU-5 FAX-6	RAX-4 RSU-4	I	I	FAX-6	BR-7	<u>ST-7</u>	
Possible cause and SUSPECTED PARTS		Improper installation, looseness	Out-of-round	Imbalance	Incorrect tire pressure	Uneven tire wear	Deformation or damage	Non-uniformity	Incorrect tire size	FRONT AXLE AND FRONT SUSPENSION	REAR AXLE AND REAR SUSPENSION	TIRES	ROAD WHEELS	DRIVE SHAFT	BRAKE	STEERING	
	TIRE	Noise	×	×	×	×	×	×	×		×	×		×	×	×	×
		Shake	×	×	×	×	×	×		×	×	×		×	×	×	×
		Vibration				×				×	×	×			×		×
Symptom		Shimmy	×	×	×	×	×	×	×	×	×	×		×		×	×
		Shudder	×	×	×	×	×	×		×	×	×		×		×	×
		Poor quality ride or handling	×	×	×	×	×	×		×	×		×	×			
	WHEEL	Noise	×	×	×			×			×	×	×		×	×	×
		Shake	×	×	×			×			×	×	×		×	×	×
		Shimmy, Shudder	×	×	×			×			×	×	×			×	×
		Poor quality ride or handling	×	×	×			×			×	×	×				

<sup>×:</sup> Applicable

M

Ν

0

# PERIODIC MAINTENANCE

# **WHEEL**

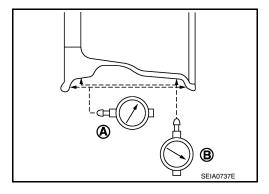
Inspection INFOID:000000012432465

- 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 wheel and mount wheel on a balancer machine.
- b. Set dial indicator as shown.
- c. Check runout, if runout value exceeds the limit, replace wheel.

Limit

Axial Runout (A) Refer to WT-54, "Wheel".

Radial Runout (B) Refer to WT-54, "Wheel".



### WHEEL AND TIRE

#### < PERIODIC MAINTENANCE >

## WHEEL AND TIRE

Adjustment INFOID:000000012432466

### BALANCING WHEELS (ADHESIVE WEIGHT TYPE)

Preparation Before Adjustment

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

#### **CAUTION:**

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

Wheel Balance Adjustment

#### **CAUTION:**

- DO NOT use center hole cone-type clamping machines to hold the wheel during tire removal/installation or balancing or damage to the wheel paint, cladding or chrome may result. Use only rim-type or universal lug-type clamping machines to hold the wheel during servicing.
- If a balancer machine has an adhesive weight mode setting, select the adhesive weight mode setting and skip Step 2 below. If a balancer machine only has the clip-on (rim flange) weight mode setting, follow Step 2 to calculate the correct size adhesive weight.
- 1. Set wheel and tire 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 wheel and tire.
- a. Indicated imbalance value  $\times$  5/3 (1.67) = balance weight to be installed

#### Calculation example:

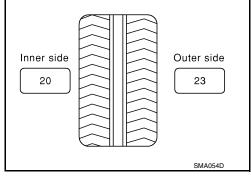
23 g (0.81 oz)  $\times$  5/3 (1.67) = 38.33 g (1.35 oz)  $\Rightarrow$  40 g (1.41 oz) balance weight (closer to calculated balance weight value)

#### NOTE:

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

### Example:

 $37.4 \Rightarrow 35 \text{ g } (1.23 \text{ oz})$  $37.5 \Rightarrow 40 \text{ g } (1.41 \text{ oz})$ 



WT

Α

В

G

Н

J

<

/

N

0

### < PERIODIC MAINTENANCE >

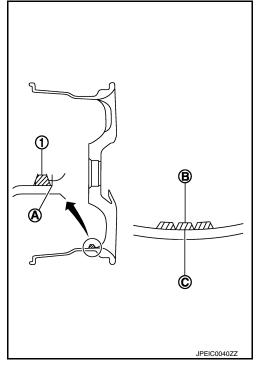
3. Install balance weight in the position shown.

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

#### **CAUTION:**

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



 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.
- Install balance weight on inner side of wheel and tire in the balancer machine indication position (angle).
   CAUTION:

Do not install more than two balance weights.

- 7. Start balancer machine. Make sure that inner and outer residual imbalance values are 5 g (0.17 oz) each or below.
- 8. If either residual imbalance value exceeds 5 g (0.17 oz), repeat installation procedures.

Wheel balance	Dynamic (At flange)	Static (At flange)			
Maximum allowable imbalance	Refer to <u>WT</u>	-54, "Wheel".			

### TIRE ROTATION

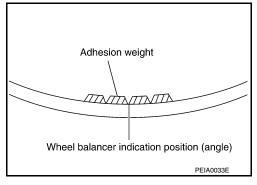
- Follow the maintenance schedule for tire rotation service intervals. Refer to MA-7, "Introduction of Periodic Maintenance".
- Rotate the wheel and tires front to back in the pattern as shown.
- When installing the wheel, tighten wheel nuts to the specified torque.

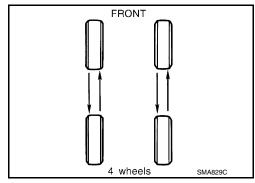
#### **WARNING:**

- · After rotating the tires, check and adjust the tire pressure.
- Do not include the spare tire when rotating the tires.

#### **CAUTION:**

- When installing wheels, tighten them diagonally by dividing the work two to three times in order to prevent the wheels from developing any distortion.
- Be careful not to tighten the wheel nuts to a torque exceeding specification to prevent strain on the disc rotor.
- Use Genuine NISSAN wheel nuts.





# **WHEEL AND TIRE**

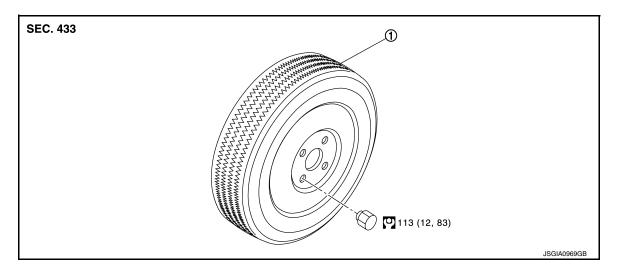
# < PERIODIC MAINTENANCE >

: WT-48, "Exploded View" Wheel nut tightening Α torque • Perform the ID registration after tire rotation. Refer to WT-22, "Work Procedure". В С D WT F G Н J K L M Ν 0

# REMOVAL AND INSTALLATION

# WHEEL AND TIRE

Exploded View



1. Wheel and tire

## Removal and Installation

INFOID:0000000012432468

### **REMOVAL**

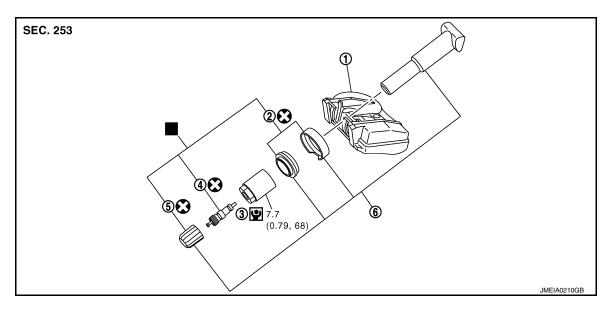
- 1. Remove wheel nuts using power tool.
- 2. Remove wheel and tire.

### **INSTALLATION**

Installation is in the reverse order of removal.

# **TRANSMITTER**

Exploded View



- 1. Transmitter (tire pressure sensor)
- 2. Washer/ Grommet seal
- Valve core 5. Valve cap
- Parts that are replaced as a set when the tire is replaced.

- 3. Valve stem nut
- 6. Valve stem assembly

### Removal and Installation

1. Remove wheel and tire using power tool. Refer to WT-48, "Removal and Installation".

2. Remove valve cap and valve core to deflate the tire.

### NOTE:

**REMOVAL** 

4.

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.

- Remove the valve stem nut and allow transmitter (1) to fall into tire.
- 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:**

Revision: August 2015

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

IPEICULAZZ

F

WT

Α

В

D

Н

K

M

N

Р

INFOID:0000000012432470

WT-49 2016 Versa Note

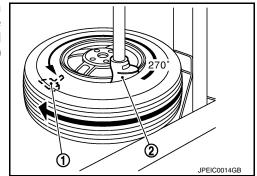
## **TRANSMITTER**

#### < REMOVAL AND INSTALLATION >

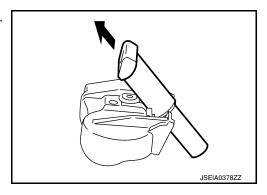
7. Turn tire so that the valve stem hole in the wheel is at the bottom and bounce so that the transmitter (1) inside the tire is near the valve stem hole in the wheel. Carefully lift tire onto turn table and position the valve stem hole in the wheel (and transmitter) 270 degrees from mounting/dismounting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

#### **CAUTION:**

Do not damage the wheel or transmitter.



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

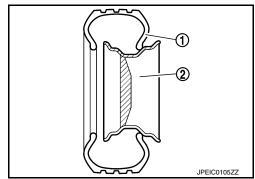


#### INSTALLATION

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

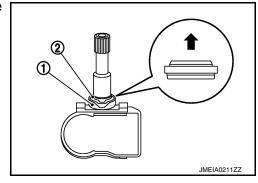


- 3. Install the valve stem to the transmitter.
- 4. Install the washer (1) onto the valve stem, and then install the grommet seal (2) onto the valve stem.

#### **CAUTION:**

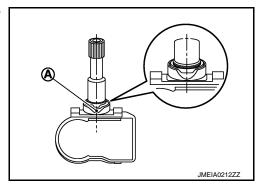
- Do not reuse grommet seal or washer.
- · Check the direction of the grommet seal.
- Insert the grommet seal all the way to the base.





#### **CAUTION:**

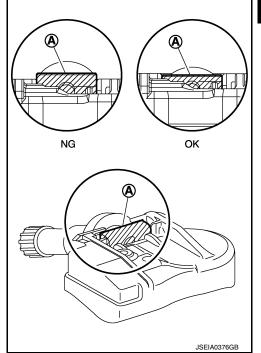
Direct the cut part (A) of the washer to the center of the valve stem as shown.



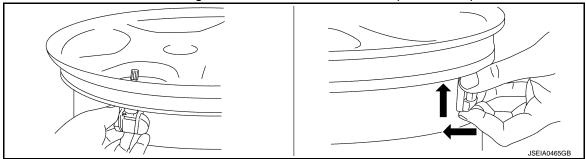
- 5. Follow the procedure below and install the transmitter to the wheel.
- Check the position of the valve stem (A) before installing transmitter to the wheel.

#### **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-49, "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.)

WT

D

Α

В

G

Н

|

Κ

M

Ν

0

#### **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.
- 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.

- 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.

Install the valve core and inflate tire. Refer to <u>WT-54, "Tire Air Pressure"</u>.

#### **CAUTION:**

Do not reuse valve core.

10. Install the valve cap.

#### **CAUTION:**

Do not reuse valve cap.

- 11. Balance the wheel and tire. Install wheel and tire in the appropriate position on vehicle. Refer to <u>WT-45</u>, "Adjustment".
- 12. 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:000000012432471

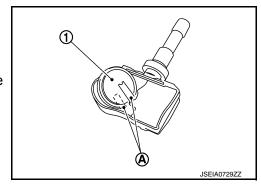
#### **CAUTION:**

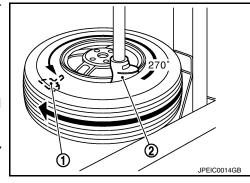
- When discarding transmitter, remove battery (1) from transmitter.
- Dispose of battery according to the law and local regulations.
- 1. Remove battery from transmitter.

#### NOTE:

The battery is sealed to the transmitter with urethane.

- a. Remove urethane from transmitter.
- Cut battery terminal (A), then remove battery from tire pressure senor.





# TIRE PRESSURE RECEIVER

# < REMOVAL AND INSTALLATION >

# TIRE PRESSURE RECEIVER

# Removal and Installation

INFOID:0000000012432472

The tire pressure receiver is integral to the remote keyless entry receiver. Refer to <u>SEC-116</u>, "Removal and <u>Installation"</u>.

С

Α

D

WT

G

Н

ı

J

K

L

M

Ν

0

# **SERVICE DATA AND SPECIFICATIONS (SDS)**

< SERVICE DATA AND SPECIFICATIONS (SDS)

# SERVICE DATA AND SPECIFICATIONS (SDS)

# SERVICE DATA AND SPECIFICATIONS (SDS)

Wheel

### **ALUMINUM WHEEL**

Item		Limit				
Runout	Axial runout	Less than 0.3 mm (0.012 in)				
Kullout	Radial runout	Less than 0.5 mm (0.012 m)				
Allowable imbalance	Dynamic (At flange)	Less than 5 g (0.17 oz) (one side)				
Allowable imbalance	Static (At flange)	Less than 10 g (0.35 oz)				

### STEEL WHEEL

Item		Limit				
Runout	Axial runout	Less than 0.8 mm (0.031 in)				
Runout	Radial runout	Less than 0.5 mm (0.020 in)				
Allowable imbalance	Dynamic (At flange)	Less than 5 g (0.17 oz) (one side)				
Allowable impalatice	Static (At flange)	Less than 10 g (0.35 oz)				

# Tire Air Pressure

INFOID:0000000012432474

Unit: kPa (kg/cm<sup>2</sup>, psi)

Tire size	Cold tire pressure					
1116 5126	Front	Rear	Spare			
P185/65R15 86H	230 (2.35, 33)	230 (2.35, 33)	_			
P195/55R16 86V	230 (2.35, 33)	230 (2.35, 33)	_			
T125/70D15	_	_	420 (4.28, 60)			