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C  
D

# WT

## SECTION

### ROAD WHEELS & TIRES

WT

## CONTENTS

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# INDEX FOR DTC

< SERVICE INFORMATION >

## SERVICE INFORMATION

### INDEX FOR DTC

DTC No. Index

INFOID:000000001327566

DTC	Items (CONSULT-III screen terms)	Reference
C1704	LOW PRESSURE FL	<a href="#">WT-25</a>
C1705	LOW PRESSURE FR	
C1706	LOW PRESSURE RR	
C1707	LOW PRESSURE RL	
C1708	[NO DATA] FL	<a href="#">WT-28</a>
C1709	[NO DATA] FR	
C1710	[NO DATA] RR	
C1711	[NO DATA] RL	
C1712	[CHECKSUM ERR] FL	<a href="#">WT-28</a>
C1713	[CHECKSUM ERR] FR	
C1714	[CHECKSUM ERR] RR	
C1715	[CHECKSUM ERR] RL	
C1716	[PRESSDATA ERR] FL	<a href="#">WT-29</a>
C1717	[PRESSDATA ERR] FR	
C1718	[PRESSDATA ERR] RR	
C1719	[PRESSDATA ERR] RL	
C1720	[CODE ERR] FL	<a href="#">WT-28</a>
C1721	[CODE ERR] FR	
C1722	[CODE ERR] RR	
C1723	[CODE ERR] RL	
C1724	[BATT VOLT LOW] FL	<a href="#">WT-28</a>
C1725	[BATT VOLT LOW] FR	
C1726	[BATT VOLT LOW] RR	
C1727	[BATT VOLT LOW] RL	
C1729	VHCL SPEED SIG ERR	<a href="#">WT-29</a>
C1730	FLAT TIRE FL	<a href="#">WT-32</a>
C1731	FLAT TIRE FR	
C1732	FLAT TIRE RR	
C1733	FLAT TIRE RL	

# PRECAUTIONS

< SERVICE INFORMATION >

## PRECAUTIONS

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

INFOID:000000001612926

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

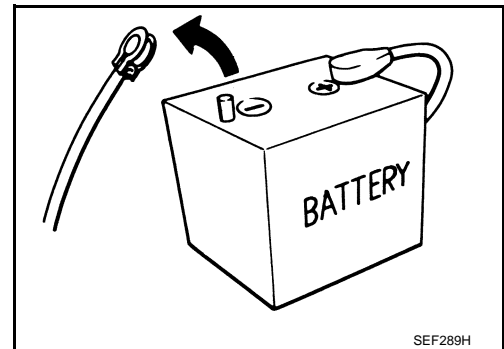
#### **WARNING:**

- 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 "SUPPLEMENTAL RESTRAINT SYSTEM".
- 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.

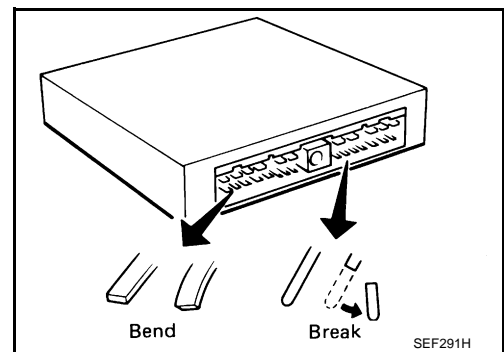
#### Precaution

INFOID:000000001327568

- Before connecting or disconnecting the BCM harness connector, turn ignition switch "OFF" and disconnect the battery cable from the negative terminal. Battery voltage is applied to BCM even if ignition switch is turned "OFF".



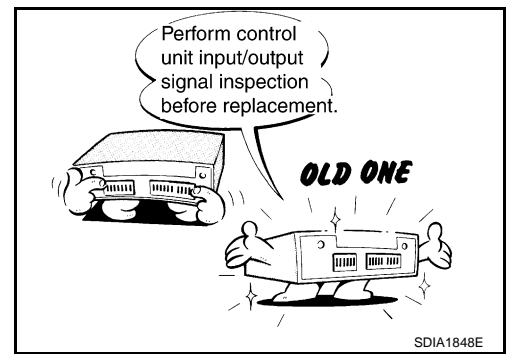
- When connecting or disconnecting pin connectors into or from BCM, take care not to damage pin terminals (bend or break). When connecting pin connectors make sure that there are not any bends or breaks on BCM pin terminals.



# PRECAUTIONS

## < SERVICE INFORMATION >

- Before replacing BCM, perform control unit input/output signal inspection and make sure whether BCM functions properly or not. Refer to [WT-17. "Control Unit Input/Output Signal Standard"](#).



## Service Notice or Precaution

INFOID:000000001327569

- Low tire pressure warning lamp flashes 1 min, then turns ON when occurring any malfunction except low tire pressure. Delete the memory with CONSULT-III, or register the ID to turn low tire pressure warning lamp OFF. Refer to [WT-22. "CONSULT-III Function \(BCM\)"](#), [WT-19. "ID Registration Procedure"](#).
- ID registration is required when replacing or rotating wheels, replacing transmitter or BCM. Refer to [WT-19. "ID Registration Procedure"](#).
- Replace grommet seal, valve core and cap of the transmitter in TPMS every tire replacement by reaching wear limit of tire.

# PREPARATION

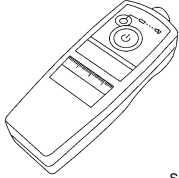
< SERVICE INFORMATION >

## PREPARATION

### Special Service Tool

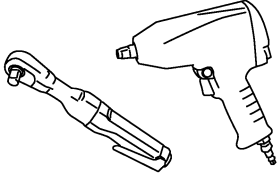
INFOID:000000001327570

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

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

### Commercial Service Tool

INFOID:000000001327571

Tool name	Description
Power tool  PBIC0190E	Loosen bolts and nuts

A  
B  
C  
D  
WT  
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G  
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I  
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L  
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# NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

< SERVICE INFORMATION >

## NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

### NVH Troubleshooting Chart

INFOID:000000001327572

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

Symptom		Possible cause and SUSPECTED PARTS		Reference																	
				FAX-4, FAX-11, FSU-5	WT-7	WT-8	WT-35	WT-9	—	—	WT-35	NVH in PR section	NVH in RFD section	NVH in FAX and FSU section	NVH in RAX and RSU section	Refer to TIRE in this chart.	Refer to ROAD WHEEL in this chart.	NVH in FAX, RAX section	NVH in BR section	NVH in PS section	
Symptom	TIRE	Noise	Improper installation, looseness	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	
		Shake	Out-of-round	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×
		Vibration	Unbalance				×				×	×		×	×			×			×
		Shimmy	Incorrect tire pressure	×	×	×	×	×	×	×	×		×	×		×		×		×	×
		Judder	Uneven tire wear	×	×	×	×	×	×	×	×		×	×		×		×		×	×
		Poor quality ride or handling	Deformation or damage	×	×	×	×	×	×	×	×		×	×		×		×			
	ROAD WHEEL	Noise	Non-uniformity																		
		Shake	Incorrect tire size																		
		Shimmy, Judder	PROPELLER SHAFT																		
		Poor quality ride or handling	DIFFERENTIAL																		

×: Applicable

# ROAD WHEEL

< SERVICE INFORMATION >

## ROAD WHEEL

### Inspection

INFOID:000000001327573

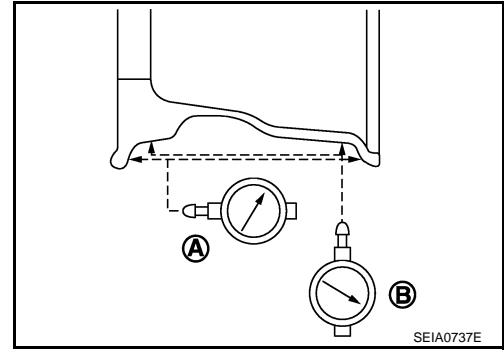
#### ALUMINUM WHEEL

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 on a tire balance machine.
  - b. Set dial indicator as shown in the illustration.

**Lateral runout limit (A) : 0.3 mm (0.012 in)**

**Radial runout limit (B) : 0.3 mm (0.012 in)**

- c. If the total runout value exceeds the limit, replace aluminum wheel.



#### STEEL WHEEL (FOR EMERGENCY USE)

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 tire balance machine.
  - b. Set two dial indicators as shown in the illustration.
  - 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.

**Lateral runout limit (A) :  $(1+2)/2$**

**Vertical runout limit (B) :  $(3+4)/2$**

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

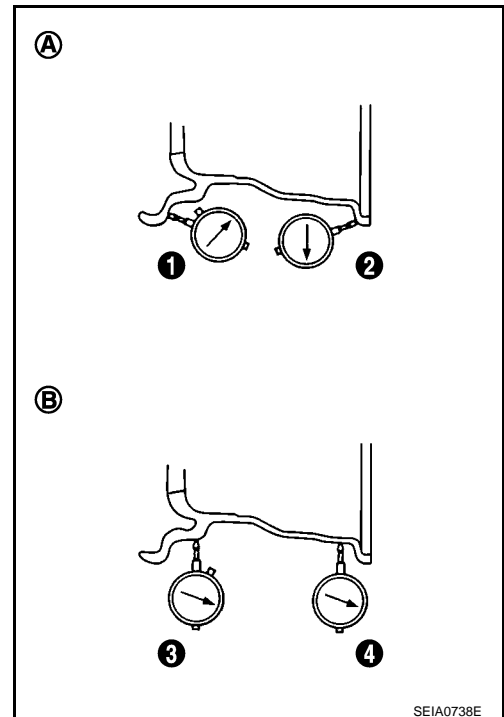
**CAUTION:**

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

**Lateral runout limit (A) : 1.5 mm (0.059 in)**

**Vertical runout limit (B) : 1.5 mm (0.059 in)**

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



# ROAD WHEEL TIRE ASSEMBLY

< SERVICE INFORMATION >

## ROAD WHEEL TIRE ASSEMBLY

### Balancing Wheels (Bonding Weight Type)

INFOID:000000001327574

#### REMOVAL

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

#### CAUTION:

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

#### WHEEL BALANCE ADJUSTMENT

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

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

#### CAUTION:

- Do not install the inner balance weight before installing the outer balance weight.
- Before installing the balance weight, be sure to clean the mating surface of the road wheel.

- a. Indicated unbalance value  $\times 5/3 =$  balance weight to be installed

#### Calculation example:

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

#### NOTE:

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

#### Example:

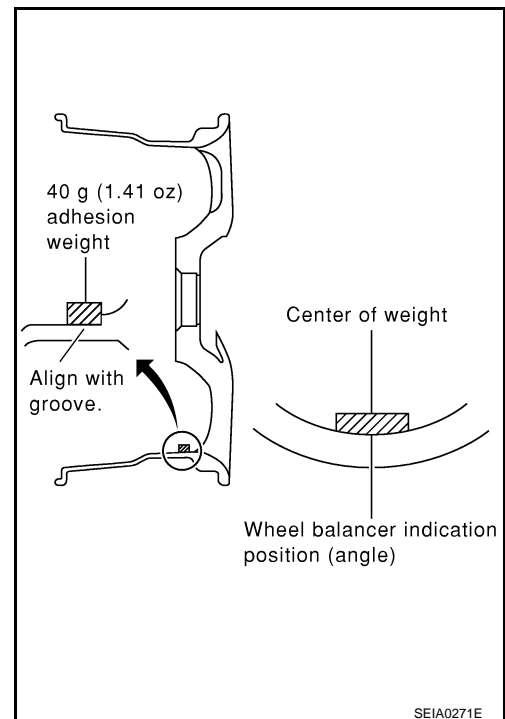
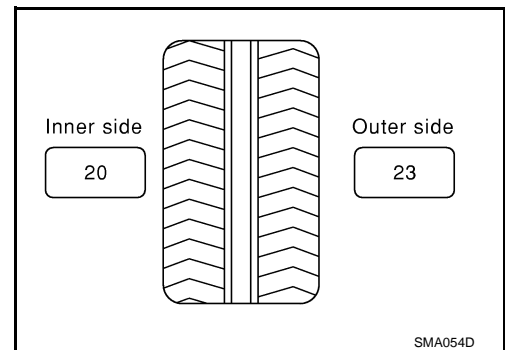
$36.2 \Rightarrow 35 \text{ g (1.23 oz)}$

$36.3 \Rightarrow 37.5 \text{ g (1.32 oz)}$

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

#### CAUTION:

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





# ROAD WHEEL TIRE ASSEMBLY

## < SERVICE INFORMATION >

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

**CAUTION:**

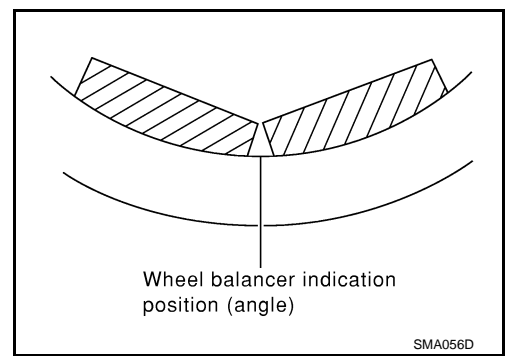
**Do not install one balance weight sheet on top of another.**

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

**CAUTION:**

**Do not install more than two balance weights.**

5. Start tire balance machine. Make sure that inner and outer residual unbalance values are 5 g (0.2 oz) each or below.  
 6. If either residual unbalance value exceeds 5 g (0.2 oz), repeat installation procedures.



Wheel balance	Dynamic (At rim flange)	Static (At rim flange)
Maximum allowable unbalance	5 g (0.2 oz) (one side)	20 g (0.7 oz)

## Tire Rotation

INFOID:000000001327575

1. Follow the maintenance schedule for tire rotation service intervals. Refer to [MA-5, "Introduction of Periodic Maintenance"](#).  
 2. Do not include the spare tire when rotating the tires.  
 3. When installing the wheel, tighten wheel nuts to the specified torque.

**Wheel nuts : 108 N·m (11 kg·m, 80 ft·lb)**

**CAUTION:**

- When installing wheels, tighten them diagonally by dividing the work two to three times in order to prevent the wheels from developing any distortion.
  - Be careful not to tighten wheel nut at torque exceeding the criteria for preventing strain of disc rotor.
4. Perform the ID registration, after tire rotation. Refer to [WT-19, "ID Registration Procedure"](#).

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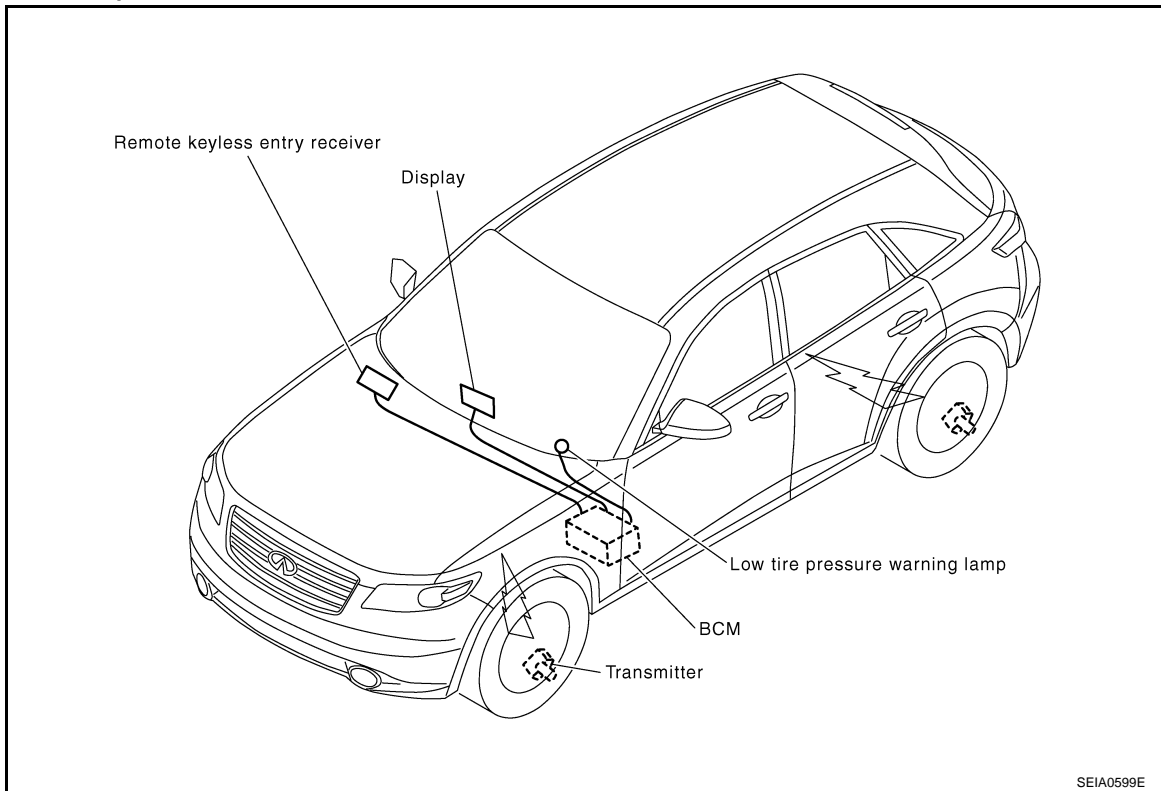
# TIRE PRESSURE MONITORING SYSTEM

< SERVICE INFORMATION >

## TIRE PRESSURE MONITORING SYSTEM

### System Component

INFOID:000000001327576



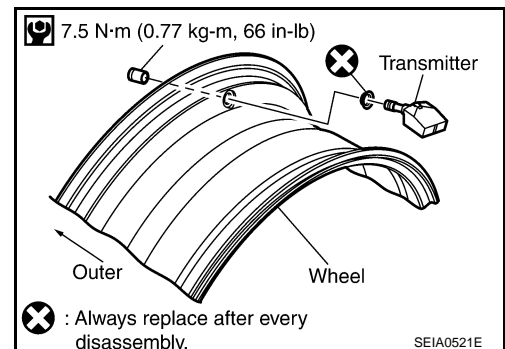
SEIA0599E

### System Description

INFOID:000000001327577

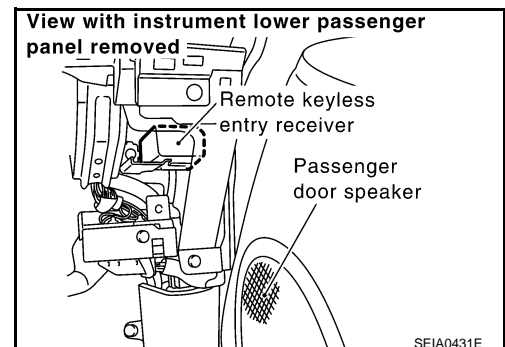
#### TRANSMITTER

A sensor-transmitter integrated with a valve is installed on a wheel, and transmits a detected air pressure signal in the form of a radio wave.



#### REMOTE KEYLESS ENTRY RECEIVER

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

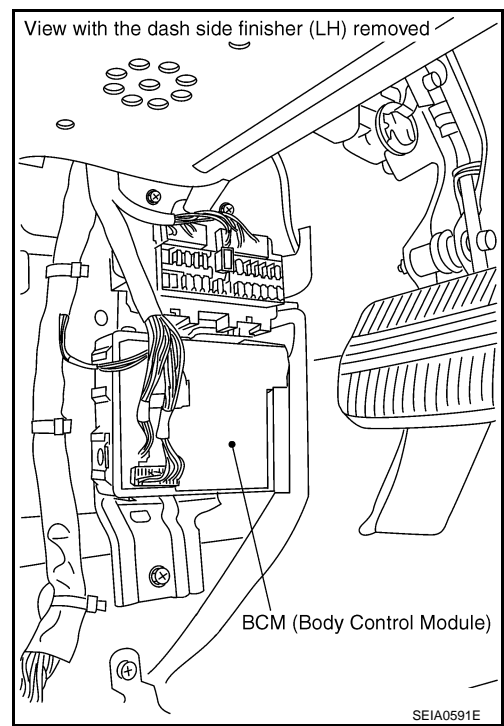


#### BCM (BODY CONTROL MODULE)

# TIRE PRESSURE MONITORING SYSTEM

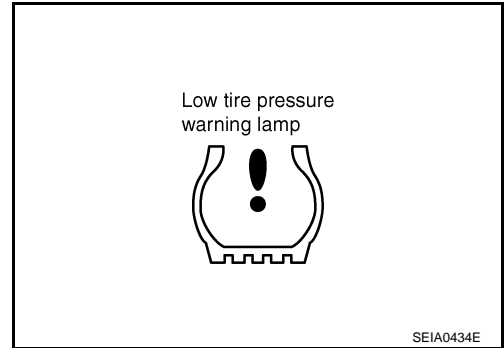
## < SERVICE INFORMATION >

The BCM reads the air 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 judgment function to detect a system malfunction.



### LOW TIRE PRESSURE WARNING LAMP

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.



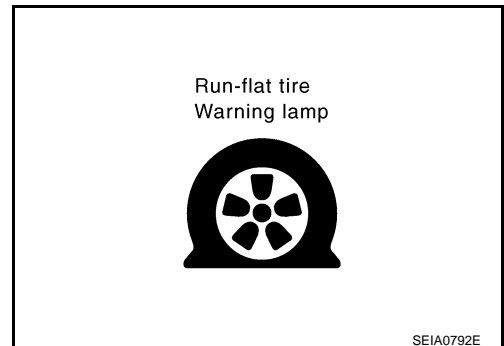
### Low Tire pressure Warning Lamp Indication

Condition	Warning lamp
Less than 173 kPa (1.8 kg/cm <sup>2</sup> , 25 psi) [Note 1]	ON
Low tire pressure warning system malfunction [Other diagnostic item]	Warning lamp flashes 1 min, then turns ON

Note 1: Standard air pressure is for 220 kpa (2.2 kg/cm<sup>2</sup>, 32 psi) vehicles.

### RUN-FLAT TIRE WARNING LAMP

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 run-flat tire warning lamp and buzzer are activated.



### Run-Flat Tire Warning Lamp Indication

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# TIRE PRESSURE MONITORING SYSTEM

## < SERVICE INFORMATION >

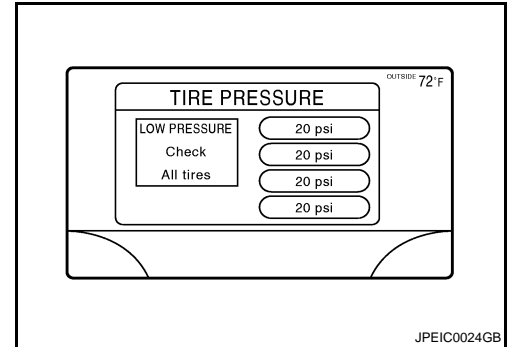
Condition	Warning lamp
Less than 86 kPa (0.88 kg/cm <sup>2</sup> , 12.5 psi) [Note 1]	ON

Note 1: Standard air pressure is for 220 kpa (2.2 kg/cm<sup>2</sup>, 32 psi) vehicles.

### DISPLAY UNIT

Displays the air pressure of each tire.

- After the ignition switch is turned ON, the pressure values are not displayed until the data of each wheel stabilizes.



# CAN COMMUNICATION

< SERVICE INFORMATION >

## CAN COMMUNICATION

---

### System Description

INFOID:000000001327578

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

Refer to [LAN-43. "CAN System Specification Chart"](#).

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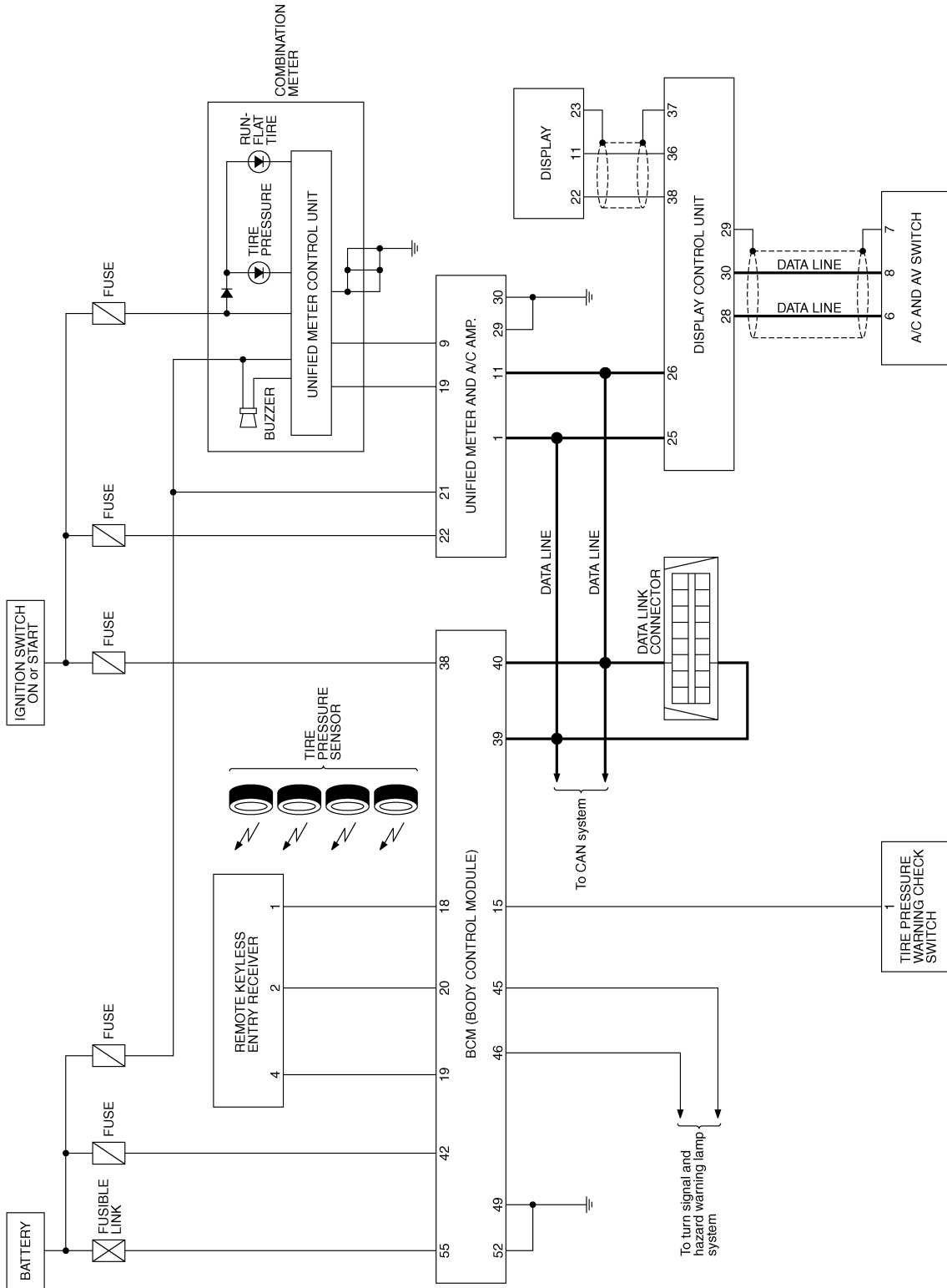
# TROUBLE DIAGNOSES

< SERVICE INFORMATION >

## TROUBLE DIAGNOSES

### Schematic

INFOID:000000001327579



TEWM0162E

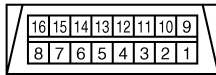
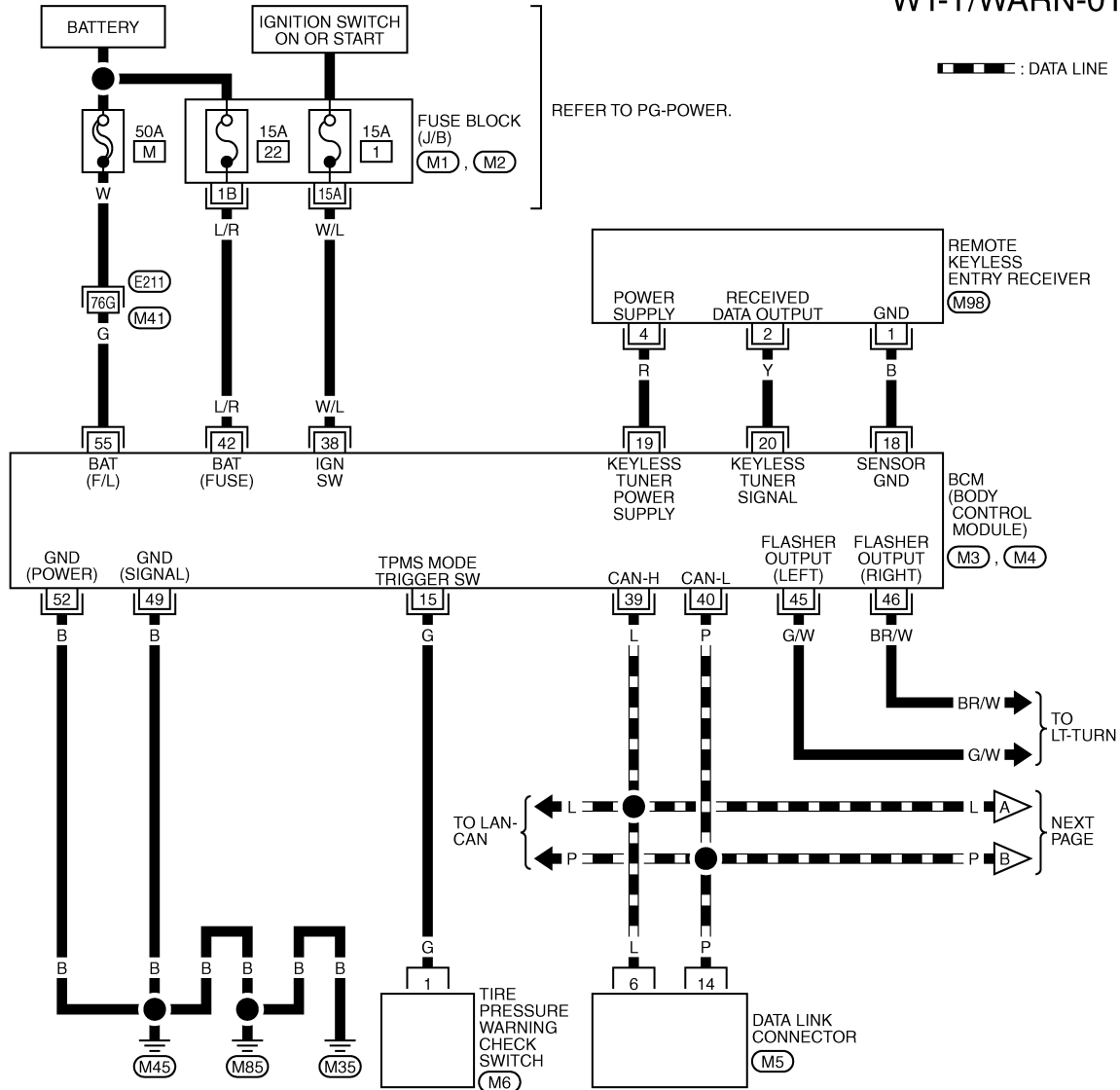
# TROUBLE DIAGNOSES

< SERVICE INFORMATION >

## Wiring Diagram- T/WARN -

INFOID:000000001327580

### WT-T/WARN-01



REFER TO THE FOLLOWING.

- (E21) -SUPER MULTIPLE JUNCTION (SMJ)
- (M1), (M2) -FUSE BLOCK-JUNCTION BOX (J/B)
- (M3), (M4) -ELECTRICAL UNITS

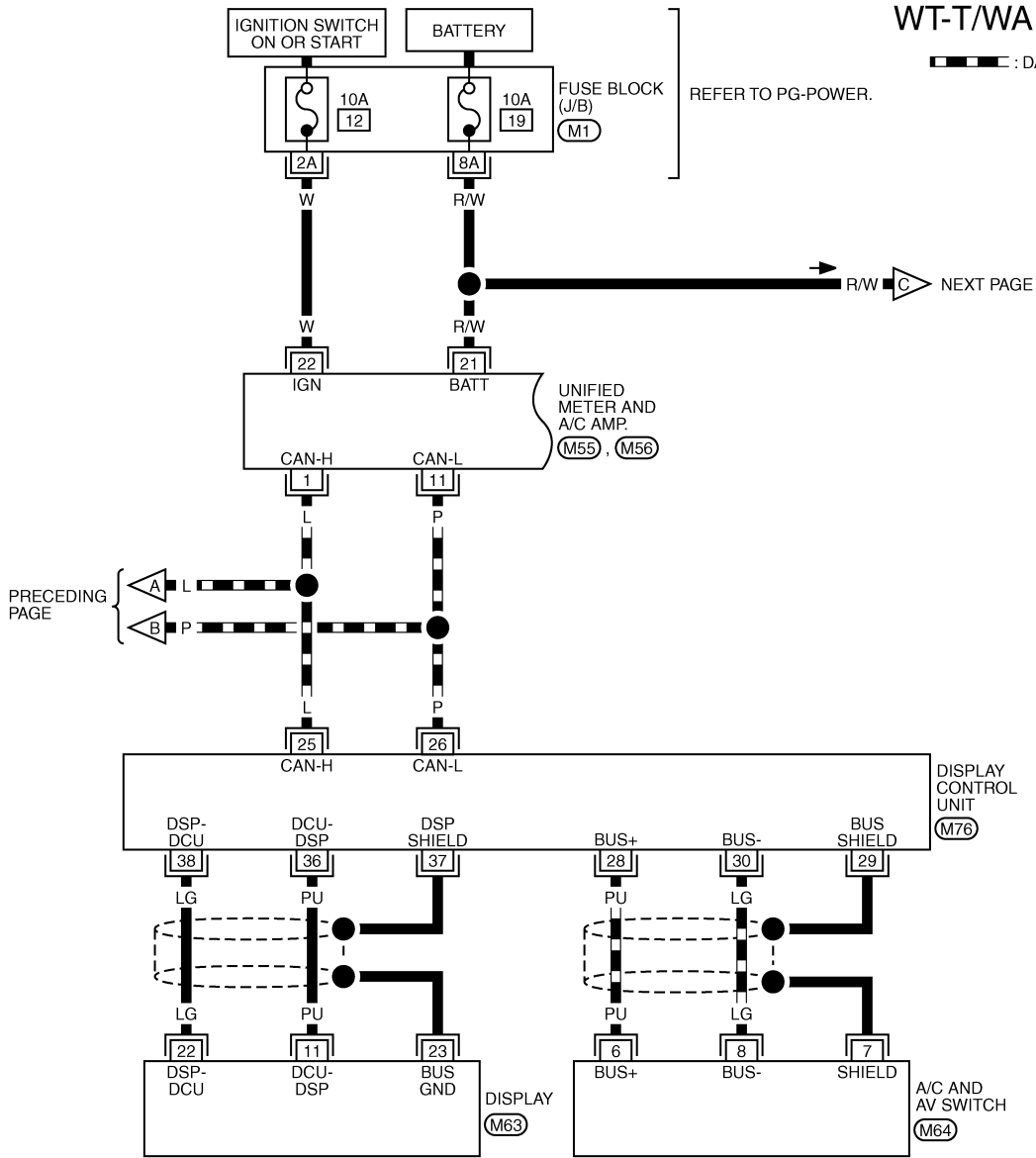
TEWM0149E

# TROUBLE DIAGNOSES

< SERVICE INFORMATION >

WT-T/WARN-02

▬ : DATA LINE



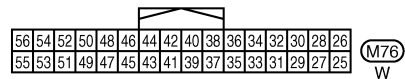
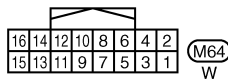
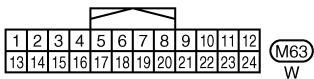
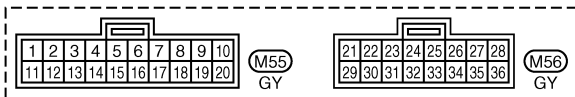
REFER TO PG-POWER.

▶ NEXT PAGE

PRECEDING PAGE

REFER TO THE FOLLOWING.

(M1) - FUSE BLOCK-JUNCTION BOX (J/B)



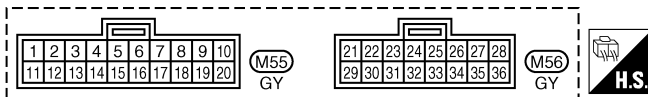
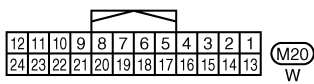
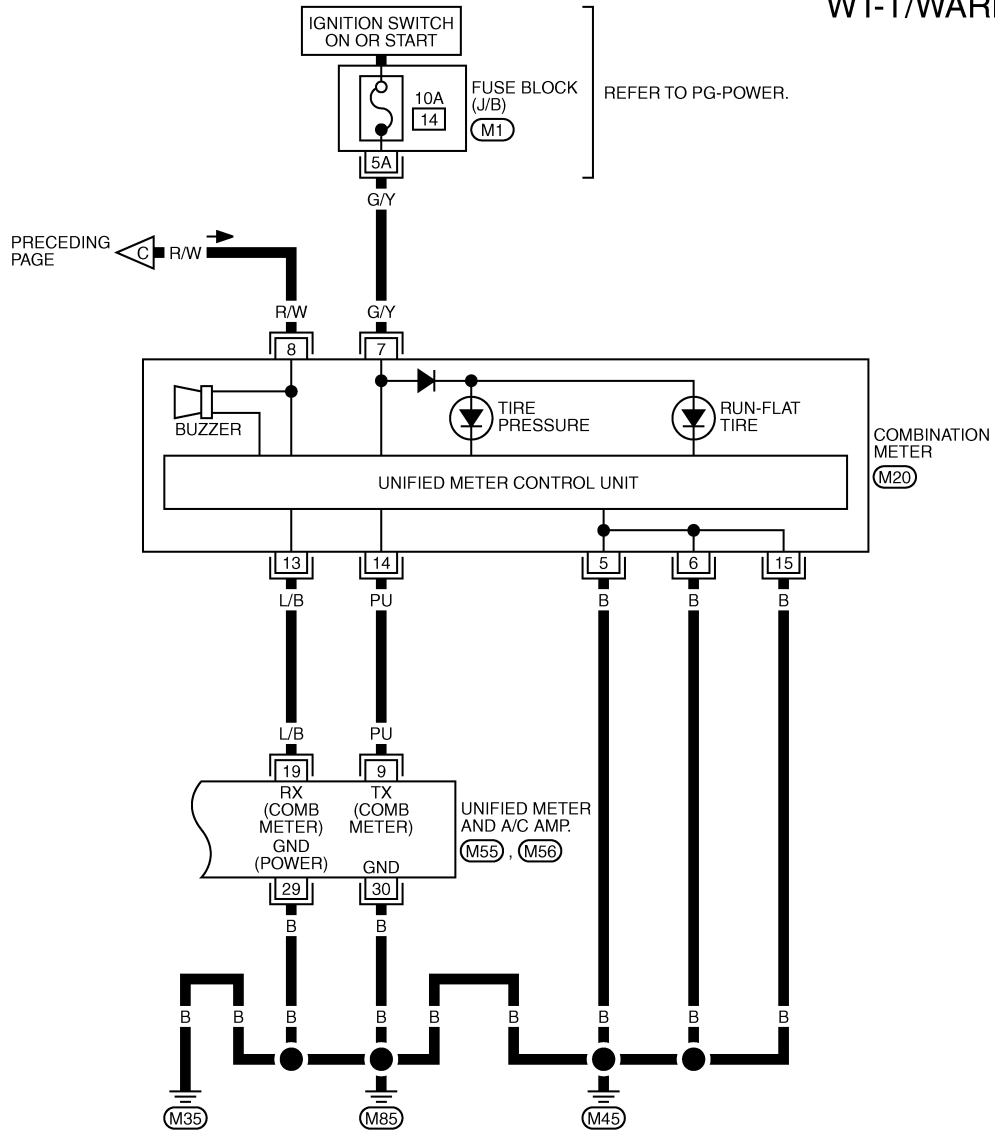
TEWM0150E



# TROUBLE DIAGNOSES

< SERVICE INFORMATION >

WT-T/WARN-03



REFER TO THE FOLLOWING.  
**(M1)** - FUSE BLOCK-JUNCTION BOX (J/B)

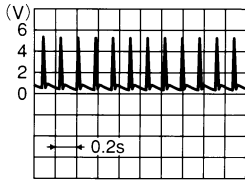
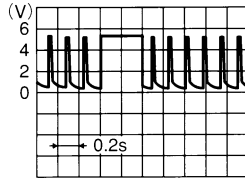
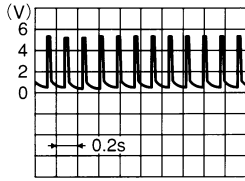
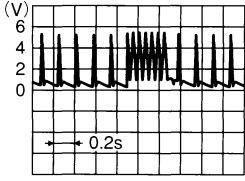
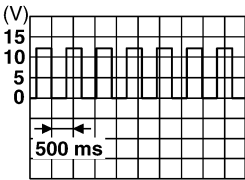
Control Unit Input/Output Signal Standard  
 Standards using a circuit tester and oscilloscope

TEWM0163E

INFOID:000000001327581

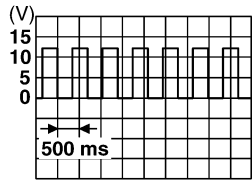
# TROUBLE DIAGNOSES

## < SERVICE INFORMATION >

Terminal		Item	Condition	Voltage (V) Approx. value	
+ (wire color)	-				
15 (G)	Ground	Tire pressure warning check connector	Always	5V	
18 (B)		Remote keyless entry receiver (Ground)	—	0V	
19 (R)		Remote keyless entry receiver (Power supply)	Stand-by		OCC3879D
			Press any of the keyfob switches		OCC3882D
20 (Y)		Remote keyless entry receiver (Signal)	Stand-by		OCC3881D
			Press any of the keyfob switches		OCC3880D
38 (W/L)		Ignition switch	Ignition switch ON or START	Battery voltage (12V)	
39 (L)		CAN-H	—	—	
40 (P)		CAN-L	—	—	
42 (L/R)		Battery power supply (Fuse)	Always	Battery voltage (12V)	
45 (G/W)	Turn signal (left)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Combination switch is turn signal (left)</li> </ul>		SKIA3009J	

# TROUBLE DIAGNOSES

## < SERVICE INFORMATION >

Terminal		Item	Condition	Voltage (V) Approx. value
+ (wire color)	-			
46 (BR/W)	Ground	Turn signal (right)	<ul style="list-style-type: none"> <li>Ignition switch ON</li> <li>Combination switch is turn signal (right)</li> </ul>	
49 (B)				
52 (B)		Ground	—	0V
55 (G)		Battery power supply (F/L)	Always	Battery voltage (12V)

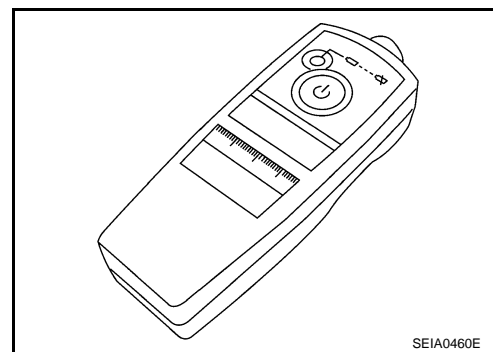
## ID Registration Procedure

INFOID:000000001327582

### ID REGISTRATION WITH ACTIVATION TOOL

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

1. Touch "WORK SUPPORT" on "SELECT DIAG MODE" screen, and select "ID REGIST".
2. With the transmitter activation tool (J-45295) pushed against the front-left transmitter position of the air valve, press and hold the button 5 seconds.
3. Register the IDs in order from FR LH, FR RH, RR RH to RR LH. When ID registration of each wheel has been completed, turn signal lamp blinks.



Activation tire position		Turn signal lamp	CONSULT-III
1	Front LH	2 times flashing	"Red" ↓ "Green"
2	Front RH		
3	Rear RH		
4	Rear LH		

4. After completing all ID registrations, press "END" to complete the procedure.

#### NOTE:

Be sure to register the IDs in order from FR LH, FR RH, RR RH, to RR LH, or the self-diagnostic results display will not function properly.

### ID Registration without Transmitter Activation Tool

#### CAUTION:

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

1. Touch "WORK SUPPORT" on "SELECT DIAG MODE" screen, and select "ID REGIST".
2. Adjust the tire pressure to the values shown in the table below for ID registration, and drive the vehicle at 40 km/h (25 MPH) or more for several minutes.

#### NOTE:

If ID registration is unable, buzzer beeps.

Tire position	Tire pressure kPa (kg/cm <sup>2</sup> , psi)
Front LH	240 (2.4, 34)
Front RH	220 (2.2, 31)
Rear RH	200 (2.0, 29)
Rear LH	180 (1.8, 26)

3. After completing all ID registrations, press "END" to complete the procedure.

# TROUBLE DIAGNOSES

## < SERVICE INFORMATION >

Activation tire position	CONSULT-III
Front LH	"Red" ↓ "Green"
Front RH	
Rear RH	
Rear LH	

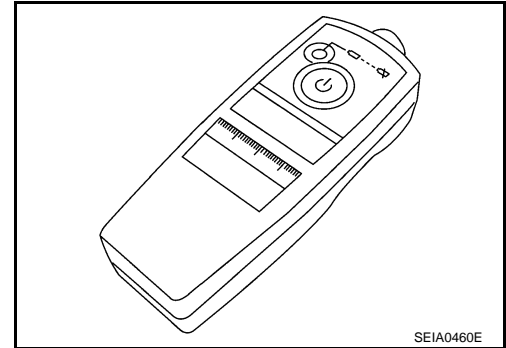
4. Inflate all tires to proper pressure. Refer to [WT-35, "Tire"](#).

### Transmitter Wake Up Operation

INFOID:000000001327583

#### WITH ACTIVATION TOOL

1. With the transmitter activation tool (J-45295) pushed against the front-left transmitter, press the button for 5 seconds.
  - When ignition switch ON, as the low tire pressure warning lamp blinks per the following diagram, the respective transmitter then must be woken up.



Low tire pressure warning lamp blinking timing	Need to activation tire position
ON OFF	a : 0.3sec b : 1.3sec  Front LH
ON OFF	a : 0.3sec b : 1.3sec  Front RH
ON OFF	a : 0.3sec b : 1.3sec  Rear RH
ON OFF	a : 0.3sec b : 1.3sec  Rear LH
ON OFF	a : 2sec b : 0.2sec  All tire

SEIA0794E

2. Register the ID of wheel that low tire pressure warning lamp flashes. When wake up of registered wheel has been completed, turn signal lamp flashes two times.
3. After completing wake up all transmitters, make sure low tire pressure warning lamp goes out.

### Self-Diagnosis

INFOID:000000001327584

#### DESCRIPTION

During driving, the low tire pressure warning system receives the signal transmitted from the transmitter installed in each wheel, and gives alarms when the tire pressure becomes low. The control unit (BCM) of this system has pressure judgment and trouble diagnosis functions.











#### FUNCTION

When the low tire pressure warning system detects low inflation pressure or another unusual symptom, the warning lamps in the combination meter comes on. To start the self-diagnostic results mode, ground terminal of the tire pressure warning check connector. The malfunction location is indicated by the warning lamp flashing and the buzzer sounds.

#### LOW TIRE PRESSURE WARNING LAMP DIAGNOSTIC CHART

# TROUBLE DIAGNOSES

## < SERVICE INFORMATION >



Diagnosis Item	Symptom (Ignition switch ON)	Low tire pressure warning lamp	Cause	Action
Low tire pressure warning lamp	Warning lamp comes on immediately and turns off after 1 second	  ON 1 sec > stays OFF <small>SEIA0592E</small>	All wheel transmitters are "activated" (working).	None (system OK)
	Warning lamp blinks on for 2 seconds, then turns off for 0.2 seconds-repeats	 Blinks:  ON 2 sec > OFF 0.2 sec <small>SEIA0593E</small>	All wheel transmitters are not activated.	Activate all wheel transmitters. Refer to <a href="#">WT-20, "Transmitter Wake Up Operation"</a> .
	Warning lamp blinks 1 time	 Blinks 1 time ON 0.3 sec > OFF 1.0 sec <small>PEIA0073E</small>	Front LH wheel transmitter is not activated.	Activate front LH wheel transmitter. Refer to <a href="#">WT-20, "Transmitter Wake Up Operation"</a> .
	Warning lamp blinks 2 times	  Blinks 2 times ON 0.3 sec > OFF 0.3 sec <small>SEIA0595E</small>	Front RH wheel transmitter is not activated.	Activate front RH wheel transmitter. Refer to <a href="#">WT-20, "Transmitter Wake Up Operation"</a> .
	Warning lamp blinks 3 times	   Blinks 3 times ON 0.3 sec > OFF 0.3 sec <small>SEIA0596E</small>	Rear RH wheel transmitter is not activated.	Activate rear RH wheel transmitter. Refer to <a href="#">WT-22, "CONSULT-III Function (BCM)"</a> .

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# TROUBLE DIAGNOSES


## < SERVICE INFORMATION >

Diagnosis Item	Symptom (Ignition switch ON)	Low tire pressure warning lamp	Cause	Action
Low tire pressure warning lamp	Warning lamp blinks 4 times	 <p>Blinks 4 times ON 0.3 sec &gt; OFF 0.3 sec SEIA0597E</p>	Rear LH wheel transmitter is not activated.	Activate rear LH wheel transmitter. Refer to <a href="#">WT-20, "Transmitter Wake Up Operation"</a> .
	Warning lamp comes on and does not turn off	 <p>Comes ON and stays ON SEIA0598E</p>	The fuse for combination meter from battery is pulled out.	Check the fuse for combination meter from battery. Install or replace (if needed).
			BCM connector pulled out.	Check BCM connector. Reconnect if needed.
			Low tire pressure or tire pressure monitoring system malfunction.	<ul style="list-style-type: none"> <li>Perform CONSULT-III Self Diagnosis. Refer to "Self-Diagnosis".</li> <li>Perform ID Registration if needed. Refer to <a href="#">WT-19, "ID Registration Procedure"</a>.</li> </ul>
Turn signal lamp	Turn signal lamp does not flash 2 times or horn does not sound after transmitter activation.		<ol style="list-style-type: none"> <li>Tool J-45295 (special service tool) battery low.</li> <li>Ignition OFF during activation.</li> <li>Tool J-45295 (special service tool) not positioned correctly.</li> <li>Transmitters already activated.</li> </ol>	<ol style="list-style-type: none"> <li>Install new battery.</li> <li>Make sure ignition is ON during activation.</li> <li>Position tool correctly during activation.</li> <li>None</li> </ol>

### NOTE:

If more than one wheel transmitter is NOT activated, the warning lamp blinking patterns for those wheels will combine. (Example: one blink/OFF/three blinks = Rear LH and Rear RH transmitters are not activated.)

## RUN-FLAT TIRE WARNING LAMP DIAGNOSTIC CHART

Diagnosis Item	Symptom (Ignition Switch ON)	Run-flat tire warning lamp	Cause	Action
Run-flat tire warning lamp	Warning lamp comes on and does not turn off	 <p>Comes ON and stays ON SEIA0793E</p>	Tire pressure drop to 86 kPa (0.88 kg/cm <sup>2</sup> , 12.5 psi) or less.	<ol style="list-style-type: none"> <li>Check air pressure of tire.</li> <li>Repair or change the tire (if needed)</li> <li>Perform CONSULT-III Self Diagnosis. Refer to <a href="#">WT-22, "CONSULT-III Function (BCM)"</a>.</li> </ol>

## CONSULT-III Function (BCM)

INFOID:000000001327585

### FUNCTION

CONSULT-III can display each self-diagnostic item using the diagnostic test modes shown following.

# TROUBLE DIAGNOSES

## < SERVICE INFORMATION >

Diagnostic test mode	Function
WORK SUPPORT	This mode enables a technician to adjust some devices faster and more accurately by following the indications on CONSULT-III.
SELF-DIAGNOSTIC RESULTS	Self-diagnostic results can be read and erased quickly.
DATA MONITOR	Input/Output data in the control unit can be read.
ACTIVE TEST	Diagnostic Test Mode in with CONSULT-III drives some actuators apart from the control unit (BCM) and also shifts some parameters in a specified range.

### WORK SUPPORT MODE

#### Test Item

- ID Read
- ID Regist

#### ID Read

The registered ID number is displayed.

#### ID Regist

Refer to [WT-19, "ID Registration Procedure"](#).

### SELF-DIAGNOSTIC RESULTS MODE

Diagnostic item	Diagnostic item is detected when ...
[C1704] LOW PRESSURE FL [C1705] LOW PRESSURE FR [C1706] LOW PRESSURE RR [C1707] LOW PRESSURE RL	Front-left tire pressure drops to 173 kPa (1.8 kg/cm <sup>2</sup> , 25 psi) or less. Front-right tire pressure drops to 173 kPa (1.8 kg/cm <sup>2</sup> , 25 psi) or less. Rear-right tire pressure drops to 173 kPa (1.8 kg/cm <sup>2</sup> , 25 psi) or less. Rear-left tire pressure drops to 173 kPa (1.8 kg/cm <sup>2</sup> , 25 psi) or less.
[C1708] [NO DATA] FL [C1709] [NO DATA] FR [C1710] [NO DATA] RR [C1711] [NO DATA] RL	Data from front-left transmitter can not be received. Data from front-right transmitter can not be received. Data from rear-right transmitter can not be received. Data from rear-left transmitter can not be received.
[C1712] [CHECKSUM ERR] FL [C1713] [CHECKSUM ERR] FR [C1714] [CHECKSUM ERR] RR [C1715] [CHECKSUM ERR] RL	Checksum data from front-left transmitter is malfunctioning. Checksum data from front-right transmitter is malfunctioning. Checksum data from rear-right transmitter is malfunctioning. Checksum data from rear-left transmitter is malfunctioning.
[C1716] [PRESS DATA ERR] FL [C1717] [PRESS DATA ERR] FR [C1718] [PRESS DATA ERR] RR [C1719] [PRESS DATA ERR] RL	Air pressure data from front-left transmitter is malfunctioning. Air pressure data from front-right transmitter is malfunctioning. Air pressure data from rear-right transmitter is malfunctioning. Air pressure data from rear-left transmitter is malfunctioning.
[C1720] [CODE ERR] FL [C1721] [CODE ERR] FR [C1722] [CODE ERR] RR [C1723] [CODE ERR] RL	Function code data from front-left transmitter is malfunctioning. Function code data from front-right transmitter is malfunctioning. Function code data from rear-right transmitter is malfunctioning. Function code data from rear-left transmitter is malfunctioning.
[C1724] [BATT VOLT LOW] FL [C1725] [BATT VOLT LOW] FR [C1726] [BATT VOLT LOW] RR [C1727] [BATT VOLT LOW] RL	Battery voltage of front-left transmitter drops. Battery voltage of front-right transmitter drops. Battery voltage of rear-right transmitter drops. Battery voltage of rear-left transmitter drops.
[C1729] VHCL SPEED SIG ERR	Vehicle speed signal is error.
[C1730] FLAT TIRE FL [C1731] FLAT TIRE FR [C1732] FLAT TIRE RR [C1733] FLAT TIRE RL	Front-left tire pressure drops to 86 kPa (0.88 kg/cm <sup>2</sup> , 12.5 psi) or less. Front-right tire pressure drops to 86 kPa (0.88 kg/cm <sup>2</sup> , 12.5 psi) or less. Rear-right tire pressure drops to 86 kPa (0.88 kg/cm <sup>2</sup> , 12.5 psi) or less. Rear-left tire pressure drops to 86 kPa (0.88 kg/cm <sup>2</sup> , 12.5 psi) or less.

#### NOTE:

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

### DATA MONITOR MODE

#### Display item List

# TROUBLE DIAGNOSES

## < SERVICE INFORMATION >

MONITOR	CONDITION	SPECIFICATION
VEHICLE SPEED	Drive vehicle.	Vehicle speed (km/h or MPH)
AIR PRESS FL AIR PRESS FR AIR PRESS RR AIR PRESS RL	<ul style="list-style-type: none"> <li>• Drive vehicle for a few minutes.</li> <li style="text-align: center;">or</li> <li>• Ignition switch ON and activation tool is transmitting activation signals.</li> </ul>	Tire pressure (kPa or Psi)
ID REGST FL 1 ID REGST FR 1 ID REGST RR 1 ID REGST RL 1	Ignition switch ON	Registration ID: DONE No registration ID: YET
WARNING LAMP		Low tire pressure warning lamp on: ON Low tire pressure warning lamp off: OFF
BUZZER		Buzzer in combination meter on: ON Buzzer in combination meter off: OFF

**NOTE:**

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

### ACTIVE TEST MODE

Test Item

- Flasher
- Horn
- Warning lamp
- ID regist warning
- Flat tire warning

### How to Perform Trouble Diagnosis for Quick and Accurate Repair

INFOID:000000001327586

### INTRODUCTION

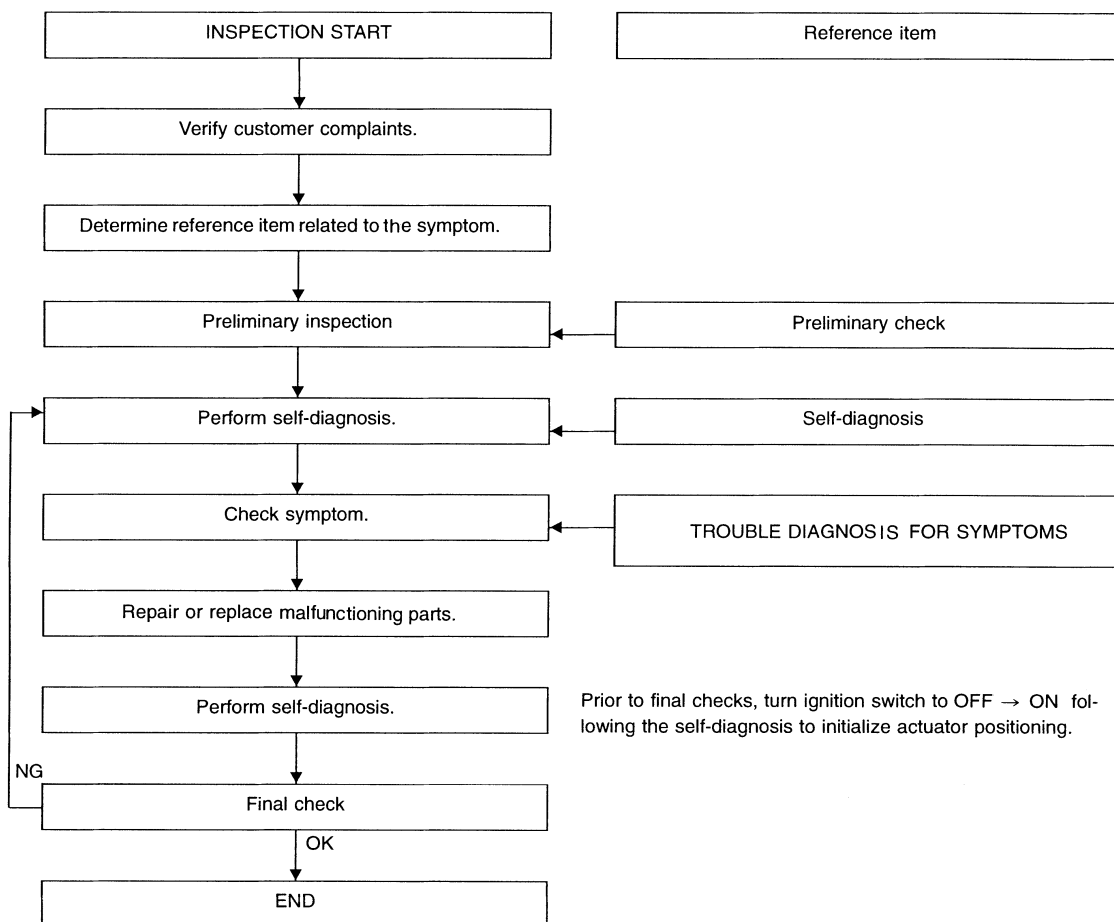
- Before troubleshooting, verify customer complaints.
- If a vehicle malfunction is difficult to reproduce, harnesses, harness connectors or terminals may be malfunctioning. Hold and shake these parts to make sure they are securely connected.
- When using a circuit tester to measure voltage or resistance of each circuit, be careful not to damage or deform connector terminals.

### WORK FLOW



# TROUBLE DIAGNOSES

< SERVICE INFORMATION >



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Preliminary check: [WT-25](#)    Self-diagnosis: [WT-20](#)    Trouble diagnosis for symptoms: [WT-30](#)

## Preliminary Check

INFOID:000000001327587

### BASIC INSPECTION

#### 1. CHECK ALL TIRE PRESSURES

- Check all tire pressures. Refer to [WT-35, "Tire"](#).

#### OK or NG

- OK >> GO TO 2.
- NG >> Adjust tire pressure to specified value.

#### 2. CHECK LOW TIRE PRESSURE WARNING LAMP ACTIVATION

1. Check low tire pressure warning lamp activation.
2. Does low tire pressure warning lamp activate for 1 second when ignition switch is turned "ON"?

#### Does warning lamp activate?

- YES >> GO TO 3.
- NO >> Check fuse and combination meter.

#### 3. CHECK CONNECTOR

1. Disconnect BCM harness connectors M3 and M4.
2. Check terminals for damage or loose connection.

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# TROUBLE DIAGNOSES

## < SERVICE INFORMATION >

### OK or NG

- OK >> GO TO 4.
- NG >> Repair or replace damaged parts.

## 4. CHECK TRANSMITTER TOOL

- Check activation tool battery.

### OK or NG

- OK >> Perform self-diagnosis.
- NG >> Replace activation tool battery.

## Malfunction Code/Symptom Chart

INFOID:000000001327588

Code/Symptom	Malfunction part	Reference
06 07 08 09	Front-left tire pressure drops to 86 kPa (0.88 kg/cm <sup>2</sup> , 12.5 psi) or less. Front-right tire pressure drops to 86 kPa (0.88 kg/cm <sup>2</sup> , 12.5 psi) or less. Rear-right tire pressure drops to 86 kPa (0.88 kg/cm <sup>2</sup> , 12.5 psi) or less. Rear-left tire pressure drops to 86 kPa (0.88 kg/cm <sup>2</sup> , 12.5 psi) or less.	—
15 16 17 18	Front-left tire pressure drops to 173 kPa (1.8 kg/cm <sup>2</sup> , 25 psi) or less. Front-right tire pressure drops to 173 kPa (1.8 kg/cm <sup>2</sup> , 25 psi) or less. Rear-right tire pressure drops to 173 kPa (1.8 kg/cm <sup>2</sup> , 25 psi) or less. Rear-left tire pressure drops to 173 kPa (1.8 kg/cm <sup>2</sup> , 25 psi) or less.	—
21 22 23 24	Transmitter no data (front - left) Transmitter no data (front - right) Transmitter no data (rear - right) Transmitter no data (rear - left)	<a href="#">WT-28</a>
31 32 33 34	Transmitter checksum error (front - left) Transmitter checksum error (front - right) Transmitter checksum error (rear - right) Transmitter checksum error (rear - left)	<a href="#">WT-28</a>
35 36 37 38	Transmitter pressure data error (front - left) Transmitter pressure data error (front - right) Transmitter pressure data error (rear - right) Transmitter pressure data error (rear - left)	<a href="#">WT-29</a>
41 42 43 44	Transmitter function code error (front - left) Transmitter function code error (front - right) Transmitter function code error (rear - right) Transmitter function code error (rear - left)	<a href="#">WT-28</a>
45 46 47 48	Transmitter battery voltage low (front - left) Transmitter battery voltage low (front - right) Transmitter battery voltage low (rear - right) Transmitter battery voltage low (rear - left)	<a href="#">WT-28</a>
52	Vehicle speed signal	<a href="#">WT-29</a>
Low tire pressure warning lamp does not come on when ignition switch is turned on.	Fuse or combination meter BCM connector or circuit BCM	<a href="#">WT-30</a>
Low tire pressure warning lamp stays on when ignition switch is turned on.	Combination meter BCM connector or circuit BCM	<a href="#">WT-30</a>
Low tire pressure warning lamp blinks when ignition switch is turned on.	BCM connector or circuit BCM Transmitter's mode off ID registration not yet	<a href="#">WT-31</a>
Run-flat tire warning lamp stays on when ignition switch is turned on.	Combination meter Tire pressure	<a href="#">WT-32</a>

# TROUBLE DIAGNOSES

## < SERVICE INFORMATION >

Code/Symptom	Malfunction part	Reference
Turn signal lamp blinks when ignition switch is turned on.	BCM connector or circuit BCM	<a href="#">WT-32</a>
ID registration can not be operated.	Transmitter Remote keyless entry receiver connector or circuit Remote keyless entry receiver BCM connector or circuit BCM	<a href="#">WT-32</a>

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# TROUBLE DIAGNOSIS FOR SELF-DIAGNOSTIC ITEMS

< SERVICE INFORMATION >

## TROUBLE DIAGNOSIS FOR SELF-DIAGNOSTIC ITEMS

Transmitter or Control Unit (BCM)

INFOID:000000001327589

MALFUNCTION CODE NO. 21, 22, 23 OR 24

### 1. CHECK CONTROL UNIT

- Drive for several minutes. Check all tire pressures with CONSULT-III "DATA MONITOR ITEM".

Are all tire pressures displayed 0 kPa?

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

### 2. CHECK REMOTE KEYLESS ENTRY RECEIVER CONNECTOR

1. Disconnect remote keyless entry receiver harness connector M98.
2. Check terminals for damage or loose connection.
3. Reconnect harness connector.

OK or NG

- OK >> Replace BCM refer to [BCS-13. "Removal and Installation of BCM"](#), then GO TO 3.
- NG >> Repair or replace remote keyless entry receiver harness connector.

### 3. ID REGISTRATION

- Perform ID registration of all transmitters.

Is there any tire that ID can not be registered to?

- YES >> Replace transmitter of the tire, then GO TO 5.
- NO >> GO TO 4.

### 4. VEHICLE DRIVING

- Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping.  
Check all tire pressures with CONSULT-III "DATA MONITOR ITEM" within 15 minutes after vehicle speed becomes 17 km/h (11 MPH).

Does "DATA MONITOR ITEM" display tire pressure as normal without any warning lamp?

- YES >> INSPECTION END
- NO >> GO TO 5.

### 5. ID REGISTRATION AND VEHICLE DRIVING

1. Perform ID registration of all transmitters.
2. 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. Then check all tire pressures with CONSULT-III "DATA MONITOR ITEM" within 5 minutes.

Does "DATA MONITOR ITEM" display tire pressure as normal without any warning lamp?

- YES >> INSPECTION END
- NO >> Go to the inspection applicable to DTC.

Transmitter - 1

INFOID:000000001327590

MALFUNCTION CODE NO. 31, 32, 33, 34, 41, 42, 43, 44, 45, 46, 47 OR 48

### 1. ID REGISTRATION (CORRECTION OF TRANSMITTER LOCATION)

1. Perform ID registration of all transmitters.
2. 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.

>> GO TO 2.

### 2. REPLACE TRANSMITTER

1. Check low tire pressure warning condition again, replace malfunctioning transmitter.
2. Perform ID registration of all transmitters.

Can ID registration of all transmitters be completed?

# TROUBLE DIAGNOSIS FOR SELF-DIAGNOSTIC ITEMS

## < SERVICE INFORMATION >

YES >> GO TO 3.

NO >> Go to the inspection 1. Refer to [WT-28, "Transmitter or Control Unit \(BCM\)"](#).

### 3.VEHICLE DRIVING

- 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. Then check all tire pressures with CONSULT-III "DATA MONITOR ITEM" within 5 minutes.

Does "DATA MONITOR ITEM" displayed tire pressure as normal without any warning lamp?

YES >> INSPECTION END.

NO >> Replace malfunctioning transmitter, and perform "Step 3" again.

### Transmitter - 2

INFOID:000000001327591

MALFUNCTION CODE NO. 35, 36, 37 OR 38

### 1.CHECK ALL TIRE PRESSURES

- Check all tire pressures. Refer to [WT-35, "Tire"](#).

Are there any tires whose pressure is "64 psi" or more?

YES >> Adjust tire pressure to specified value.

NO >> GO TO 2.

### 2.VEHICLE DRIVING

1. Perform ID registration of all transmitters.
2. Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping. Check all tire pressures with CONSULT-III "DATA MONITOR ITEM" within 15 minutes after vehicle speed become 17 km/h (11 MPH).

>> Replace transmitter with new one if "DATA MONITOR ITEM" displayed 64 psi or more. Then GO TO 3.

### 3.ID REGISTRATION AND VEHICLE DRIVING

1. Perform ID registration of all transmitters.
2. 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. Then check all tire pressures with CONSULT-III "DATA MONITOR ITEM" within 5 minutes.

Does "DATA MONITOR ITEM" display tire pressure as normal without any warning lamp?

YES >> INSPECTION END

NO >> Go to the inspection applicable to DTC.

### Vehicle Speed Signal

INFOID:000000001327592

MALFUNCTION CODE NO. 52

### 1.CHECK SELF-DIAGNOSIS RESULTS

1. Select "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.
2. Check display contents in self-diagnostic results.

Is "CAN COMM CIRCUIT" displayed in the self-diagnosis display items?

YES >> Malfunction in CAN communication system. Go to [LAN-43, "CAN System Specification Chart"](#).

NO >> No malfunction. Check combination meter refer to [DI-5, "System Description"](#).

# TROUBLE DIAGNOSIS FOR SYMPTOMS

< SERVICE INFORMATION >

## TROUBLE DIAGNOSIS FOR SYMPTOMS

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

INFOID:000000001327593

#### DIAGNOSTIC PROCEDURE

##### 1. CHECK SELF-DIAGNOSIS RESULTS

1. Select "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.
2. Check display contents in self-diagnostic results.

Is "CAN COMM CIRCUIT" displayed in the self-diagnosis display items?

- YES >> Malfunction in CAN communication system. Go to [LAN-43. "CAN System Specification Chart"](#).
- NO >> No malfunction. GO TO 2.

##### 2. CHECK COMBINATION METER

- Check combination meter function.

##### OK or NG

- OK >> GO TO 3.
- NG >> Check combination meter. Refer to [DI-5. "System Description"](#).

##### 3. CHECK LOW TIRE PRESSURE WARNING LAMP

- Disconnect BCM harness connectors M3 and M4.

Does the warning lamp activate?

- YES >> Replace BCM. Refer to [BCS-13. "Removal and Installation of BCM"](#).
- NO >> Check combination meter and repair or replace.

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

INFOID:000000001327594

#### DIAGNOSTIC PROCEDURE

##### 1. CHECK CONNECTOR

1. Disconnect BCM harness connectors M3 and M4.
2. Check terminals for damage or loose connections.

##### OK or NG

- OK >> GO TO 2.
- NG >> Repair or replace damaged parts.

##### 2. CHECK POWER SUPPLY CIRCUIT (BATTERY)

Make sure voltage between BCM harness connector M4 and ground.

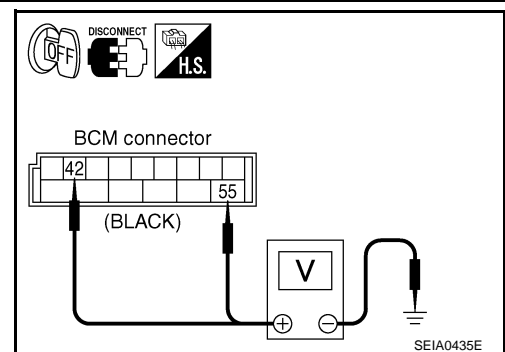
Terminal		Voltage
(+)	(-)	
42, 55	Ground	12V

##### OK or NG

- OK >> GO TO 3.
- NG >> Check BCM power supply circuit for open or short.

##### 3. CHECK POWER SUPPLY CIRCUIT (IGN)

1. Turn ignition switch ON.



# TROUBLE DIAGNOSIS FOR SYMPTOMS

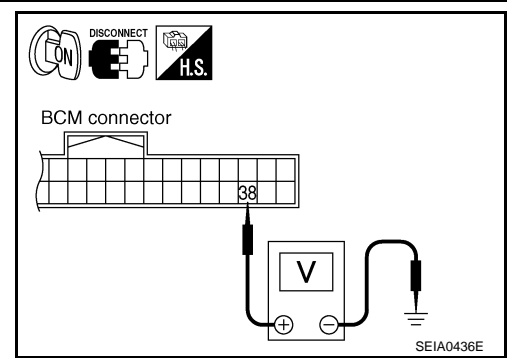
## < SERVICE INFORMATION >

- Make sure voltage between BCM harness connector M3 and ground.

Terminal		Voltage
(+)	(-)	
38	Ground	12V

### OK or NG

- OK >> GO TO 4.
- NG >> Check BCM power supply circuit for open or short.



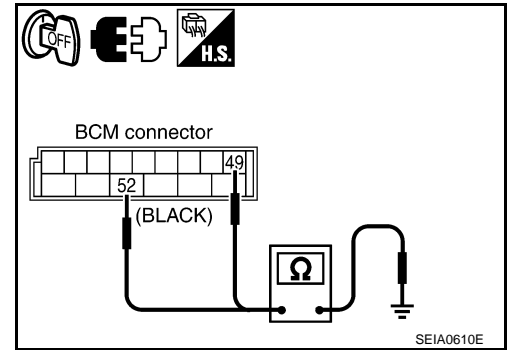
## 4.CHECK GROUND CIRCUIT

- Check continuity between BCM harness connector M4 and ground.

Terminal		Continuity
(+)	(-)	
49, 52	Ground	Yes

### OK or NG

- OK >> Replace BCM. Refer to [BCS-13. "Removal and Installation of BCM"](#).
- NG >> Repair or replace BCM ground circuit.



## Low Tire Pressure Warning Lamp Blinks When Ignition Switch Is Turned On

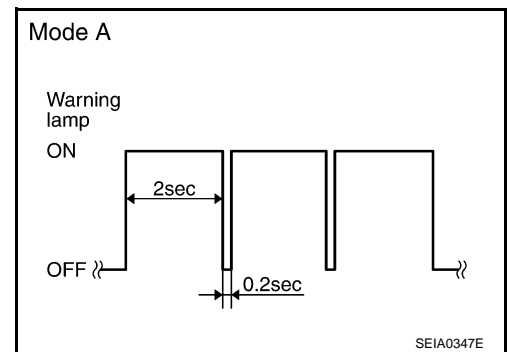
INFOID:0000000001327595

### NOTE:

If warning lamp blink below, the system is normal.

Blink Mode A

- This mode shows transmitter status is OFF-mode. Perform transmitter wake up operation. Refer to [WT-20. "Transmitter Wake Up Operation"](#).



## DIAGNOSTIC PROCEDURE

### 1.CHECK CONNECTOR

- Disconnect BCM harness connector M3.
- Check terminals for damage or loose connections.

### OK or NG

- OK >> GO TO 2.
- NG >> Repair or replace damaged parts.

### 2.CHECK TIRE PRESSURE WARNING CHECK SWITCH CIRCUIT

## TROUBLE DIAGNOSIS FOR SYMPTOMS

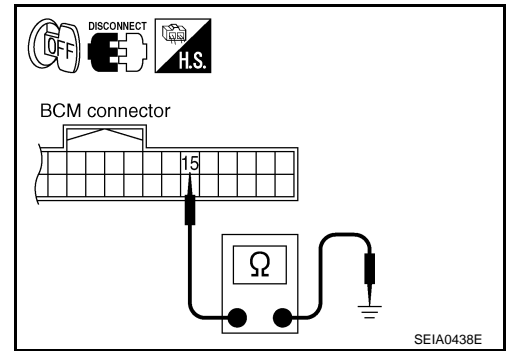
### < SERVICE INFORMATION >

- Check continuity between BCM harness connector M3 and ground.

Terminal		Continuity
(+)	(-)	
15	Ground	No

#### OK or NG

- OK >> Replace BCM. Refer to [BCS-13. "Removal and Installation of BCM"](#).
- NG >> Repair or replace harness connector.



### Run-Flat Tire Warning Lamp Stays On When Ignition Switch Is Turned On INFOID:000000001327596

#### DIAGNOSTIC PROCEDURE

##### 1. CHECK ALL TIRE PRESSURES

- Check all tire pressures. Refer to [WT-35. "Tire"](#).

#### OK or NG

- OK >> Check combination meter. Refer to [DI-5](#).
- NG >> Adjust tire pressure to specified value or change the tires.

### Turn Signal Lamp Blinks When Ignition Switch Is Turned On INFOID:000000001327597

#### DIAGNOSTIC PROCEDURE

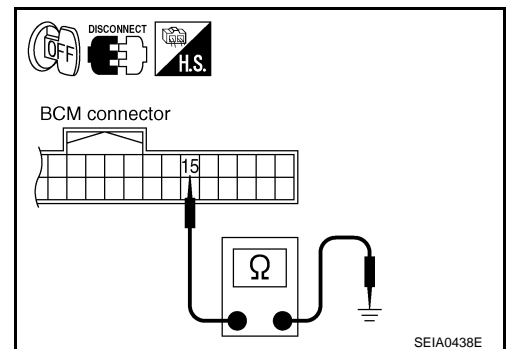
##### 1. CHECK TIRE PRESSURE WARNING CHECK SWITCH CIRCUIT

- Check continuity between BCM harness connector M3 and ground.

Terminal		Continuity
(+)	(-)	
15	Ground	No

#### OK or NG

- OK >> Check turn signal lamp operation. Refer to [LT-78. "System Description"](#).
- NG >> Repair or replace harness connector.



### ID Registration Cannot Be Completed INFOID:000000001327598

#### DIAGNOSTIC PROCEDURE

##### 1. ID REGISTRATION (ALL)

- Perform ID registration of all transmitters.

#### Can ID registration of all transmitters be completed?

- YES >> INSPECTION END
- NO >> Go to [WT-28](#).



# REMOVAL AND INSTALLATION

< SERVICE INFORMATION >

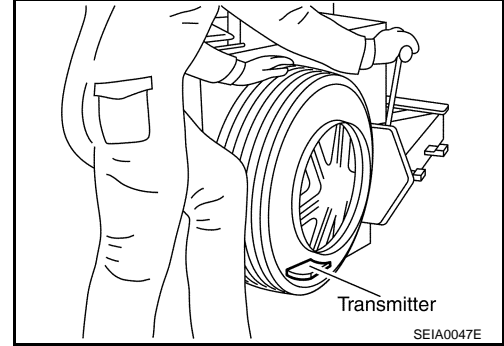
## REMOVAL AND INSTALLATION

### Transmitter

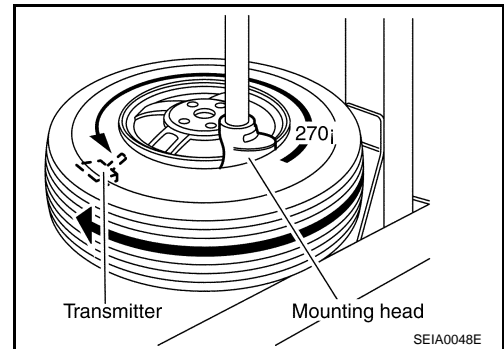
INFOID:000000001327599

#### REMOVAL

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

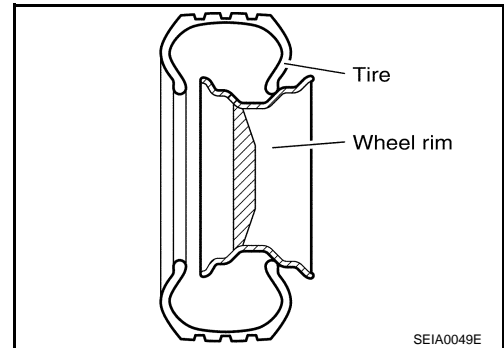


3. Turn tire so that valve hole is at bottom and bounce so that transmitter is near valve hole. Carefully lift tire onto turntable and position valve hole (and transmitter) 270 degree from mounting/dismounting head.
4. Lubricate tire well and remove first side of the tire. Reach inside the tire and remove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

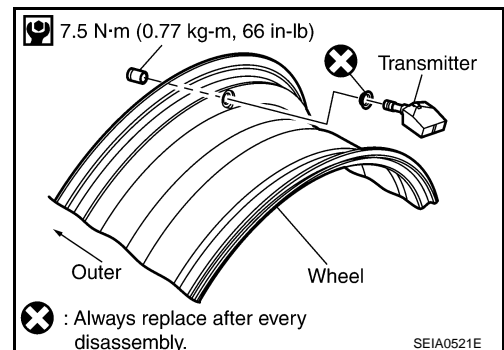


#### INSTALLATION

1. Put first side of tire onto rim.



2. Mount transmitter on rim and tighten nut.



A  
B  
C  
D  
WT  
F  
G  
H  
I  
J  
K  
L  
M  
N  
O  
P

## REMOVAL AND INSTALLATION

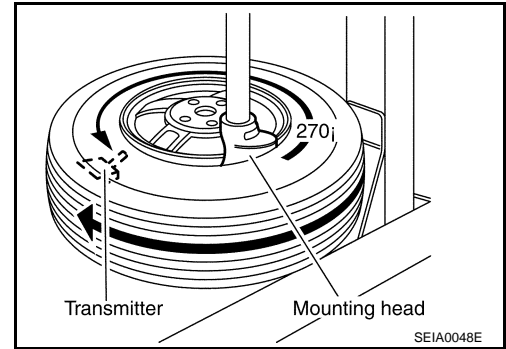
### < SERVICE INFORMATION >

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

**NOTE:**

Do not touch transmitter at mounting head.

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



# SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE INFORMATION >

## SERVICE DATA AND SPECIFICATIONS (SDS)

### Road Wheel

INFOID:000000001327600

Kind of wheel		Aluminum	Steel (for emergency use)
Maximum radial runout limit	Lateral deflection	Less than 0.3 mm (0.012 in)	Less than 1.5 mm (0.059 in)
	Vertical deflection	Less than 0.3 mm (0.012 in)	Less than 1.5 mm (0.059 in)
Maximum allowable unbalance	Dynamic (At rim flange)	Less than 5.0 g (0.2 oz) (one side)	—
	Static (At rim flange)	Less than 20 g (0.7 oz)	—

### Tire

INFOID:000000001327601

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

Tire size	Air pressure	
	Front	Rear
P265/60R18 109V	220 (2.2, 32)	220 (2.2, 32)
P265/50R20 106V	220 (2.2, 32)	220 (2.2, 32)
T175/90D18 110M	420 (4.2, 60)	420 (4.2, 60)

A  
B  
C  
D  
WT  
F  
G  
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K  
L  
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N  
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