

A
B
C
D

WT

SECTION

ROAD WHEELS & TIRES

CONTENTS

WT

PRECAUTIONS 3		
Service Notice or Precautions 3		
PREPARATION 4		
Special Service Tools 4		
Commercial Service Tools 4		
NOISE, VIBRATION AND HARSHNESS (NVH)		
TROUBLESHOOTING 5		
NVH Troubleshooting Chart 5		
ROAD WHEEL 6		
Inspection 6		
ALUMINUM WHEEL 6		
STEEL WHEEL 6		
ROAD WHEEL TIRE ASSEMBLY 7		
Balancing Wheels (Bonding Weight Type) 7		
REMOVAL 7		
WHEEL BALANCE ADJUSTMENT 7		
Rotation 8		
LOW TIRE PRESSURE WARNING SYSTEM 9		
System Components 9		
System Description 9		
TRANSMITTER 9		
REMOTE KEYLESS ENTRY RECEIVER 9		
BCM (BODY CONTROL MODULE) 10		
LOW TIRE PRESSURE WARNING LAMP 10		
Can Communication 10		
SYSTEM DESCRIPTION 10		
TROUBLE DIAGNOSES 11		
How to Perform Trouble Diagnosis 11		
BASIC CONCEPT 11		
INTRODUCTION 11		
WORK FLOW 12		
Wiring Diagram — T/WARN — 13		
Trouble Diagnosis Chart for Symptoms 15		
Control Unit Input/Output Signal Standard 16		
ID Registration Procedure 17		
ID REGISTRATION WITH ACTIVATION TOOL.. 17		
ID REGISTRATION WITHOUT ACTIVATION TOOL 17		
Transmitter Wake Up Operation 18		
WITH ACTIVATION TOOL 18		
	CONSULT-II Function (AIR PRESSURE MONI- TOR) 18 CONSULT-II MAIN FUNCTION 18 CONSULT-II SETTING PROCEDURE 18 WORK SUPPORT MODE 19 SELF-DIAG RESULTS MODE 20 DATA MONITOR MODE 21 ACTIVE TEST MODE 21 Diagnosis Procedure with Warning Lamp Function (Without CONSULT-II) 23 DESCRIPTION 23 FUNCTION 23 MALFUNCTION CODE CHART 23 LOW TIRE PRESSURE WARNING LAMP SYMPTOM CHART 24 Preliminary Check 26 BASIC INSPECTION 26 TROUBLE DIAGNOSIS FOR SELF-DIAGNOSTIC ITEMS 27 Transmitter or Control Unit (BCM) 27 MALFUNCTION CODE NO. 21, 22, 23 OR 24 ... 27 Transmitter - 1 27 MALFUNCTION CODE NO. 31, 32, 33, 34, 41, 42, 43, 44, 45, 46, 47 OR 48 27 Transmitter - 2 28 MALFUNCTION CODE NO. 35, 36, 37 OR 38 ... 28 Vehicle Speed Signal 29 MALFUNCTION CODE NO. 52 29 TROUBLE DIAGNOSIS FOR SYMPTOMS 30 Warning Lamp Does Not Come On When Ignition Switch Is Turned On 30 DIAGNOSTIC PROCEDURE 30 Warning Lamp Stays On When Ignition Switch Is Turned On 30 DIAGNOSTIC PROCEDURE 30 Warning Lamp Blinks When Ignition Switch Is Turned On 32 DIAGNOSTIC PROCEDURE 32 Turn Signal Lamp Blinks When Ignition Switch Is Turned On 32	F G H I J K L M

DIAGNOSTIC PROCEDURE	32	SERVICE DATA AND SPECIFICATIONS (SDS)	36
ID Registration Can Not Be Completed	33	Road Wheel	36
DIAGNOSTIC PROCEDURE	33	Tire	36
TRANSMITTER	34	Tightening Torque	36
Removal and Installation	34		
REMOVAL	34		
INSTALLATION	34		

PRECAUTIONS

PRECAUTIONS

PFP:00001

Service Notice or Precautions

NES000CP

- Low tire pressure warning lamp flashes 1min., then turns ON when occurring any malfunction except low tire pressure.
Delete the memory with CONSULT-II, or register the ID to turn low tire pressure warning lamp OFF. Refer to [WT-20, "Erase Memory"](#) , [WT-17, "ID Registration Procedure"](#) .
- ID registration is required when replacing or rotating wheels. Refer to [WT-17, "ID Registration Procedure"](#) .
- Replace grommet seal, valve core and cap of the transmitter in TPMS every tire replacement by reaching wear limit of tire.

A
B
C
D

WT

F
G
H
I
J
K
L
M

PREPARATION

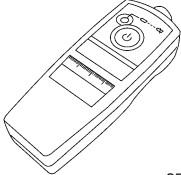
PREPARATION

PFP:00002

Special Service Tools

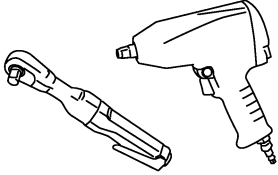
NES00058

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 Tools

NES00059

Tool name	Description
Power tool  PBIC0190E	Removing wheel nuts

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

PPF:00003

NVH Troubleshooting Chart

NES0005A

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

Symptom		Reference page		Possible cause and SUSPECTED PARTS																	
		2WD Model FAX-4, FSU-9	AWD Model FAX-12, FSU-23	Improper installation, looseness	Out-of-round	Imbalance	Incorrect tire pressure	Uneven tire wear	Deformation or damage	Non-uniformity	Incorrect tire size	PROPELLER SHAFT	DIFFERENTIAL	FRONT AXLE AND FRONT SUSPENSION	REAR AXLE AND REAR SUSPENSION	TIRES	ROAD WHEELS	DRIVE SHAFT	BRAKE	STEERING	
Noise	Tires	Noise	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
		Shake	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	
		Vibration				x					x	x		x	x			x			x
		Shimmy	x	x	x	x	x	x	x	x	x			x	x		x		x		x
	Road wheel	Noise	x	x	x			x				x	x	x	x	x		x	x	x	x
		Shake	x	x	x				x			x		x	x	x		x	x	x	x
		Shimmy, Judder	x	x	x				x					x	x	x				x	x
		Poor quality ride or handling	x	x	x				x					x	x	x					
Judder	Tires	Judder	x	x	x	x	x	x		x			x	x		x		x		x	
		Shimmy	x	x	x	x	x	x	x	x			x	x		x		x		x	
		Poor quality ride or handling	x	x	x	x	x	x	x	x			x	x		x					
		Shimmy, Judder	x	x	x				x					x	x	x				x	x

x: Applicable

A
B
C
D
E
F
G
H
I
J
K
L
M

WT

ROAD WHEEL

ROAD WHEEL

PFP:40300

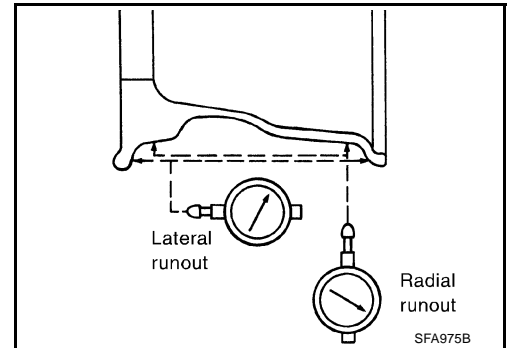
Inspection ALUMINUM WHEEL

NES0005B

1. Check tires for wear and improper inflation.
2. Check wheels for deformation, cracks and other damage. If deformed, remove wheel and check wheel runout.
 - a. Remove tire from aluminum wheel and mount on a tire balance machine.
 - b. Set dial indicator as shown in the figure.

Wheel runout (Dial indicator value):

Refer to [WT-36, "SERVICE DATA AND SPECIFICATIONS \(SDS\)"](#).



STEEL WHEEL

1. Check tires for wear and improper inflation.
2. Check wheels for deformation, cracks and other damage. If deformed, remove wheel and check wheel runout.
 - a. Remove tire from steel wheel and mount wheel on a tire balance machine.
 - b. Set two dial indicators as shown in the figure.
 - 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.

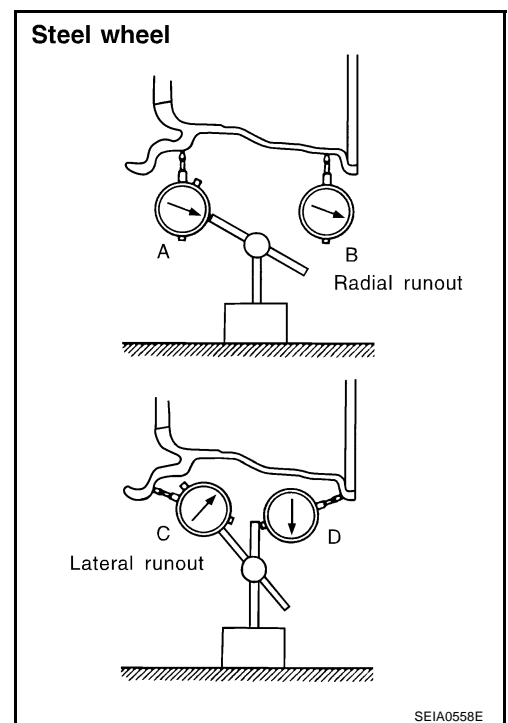
Radial runout = (A+B)/2

Lateral runout = (C+D)/2

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

Wheel runout:

Refer to [WT-36, "SERVICE DATA AND SPECIFICATIONS \(SDS\)"](#).



ROAD WHEEL TIRE ASSEMBLY

ROAD WHEEL TIRE ASSEMBLY

PPF:40300

Balancing Wheels (Bonding Weight Type) REMOVAL

NES0005C

1. Remove inner and outer balance weights from the road wheel.

CAUTION:

Be careful not to scratch the road wheel during removal.

2. 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 wheel balancer using the center hole as a guide. Start the tire balance machine.
2. When inner and outer unbalance values are shown on the wheel balancer 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.**

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

Calculation example:

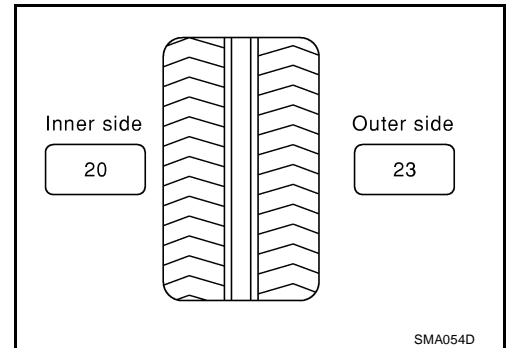
$23 \text{ g (0.81 oz)} \times 5/3 = 38.33 \text{ g (1.35 oz)} = 40 \text{ g (1.41 oz)}$ balance weight (closer to calculated balance weight value)

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

Example:

$37.4 = 35 \text{ g (1.23 oz)}$

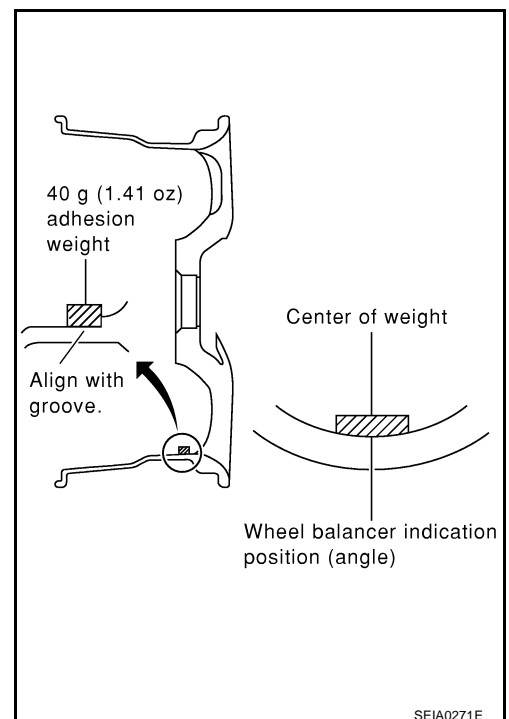
$37.5 = 40 \text{ g (1.41 oz)}$



- a. Install balance weight in the position shown in the figure.
- b. 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 wheel balancer indication position (angle).

CAUTION:

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



ROAD WHEEL TIRE ASSEMBLY

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

CAUTION:

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

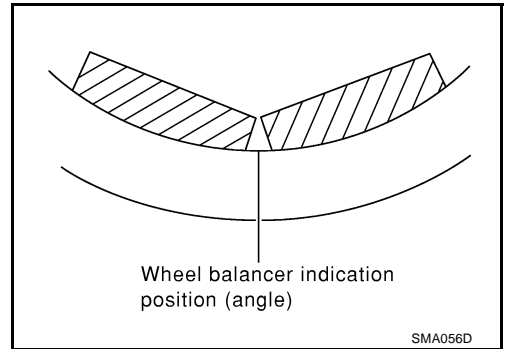
3. Start wheel balancer again.
 4. Install drive-in balance weight on inner side of road wheel in the wheel balancer indication position (angle).

CAUTION:

Do not install more than two balance weights.

5. Start wheel balancer. Make sure that inner and outer residual unbalance values are 5 g (0.17 oz) each or below.
 • If either residual unbalance value exceeds 5 g (0.17 oz), repeat installation procedures.

Wheel balance (Maximum allowable unbalance):



Maximum allowable unbalance	Dynamic (At rim flange)	Less than 5 g (0.17 oz) (one side)
	Static (At rim flange)	Less than 10 g (0.35 oz)

Rotation

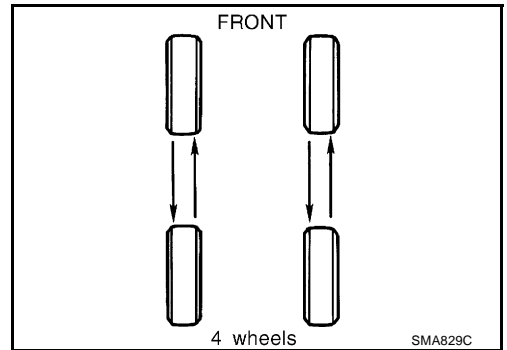
NES0005D

- Follow the maintenance schedule for tire rotation service intervals. Refer to [MA-6. "PERIODIC MAINTENANCE"](#).
- Do not include the T-type 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 wheel nut at torque exceeding the criteria for preventing strain of disc rotor.**

Tightening torque of wheel nut :108 N-m (11 kg-m, 80 ft-lb)



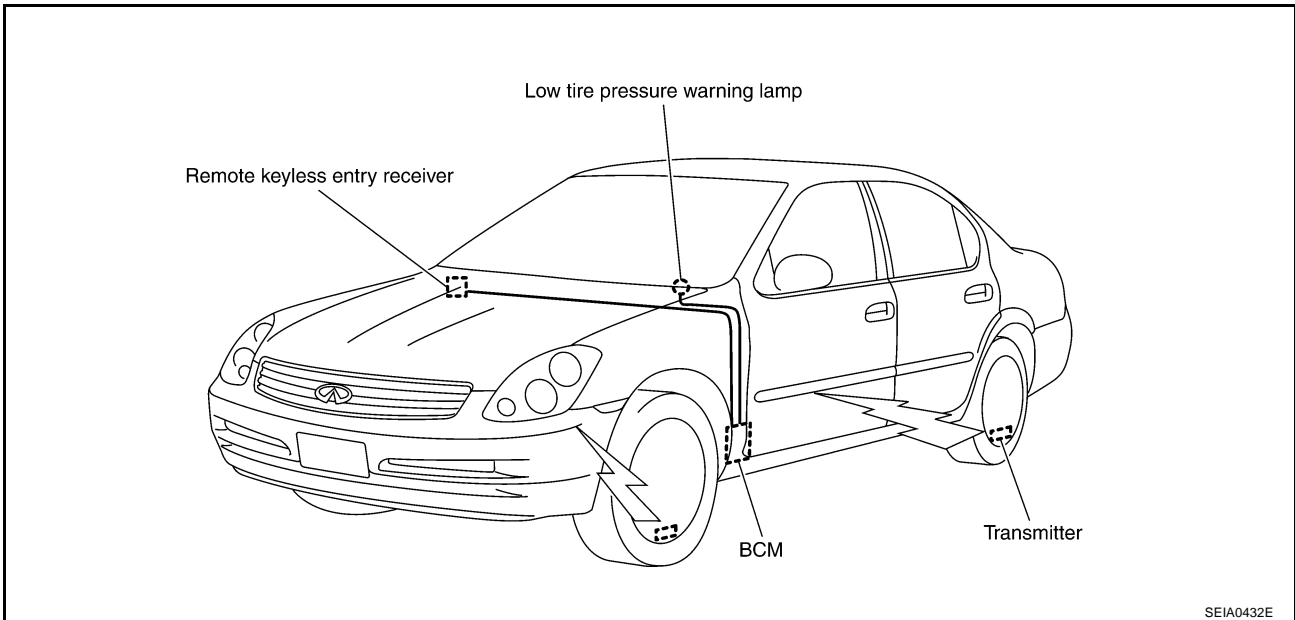
LOW TIRE PRESSURE WARNING SYSTEM

LOW TIRE PRESSURE WARNING SYSTEM

PFP:40300

System Components

NES0005E

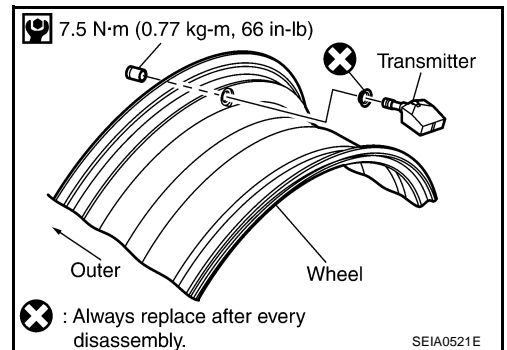


System Description

TRANSMITTER

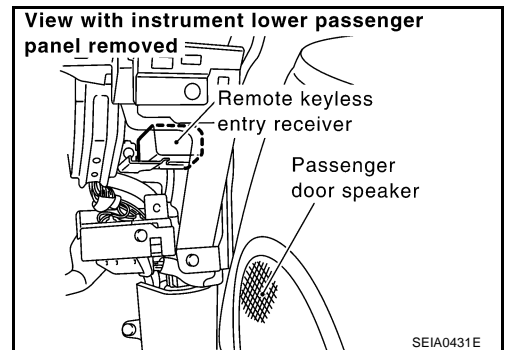
NES0005F

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.

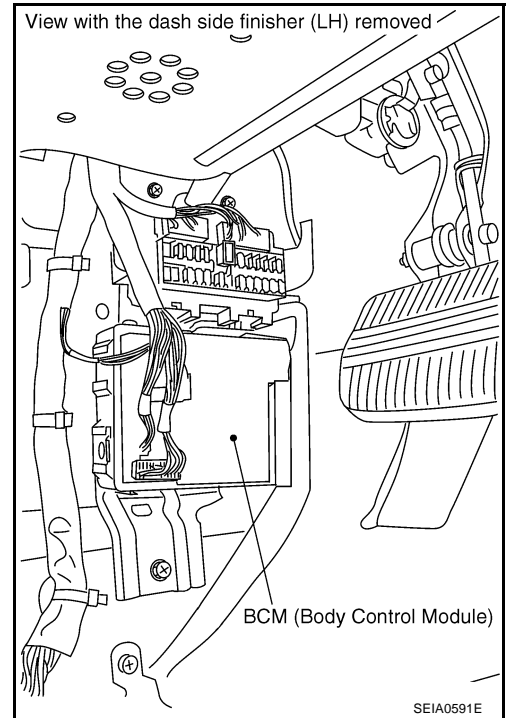


A
B
C
D
WT
F
G
H
I
J
K
L
M

LOW TIRE PRESSURE WARNING SYSTEM

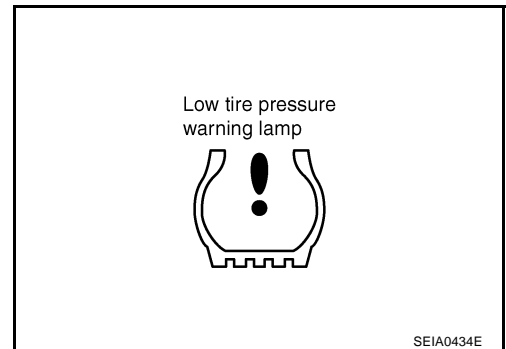
BCM (BODY CONTROL MODULE)

The BCM reads the air pressure signal received by the remote keyless entry receiver, and controls the low tire pressure warning lamp operations. It also has a judgement 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 are activated.



Low tire pressure warning lamp indication

Condition	Low tire pressure warning lamp
Less than 171 kPa (1.71 kg/cm ² , 25 psi) [Note 1]	ON
Less than 186 kPa (1.86 kg/cm ² , 27 psi) [Note 2]	
Low tire pressure warning system malfunction [Other diagnostic item]	Warning lamp flashes 1 min, then turns ON.

Note 1: Standard air pressure is for 210 kpa (2.1 kg/cm², 30 psi) vehicles.

Note 2: Standard air pressure is for 230 kpa (2.3 kg/cm², 33 psi) vehicles.

Can Communication SYSTEM DESCRIPTION

NES000B3

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-22, "CAN COMMUNICATION"](#).

TROUBLE DIAGNOSES

PF0:00004

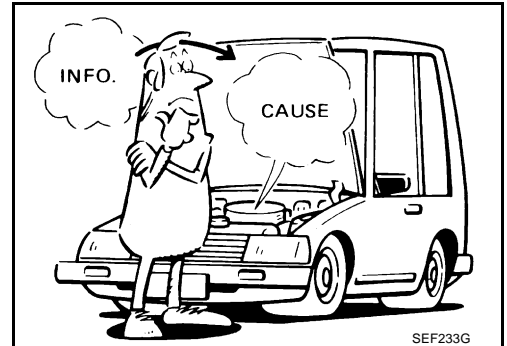
How to Perform Trouble Diagnosis BASIC CONCEPT

NES000B4

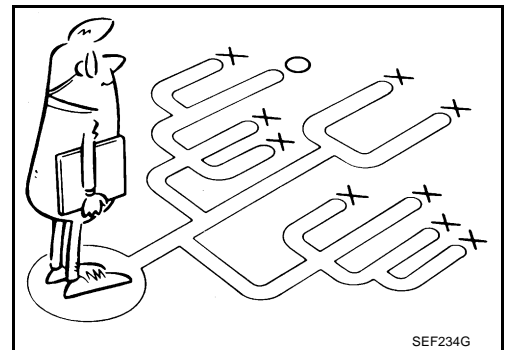
- To perform trouble diagnosis, it is the most important to have understanding about vehicle systems (control and mechanism) thoroughly.
- It is also important to clarify customer complaints before inspection.
First of all, reproduce symptoms, and understand them fully. Ask customer about his/her complaints carefully. In some cases, it will be necessary to check symptoms by driving vehicle with customer.

CAUTION:

Customers are not professional. It is dangerous to make an easy guess like “maybe the customer means that...,” or “maybe the customer mentions this symptom”.



- It is essential to check symptoms right from the beginning in order to repair malfunctions completely. For intermittent malfunctions, reproduce symptoms based on interview with customer and past examples. Do not perform inspection on ad hoc basis. Most intermittent malfunctions are caused by poor contacts. In this case, it will be effective to shake suspected harness or connector by hand. When repairing without any symptom diagnosis, you cannot judge if malfunctions have actually been eliminated.
- After completing diagnosis, always erase diagnostic memory. Refer to [WT-20, "Erase Memory"](#) .
- For intermittent malfunctions, move harness or harness connector by hand. Then check for poor contact or reproduced open circuit.



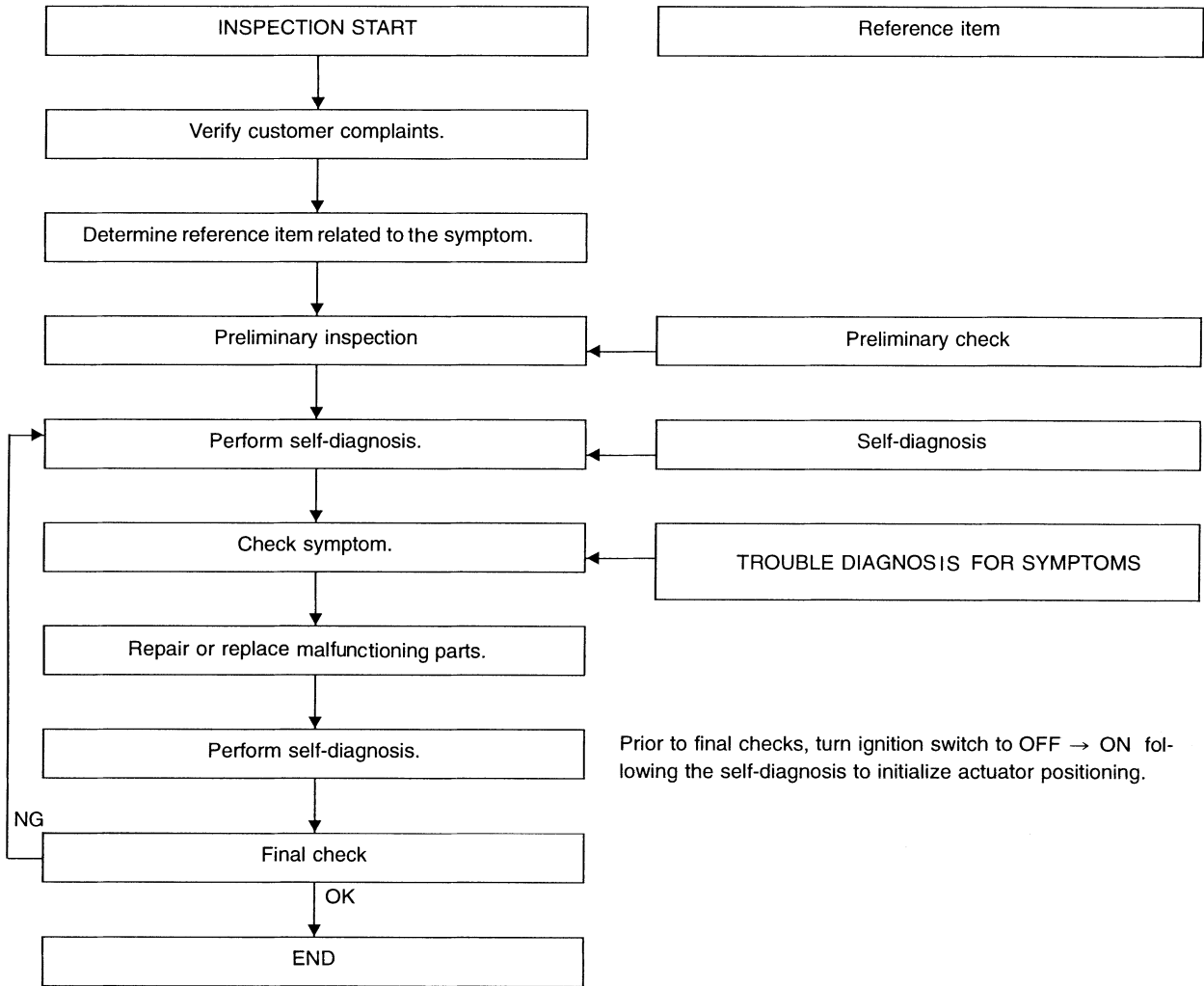
INTRODUCTION

- 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.

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

TROUBLE DIAGNOSES

WORK FLOW



SEIA0100E

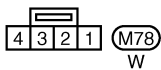
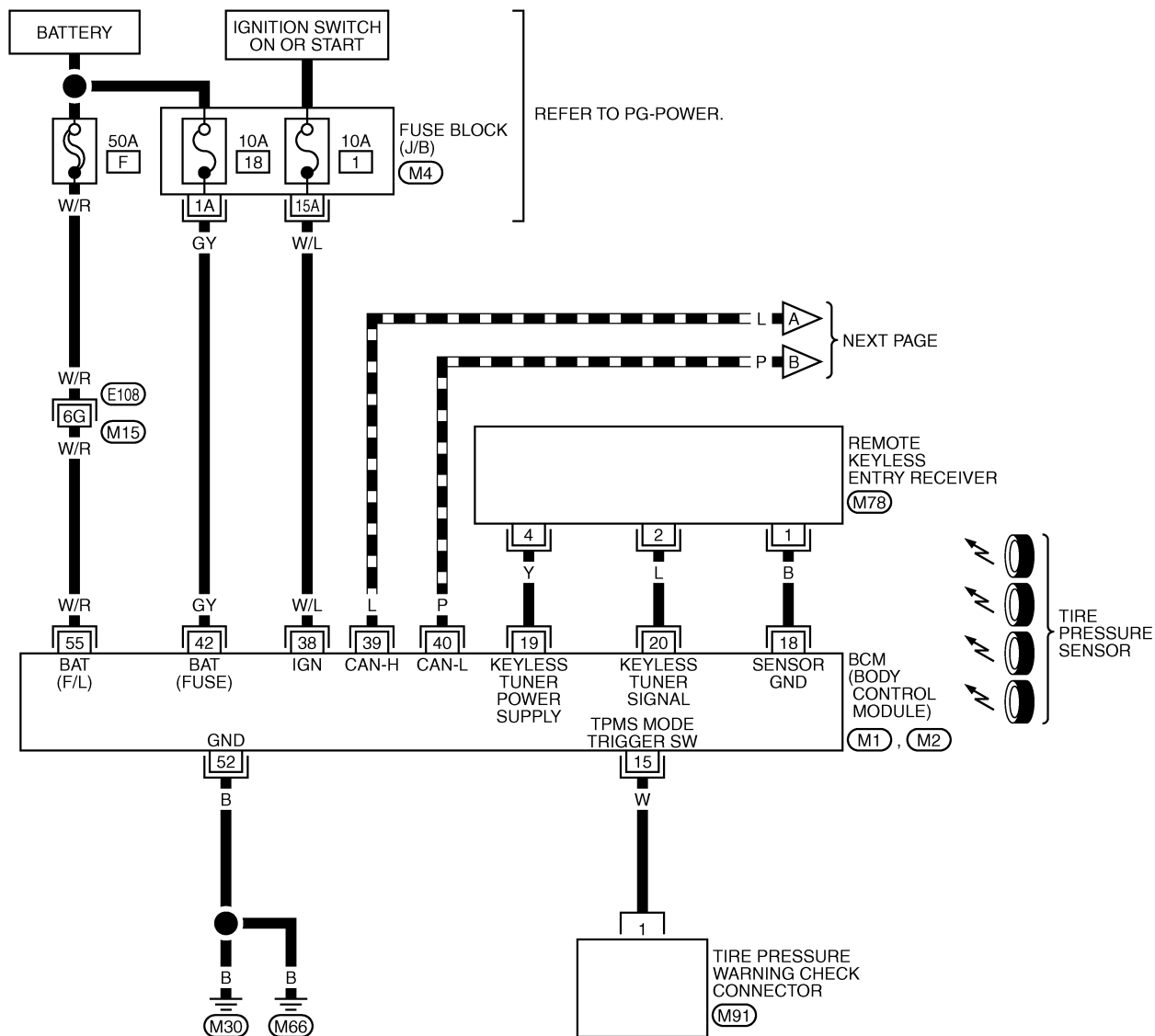
Preliminary check: [WT-26](#) Self-diagnosis: [WT-20](#) Trouble diagnosis for symptoms: [WT-30](#)

TROUBLE DIAGNOSES

Wiring Diagram — T/WARN —

NES0005H

WT-T/WARN-01



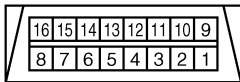
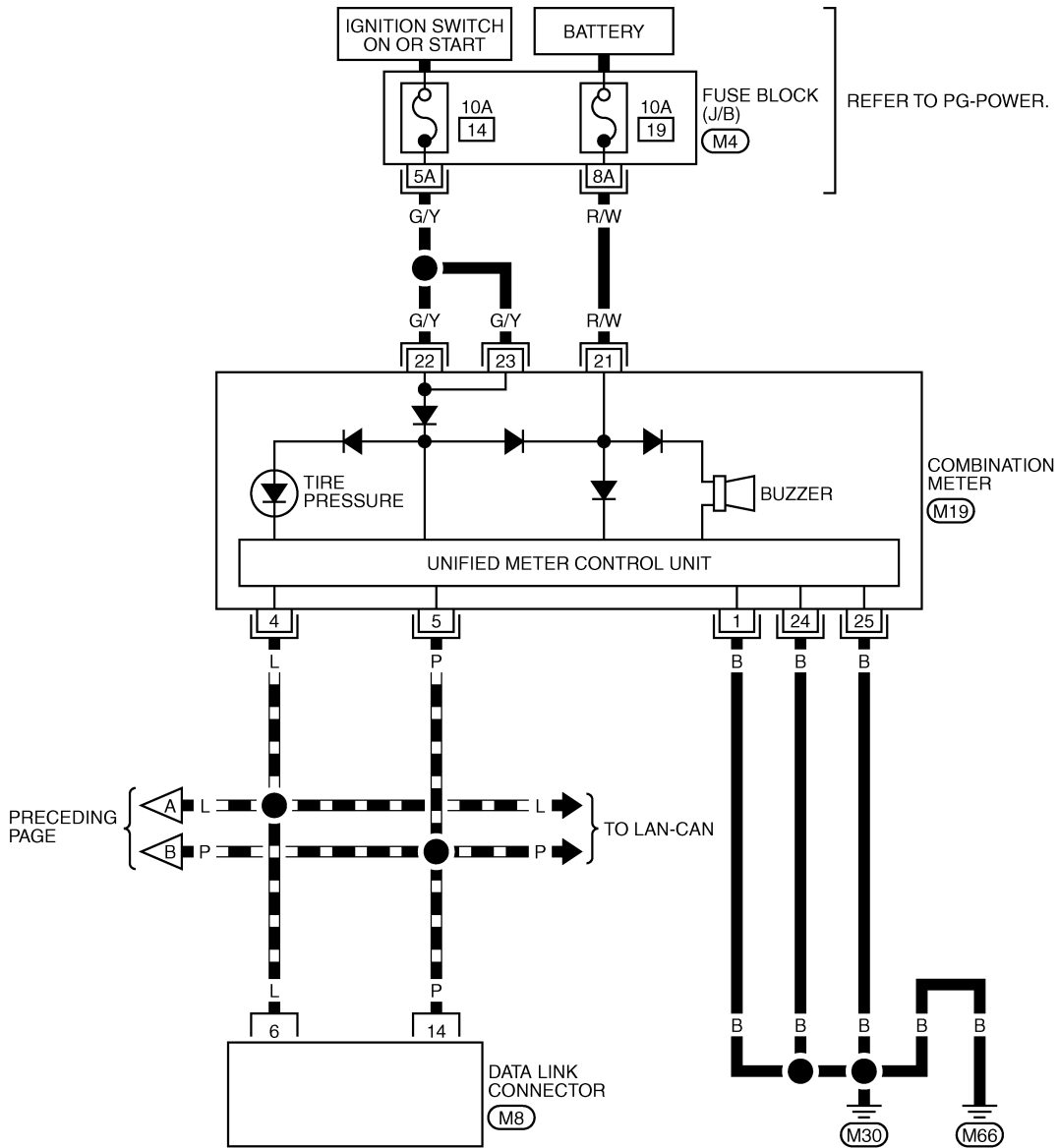
REFER TO THE FOLLOWING.
 (E108) -SUPER MULTIPLE JUNCTION (SMJ)
 (M4) -FUSE BLOCK-JUNCTION BOX (J/B)
 (M1), (M2) -ELECTRICAL UNITS

TEWM0107E

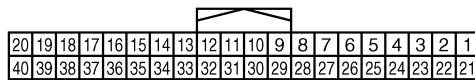
TROUBLE DIAGNOSES

WT-T/WARN-02

▬ : DATA LINE



(M8)
W



(M19)
W

REFER TO THE FOLLOWING.

(M4) - FUSE BLOCK-JUNCTION BOX (J/B)

TEWM0108E

TROUBLE DIAGNOSES

Trouble Diagnosis Chart for Symptoms

NES000B5

If low tire pressure warning lamp turns ON, perform self-diagnosis. Refer to [WT-20, "SELF-DIAG RESULTS MODE"](#).

Symptom	Check item	Reference page
Warning lamp does not come on when ignition switch is turned on.	CAN communication line	WT-30
	Combination meter	
	BCM	
Warning lamp stays on when ignition switch is turned on.	ID registration	WT-30
	BCM connector or circuit	
	BCM	
Warning lamp blinks when ignition switch is turned on.	BCM connector or circuit	WT-32
	BCM	
Turn signal lamp blinks when ignition switch is turned on.	BCM connector or circuit	WT-32
	BCM	
ID registration can not be operated.	Transmitter	WT-33
	Remote keyless entry receiver connector or circuit	
	Remote keyless entry receiver	
	BCM connector or circuit	
	BCM	

A

B

C

D

WT

F

G

H

I

J

K

L

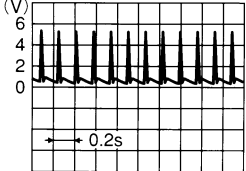
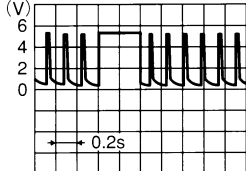
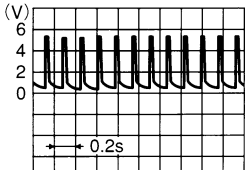

M

TROUBLE DIAGNOSES

Control Unit Input/Output Signal Standard

NES00051

Standards using a circuit tester and oscilloscope

Terminal (Wire color)	Item	Condition	Voltage (V) Approx. value
15 (W)	Tire pressure warning check connector	Always	5V
18 (B)	Remote keyless entry receiver (Ground)	—	0V
19 (Y)	Remote keyless entry receiver (Power supply)	Stand-by	 OCC3879D
		Press any of the keyfob switches	 OCC3882D
20 (L)	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)	Data line (CAN H)	—	—
40 (P)	Data line (CAN L)	—	—
42 (GY)	Battery power supply (Fuse)	Always	Battery voltage (12V)
52 (B)	Ground	—	0V
55 (W/R)	Battery power supply (F/L)	Always	Battery voltage (12V)

TROUBLE DIAGNOSES

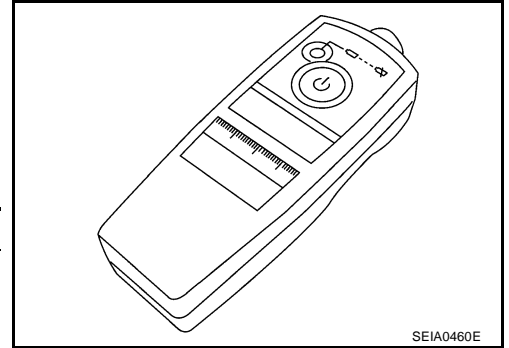
NES000CK

ID Registration Procedure

ID REGISTRATION WITH ACTIVATION TOOL

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

1. Perform "CONSULT-II SETTING PROCEDURE". Refer to [WT-18, "CONSULT-II SETTING PROCEDURE"](#).
2. Touch "WORK SUPPORT" on "SELECT DIAG MODE" screen, and select "ID REGIST".
3. With the activation tool (J-45295) pushed against the front-left transmitter position of the tire air valve, press the button then keep 5 seconds.
4. Register the IDs in order from FR LH, FR RH, RR RH to RR LH. When ID registration of each wheel has been completed, a buzzer sounds and turn signal lamp (LH/ RH) blinks.



Activation tire position	Buzzer	Turn signal lamp	CONSULT-II
1 Front LH	Once	2 times flashing	"YET" ↓ "DONE"
2 Front RH	2 times		
3 Rear RH	3 times		
4 Rear LH	4 times		

5. 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 ACTIVATION TOOL

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

1. Perform "CONSULT-II SETTING PROCEDURE". Refer to [WT-18, "CONSULT-II SETTING PROCEDURE"](#).
2. Touch "WORK SUPPORT" on "SELECT DIAG MODE" screen, and select "ID REGIST".
3. 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 a few minutes.

Tire position	Tire pressure kPa (kg/cm ² , psi)
Front – Left	240 (2.4, 34)
Front – Right	220 (2.2, 31)
Rear – Right	200 (2.0, 29)
Rear – Left	180 (1.8, 26)

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

Activation tire position	CONSULT-II
Front LH	"YET" ↓ "DONE"
Front RH	
Rear RH	
Rear LH	

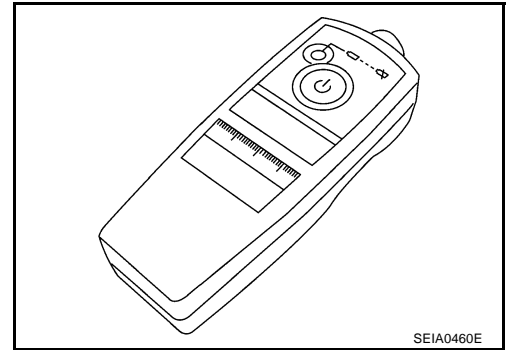
5. Inflate all tires to proper pressure. Refer to [WT-36, "SERVICE DATA AND SPECIFICATIONS \(SDS\)"](#).

TROUBLE DIAGNOSES

Transmitter Wake Up Operation WITH ACTIVATION TOOL

NES0005K

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



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

SEIA0378E

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

CONSULT-II Function (AIR PRESSURE MONITOR) CONSULT-II MAIN FUNCTION

NES000B6

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

Mode	Function	Reference
WORK SUPPORT	This mode enables a technician to adjust some devices faster and more accurately by following the indications on CONSULT-II.	WT-19. "WORK SUPPORT MODE".
SELF-DIAG RESULTS	Self-diagnostic results can be read and erased quickly.	WT-20. "SELF-DIAG RESULTS MODE".
DATA MONITOR	Input/Output data in the control unit can be read.	WT-21. "DATA MONITOR MODE".
ACTIVE TEST	Diagnostic Test Mode in with CONSULT-II drives some actuators apart from the control unit (BCM) and also shifts some parameters in a specified range.	WT-21. "ACTIVE TEST MODE".

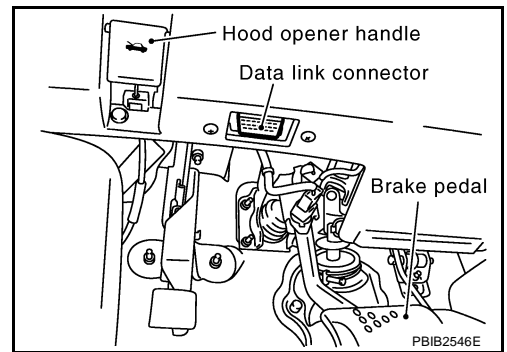
CONSULT-II SETTING PROCEDURE

CAUTION:

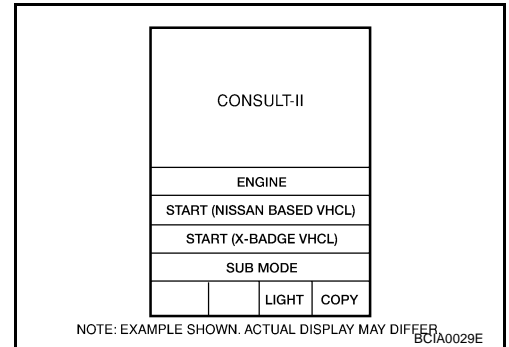
If CONSULT-II is used with no connection of CONSULT-II CONVERTER, malfunctions might be detected in self-diagnosis depending on control unit which carry out CAN communication.

TROUBLE DIAGNOSES

- For details, refer to the separate "CONSULT-II Operations Manual".
1. Turn ignition switch "OFF".
 2. Connect CONSULT-II and CONSULT-II CONVERTER to data link connector on vehicle.
 3. Turn ignition switch "ON".



4. Touch "START (NISSAN BASED VHCL)".

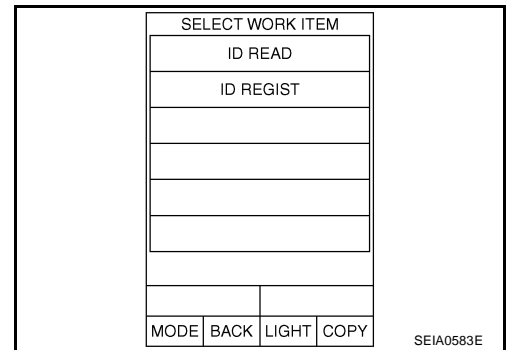


5. Touch "BCM" on "SELECT SYSTEM" screen. If "BCM" is not indicated, go to [GI-39, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#).
6. Touch "AIR PRESSURE MONITOR" on "SELECT TEST ITEM" screen.
7. Perform each diagnostic test mode according to each service procedure.

WORK SUPPORT MODE

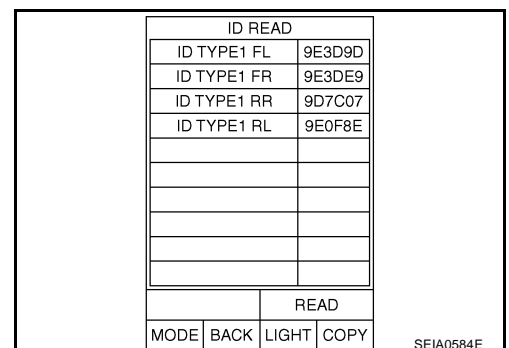
Operation Procedure

1. Perform "CONSULT-II SETTING PROCEDURE". Refer to [WT-18, "CONSULT-II SETTING PROCEDURE"](#).
2. Touch "WORK SUPPORT".
3. Select from "SELECT WORK ITEM", screen of work support made is displayed



ID Read

The registered ID number is displayed.



TROUBLE DIAGNOSES

ID Regist

Refer to [WT-17, "ID Registration Procedure"](#) .

SELF-DIAG RESULTS MODE

Operation Procedure

1. Perform "CONSULT-II SETTING PROCEDURE". Refer to [WT-18, "CONSULT-II SETTING PROCEDURE"](#) .
2. Touch "SELF-DIAG RESULTS". Display shows malfunction experienced since the last erasing operation.

Display Item List

DTC	Diagnostic item	Diagnostic item is detected when ...	Check items
C1704	FLAT_TIRE_FL	Front-left tire pressure drops to * kPa (* kg/cm ² , * psi) or less.	—
C1705	FLAT_TIRE_FR	Front-right tire pressure drops to * kPa (* kg/cm ² , * psi) or less.	
C1706	FLAT_TIRE_RR	Rear-right tire pressure drops to * kPa (* kg/cm ² , * psi) or less.	
C1707	FLAT_TIRE_RL	Rear-left tire pressure drops to * kPa (* kg/cm ² , * psi) or less.	
C1708	[NO_DATA]_FL	Data from front-left transmitter cannot be received.	WT-27
C1709	[NO_DATA]_FR	Data from front-right transmitter cannot be received.	
C1710	[NO_DATA]_RR	Data from rear-right transmitter cannot be received.	
C1711	[NO_DATA]_RL	Data from rear-left transmitter cannot be received.	
C1712	[CHECKSUM_ERR]_FL	Checksum data from front-left transmitter is malfunctioning.	WT-27
C1713	[CHECKSUM_ERR]_FR	Checksum data from front-right transmitter is malfunctioning.	
C1714	[CHECKSUM_ERR]_RR	Checksum data from rear-right transmitter is malfunctioning.	
C1715	[CHECKSUM_ERR]_RL	Checksum data from rear-left transmitter is malfunctioning.	
C1716	[PRESSDATA_ERR]_FL	Air pressure data from front-left transmitter is malfunctioning.	WT-28
C1717	[PRESSDATA_ERR]_FR	Air pressure data from front-right transmitter is malfunctioning.	
C1718	[PRESSDATA_ERR]_RR	Air pressure data from rear-right transmitter is malfunctioning.	
C1719	[PRESSDATA_ERR]_RL	Air pressure data from rear-left transmitter is malfunctioning.	
C1720	[CODE_ERROR]_FL	Function code data from front-left transmitter is malfunctioning.	WT-27
C1721	[CODE_ERROR]_FR	Function code data from front-right transmitter is malfunctioning.	
C1722	[CODE_ERROR]_RR	Function code data from rear-right transmitter is malfunctioning.	
C1723	[CODE_ERROR]_RL	Function code data from rear-left transmitter is malfunctioning.	
C1724	[BATT_VOLT_LOW]_FL	Battery voltage of front-left transmitter drops.	WT-27
C1725	[BATT_VOLT_LOW]_FR	Battery voltage of front-right transmitter drops.	
C1726	[BATT_VOLT_LOW]_RR	Battery voltage of rear-right transmitter drops.	
C1727	[BATT_VOLT_LOW]_RL	Battery voltage of rear-left transmitter drops.	
C1729	VHCL_SPEED_SIG_ERR	Vehicle speed signal is error.	WT-29

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-II.

*:

- 171 kPa (1.71 kg/cm² , 25 psi): Standard air pressure is for 210 kpa (2.1 kg/cm² , 30 psi) vehicles.
- 186 kPa (1.86 kg/cm² , 27 psi): Standard air pressure is for 230 kpa (2.3 kg/cm² , 33 psi) vehicles.

Erase Memory

1. Turn ignition switch OFF.
2. Start engine and touch "START (NISSAN BASED VHCL)".
3. Select "SELF-DIAG RESULTS" mode for "AIR PRESSURE MONITOR".
4. Touch "ERASE" on CONSULT-II screen to erase memory.

TROUBLE DIAGNOSES

DATA MONITOR MODE

Operation Procedure

1. Perform "CONSULT-II SETTING PROCEDURE". Refer to [WT-18, "CONSULT-II SETTING PROCEDURE"](#).
2. Touch "DATA MONITOR".
3. Select from "SELECT MONITOR ITEM", screen of data monitor mode is displayed.

NOTE:

When malfunction is detected, CONSULT-II performs REAL-TIME DIAGNOSIS. Also, any malfunction detected while in this mode will be displayed at real time.

Display Item List

×: Standard -: Not applicable

Monitor item (Unit)	SELECT MONITOR ITEM		Remarks
	ALL SIGNALS	SELECTION FROM MENU	
VEHICLE SPEED [km/h] or [mph]	×	×	Vehicle speed is displayed.
AIR PRESS FL [kpa] or [psi]	×	×	Tire pressure is displayed.
AIR PRESS FR [kPa] or [psi]	×	×	Tire pressure is displayed.
AIR PRESS RR [kpa] or [psi]	×	×	Tire pressure is displayed.
AIR PRESS RL [kpa] or [psi]	×	×	Tire pressure is displayed.
ID REGST FL 1 [DONE/YET]	×	×	Registration ID is displayed.
ID REGST FR 1 [DONE/YET]	×	×	Registration ID is displayed.
ID REGST RR 1 [DONE/YET]	×	×	Registration ID is displayed.
ID REGST RL 1 [DONE/YET]	×	×	Registration ID is displayed.
WARNING LAMP [ON/OFF]	×	×	Control status of low tire pressure warning lamp is displayed.
BUZZER [ON/OFF]	×	×	Buzzer in combination meter is displayed.
Voltage [V]	-	×	The value measured by the voltage probe is displayed.
Frequency [Hz]	-	×	The value measured by the pulse probe is displayed.
DUTY-HI (high) [%]	-	×	
DUTY-LOW (low) [%]	-	×	
PLS WIDTH-HI [msec]	-	×	
PLS WIDTH-LOW [msec]	-	×	

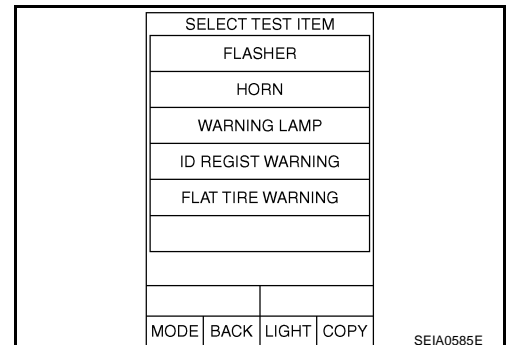
ACTIVE TEST MODE

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-II.

Operation Procedure

1. Perform CONSULT-II SETTING PROCEDURE. Refer to [WT-18, "CONSULT-II SETTING PROCEDURE"](#).
2. Touch "ACTIVE TEST".
3. Select from "SELECT TEST ITEM", screen of active test mode is displayed.



TROUBLE DIAGNOSES

TEST ITEM LIST

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

TROUBLE DIAGNOSES

Diagnosis Procedure with Warning Lamp Function (Without CONSULT-II)

NES0005L

DESCRIPTION

During driving, the low tire pressure warning system receives the signal transmitted from the transmitter installed in each wheel, when the tire pressure becomes low. The control unit (BCM) of this system has pressure judgement 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. Refer to [PG-42, "HARNESS"](#).

MALFUNCTION CODE CHART











Code (warning lamp blinks)	Diagnosis item	Reference
15	Front-left tire pressure drops to * kPa (* kg/cm ² , * psi) or less.	—
16	Front-right tire pressure drops to * kPa (* kg/cm ² , * psi) or less.	
17	Rear-right tire pressure drops to * kPa (* kg/cm ² , * psi) or less.	
18	Rear-left tire pressure drops to * kPa (* kg/cm ² , * psi) or less.	
21	Transmitter no data (front - left)	WT-27
22	Transmitter no data (front - right)	
23	Transmitter no data (rear - right)	
24	Transmitter no data (rear - left)	
31	Transmitter checksum error (front - left)	WT-27
32	Transmitter checksum error (front - right)	
33	Transmitter checksum error (rear - right)	
34	Transmitter checksum error (rear - left)	
35	Transmitter pressure data error (front - left)	WT-28
36	Transmitter pressure data error (front - right)	
37	Transmitter pressure data error (rear - right)	
38	Transmitter pressure data error (rear - left)	
41	Transmitter function code error (front - left)	WT-27
42	Transmitter function code error (front - right)	
43	Transmitter function code error (rear - right)	
44	Transmitter function code error (rear - left)	
45	Transmitter battery voltage low (front - left)	WT-27
46	Transmitter battery voltage low (front - right)	
47	Transmitter battery voltage low (rear - right)	
48	Transmitter battery voltage low (rear - left)	
52	Vehicle speed signal	WT-29

*:



- 171 kPa (1.71 kg/cm², 25 psi): Standard air pressure is for 210 kPa (2.1 kg/cm², 30 psi) vehicles.
- 186 kPa (1.86 kg/cm², 27 psi): Standard air pressure is for 230 kPa (2.3 kg/cm², 33 psi) vehicles.

TROUBLE DIAGNOSES

LOW TIRE PRESSURE WARNING LAMP SYMPTOM CHART

Diagnosis Item	Symptom (Ignition switch ON)	Low tire pressure warning lamp	Cause	Action
Low tire pressure warning lamp	Warning light 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 light 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 WT-18, "Transmitter Wake Up Operation" .
	Warning light 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 WT-18, "Transmitter Wake Up Operation" .
	Warning light 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 WT-18, "Transmitter Wake Up Operation" .
	Warning light 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 WT-18, "Transmitter Wake Up Operation" .

TROUBLE DIAGNOSES

Diagnosis Item	Symptom (Ignition switch ON)	Low tire pressure warning lamp	Cause	Action
Low tire pressure warning lamp	Warning light blinks 4 times.	 Blinks 4 times ON 0.3 sec > OFF 0.3 sec <small>SEIA0597E</small>	Rear LH wheel transmitter is not activated.	Activate rear LH wheel transmitter. Refer to WT-18, "Transmitter Wake Up Operation" .
	Warning light comes on and does not turn off.	 Comes ON and stays ON <small>SEIA0598E</small>	Tire pressure is low.	Check tire pressure with CONSULT-II. Refer to WT-21, "DATA MONITOR MODE" .
			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 low tire pressure warning system malfunction.	<ul style="list-style-type: none"> ● Perform CONSULT-II Self-Diagnosis. Refer to WT-20, "SELF-DIAG RESULTS MODE". – Perform ID Registration if needed. Refer to WT-17, "ID Registration Procedure".
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"> 1. Tool J-45295 (special service tool) battery low. 2. Ignition OFF during activation. 3. Tool J-45295 (special service tool) not positioned correctly. 4. Transmitters already activated. 	<ol style="list-style-type: none"> 1. Install new battery. 2. Make sure ignition is ON during activation. 3. Position tool correctly during activation. 4. None

NOTE:

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

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

TROUBLE DIAGNOSES

Preliminary Check

NES0005N

BASIC INSPECTION

1. CHECK ALL TIRE PRESSURES

- Check all tire pressures. Refer to [WT-36, "SERVICE DATA AND SPECIFICATIONS \(SDS\)"](#) .

OK or NG

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

2. CHECK LOW TIRE PRESSURE WARNING LAMP ACTIVATION

- Check low tire pressure warning lamp activation.

Dose low tire pressure warning lamp activate for 1 second when ignition switch is turned "ON"?

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

3. CHECK CONNECTOR

1. Disconnect BCM harness connectors M1 and M2.
2. Check terminals for damage or loose connection.

OK or NG

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

4. CHECK ACTIVATION TOOL

- Check activation tool battery.

OK or NG

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

TROUBLE DIAGNOSIS FOR SELF-DIAGNOSTIC ITEMS

TROUBLE DIAGNOSIS FOR SELF-DIAGNOSTIC ITEMS

PFP:00000

Transmitter or Control Unit (BCM) MALFUNCTION CODE NO. 21, 22, 23 OR 24

NES0005P

1. CHECK CONTROL UNIT

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

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 M78.
2. Check terminals for damage or loose connection.
3. Reconnect harness connector.

OK or NG

- OK >> Replace BCM refer to [BCS-18, "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.

Are there any tires 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-II "DATA MONITOR" within 15 minutes after vehicle speed becomes 17 km/h (11 MPH).

Does "DATA MONITOR" 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-II "DATA MONITOR" within 5 minutes.

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

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

Transmitter - 1 MALFUNCTION CODE NO. 31, 32, 33, 34, 41, 42, 43, 44, 45, 46, 47 OR 48

NES0005Q

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.

TROUBLE DIAGNOSIS FOR SELF-DIAGNOSTIC ITEMS

2. REPLACE TRANSMITTER

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

Can ID registration of all transmitters be completed?

YES >> GO TO 3.

NO >> GO TO the inspection 1. Refer to [WT-27, "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-II "DATA MONITOR" within 5 minutes.

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

YES >> INSPECTION END

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

Transmitter - 2 MALFUNCTION CODE NO. 35, 36, 37 OR 38

NES0005R

1. CHECK ALL TIRE PRESSURES

- Check all tire pressures. Refer to [WT-36, "SERVICE DATA AND SPECIFICATIONS \(SDS\)"](#) .

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-II "DATA MONITOR" within 15 minutes after vehicle speed becomes 17 km/h (11 MPH).

>> Replace transmitter with new one if "DATA MONITOR" display 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-II "DATA MONITOR" within 5 minutes.

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

YES >> INSPECTION END

NO >> GO TO the inspection applicable to DTC.

TROUBLE DIAGNOSIS FOR SELF-DIAGNOSTIC ITEMS

Vehicle Speed Signal MALFUNCTION CODE NO. 52

NES0005S

1. CHECK SELF-DIAGNOSTIC RESULTS

1. Turn ignition switch OFF.
2. Connect CONSULT-II and CONSULT-II CONVERTER to the data link connector.
3. Turn the ignition switch ON.
4. Touch "START (NISSAN BASED VHCL)".
5. Touch "BCM" on "SELECT SYSTEM" screen.

NOTE:

If "BCM" is not indicated, go to [GI-39, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#) .

6. Touch "BCM C/U" on "SELECT SYSTEM" screen.
7. Touch "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.
8. Check display contents in self-diagnostic results.

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

YES >> Perform trouble diagnosis for CAN communication system. GO TO [LAN-3, "Precautions When Using CONSULT-II"](#) .

NO >> Check combination meter refer to [DI-15, "Vehicle Speed Signal Inspection"](#) .

A

B

C

D

WT

F

G

H

I

J

K

L

M

TROUBLE DIAGNOSIS FOR SYMPTOMS

TROUBLE DIAGNOSIS FOR SYMPTOMS

PFP:00007

Warning Lamp Does Not Come On When Ignition Switch Is Turned On DIAGNOSTIC PROCEDURE

NES000B7

1. CHECK SELF-DIAGNOSTIC RESULTS

1. Turn ignition switch OFF.
2. Connect CONSULT-II and CONSULT-II CONVERTER to the data link connector.
3. Turn the ignition switch ON.
4. Touch "START (NISSAN BASED VHCL)".
5. Touch "BCM" on "SELECT SYSTEM" screen.
If the "BCM" is not indicated, go to [GI-39, "CONSULT-II Data Link Connector \(DLC\) Circuit"](#) .
6. Touch "BCM C/U" on "SELECT SYSTEM" screen.
7. Touch "SELF-DIAG RESULTS" on "SELECT DIAG MODE" screen.
8. Check display contents in self-diagnostic results.

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

- YES >> Perform trouble diagnosis for CAN communication system. GO TO [LAN-3, "Precautions When Using CONSULT-II"](#) .
- NO >> 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-12, "Self-Diagnosis Mode of Combination Meter"](#) .

3. CHECK LOW TIRE PRESSURE WARNING LAMP

Disconnect BCM harness connectors M1 and M2.

Does the warning lamp activate?

- YES >> Replace BCM. Refer to [BCS-18, "Removal and Installation of BCM"](#) .
- NO >> Check combination meter and repair or replace.

Warning Lamp Stays On When Ignition Switch Is Turned On DIAGNOSTIC PROCEDURE

NES000B8

1. PERFORM SELF-DIAGNOSIS

1. Turn ignition switch ON. (Do not start engine.)
2. Select "SELF-DIAG RESULTS" mode for "AIR PRESSURE MONITOR" with CONSULT-II.
3. Touch "ERASE".
4. Turn ignition switch OFF.
5. Start engine.

Does low tire pressure warning lamp turn OFF?

- YES >> INSPECTION END
- NO >> GO TO 2.

2. PERFORM ID REGISTRATION

Perform ID registration all transmitters. Refer to [WT-17, "ID Registration Procedure"](#) .

Does low tire pressure warning lamp turn OFF?

- YES >> INSPECTION END
- NO >> GO TO 3.

TROUBLE DIAGNOSIS FOR SYMPTOMS

3. CHECK CONNECTOR

1. Turn ignition switch OFF.
2. Disconnect BCM harness connectors M1 and M2.
3. Check terminals for damage or loose connections.

OK or NG

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

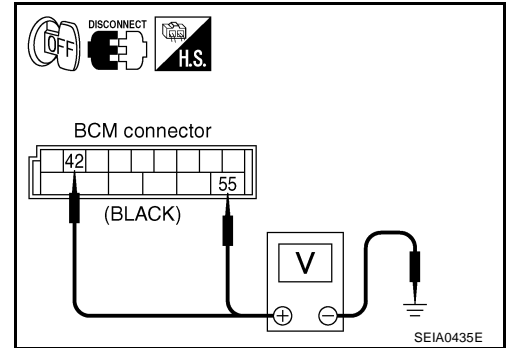
4. CHECK POWER SUPPLY CIRCUIT (BATTERY)

Check voltage between BCM harness connector M2 terminals 42, 55 and ground.

Connector	Terminal	Voltage (Approx.)
M2	42 - Ground	Battery voltage
	55 - Ground	

OK or NG

- OK >> GO TO 5.
 NG >> Check BCM power supply circuit for open or short.



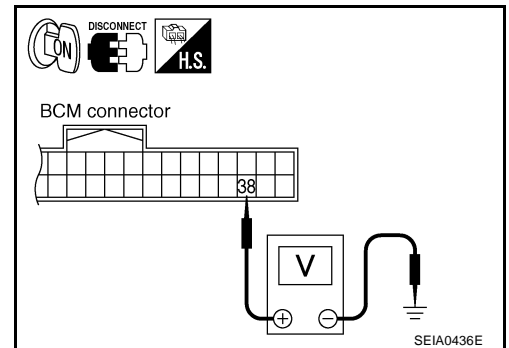
5. CHECK POWER SUPPLY CIRCUIT (IGN)

1. Turn ignition switch ON.
2. Check voltage between BCM harness connector M1 terminal 38 and ground.

Connector	Terminal	Voltage (Approx.)
M1	38 - Ground	Battery voltage

OK or NG

- OK >> GO TO 6.
 NG >> Check BCM power supply circuit for open or short.



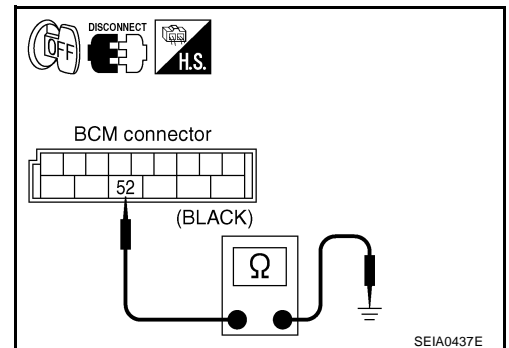
6. CHECK GROUND CIRCUIT

1. Turn ignition switch OFF.
2. Check continuity between BCM harness connector M2 terminal 52 and ground.

Continuity should exist.

OK or NG

- OK >> Replace BCM. Refer to [BCS-18, "Removal and Installation of BCM"](#) .
 NG >> Repair or replace BCM ground circuit.



TROUBLE DIAGNOSIS FOR SYMPTOMS

Warning Lamp Blinks When Ignition Switch Is Turned On

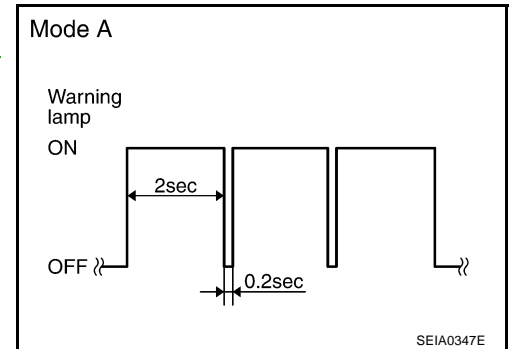
NES000B9

NOTE:

If warning lamp blinks below, the system is normal.

Blink Mode A

- This mode shows transmitter status is OFF-mode. Perform transmitter wake up operation. Refer to [WT-18, "Transmitter Wake Up Operation"](#).



DIAGNOSTIC PROCEDURE

1. CHECK CONNECTOR

- Turn ignition switch OFF.
- Disconnect BCM harness connector M1.
- Check terminals for damage or loose connections.

OK or NG

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

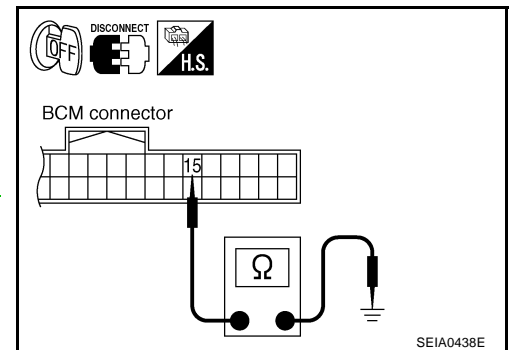
2. CHECK TIRE PRESSURE WARNING CHECK SWITCH CIRCUIT

- Check continuity between BCM harness connector M1 terminal 15 and ground.

Continuity should exist.

OK or NG

- OK >> Replace BCM. Refer to [BCS-18, "Removal and Installation of BCM"](#).
- NG >> Repair or replace harness connector.



Turn Signal Lamp Blinks When Ignition Switch Is Turned On

NES000BA

DIAGNOSTIC PROCEDURE

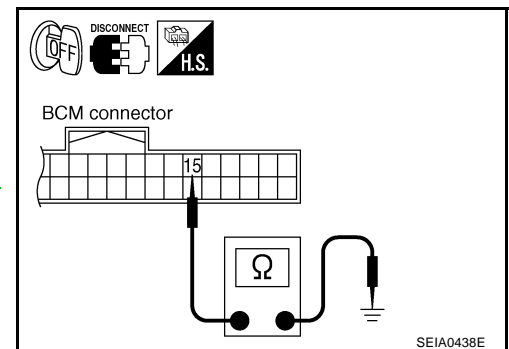
1. CHECK TIRE PRESSURE WARNING CHECK SWITCH CIRCUIT

- Check continuity between BCM harness connector M1 terminal 15 and ground.

Continuity should exist.

OK or NG

- OK >> Check turn signal lamp operation. Refer to [LT-106, "TURN SIGNAL AND HAZARD WARNING LAMPS"](#).
- NG >> Repair or replace harness connector.



TROUBLE DIAGNOSIS FOR SYMPTOMS

ID Registration Can Not Be Completed DIAGNOSTIC PROCEDURE

NES000BB

A

1. ID REGISTRATION (ALL)

- Perform ID registration of all transmitters.

B

Can ID registration of all transmitters be completed?

YES >> INSPECTION END

NO >> GO TO [WT-27, "TROUBLE DIAGNOSIS FOR SELF-DIAGNOSTIC ITEMS"](#) .

C

D

WT

F

G

H

I

J

K

L

M

TRANSMITTER

PFP:40700

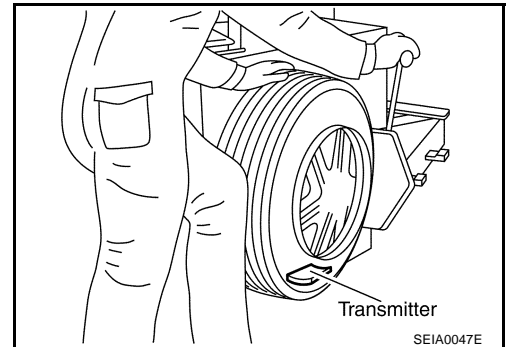
NES0005Y

TRANSMITTER

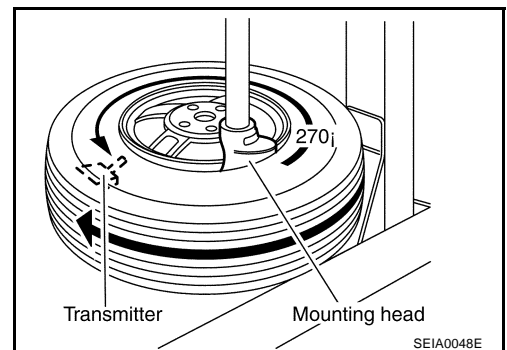
Removal and Installation

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.

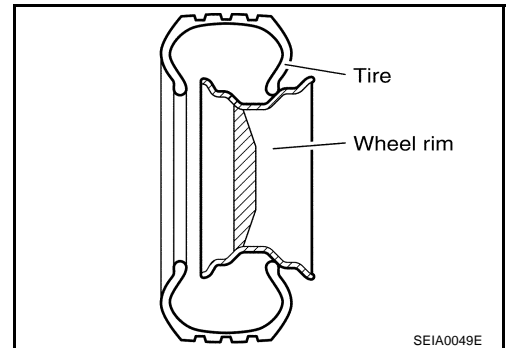


3. Turn tire so that valve hole is at bottom and bounce so that transmitter is near valve hole. Carefully lift tire onto turntable and position valve hole (and transmitter) 270 degree from mounting/dismounting head.
4. Lubricate tire well and remove first side of the tire. Reach inside the tire and remove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



INSTALLATION

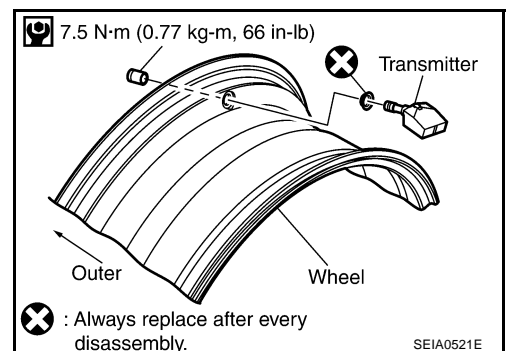
1. Put first side of tire onto rim.



2. Mount transmitter on rim and tighten nut.

CAUTION:

Speed for tightening nut should be less than 40 rpm.

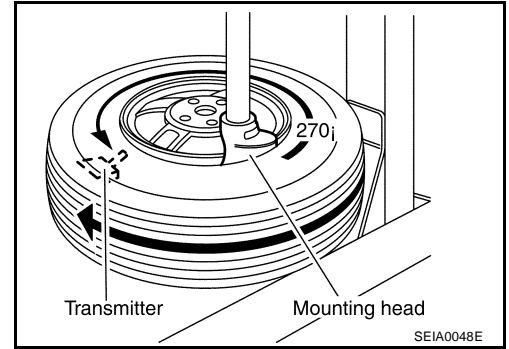


TRANSMITTER

- 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.



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

A
B
C
D

WT

F
G
H
I
J
K
L
M

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

PFP:00030

Road Wheel

NES0005Z

Kind of wheel		Aluminum	Steel for emergency use
Deflection limit	Lateral deflection	Less than 0.3 mm (0.012 in)	Less than 1.5 mm (0.059 in)
	Vertical deflection		
Allowable quantity of residual unbalance	Dynamic (At rim flange)	Less than 5g (0.17 oz) (per side)	
	Static (At rim flange)	Less than 10g (0.35 oz)	

Tire

NES00060

Unit: kPa (kg/cm², psi)

Tire size	Air pressure	
	Front tire	Rear tire
P215/55R17 93V	230 (2.3, 33)	230 (2.3, 33)
235/45R18 94W	210 (2.1, 30)	210 (2.1, 30)
T145/80D17	420 (4.2, 60)	420 (4.2, 60)

Tightening Torque

NES000BC

Wheel nut	108 N.m (11 kg-m, 80 ft-lb)
-----------	-----------------------------