

WT

SECTION

ROAD WHEELS & TIRES

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DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

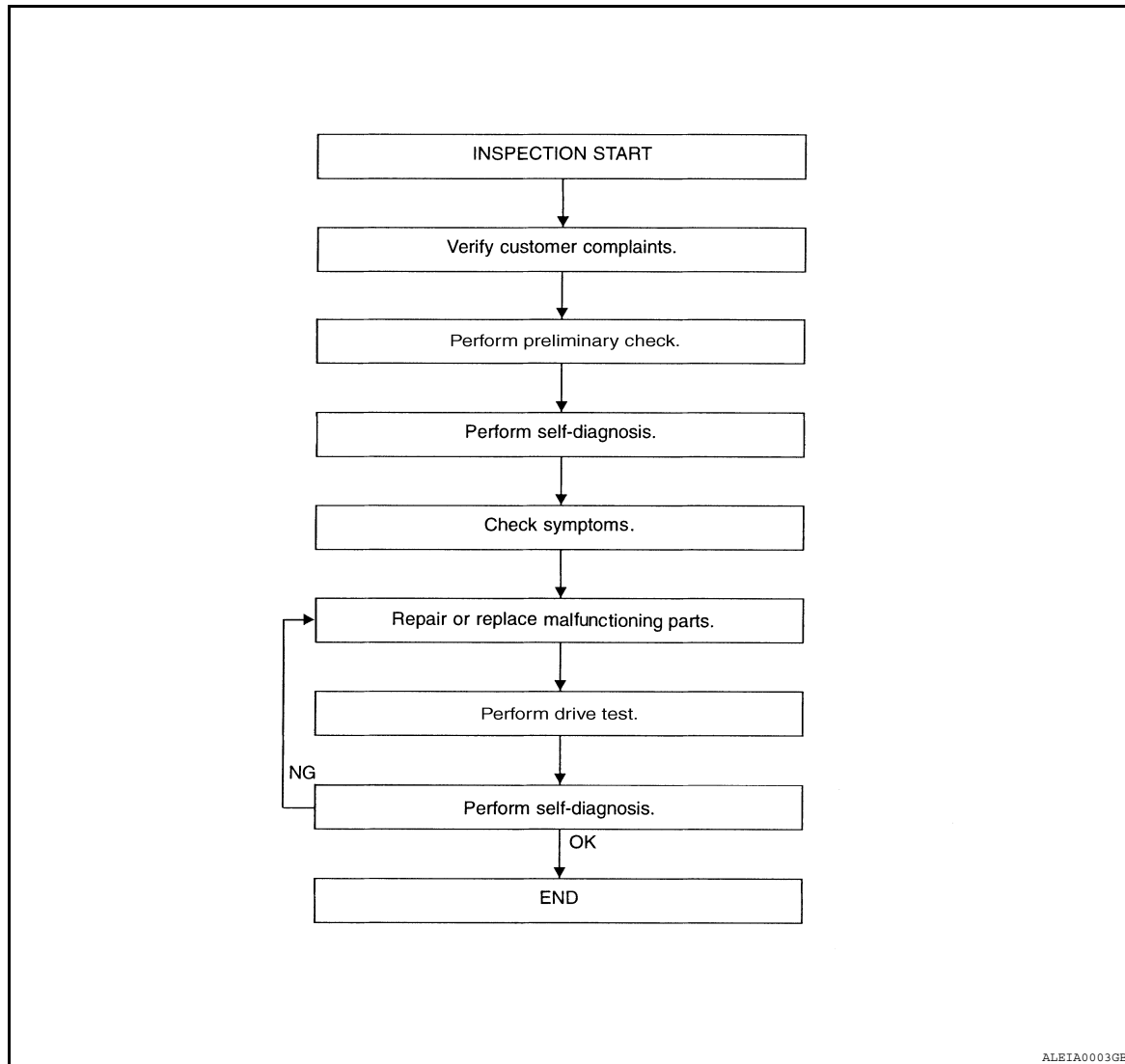
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORKFLOW

Repair Work Flow

INFOID:0000000005434606

WORK FLOW



[WT-5. "Preliminary Check"](#)

[WT-44. "Self-Diagnosis \(With CONSULT-III\)"](#)

[WT-54. "Symptom Table"](#)

[WT-44. "Self-Diagnosis \(Without CONSULT-III\)"](#)

DETAILED FLOW

1.CUSTOMER INFORMATION

Interview the customer to obtain detailed information about the symptom.

>> GO TO 2

2.PRELIMINARY CHECK

Perform preliminary check. Refer to [WT-5. "Preliminary Check"](#)

>> GO TO 3

DIAGNOSIS AND REPAIR WORKFLOW

< BASIC INSPECTION >

3.SELF-DIAGNOSIS

Perform SELF-DIAGNOSIS. Refer to [WT-44, "Self-Diagnosis \(With CONSULT-III\)"](#) or [WT-44, "Self-Diagnosis \(Without CONSULT-III\)"](#).

>> GO TO 4

4.SYMPTOM

Check for symptoms. Refer to [WT-54, "Symptom Table"](#).

>> GO TO 5

5.MALFUNCTIONING PARTS

Repair or replace the applicable parts.

>> GO TO 6

6.DRIVE TEST

1. Perform a drive test.
2. Check the low tire pressure warning lamp.

>> GO TO 7

7.SELF-DIAGNOSIS

Perform SELF-DIAGNOSIS. Refer to [WT-44, "Self-Diagnosis \(With CONSULT-III\)"](#) or [WT-44, "Self-Diagnosis \(Without CONSULT-III\)"](#).

Are any DTCs displayed?

YES >> GO TO 5
NO >> Inspection End

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

INSPECTION AND ADJUSTMENT

Preliminary Check

INFOID:0000000005434607

1. TIRE PRESSURE

Check all tire pressures. Refer to [WT-69, "Tire"](#).

Do tire pressures match specification?

YES >> GO TO 2

NO >> Adjust tire pressure to specified value.

2. LOW TIRE PRESSURE WARNING LAMP

Check low tire pressure warning lamp activation.

Does the low tire pressure warning lamp activate for one second when ignition switch is turned ON?

YES >> GO TO 3

NO >> GO TO [WT-55, "Low Tire Pressure Warning Lamp Does Not Come On When Ignition Switch Is Turned On"](#).

3. BCM CONNECTOR

1. Disconnect BCM harness connectors.
2. Check terminals for damage or loose connection.
3. Reconnect harness connector.

Are BCM connectors damaged or loose?

YES >> Repair or replace damaged parts.

NO >> GO TO 4

4. TRANSMITTER ACTIVATION TOOL

Check battery in transmitter activation tool.

Is transmitter activation tool battery fully charged?

YES >> Perform SELF-DIAGNOSIS. Refer to [WT-44, "Self-Diagnosis \(With CONSULT-III\)"](#).

NO >> Replace battery in transmitter activation tool.

Transmitter Wake Up Operation

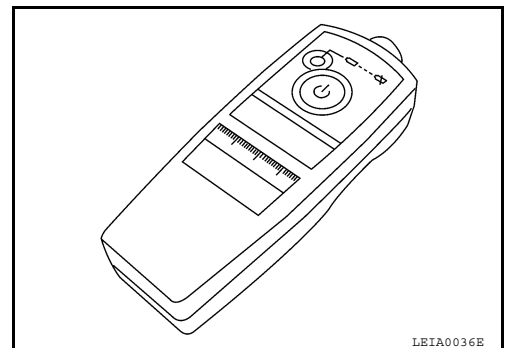
INFOID:0000000005434608

NOTE:

This procedure must be done after replacement of a low tire pressure warning transmitter or BCM. New replacement transmitters are provided "asleep" and must first be "woken up" using Transmitter Activation Tool J-45295 before ID registration can be performed.

1. Turn ignition switch ON. Push the transmitter activation tool against the tire near the front left transmitter. Press the button for 5 seconds. The hazard warning lamps flash per the following diagram.

Tool number : (J-45295)

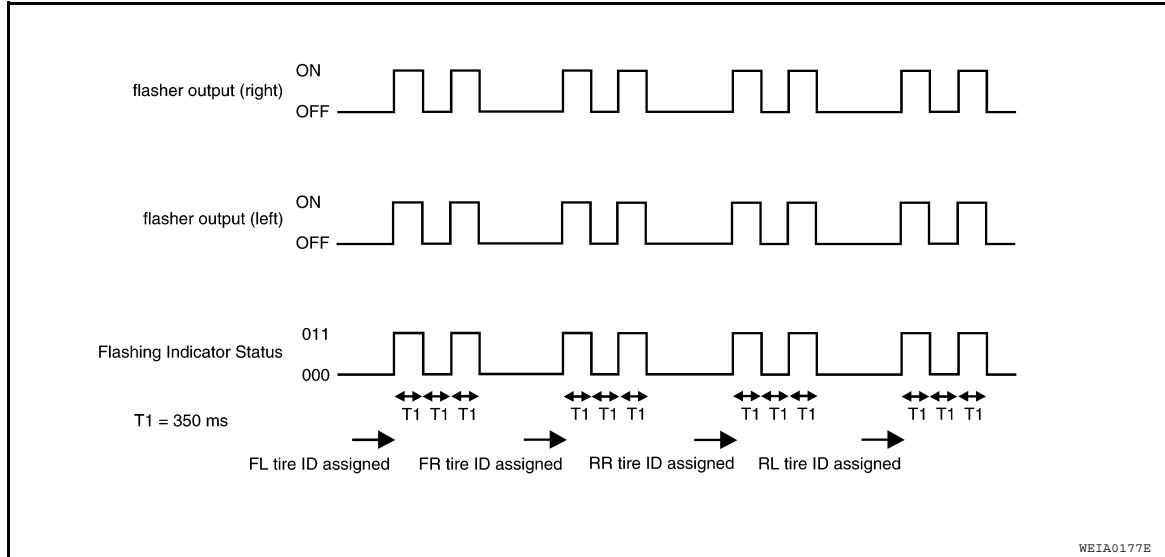


2. Repeat this procedure for each tire in the following order: FL, FR, RR, RL.

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

- When the BCM finishes assigning each tire ID, the BCM flashes the hazard warning lamps and sends flashing indicator status by CAN according to the following time chart.



- After completing wake up of all transmitters, make sure low tire pressure warning lamp goes out.

ID Registration Procedure

INFOID:000000005434609

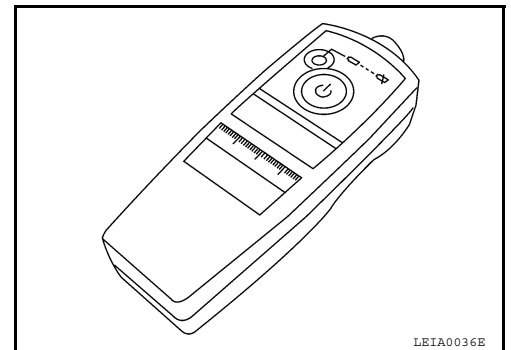
ID REGISTRATION WITH TRANSMITTER ACTIVATION TOOL

NOTE:

This procedure must be done after replacement of a low tire pressure warning transmitter or BCM. New replacement transmitters are provided "asleep" and must first be "woken up" using Transmitter Activation Tool J-45295 before ID registration can be performed.

- Connect CONSULT-III.
- Select "ID REGIST" under BCM.
- Push the transmitter activation tool against the tire near the front left transmitter. Press the button for 5 seconds.

Tool number : (J-45295)



- Register the IDs in order from FR LH, FR RH, RR RH and RR LH. When ID registration of each wheel has been completed, the hazard warning lamps flash.

Step	Activation tire position	Hazard warning lamp	CONSULT-III
1	Front LH	2 times flashing	"YET" ↓ "DONE"
2	Front RH		
3	Rear RH		
4	Rear LH		

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

NOTE:

Be sure to register all of 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

NOTE:

INSPECTION AND ADJUSTMENT

< BASIC INSPECTION >

This procedure must be done after replacement of a low tire pressure warning transmitter or BCM. New replacement transmitters are provided "asleep" and must first be "woken up" before ID registration can be performed.

1. Connect CONSULT-III.
2. Select "ID REGIST" under BCM.
3. Adjust the tire pressures to the values shown in the table 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 LH	250 (2.5, 36)
Front RH	230 (2.3, 33)
Rear RH	210 (2.1, 30)
Rear LH	190 (1.9, 27)

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

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

5. Inflate all tires to proper pressure. Refer to [WT-69, "Tire"](#).

TPMS

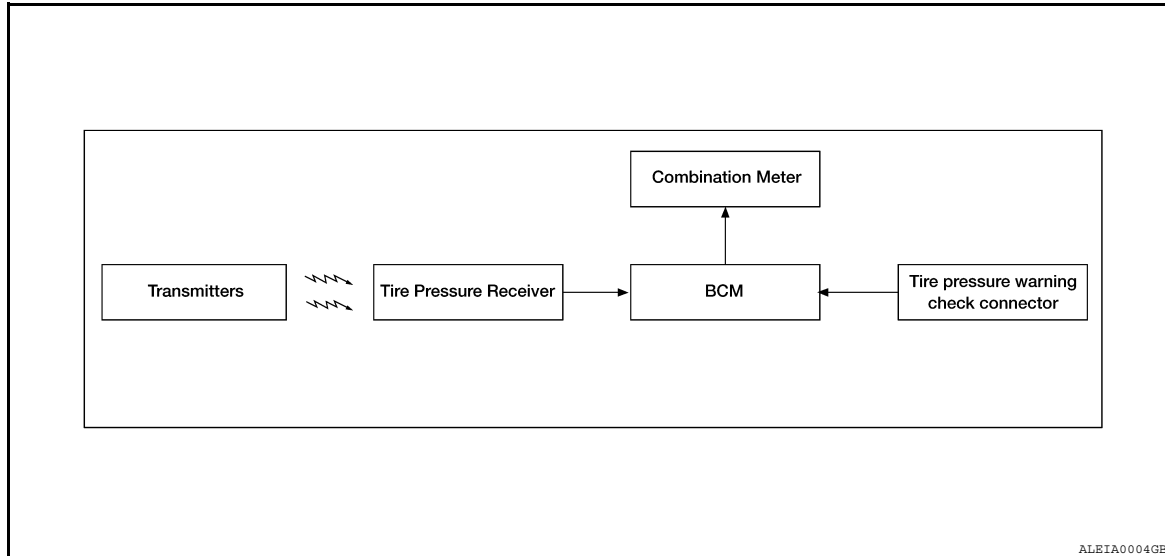
< FUNCTION DIAGNOSIS >

FUNCTION DIAGNOSIS

TPMS

System Diagram

INFOID:000000005434610



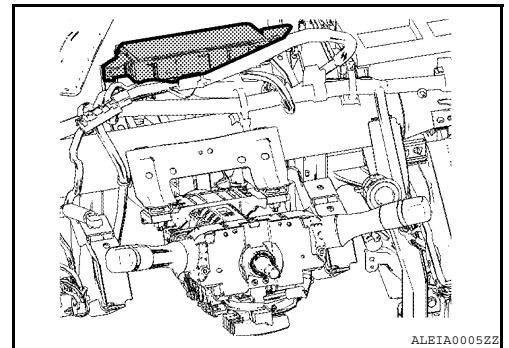
System Description

INFOID:000000005434611

BODY CONTROL MODULE (BCM)

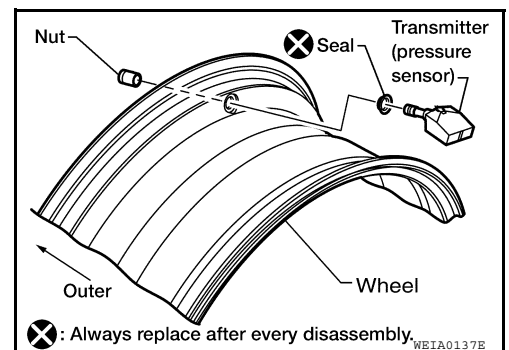
The BCM is shown with the instrument panel LH removed. The BCM reads the air pressure signal received by the tire pressure receiver, and controls the low tire pressure warning lamp as shown below. It also has a self-diagnosis function to detect a system malfunction.

Condition	Low tire pressure warning lamp
System normal	On for 1 second after ignition ON
Tire pressure less than 174.1 kPa (1.775 kg/cm ² , 25.25 psi)	ON
Tire pressure monitoring system malfunction	After key ON, flashes once per second for 1 minute, then stays ON



TRANSMITTER

A sensor-transmitter integrated with a valve is installed in each wheel. It transmits a detected air pressure signal in the form of a radio wave when the vehicle is moving. The radio signal is received by the tire pressure receiver.

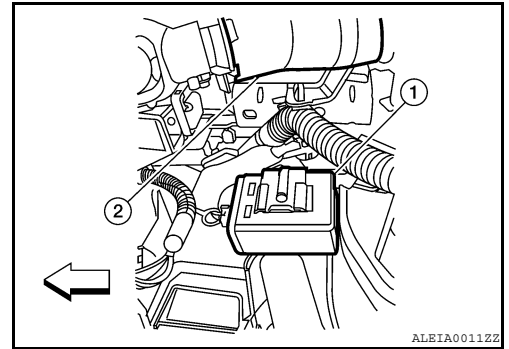


TIRE PRESSURE RECEIVER

TPMS

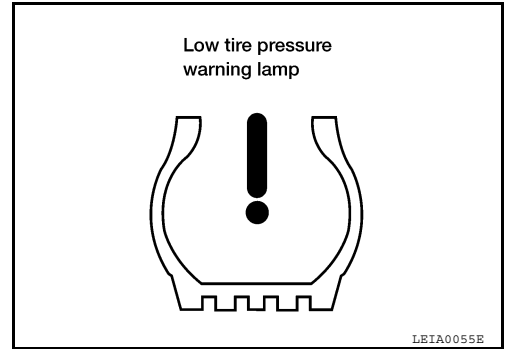
< FUNCTION DIAGNOSIS >

The tire pressure receiver (1) is located next to the steering column assembly (2) and is shown with the lower instrument panel LH removed. The tire pressure receiver receives the air pressure signal transmitted by the transmitter in each wheel.



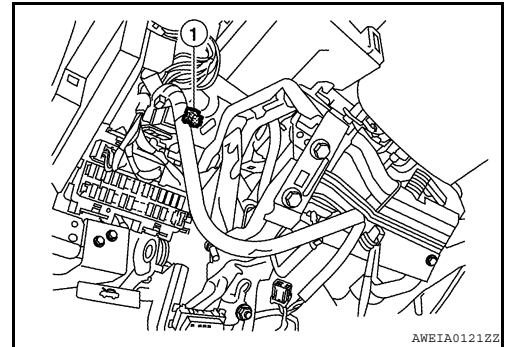
COMBINATION METER

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 low tire pressure warning lamp is activated.



TIRE PRESSURE WARNING CHECK CONNECTOR

The tire pressure warning check connector can be grounded in order to initiate self-diagnosis without a CONSULT-III. Refer to [WT-44, "Self-Diagnosis \(Without CONSULT-III\)"](#). The tire pressure warning check connector (1) is located behind the lower portion of the instrument panel LH.



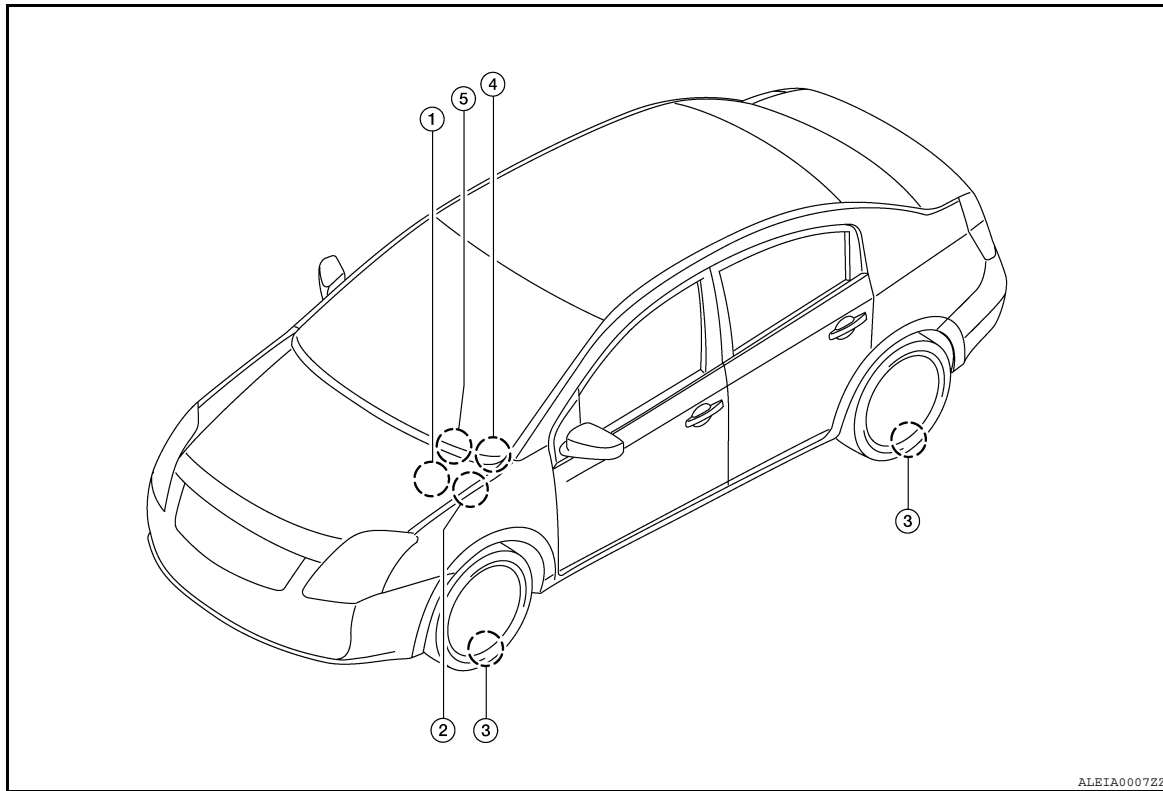
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TPMS

< FUNCTION DIAGNOSIS >

System Components

INFOID:0000000005434612



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- | | | |
|-------------------------------|--|-----------------|
| 1. Tire pressure receiver M70 | 2. Tire pressure warning check connector M62 | 3. Transmitters |
| 4. Combination meter M24 | 5. BCM M16, M17, M18, M19 | |

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

DIAGNOSIS SYSTEM (BCM)

CONSULT-III Function (BCM)

INFOID:000000005434613

CONSULT-III DIAGNOSTIC MODES

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

Diagnostic mode	Description
Work Support	Supports inspections and adjustments. Commands are transmitted to the BCM for setting the status suitable for required operation, input/output signals are received from the BCM and received data is displayed.
Data Monitor	Displays BCM input/output data in real time.
Active Test	Operation of electrical loads can be checked by sending drive signal to them.
Self Diagnostic Result	Displays BCM self-diagnosis results.
CAN Diag Support Mntr	The result of transmit/receive diagnosis of CAN communication can be read.
ECU Identification	BCM part number can be read.
Configuration	Performs BCM configuration read/write functions.

DESCRIPTION

During driving, the tire pressure monitoring system receives the signal transmitted from the transmitter installed in each wheel, and turns on the low tire pressure warning lamp when the tire pressure becomes low. The control unit (BCM) for this system has pressure judgement and self-diagnosis functions.

FUNCTION

When the tire pressure monitoring system detects low inflation pressure or an internal malfunction, the low tire pressure warning lamp in the combination meter comes on. The malfunction is indicated by the low tire pressure warning lamp flashing.

CONSULT-III Application to Tire Pressure Monitoring System

ITEM	SELF-DIAGNOSTIC RESULTS	DATA MONITOR
Front - Left transmitter	×	×
Front - Right transmitter	×	×
Rear - Left transmitter	×	×
Rear - Right transmitter	×	×
Warning lamp	—	×
Vehicle speed	×	×
CAN Communication	×	×

× : Applicable

— : Not applicable

Data Monitor Mode

MONITOR	CONDITION	SPECIFICATION
AIR PRESS FL	• Drive vehicle for a few minutes. or • Ignition switch ON and activation tool is transmitting activation signals.	Tire pressure (kPa or psi)
AIR PRESS FR		
AIR PRESS RR		
AIR PRESS RL		
ID REGST FL1	Ignition switch ON	ID not registered: YET ID registered: DONE
ID REGST FR1		
ID REGST RR1		
ID REGST RL1		

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

MONITOR	CONDITION	SPECIFICATION
WARNING LAMP	Ignition switch ON	Low tire pressure warning lamp on: ON Low tire pressure warning lamp off: OFF
BUZZER	Ignition switch ON	Low tire pressure warning buzzer on: ON Low tire pressure warning buzzer off: OFF

NOTE:

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

Active Test

Test item	Content
WARNING LAMP [On/Off]	Activates the low tire pressure warning lamp (On/Off).
ID REGIST WARNING [On/Off]	Activates the low tire pressure warning buzzer (On/Off).
FLASHER [Off/LH/RH]	Activates the flashers (Off/LH/RH).
HORN [On/Off]	Activates the horn (On/Off).

Work Support

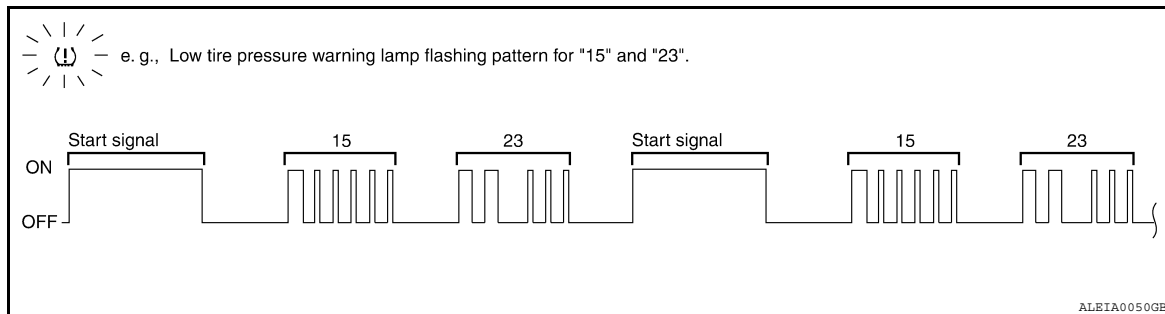
Test item	Content
ID REGIST	The identification number of the transmitter is registered in the BCM.
ID READ	The identification registration number of the transmitter is read by the BCM.

Self-Diagnosis (Without CONSULT-III)

INFOID:000000005778708

SELF DIAGNOSTIC PROCEDURE (WITHOUT CONSULT-III)

1. Turn ignition switch ON.
2. Ground the tire pressure warning check connector to initiate self diagnosis.
3. Compare the flashing pattern with the flash code chart below.



NOTE:

The system is normal when the low tire pressure warning lamp flashes 5 times and continues repeating. Self-diagnosis results are erased automatically by turning the ignition switch "OFF".

Flash Code	Malfunction part	Reference page
15 16 17 18	Tire pressure dropped below specified value. Refer to WT-8, "System Description" .	—
21 22 23 24	Transmitter no data (FL) Transmitter no data (FR) Transmitter no data (RR) Transmitter no data (RL)	WT-14
31 32 33 34	Transmitter checksum error (FL) Transmitter checksum error (FR) Transmitter checksum error (RR) Transmitter checksum error (RL)	WT-16

DIAGNOSIS SYSTEM (BCM)

< FUNCTION DIAGNOSIS >

Flash Code	Malfunction part	Reference page
35	Transmitter pressure data error (FL)	WT-18
36	Transmitter pressure data error (FR)	
37	Transmitter pressure data error (RR)	
38	Transmitter pressure data error (RL)	
41	Transmitter function code error (FL)	WT-16
42	Transmitter function code error (FR)	
43	Transmitter function code error (RR)	
44	Transmitter function code error (RL)	
45	Transmitter battery voltage low (FL)	WT-16
46	Transmitter battery voltage low (FR)	
47	Transmitter battery voltage low (RR)	
48	Transmitter battery voltage low (RL)	
52	Vehicle speed signal	WT-19
53	TPMS malfunction in BCM	WT-20

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C1708 - C1711 DATA FROM TRANSMITTER NOT BEING RECEIVED

< COMPONENT DIAGNOSIS >

COMPONENT DIAGNOSIS

C1708 - C1711 DATA FROM TRANSMITTER NOT BEING RECEIVED

Description

INFOID:000000005434615

Tire pressure data for one or more transmitters is not being received by the BCM.

DTC Logic

INFOID:000000005434616

DTC DETECTION LOGIC

DTC	CONSULT-III	DTC detecting condition
C1708	[NO - DATA] - FL	Data from FL transmitter cannot be received.
C1709	[NO - DATA] - FR	Data from FR transmitter cannot be received.
C1710	[NO - DATA] - RR	Data from RR transmitter cannot be received.
C1711	[NO - DATA] - RL	Data from RL transmitter cannot be received.

DTC CONFIRMATION PROCEDURE

1.ID REGISTRATION AND VEHICLE DRIVING

1. Carry out 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.
3. Check all tire pressures with CONSULT-III within 5 minutes.

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

YES >> Inspection End.

NO >> Refer to [WT-14, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005434617

MALFUNCTION CODE NO. 21, 22, 23 OR 24 (DTC C1708, C1709, C1710 OR C1711)

1.CHECK BCM

Drive for several minutes. Check all tire pressures with CONSULT-III.

Are all tire pressures displayed as 0 kPa?

YES >> GO TO 2

NO >> GO TO 3

2.CHECK TIRE PRESSURE RECEIVER CONNECTOR

Check tire pressure receiver connector for damage or loose connections.

Is tire pressure receiver connector damaged or loose?

YES >> Repair or replace tire pressure receiver connector.

NO >> Replace BCM, then GO TO 3. Refer to [BCS-96, "Removal and Installation"](#).

3.PERFORM ID REGISTRATION

Carry out ID registration of all transmitters. Refer to [WT-6, "ID Registration Procedure"](#).

Is there a tire that cannot register ID?

YES >> Replace malfunctioning transmitter, then GO TO 5. Refer to [WT-67, "Removal and Installation"](#).

NO >> GO TO 4

4.DRIVE VEHICLE

1. Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping.
2. Check all tire pressures with CONSULT-III 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.

C1708 - C1711 DATA FROM TRANSMITTER NOT BEING RECEIVED

< COMPONENT DIAGNOSIS >

NO >> GO TO 5

5.ID REGISTRATION AND VEHICLE DRIVING

1. Carry out 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.
3. Check all tire pressures with CONSULT-III within 5 minutes.

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

YES >> Inspection End.

NO >> Proceed to the inspection applicable to DTC.

Special Repair Requirement

INFOID:0000000005434618

Perform preliminary check. Refer to [WT-5, "Preliminary Check"](#).

WT

C1712 - C1715, C1720 - C1723, C1724 - C1727 TRANSMITTER MALFUNCTION

< COMPONENT DIAGNOSIS >

C1712 - C1715, C1720 - C1723, C1724 - C1727 TRANSMITTER MALFUNCTION

Description

INFOID:000000005434619

One or more transmitters are malfunctioning internally.

DTC Logic

INFOID:000000005434620

DTC DETECTION LOGIC

DTC	CONSULT-III	DTC detecting condition
C1712	[CHECKSUM - ERR] - FL	Checksum data from FL transmitter is malfunctioning.
C1713	[CHECKSUM - ERR] - FR	Checksum data from FR transmitter is malfunctioning.
C1714	[CHECKSUM - ERR] - RR	Checksum data from RR transmitter is malfunctioning.
C1715	[CHECKSUM - ERR] - RL	Checksum data from RL transmitter is malfunctioning.
C1720	[CODE - ERR] - FL	Function code data from FL transmitter is malfunctioning.
C1721	[CODE - ERR] - FR	Function code data from FR transmitter is malfunctioning.
C1722	[CODE - ERR] - RR	Function code data from RR transmitter is malfunctioning.
C1723	[CODE - ERR] - RL	Function code data from RL transmitter is malfunctioning.
C1724	[BATT - VOLT - LOW] - FL	Battery voltage of FL transmitter drops.
C1725	[BATT - VOLT - LOW] - FR	Battery voltage of FR transmitter drops.
C1726	[BATT - VOLT - LOW] - RR	Battery voltage of RR transmitter drops.
C1727	[BATT - VOLT - LOW] - RL	Battery voltage of RL transmitter drops.

DTC CONFIRMATION PROCEDURE

1.DRIVE VEHICLE

1. Drive at a speed of 40 km/h (25 MPH) or more for 3 minutes, and then drive the vehicle at any speed for 10 minutes.
2. Check all tire pressures with CONSULT-III within 5 minutes.

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

YES >> Inspection End.

NO >> Refer to [WT-16, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005434621

MALFUNCTION CODE NO. 31, 32, 33, 34, 41, 42, 43, 44, 45, 46, 47 OR 48 (DTC C1712, C1713, C1714, C1715, C1720, C1721, C1722, C1723, C1724, C1725, C1726 OR C1727)

1.PERFORM ID REGISTRATION

1. Carry out ID registration of all transmitters. Refer to [WT-6, "ID Registration Procedure"](#).
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 lamp again for flashing, replace malfunctioning transmitter. Refer to [WT-67, "Removal and Installation"](#).
2. Carry out ID registration of all transmitters.

Can ID registration of all transmitters be completed?

YES >> GO TO 3

NO >> GO TO [WT-14, "Diagnosis Procedure"](#).

C1712 - C1715, C1720 - C1723, C1724 - C1727 TRANSMITTER MALFUNCTION

< COMPONENT DIAGNOSIS >

3.DRIVE VEHICLE

1. Drive at a speed of 40 km/h (25 MPH) or more for 3 minutes, and then drive the vehicle at any speed for 10 minutes.
2. Check all tire pressures with CONSULT-III within 5 minutes.

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

YES >> Inspection End.

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

Special Repair Requirement

INFOID:0000000005778709

Perform preliminary check. Refer to [WT-5. "Preliminary Check"](#).

C1716 - C1719 TRANSMITTER PRESSURE MALFUNCTION

< COMPONENT DIAGNOSIS >

C1716 - C1719 TRANSMITTER PRESSURE MALFUNCTION

Description

INFOID:000000005434623

Air pressure data from one or more transmitters is out of range.

DTC Logic

INFOID:000000005434624

DTC DETECTION LOGIC

DTC	CONSULT - III	DTC detecting condition
C1716	[PRESSDATA - ERR] FL	Air pressure data from FL transmitter is malfunctioning.
C1717	[PRESSDATA - ERR] FR	Air pressure data from FR transmitter is malfunctioning.
C1718	[PRESSDATA - ERR] RR	Air pressure data from RR transmitter is malfunctioning.
C1719	[PRESSDATA - ERR] RL	Air pressure data from RL transmitter is malfunctioning.

DTC CONFIRMATION PROCEDURE

1.ID REGISTRATION AND VEHICLE DRIVING

1. Carry out 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.
3. Check all tire pressures with CONSULT-III within 5 minutes.

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

YES >> Inspection End.

NO >> Refer to [WT-18, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000005434625

MALFUNCTION CODE NO. 35, 36, 37 OR 38 (DTC C1716, C1717, C1718 OR C1719)

1.CHECK ALL TIRE PRESSURES

Check all tire pressures. Refer to [WT-69, "Tire"](#).

Are there any tires with pressure of 64 psi or more?

YES >> Adjust tire pressure to specified value.

NO >> GO TO 2

2.ID REGISTRATION AND VEHICLE DRIVING

1. Carry out ID registration of all transmitters. Refer to [WT-6, "ID Registration Procedure"](#).
2. Drive at a speed of 40 km/h (25 MPH) or more for several minutes without stopping.
3. Check all tire pressures with CONSULT-III within 15 minutes after vehicle speed becomes 17 km/h (11 MPH).

Does "DATA MONITOR ITEM" display 64 psi or more?

YES >> Replace transmitter. Refer to [WT-67, "Removal and Installation"](#). GO TO 3.

NO >> GO TO 3

3.ID REGISTRATION AND VEHICLE DRIVING

1. Carry out 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.
3. Check all tire pressures with CONSULT-III within 5 minutes.

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

YES >> Inspection End.

NO >> Proceed to the inspection applicable to DTC.

Special Repair Requirement

INFOID:000000005778710

Perform preliminary check. Refer to [WT-5, "Preliminary Check"](#).

C1729 VEHICLE SPEED SIGNAL

< COMPONENT DIAGNOSIS >

C1729 VEHICLE SPEED SIGNAL

Description

INFOID:000000005434627

The vehicle speed signal is not being detected by the BCM.

DTC Logic

INFOID:000000005434628

DTC DETECTION LOGIC

DTC	CONSULT-III	DTC detecting condition
C1729	VHCL SPEED SIG ERR	Vehicle speed signal is in error.

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULTS

1. On SELECT DIAG MODE, select the SELF-DIAG RESULT screen.
2. Check display contents on SELF DIAG RESULT screen.

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

YES >> Refer to [WT-19, "Diagnosis Procedure"](#).

NO >> Inspection End.

Diagnosis Procedure

INFOID:000000005434629

MALFUNCTION CODE NO. 52 (DTC C1729)

1.CHECK SELF-DIAGNOSTIC RESULTS

1. On "SELECT DIAG MODE", select the "SELF-DIAG RESULT" screen.
2. Check display contents on "SELF DIAG RESULT" screen.

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

YES >> Perform trouble diagnosis for CAN communication system. Refer to [LAN-26, "CAN System Specification Chart"](#).

NO >> Check combination meter. Refer to [MWI-42, "CONSULT-III Function \(METER/M&A\)"](#).

Special Repair Requirement

INFOID:000000005778711

Perform preliminary check. Refer to [WT-5, "Preliminary Check"](#).

C1734 CONTROL UNIT

< COMPONENT DIAGNOSIS >

C1734 CONTROL UNIT

Description

INFOID:000000005434631

An internal malfunction has been detected in the TPMS function of the BCM.

DTC Logic

INFOID:000000005434632

DTC DETECTION LOGIC

DTC	CONSULT - III	DTC detecting condition
C1734	CONTROL UNIT	TPMS malfunction in BCM.

DTC CONFIRMATION PROCEDURE

1.CHECK SELF-DIAGNOSTIC RESULTS

1. On SELECT DIAG MODE, select the SELF-DIAG RESULT screen.
2. Check display contents on SELF DIAG RESULT screen.

Is C1734 displayed in the self-diagnosis display?

- YES >> Refer to [WT-20, "Diagnosis Procedure"](#).
NO >> Inspection End.

Diagnosis Procedure

INFOID:000000005434633

MALFUNCTION CODE NO. 53 (DTC C1734)

1.SELF-DIAGNOSTIC RESULTS

1. On "SELECT DIAG" mode, select the "SELF-DIAG RESULT" screen for BCM.
2. Check display contents on "SELF-DIAG RESULT".

Does self-diagnostic results indicate any DTC other than C1734?

- YES >> Perform trouble diagnosis for DTC. Refer to [BCS-70, "DTC Index"](#).
NO >> GO TO 2.

2.CHECK BCM HARNESS CONNECTORS

Check BCM harness connectors for damage or loose connections.

Are the BCM harness connectors damaged or loose?

- YES >> Repair or replace damaged parts.
NO >> GO TO 3.

3.BCM POWER SUPPLY AND GROUND

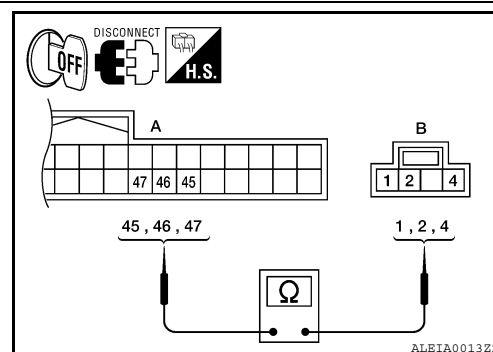
Check BCM power supply and ground. Refer to [BCS-42, "Diagnosis Procedure"](#).

Are the power supply and grounds normal?

- YES >> GO TO 4.
NO >> Repair power supply or grounds as necessary.

4.CHECK HARNESS BETWEEN BCM AND TIRE PRESSURE RECEIVER

1. Turn ignition switch "OFF"
2. Disconnect BCM harness connector M18 (A) and tire pressure receiver harness connector M70 (B).
3. Check continuity between BCM harness connector and tire pressure receiver harness connector.



C1734 CONTROL UNIT

< COMPONENT DIAGNOSIS >

BCM		Tire pressure receiver		Continuity
Connector	Terminal	Connector	Terminal	
M18	45	M70	1	YES
	46		4	
	47		2	

Does continuity exist?

YES >> GO TO 5.

NO >> Repair circuits as necessary.

5.BCM INPUT/OUTPUT SIGNALS

Check BCM input/output signals. Refer to [BCS-47. "Reference Value"](#).

Are the inputs and outputs normal?

YES >> Inspection End.

NO >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).

Special Repair Requirement

INFOID:0000000005778712

Perform preliminary check. Refer to [WT-5. "Preliminary Check"](#).

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

ECU DIAGNOSIS

BCM (BODY CONTROL MODULE)

Reference Value

INFOID:000000005778714

VALUES ON THE DIAGNOSIS TOOL

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	OFF
	Front wiper switch HI	ON
FR WIPER LOW	Other than front wiper switch LO	OFF
	Front wiper switch LO	ON
FR WASHER SW	Front washer switch OFF	OFF
	Front washer switch ON	ON
FR WIPER INT	Other than front wiper switch INT	OFF
	Front wiper switch INT	ON
FR WIPER STOP	Front wiper is not in STOP position	OFF
	Front wiper is in STOP position	ON
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
TURN SIGNAL R	Other than turn signal switch RH	OFF
	Turn signal switch RH	ON
TURN SIGNAL L	Other than turn signal switch LH	OFF
	Turn signal switch LH	ON
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	OFF
	Lighting switch 1ST or 2ND	ON
HI BEAM SW	Other than lighting switch HI	OFF
	Lighting switch HI	ON
HEAD LAMP SW 1	Other than lighting switch 2ND	OFF
	Lighting switch 2ND	ON
HEAD LAMP SW 2	Other than lighting switch 2ND	OFF
	Lighting switch 2ND	ON
PASSING SW	Other than lighting switch PASS	OFF
	Lighting switch PASS	ON
AUTO LIGHT SW	Other than lighting switch AUTO	OFF
	Lighting switch AUTO	ON
FR FOG SW	Front fog lamp switch OFF	OFF
	Front fog lamp switch ON	ON
DOOR SW-DR	Driver door closed	OFF
	Driver door opened	ON
DOOR SW-AS	Passenger door closed	OFF
	Passenger door opened	ON
DOOR SW-RR	Rear door RH closed	OFF
	Rear door RH opened	ON
DOOR SW-RL	Rear door LH closed	OFF
	Rear door LH opened	ON

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status	
CDL LOCK SW	Other than power door lock switch LOCK	OFF	A
	Power door lock switch LOCK	ON	
CDL UNLOCK SW	Other than power door lock switch UNLOCK	OFF	B
	Power door lock switch UNLOCK	ON	
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	OFF	C
	Driver door key cylinder LOCK position	ON	
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	OFF	D
	Driver door key cylinder UNLOCK position	ON	
HAZARD SW	When hazard switch is not pressed	OFF	WT
	When hazard switch is pressed	ON	
REAR DEF SW	When rear window defogger switch is pressed	ON	
TR CANCEL SW	Trunk lid opener cancel switch OFF	OFF	F
	Trunk lid opener cancel switch ON	ON	
TR/BD OPEN SW	Trunk lid opener switch OFF	OFF	G
	While the trunk lid opener switch is turned ON	ON	
TRNK/HAT MNTR	Trunk lid closed	OFF	H
	Trunk lid opened	ON	
RKE-LOCK	When LOCK button of Intelligent Key is not pressed	OFF	I
	When LOCK button of Intelligent Key is pressed	ON	
RKE-UNLOCK	When UNLOCK button of Intelligent Key is not pressed	OFF	J
	When UNLOCK button of Intelligent Key is pressed	ON	
RKE-TR/BD	When TRUNK OPEN button of Intelligent Key is not pressed	OFF	K
	When TRUNK OPEN button of Intelligent Key is pressed	ON	
RKE-PANIC	When PANIC button of Intelligent Key is not pressed	OFF	L
	When PANIC button of Intelligent Key is pressed	ON	
RKE-P/W OPEN	When UNLOCK button of Intelligent Key is not pressed and held	OFF	M
	When UNLOCK button of Intelligent Key is pressed and held	ON	
RKE-MODE CHG	When LOCK/UNLOCK button of Intelligent Key is not pressed and held simultaneously	OFF	N
	When LOCK/UNLOCK button of Intelligent Key is pressed and held simultaneously	ON	
OPTICAL SENSOR	When outside of the vehicle is bright	Close to 5 V	O
	When outside of the vehicle is dark	Close to 0 V	
REQ SW-DR	When driver door request switch is not pressed	OFF	P
	When driver door request switch is pressed	ON	
REQ SW-AS	When passenger door request switch is not pressed	OFF	
	When passenger door request switch is pressed	ON	
REQ SW-BD/TR	When trunk request switch is not pressed	OFF	
	When trunk request switch is pressed	ON	
PUSH SW	When engine switch (push switch) is not pressed	OFF	
	When engine switch (push switch) is pressed	ON	
IGN RLY2-F/B	Ignition switch OFF or ACC	OFF	
	Ignition switch ON	ON	
ACC RLY-F/B	Ignition switch OFF	OFF	
	Ignition switch ACC or ON	ON	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Monitor Item	Condition	Value/Status
CLUTCH SW	When the clutch pedal is not depressed	OFF
	When the clutch pedal is depressed	ON
BRAKE SW 1	When the brake pedal is not depressed	ON
	When the brake pedal is depressed	OFF
DETE/CANCL SW	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN/N SW	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
UNLK SEN-DR	Driver door UNLOCK status	OFF
	Driver door LOCK status	ON
PUSH SW-IPDM	When engine switch (push switch) is not pressed	OFF
	When engine switch (push switch) is pressed	ON
IGN RLY1 F/B	Ignition switch OFF or ACC	OFF
	Ignition switch ON	ON
DETE SW -IPDM	When selector lever is in P position	OFF
	When selector lever is in any position other than P	ON
SFT PN -IPDM	When selector lever is in any position other than P or N	OFF
	When selector lever is in P or N position	ON
SFT P-MET	When selector lever is in any position other than P	OFF
	When selector lever is in P position	ON
SFT N-MET	When selector lever is in any position other than N	OFF
	When selector lever is in N position	ON
ENGINE STATE	Engine stopped	STOP
	While the engine stalls	STALL
	At engine cranking	CRANK
	Engine running	RUN
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door UNLOCK status	UNLK
DOOR STAT-AS	Passenger door LOCK status	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door UNLOCK status	UNLK
ID OK FLAG	Ignition switch ACC or ON	RESET
	Ignition switch OFF	SET
PRMT ENG STAT	When the engine start is prohibited	RESET
	When the engine start is permitted	SET
KEY SW -SLOT	When Intelligent Key is not inserted into key slot	OFF
	When Intelligent Key is inserted into key slot	ON
RKE OPE COUN1	During the operation of Intelligent Key	Operation frequency of Intelligent Key
CONFRM ID ALL	The key ID that the key slot receives does not accord with any key ID registered to BCM.	YET
	The key ID that the key slot receives accords with any key ID registered to BCM.	DONE

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

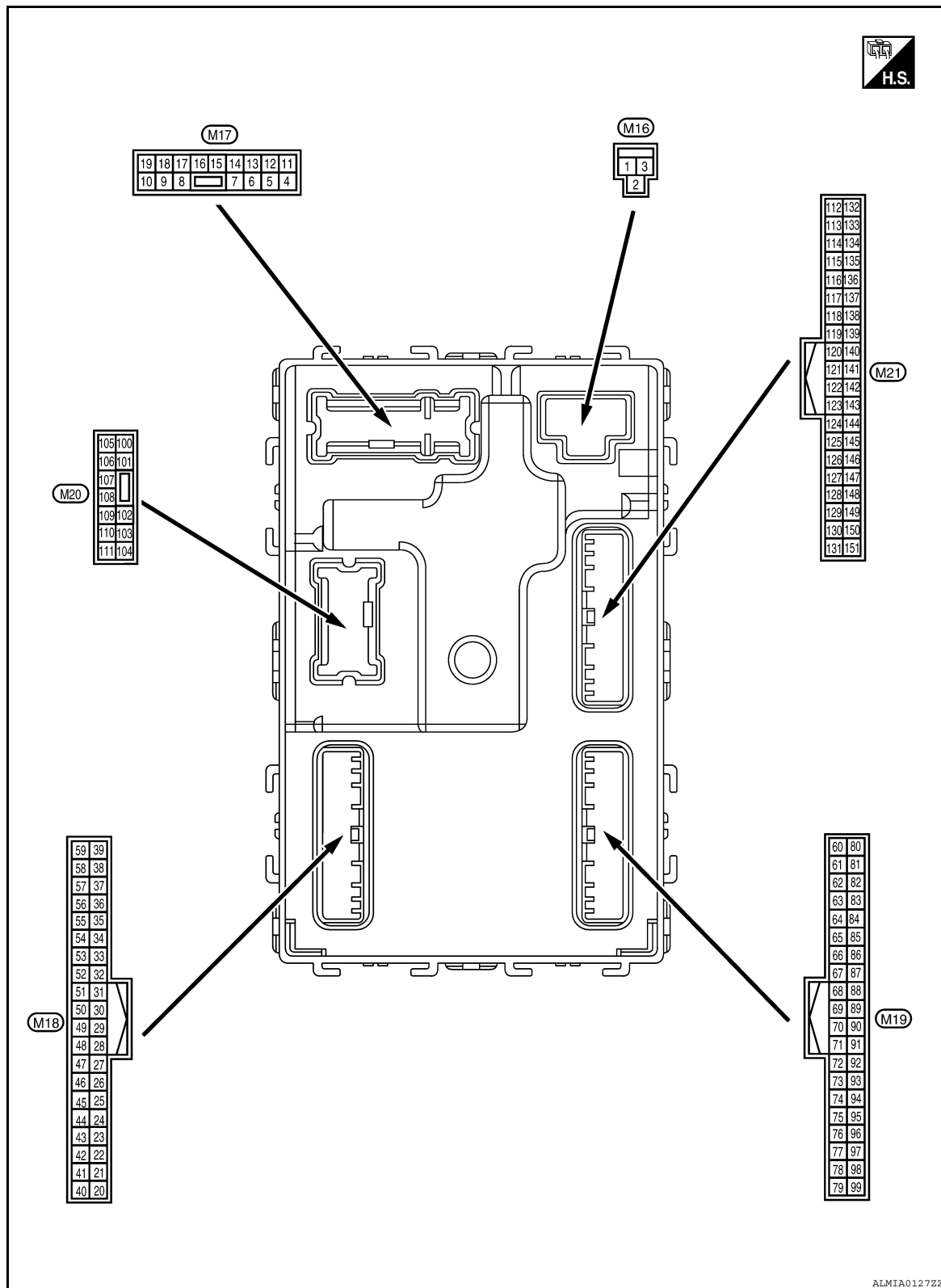
Monitor Item	Condition	Value/Status	
CONFIRM ID4	The key ID that the key slot receives does not accord with the fourth key ID registered to BCM.	YET	A
	The key ID that the key slot receives accords with the fourth key ID registered to BCM.	DONE	B
CONFIRM ID3	The key ID that the key slot receives does not accord with the third key ID registered to BCM.	YET	C
	The key ID that the key slot receives accords with the third key ID registered to BCM.	DONE	D
CONFIRM ID2	The key ID that the key slot receives does not accord with the second key ID registered to BCM.	YET	WT
	The key ID that the key slot receives accords with the second key ID registered to BCM.	DONE	F
CONFIRM ID1	The key ID that the key slot receives does not accord with the first key ID registered to BCM.	YET	G
	The key ID that the key slot receives accords with the first key ID registered to BCM.	DONE	H
TP 4	The ID of fourth key is not registered to BCM	YET	I
	The ID of fourth key is registered to BCM	DONE	J
TP 3	The ID of third key is not registered to BCM	YET	K
	The ID of third key is registered to BCM	DONE	L
TP 2	The ID of second key is not registered to BCM	YET	M
	The ID of second key is registered to BCM	DONE	N
TP 1	The ID of first key is not registered to BCM	YET	O
	The ID of first key is registered to BCM	DONE	P
AIR PRESS FL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front LH tire	
AIR PRESS FR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of front RH tire	
AIR PRESS RR	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear RH tire	
AIR PRESS RL	Ignition switch ON (only when the signal from the transmitter is received)	Air pressure of rear LH tire	
ID REGST FL1	When ID of front LH tire transmitter is registered	DONE	
	When ID of front LH tire transmitter is not registered	YET	
ID REGST FR1	When ID of front RH tire transmitter is registered	DONE	
	When ID of front RH tire transmitter is not registered	YET	
ID REGST RR1	When ID of rear RH tire transmitter is registered	DONE	
	When ID of rear RH tire transmitter is not registered	YET	
ID REGST RL1	When ID of rear LH tire transmitter is registered	DONE	
	When ID of rear LH tire transmitter is not registered	YET	
WARNING LAMP	Tire pressure indicator OFF	OFF	
	Tire pressure indicator ON	ON	
BUZZER	Tire pressure warning alarm is not sounding	OFF	
	Tire pressure warning alarm is sounding	ON	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal Layout

INFOID:000000005778715

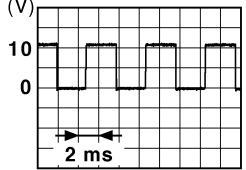


Physical Values

INFOID:000000005778716

BCM (BODY CONTROL MODULE)

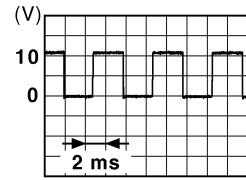
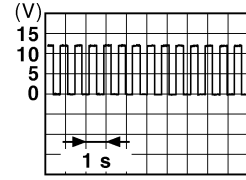
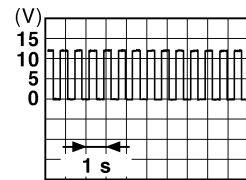
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
1 (W/B)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
2 (R/Y)	Ground	Battery power supply output	Output	Ignition switch OFF		Battery voltage
3 (L/W)	Ground	Ignition power supply output	Output	Ignition switch ON		Battery voltage
4 (P/W)	Ground	Interior room lamp power supply	Output	After passing the interior room lamp battery saver operation time		0V
				Any other time after passing the interior room lamp battery saver operation time		Battery voltage
5 (G/Y)	Ground	Front door RH UNLOCK	Output	Front door RH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
7 (R/W)	Ground	Step lamp	Output	Step lamp	ON	0V
					OFF	Battery voltage
8 (V)	Ground	All doors LOCK	Output	All doors	LOCK (actuator is activated)	Battery voltage
					Other than LOCK (actuator is not activated)	0V
9 (G)	Ground	Front door LH UNLOCK	Output	Front door LH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
10 ¹ (G/Y)	Ground	Rear door RH and rear door LH UNLOCK	Output	Rear door RH and rear door LH	UNLOCK (actuator is activated)	Battery voltage
					Other than UNLOCK (actuator is not activated)	0V
11 (Y/R)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
13 (B)	Ground	Ground	—	Ignition switch ON		0V
14 ⁶ (R/Y)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	OFF	0V
					ON	NOTE: When the illumination brightening/dimming level is in the neutral position 

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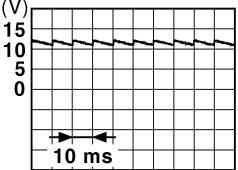
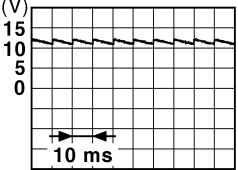
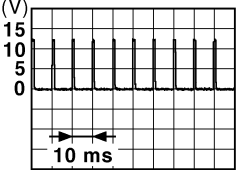
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
14 ¹ (O/W)	Ground	Engine switch (push switch) illumination ground	Input	Tail lamp	OFF	0V
					ON	NOTE: When the illumination brightening/dimming level is in the neutral position  <small>JSNIA0010GB</small>
15 (Y/L)	Ground	ACC indicator lamp	Output	Ignition switch	OFF	Battery voltage
					ACC or ON	0V
17 (G/B)	Ground	Turn signal (RH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch RH	 <small>PKID0926E</small> 6.5 V
18 (G/Y)	Ground	Turn signal (LH)	Output	Ignition switch ON	Turn signal switch OFF	0V
					Turn signal switch LH	 <small>PKID0926E</small> 6.5 V
19 (Y)	Ground	Room lamp timer control	Output	Interior room lamp	OFF	Battery voltage
					ON	0V
21 (P/B)	Ground	Optical sensor signal	Input	Ignition switch ON	When outside of the vehicle is bright	Close to 5V
					When outside of the vehicle is dark	Close to 0V
22 (R/Y)	Ground	Clutch interlock switch	Input	Clutch interlock switch	OFF (clutch pedal is not depressed)	0V
					ON (clutch pedal is depressed)	Battery voltage
24 (R/W)	Ground	Stop lamp switch 1	Input	—	—	Battery voltage
26 (O/L)	Ground	Stop lamp switch 2	Input	Stop lamp switch	OFF (brake pedal is not depressed)	0V
					ON (brake pedal is depressed)	Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
27 (G/W)	Ground	Front door lock assembly LH (unlock sensor)	Input	Front door LH	LOCK status	 JPMIA0011GB 11.8V
					UNLOCK status	0V
29 (Y)	Ground	Key slot switch	Input	When Intelligent Key is inserted into key slot		Battery voltage
				When Intelligent Key is not inserted into key slot		0V
30 (V/Y)	Ground	ACC feedback signal	Input	Ignition switch	OFF	0
					ACC or ON	Battery voltage
31 (G)	Ground	Rear window defogger feedback signal	Input	Rear window defogger switch	OFF	0V
					ON	Battery voltage
32 (R/B)	Ground	Front door RH switch	Input	Front door RH switch	OFF (when front door RH closes)	 JPMIA0011GB 11.8 V
					ON (when front door RH opens)	0V
33 (SB)	Ground	Compressor ON signal	Input	A/C switch	OFF	9.0 - 12.0V
					ON	0V
34 ² (L/R)	Ground	Front door lock assembly LH (key cylinder switch) (unlock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral)	5V
					ON (unlock)	0V
36 ² (GR)	Ground	Lock switch signal	Input	Door lock/unlock switch	Lock	Battery voltage
					Unlock	0V
37 (O)	Ground	Trunk lid opener cancel switch	Input	Trunk lid opener cancel switch	CANCEL	 JPMIA0012GB 1.1V
					ON	0V
38 (GR/W)	Ground	Rear window defogger ON signal	Input	Rear window defogger switch	OFF	5V
					ON	0V
39 ² (GR/R)	Ground	Unlock switch signal	Input	Door lock/unlock switch	Unlock	Battery voltage
					Lock	0V

A

B

C

D

WT

F

G

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I

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M

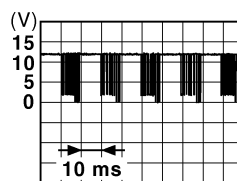
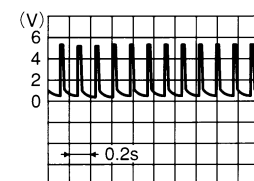
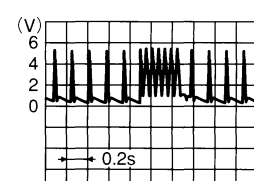
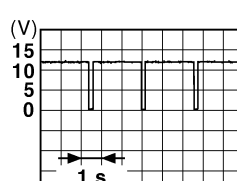
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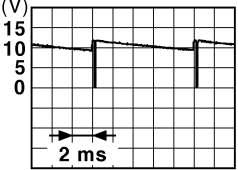
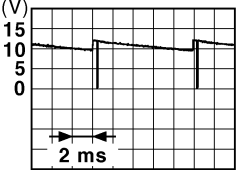
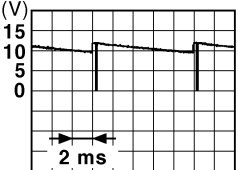
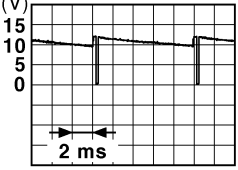

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
40 ³ (Y/G)	Ground	Power window serial link	Input/ Output	Ignition switch ON		 10.2V
				Ignition switch OFF or ACC		0V
41 (W)	Ground	Engine switch (push switch) illumination	Output	Engine switch (push switch) illumination	ON	5.5V
					OFF	0V
42 (R)	Ground	LOCK indicator lamp	Output	LOCK indicator lamp	ON	0V
					OFF	Battery voltage
45 (P)	Ground	Receiver & sensor ground	Input	Ignition switch ON		0V
46 (V/W)	Ground	Receiver & sensor power supply output	Output	Ignition switch	OFF	0V
					ACC or ON	5.0V
47 (G/O)	Ground	Tire pressure receiver signal	Input/ Output	Ignition switch ON	Standby state	 OCC3881D
					When receiving the signal from the transmitter	 OCC3880D
48 (R/G)	Ground	Selector lever P/N position signal	Input	Selector lever	P or N position	12.0V
					Except P and N positions	0V
49 (L/O)	Ground	Security indicator signal	Output	Security indicator	ON	0V
					Blinking	 11.3V
					OFF	Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
(+)	(-)	Signal name	Input/ Output		
50 (LG/ B)	Ground	Combination switch OUTPUT 5	Output	All switch OFF	0V
				Lighting switch 1ST	
				Lighting switch high-beam	
				Lighting switch 2ND	
				Turn signal switch RH	10.7V
51 (L/W)	Ground	Combination switch OUTPUT 1	Output	All switch OFF (Wiper intermittent dial 4)	0V
				Front wiper switch HI (Wiper intermittent dial 4)	
				Any of the conditions below with all switch OFF	
				<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 • Wiper intermittent dial 6 • Wiper intermittent dial 7 	10.7V
52 (G/B)	Ground	Combination switch OUTPUT 2	Output	All switch OFF (Wiper intermittent dial 4)	0V
				Front washer switch ON (Wiper intermittent dial 4)	
				Any of the conditions below with all switch OFF	
				<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 	10.7V
53 (LG/ R)	Ground	Combination switch OUTPUT 3	Output	All switch OFF	0V
				Front wiper switch INT	
				Front wiper switch LO	
				Lighting switch AUTO	10.7V
54 (G/Y)	Ground	Combination switch OUTPUT 4	Output	All switch OFF	0V
				Front fog lamp switch ON	
				Lighting switch 2ND	
				Lighting switch flash-to-pass	
				Turn signal switch LH	10.7V
55 (BR/ W)	Ground	Front blower monitor	Input	ON	Battery voltage
				OFF	0V

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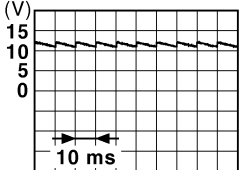
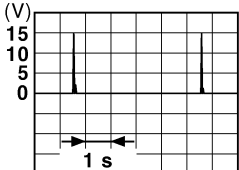
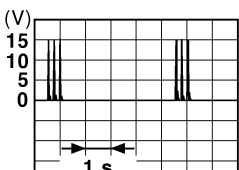
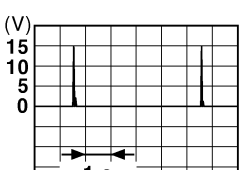
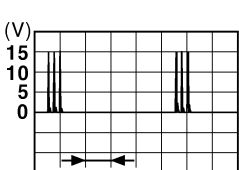
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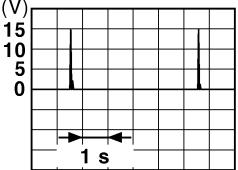
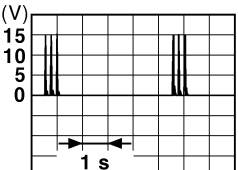
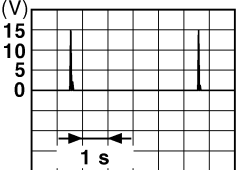
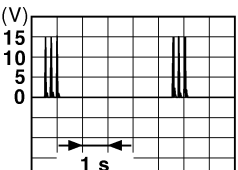
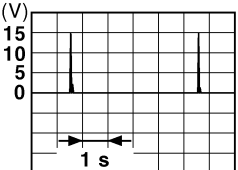
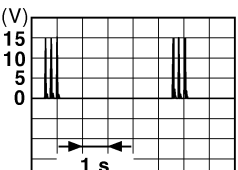
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
56 ² (L/B)	Ground	Front door lock assembly LH (key cylinder switch) (lock)	Input	Front door lock assembly LH (key cylinder switch)	OFF (neutral)	5V
					ON (lock)	0V
57 (W)	Ground	Tire pressure warning check switch	Input	—		5V
58 (SB)	Ground	Front door LH switch	Input	Front door LH switch	OFF (front door LH CLOSE)	 11.8V
					ON (front door LH OPEN)	0V
59 (G/R)	Ground	Rear window defogger relay	Output	Rear window defogger	Active	Battery voltage
					Not activated	0V
60 (B/R)	Ground	Front console antenna 2 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
61 (W/R)	Ground	Center console antenna 2 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
(+)	(-)	Signal name	Input/ Output		
62 ⁴ (B/Y)	Ground	Front outside handle RH antenna (-)	Output	When the front door RH request switch is operat- ed with ignition switch OFF	 <p>JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p>JMKIA0063GB</p>
63 ⁴ (LG)	Ground	Front outside handle RH antenna (+)	Output	When the front door RH request switch is operat- ed with ignition switch OFF	 <p>JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p>JMKIA0063GB</p>
64 ⁴ (V)	Ground	Front outside handle LH antenna (-)	Output	When the front door LH request switch is operat- ed with ignition switch OFF	 <p>JMKIA0062GB</p>
				When Intelligent Key is not in the antenna detection area	 <p>JMKIA0063GB</p>

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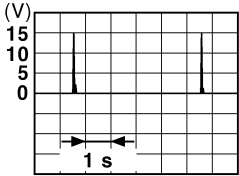
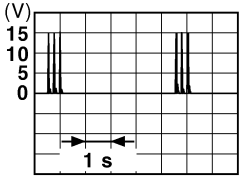
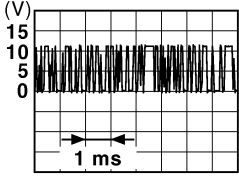
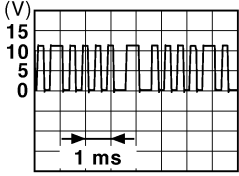
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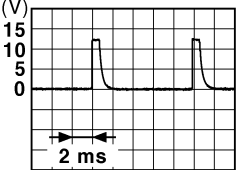


BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
65 ⁴ (P)	Ground	Front outside handle LH antenna (+)	Output	When the front door LH request switch is operat- ed with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
				When Intelligent Key is not in the antenna detection area	When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
68 (G/O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
69 (O)	Ground	NATS antenna amp (built in key slot)	Input/ Output	During waiting	Ignition switch is pressed while inserting the Intelli- gent Key into the key slot.	Just after pressing ignition switch. Pointer of tester should move.
70 (R/B)	Ground	Ignition relay-2 con- trol	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
71 (L/O)	Ground	Remote keyless entry receiver signal	Input/ Output	During waiting		 JMKIA0064GB
				When operating either button on Intelligent Key		 JMKIA0065GB

BCM (BODY CONTROL MODULE)

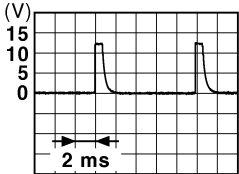


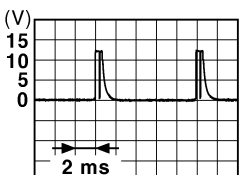
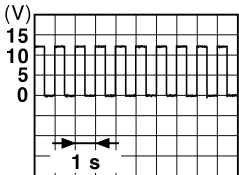
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
75 (R/Y)	Ground	Combination switch INPUT 5	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 1.4V
					Front fog lamp switch ON (Wiper intermittent dial 4)	 1.3V
					Any of the conditions below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7 	 1.3V

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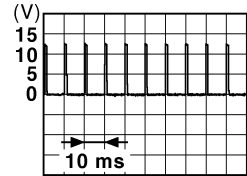
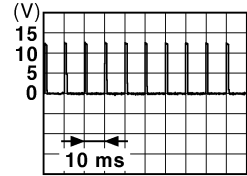
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
76 (R/G)	Ground	Combination switch INPUT 3	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	 JPMIA0041GB 1.4V
					Lighting switch high-beam (Wiper intermittent dial 4)	 JPMIA0036GB 1.3V
					Lighting switch 2ND (Wiper intermittent dial 4)	 JPMIA0037GB 1.3V
					Any of the conditions below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 	 JPMIA0040GB 1.3V
78 (P)	Ground	CAN-L	Input/ Output	—		—
79 (L)	Ground	CAN-H	Input/ Output	—		—
80 (R/L)	Ground	Key slot illumination	Output	Key slot illumina- tion	OFF	0V
					Blinking	 JPMIA0015GB 6.5V
					ON	Battery voltage
81 (LG)	Ground	ON indicator lamp	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
83 (L)	Ground	ACC relay control	Output	Ignition switch	OFF	0V
					ACC or ON	Battery voltage
84 (Y/R)	Ground	CVT shift selector	Output	—		Battery voltage
87 (G/B)	Ground	Selector lever P position switch	Input	Selector lever	P position	0V
					Any position other than P	Battery voltage
88 ⁴ (P/L)	Ground	Front door RH request switch	Input	Front door RH request switch	ON (pressed)	0V
					OFF (not pressed)	 1.0V
						JPMIA0016GB
89 ⁴ (B/W)	Ground	Front door LH request switch	Input	Front door LH request switch	ON (pressed)	0V
					OFF (not pressed)	 1.0V
						JPMIA0016GB
90 (Y)	Ground	Blower fan motor relay control	Output	Ignition switch	OFF or ACC	0V
					ON	Battery voltage
91 (L/R)	Ground	Remote keyless entry receiver power supply	Output	Ignition switch OFF		Battery voltage

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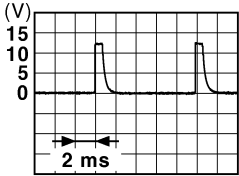
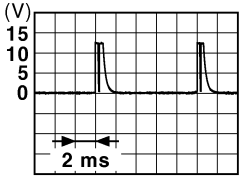
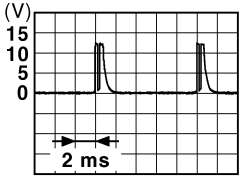
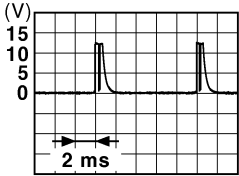
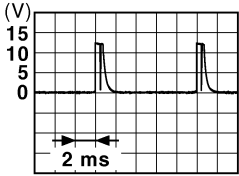
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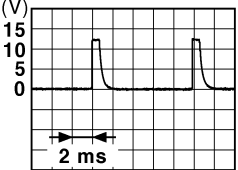

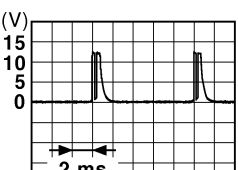
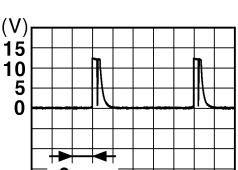
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
(+)	(-)	Signal name	Input/ Output		
95 (R/W)	Ground	Combination switch INPUT 1	Input	Combination switch (Wiper intermittent dial 4)	
				All switch OFF	 <p>JPMIA0041GB</p> <p>1.4V</p>
				Turn signal switch LH	 <p>JPMIA0037GB</p> <p>1.3V</p>
				Turn signal switch RH	 <p>JPMIA0036GB</p> <p>1.3V</p>
				Front wiper switch LO	 <p>JPMIA0038GB</p> <p>1.3V</p>
				Front washer switch ON	 <p>JPMIA0039GB</p> <p>1.3V</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
(+)	(-)	Signal name	Input/ Output		
96 (P/B)	Ground	Combination switch INPUT 4	Input	Combination switch	<div> <p>All switch OFF (Wiper intermittent dial 4)</p>  <p>JPMIA0041GB</p> <p>1.4V</p> </div>
				Lighting switch AUTO (Wiper intermittent dial 4)	<div>  <p>JPMIA0038GB</p> <p>1.3V</p> </div>
				Lighting switch 1ST (Wiper intermittent dial 4)	<div>  <p>JPMIA0036GB</p> <p>1.3V</p> </div>
				Any of the conditions below with all switch OFF <ul style="list-style-type: none"> Wiper intermittent dial 1 Wiper intermittent dial 5 Wiper intermittent dial 6 	<div>  <p>JPMIA0039GB</p> <p>1.3V</p> </div>

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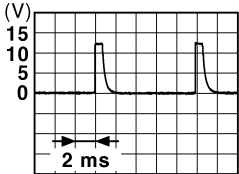

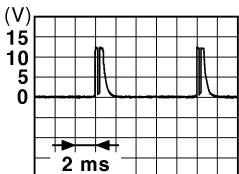
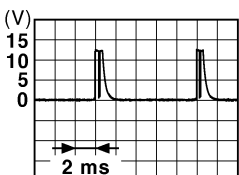
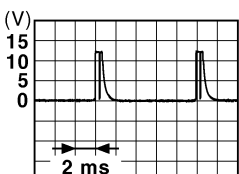
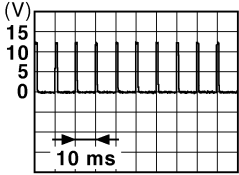
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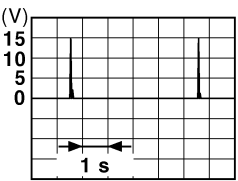
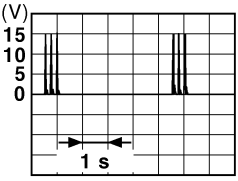
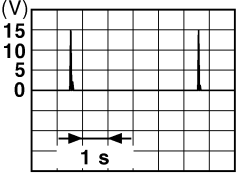
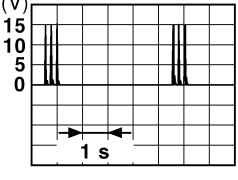
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
97 (R/B)	Ground	Combination switch INPUT 2	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	 JPMIA0041GB 1.4V
					Lighting switch flash-to-pass	 JPMIA0037GB 1.3V
					Lighting switch 2ND	 JPMIA0036GB 1.3V
					Front wiper switch INT	 JPMIA0038GB 1.3V
					Front wiper switch HI	 JPMIA0040GB 1.3V
98 (G/O)	Ground	Hazard switch	Input	Hazard switch	Pressed	0 V
					Not pressed	 JPMIA0012GB 1.1V

BCM (BODY CONTROL MODULE)

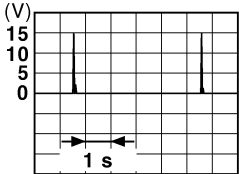
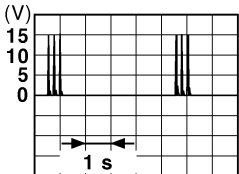
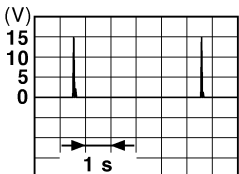
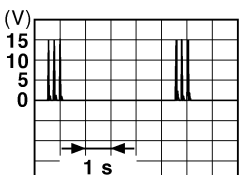
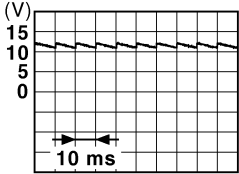
< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
103 (V)	Ground	Trunk lid opening	Output	Trunk lid	Open (trunk lid opener actuator is activated)	Battery voltage
					Close (trunk lid opener actuator is not activated)	0V
110 (V/W)	Ground	Trunk room lamp	Output	Trunk room lamp	ON	0V
					OFF	Battery voltage
114 (B)	Ground	Rear parcel shelf antenna 1 (-)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB
115 (W)	Ground	Rear parcel shelf antenna 1 (+)	Output	Ignition switch OFF	When Intelligent Key is in the passenger compartment	 JMKIA0062GB
					When Intelligent Key is not in the passenger compartment	 JMKIA0063GB

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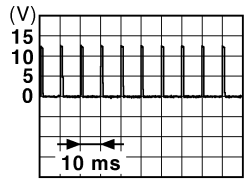
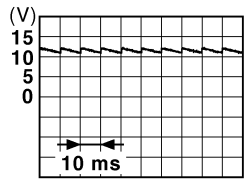
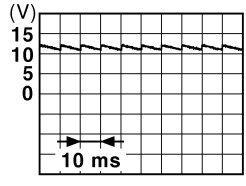
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
118 ⁴ (L/O)	Ground	Rear bumper antenna (-)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
				When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
119 ⁴ (BR/W)	Ground	Rear bumper antenna (+)	Output	When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is in the antenna detection area	 JMKIA0062GB
				When the trunk lid request switch is operated with ignition switch OFF	When Intelligent Key is not in the antenna detection area	 JMKIA0063GB
127 (BR/W)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	Battery voltage
					ON	0V
130 (Y/G)	Ground	Trunk room lamp switch	Input	Trunk room lamp switch	OFF (trunk is closed)	 JPMIA0011GB 11.8V
					ON (trunk is open)	0V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
(+)	(-)	Signal name	Input/ Output			
132 (R)	Ground	Starter motor relay control	Output	Ignition switch OFF (M/T vehicle)	When the clutch pedal is depressed	Battery voltage
					When the clutch pedal is not depressed	0V
				Ignition switch ON (other than M/ T vehicle)	When selector lever is in P or N position and the brake is depressed	Battery voltage
					When selector lever is in P or N position and the brake is not depressed	0V
140 (BR)	Ground	Engine switch (push switch)	Input	Engine switch (push switch)	Pressed	0V
					Not pressed	Battery voltage
141 (G/R)	Ground	Trunk request switch	Input	Trunk request switch	ON (pressed)	0V
					OFF (not pressed)	 <p>1.0V</p>
144 ⁴ (GR)	Ground	Intelligent Key warning buzzer	Output	Request switch buzzer	Sounding	0V
					Not sounding	Battery voltage
144 ⁵ (GR)	Ground	Outside warning buzzer	Output	Outside warning buzzer	Sounding	0V
					Not sounding	Battery voltage
147 (L/R)	Ground	Trunk lid opener switch	Input	Trunk lid opener switch	Pressed	0V
					Not pressed	Battery voltage
148 ¹ (R/W)	Ground	Rear door RH switch	Input	Rear door RH switch	OFF (when rear door RH closes)	 <p>11.8V</p>
					ON (when rear door RH opens)	0V
149 ¹ (R/B)	Ground	Rear door LH switch	Input	Rear door LH switch	OFF (when rear door LH closes)	 <p>11.8V</p>
					ON (when rear door LH opens)	0V

1: Sedan

2: With LH front window anti-pinch

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >

3: With LH and RH front window anti-pinch

4: With Intelligent Key

5: Without Intelligent Key

6: Coupe

Self-Diagnosis (With CONSULT-III)

INFOID:000000005434640

FUNCTION

Self-Diagnostic Results Mode

Diagnostic item	Diagnostic item is detected when ...	Reference page
LOW - PRESSURE - FL [C1704] LOW - PRESSURE - FR [C1705] LOW - PRESSURE - RR [C1706] LOW - PRESSURE - RL [C1707]	Tire pressures dropped below specified value. Refer to WT-8, "System Description" .	—
[NO-DATA] - FL [C1708] [NO-DATA] - FR [C1709] [NO-DATA] - RR [C1710] [NO-DATA] - RL [C1711]	Data from FL transmitter cannot be received. Data from FR transmitter cannot be received. Data from RR transmitter cannot be received. Data from RL transmitter cannot be received.	WT-14
[CHECKSUM- ERR] - FL [C1712] [CHECKSUM- ERR] - FR [C1713] [CHECKSUM- ERR] - RR [C1714] [CHECKSUM- ERR] - RL [C1715]	Checksum data from FL transmitter is malfunctioning. Checksum data from FR transmitter is malfunctioning. Checksum data from RR transmitter is malfunctioning. Checksum data from RL transmitter is malfunctioning.	WT-16
[PRESSDATA- ERR] - FL [C1716] [PRESSDATA- ERR] - FR [C1717] [PRESSDATA- ERR] - RR [C1718] [PRESSDATA- ERR] - RL [C1719]	Air pressure data from FL transmitter is malfunctioning. Air pressure data from FR transmitter is malfunctioning. Air pressure data from RR transmitter is malfunctioning. Air pressure data from RL transmitter is malfunctioning.	WT-18
[CODE- ERR] - FL [C1720] [CODE- ERR] - FR [C1721] [CODE- ERR] - RR [C1722] [CODE- ERR] - RL [C1723]	Function code data from FL transmitter is malfunctioning. Function code data from FR transmitter is malfunctioning. Function code data from RR transmitter is malfunctioning. Function code data from RL transmitter is malfunctioning.	WT-16
[BATT - VOLT - LOW] - FL [C1724] [BATT - VOLT - LOW] - FR [C1725] [BATT - VOLT - LOW] - RR [C1726] [BATT - VOLT - LOW] - RL [C1727]	Battery voltage of FL transmitter drops. Battery voltage of FR transmitter drops. Battery voltage of RR transmitter drops. Battery voltage of RL transmitter drops.	WT-16
VHCL_SPEED_SIG_ERR [C1729]	Vehicle speed signal is in error.	WT-19
CONTROL MODULE [C1734]	TPMS malfunction in BCM.	WT-20

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.

Self-Diagnosis (Without CONSULT-III)

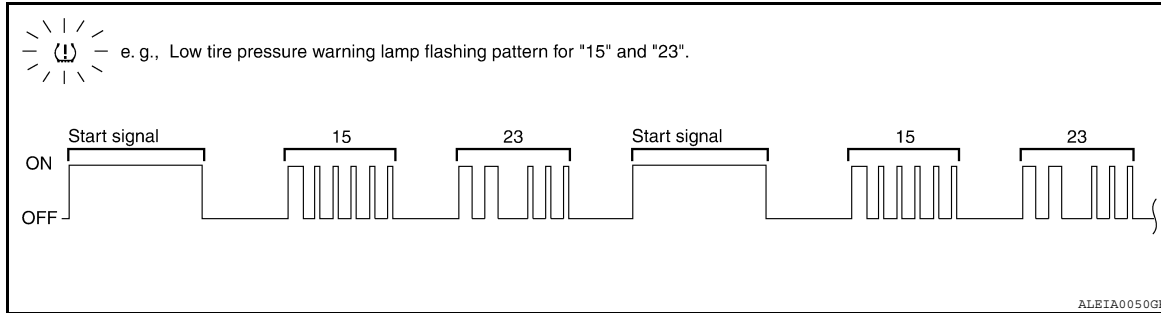
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SELF DIAGNOSTIC PROCEDURE (WITHOUT CONSULT-III)

1. Turn ignition switch ON.
2. Ground the tire pressure warning check connector to initiate self diagnosis.
3. Compare the flashing pattern with the flash code chart below.

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS >



NOTE:

The system is normal when the low tire pressure warning lamp flashes 5 times and continues repeating. Self-diagnosis results are erased automatically by turning the ignition switch "OFF".

Flash Code	Malfunction part	Reference page
15 16 17 18	Tire pressure dropped below specified value. Refer to WT-8, "System Description" .	—
21 22 23 24	Transmitter no data (FL) Transmitter no data (FR) Transmitter no data (RR) Transmitter no data (RL)	WT-14
31 32 33 34	Transmitter checksum error (FL) Transmitter checksum error (FR) Transmitter checksum error (RR) Transmitter checksum error (RL)	WT-16
35 36 37 38	Transmitter pressure data error (FL) Transmitter pressure data error (FR) Transmitter pressure data error (RR) Transmitter pressure data error (RL)	WT-18
41 42 43 44	Transmitter function code error (FL) Transmitter function code error (FR) Transmitter function code error (RR) Transmitter function code error (RL)	WT-16
45 46 47 48	Transmitter battery voltage low (FL) Transmitter battery voltage low (FR) Transmitter battery voltage low (RR) Transmitter battery voltage low (RL)	WT-16
52	Vehicle speed signal	WT-19
53	TPMS malfunction in BCM	WT-20

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TIRE PRESSURE MONITORING SYSTEM

< WIRING DIAGRAM >

WIRING DIAGRAM

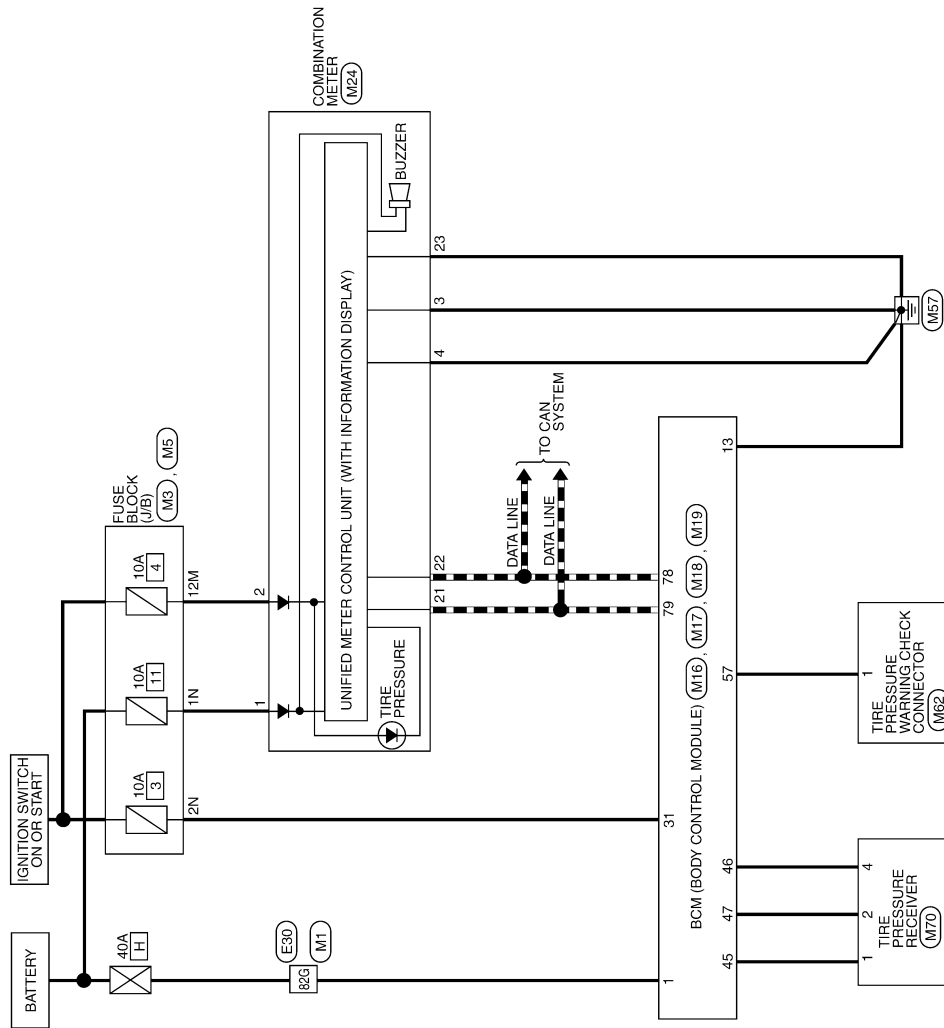
TIRE PRESSURE MONITORING SYSTEM

COUPE

COUPE : Wiring Diagram

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TIRE PRESSURE MONITORING SYSTEM - COUPE



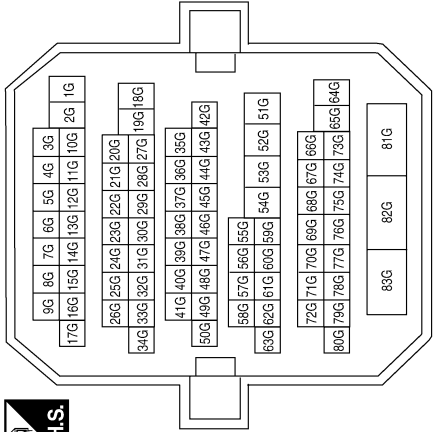
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TIRE PRESSURE MONITORING SYSTEM

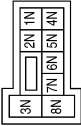
< WIRING DIAGRAM >

TIRE PRESSURE MONITORING SYSTEM CONNECTORS - COUPE

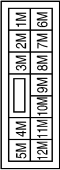
Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Connector No.	M5
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1N	W/L	-
2N	G	-

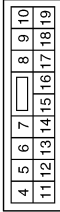
Terminal No.	Color of Wire	Signal Name
12M	O	-

Terminal No.	Color of Wire	Signal Name
82G	W/B	-

Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1	W/B	BAT_POWER_F/L

Terminal No.	Color of Wire	Signal Name
13	B	GND1

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TIRE PRESSURE MONITORING SYSTEM

< WIRING DIAGRAM >

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN



39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40

Terminal No.	Color of Wire	Signal Name
31	G	IGN F/B
45	P	GND RF2 A/L
46	V/W	AL SENS KEYLESS TUNER POWER SUPPLY
47	G/O	KEYLESS TUNER SI
57	W	TPMS MODE TRIGGER SW

Connector No.	M62
Connector Name	TIRE PRESSURE WARNING CHECK CONNECTOR
Connector Color	WHITE



1	2
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Terminal No.	Color of Wire	Signal Name
1	W	LOW_TIRE

Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60
99	98	97	96	95	94	93	92	91	90	89	88	87	86	85	84	83	82	81	80

Terminal No.	Color of Wire	Signal Name
78	P	CAN-L
79	L	CAN-H

Connector No.	M70
Connector Name	TIRE PRESSURE RECEIVER
Connector Color	WHITE



1	2	3	4
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Terminal No.	Color of Wire	Signal Name
1	P	GND
2	G/O	SIGNAL
4	V/W	POWER

Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE



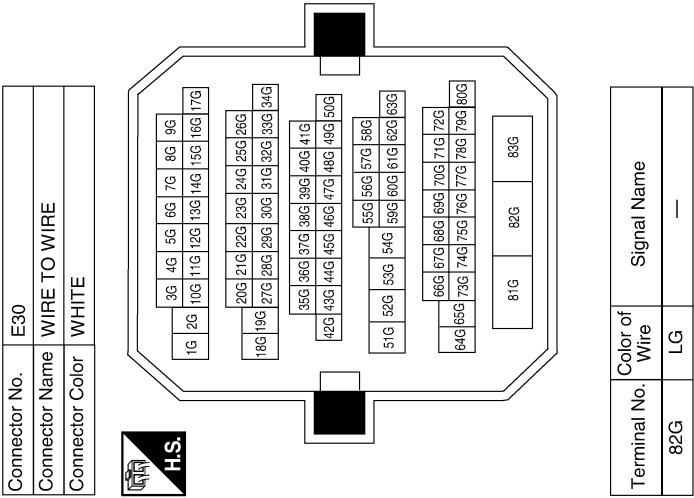
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
1	W/L	BATT
2	O	IGN
3	B	GND (POWER)
4	B	GND (ILL)
21	L	CAN-H
22	P	CAN-L
23	B	GND (CIRCUIT)

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TIRE PRESSURE MONITORING SYSTEM

< WIRING DIAGRAM >



SEDAN

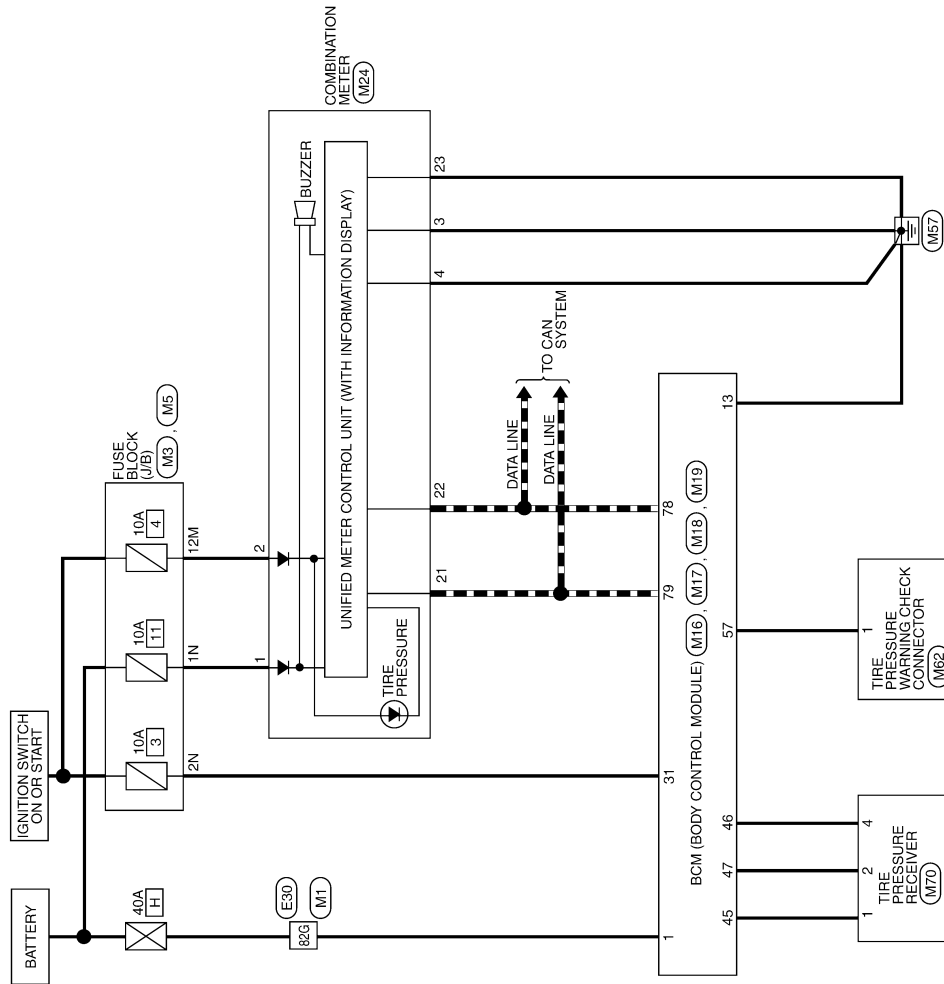
TIRE PRESSURE MONITORING SYSTEM

< WIRING DIAGRAM >

SEDAN : Wiring Diagram

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TIRE PRESSURE MONITORING SYSTEM - SEDAN



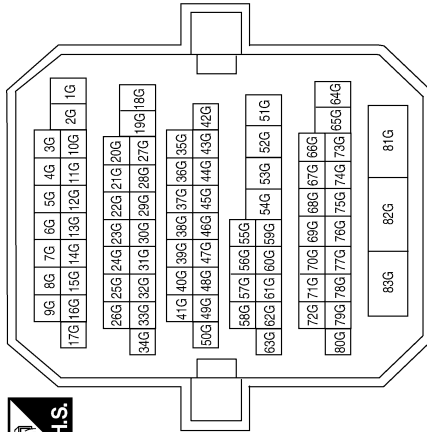
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TIRE PRESSURE MONITORING SYSTEM

< WIRING DIAGRAM >

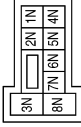
TIRE PRESSURE MONITORING SYSTEM CONNECTORS - SEDAN

Connector No.	M1
Connector Name	WIRE TO WIRE
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
82G	W/B	-

Connector No.	M3
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
1N	W/L	-
2N	G	-

Connector No.	M5
Connector Name	FUSE BLOCK (J/B)
Connector Color	WHITE



Terminal No.	Color of Wire	Signal Name
12M	O	-

Connector No.	M16
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK



Terminal No.	Color of Wire	Signal Name
1	W/B	BAT_POWER_F/L

Connector No.	M17
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	WHITE




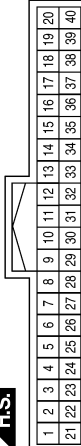
Terminal No.	Color of Wire	Signal Name
13	B	GND1

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TIRE PRESSURE MONITORING SYSTEM

< WIRING DIAGRAM >


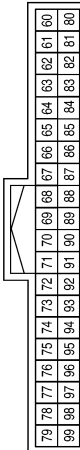
Connector No.	M24
Connector Name	COMBINATION METER
Connector Color	WHITE

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40

Terminal No.	Color of Wire	Signal Name
1	W/L	BATT
2	O	IGN
3	B	GND (POWER)
4	B	GND (ILL)
21	L	CAN-H
22	P	CAN-L
23	B	GND (CIRCUIT)



Connector No.	M19
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	BLACK

79	78	77	76	75	74	73	72	71	70	69	68	67	66	65	64	63	62	61	60
59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40

Terminal No.	Color of Wire	Signal Name
78	P	CAN-L
79	L	CAN-H

Connector No.	M18
Connector Name	BCM (BODY CONTROL MODULE)
Connector Color	GREEN

39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20
59	58	57	56	55	54	53	52	51	50	49	48	47	46	45	44	43	42	41	40

Terminal No.	Color of Wire	Signal Name
31	G	IGN F/B
45	P	GND RF2 A/L
46	V/W	AVL SENS KEYLESS TUNER POWER SUPPLY
47	G/O	KEYLESS TUNER SI
57	W	TPMS MODE TRIGGER SW

Connector No.	M70
Connector Name	TIRE PRESSURE RECEIVER
Connector Color	WHITE




1	2	3	4
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Terminal No.	Color of Wire	Signal Name
1	P	GND
2	G/O	SIGNAL
4	V/W	POWER

Connector No.	M62
Connector Name	TIRE PRESSURE WARNING CHECK CONNECTOR
Connector Color	WHITE



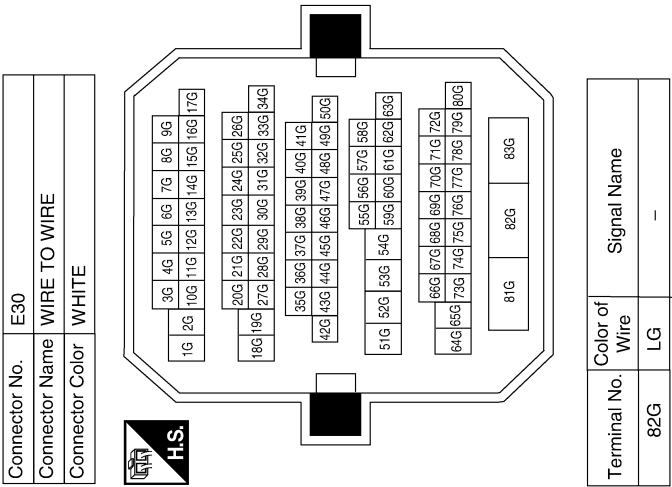

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Terminal No.	Color of Wire	Signal Name
1	W	LOW_TIRE

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TIRE PRESSURE MONITORING SYSTEM

< WIRING DIAGRAM >



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TPMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

TPMS

Symptom Table

INFOID:0000000005434642

Symptom	Reference
Low tire pressure warning lamp does not come on when ignition switch is turned ON.	WT-55
Low tire pressure warning lamp stays on when ignition switch is turned ON.	WT-56
Low tire pressure warning lamp flashes when ignition switch is turned ON.	WT-57
Hazard warning lamps flash when ignition switch is turned ON.	WT-58
ID registration cannot be completed.	WT-59

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN ON

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP DOES NOT TURN ON

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

INFOID:0000000005434643

DIAGNOSTIC PROCEDURE

1.SELF-DIAGNOSTIC RESULT CHECK

Using CONSULT-III, check display contents of BCM in SELF-DIAGNOSIS.

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

YES >> Malfunction in CAN communication system. Refer to [LAN-26, "CAN System Specification Chart"](#).

NO >> GO TO 2

2.CHECK COMBINATION METER

Check combination meter operation. Refer to [MWI-42, "CONSULT-III Function \(METER/M&A\)"](#).

Is the inspection result normal?

YES >> GO TO 3

NO >> Replace combination meter. Refer to [IP-11, "Removal and Installation"](#).

3.CHECK LOW TIRE PRESSURE WARNING LAMP

Disconnect BCM harness connector.

Does the low tire pressure warning lamp activate?

YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).

NO >> Check combination meter operation.

LOW TIRE PRESSURE WARNING LAMP STAYS ON

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP STAYS ON

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

INFOID:000000005434644

DIAGNOSTIC PROCEDURE

1.CHECK BCM CONNECTORS

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

Is the inspection result normal?

YES >> GO TO 2

NO >> Repair or replace damaged parts.

2.CHECK BCM POWER SUPPLY AND GROUND CIRCUITS

Check BCM power supply and ground circuits. Refer to [BCS-42. "Diagnosis Procedure"](#).

Is the inspection result normal?

YES >> Replace BCM. Refer to [BCS-96. "Removal and Installation"](#).

NO >> Repair BCM circuits.

LOW TIRE PRESSURE WARNING LAMP BLINKS

< SYMPTOM DIAGNOSIS >

LOW TIRE PRESSURE WARNING LAMP BLINKS

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

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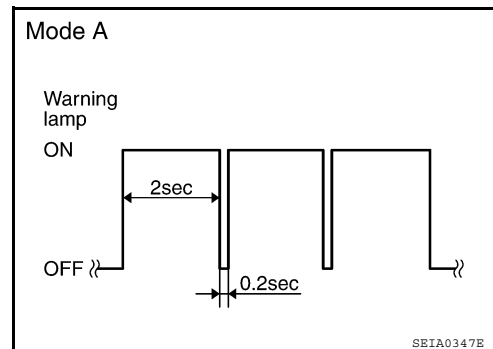
Regarding Wiring Diagram information, refer to [WT-46, "COUPE : Wiring Diagram"](#) or [WT-50, "SEDAN : Wiring Diagram"](#).

NOTE:

If low tire pressure warning lamp flashes as shown, the system is normal.

Flash Mode A

- This mode shows transmitter status is OFF-mode.
Carry out transmitter wake up operation. Refer to [WT-5, "Transmitter Wake Up Operation"](#).



1.CHECK BCM CONNECTORS

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

Is the Inspection result normal?

YES >> GO TO 2

NO >> Repair or replace damaged parts.

2.CHECK TIRE PRESSURE WARNING CHECK CONNECTOR CIRCUIT

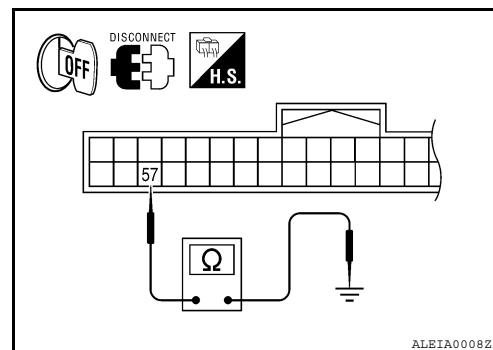
Check continuity between BCM harness connector M18 terminal 57 and ground.

Continuity should not exist.

Is the Inspection result normal?

YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).

NO >> Repair circuit for short to ground.



HAZARD WARNING LAMPS FLASH

< SYMPTOM DIAGNOSIS >

HAZARD WARNING LAMPS FLASH

Hazard Warning Lamps Flash When Ignition Switch Is Turned On

INFOID:0000000005434646

DIAGNOSTIC PROCEDURE

1. CHECK BCM GROUND CIRCUIT

Check BCM ground circuit. Refer to [BCS-42, "Diagnosis Procedure"](#).

Is the inspection result normal?

- YES >> Replace BCM. Refer to [BCS-96, "Removal and Installation"](#).
- NO >> Repair BCM ground circuit.

ID REGISTRATION CANNOT BE COMPLETED

< SYMPTOM DIAGNOSIS >

ID REGISTRATION CANNOT BE COMPLETED

ID Registration Cannot Be Completed

INFOID:0000000005434647

DIAGNOSTIC PROCEDURE

1.PERFORM ID REGISTRATION OF ALL TRANSMITTERS

Carry out ID registration of all transmitters. Refer to [WT-6, "ID Registration Procedure"](#).

Can ID registration of all transmitters be completed?

YES >> Inspection End.

NO >> GO TO [WT-14, "Diagnosis Procedure"](#).

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NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

< SYMPTOM DIAGNOSIS >

NOISE, VIBRATION AND HARSHNESS (NVH) TROUBLESHOOTING

NVH Troubleshooting Chart

INFOID:000000005434648

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

Reference page			WT-63	WT-63	WT-63	WT-69	WT-63	—	—	WT-69	FAX-3, "NVH Troubleshooting Chart", FSU-3, "NVH Troubleshooting Chart"	RAX-3, "NVH Troubleshooting Chart", RSU-3, "NVH Troubleshooting Chart"	Refer to TIRES in this chart.	Refer to ROAD WHEEL in this chart.	FAX-3, "NVH Troubleshooting Chart"	BR-6, "NVH Troubleshooting Chart"	ST-4, "NVH Troubleshooting Chart"
Possible cause and SUSPECTED PARTS			Improper installation, looseness	Out-of-round	Imbalance	Incorrect tire pressure	Uneven tire wear	Deformation or damage	Non-uniformity	Incorrect tire size	FRONT AXLE AND FRONT SUSPENSION	REAR AXLE AND REAR SUSPENSION	TIRES	ROAD WHEELS	DRIVE SHAFT	BRAKE	STEERING
Symptom	TIRES	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	x
		Vibration				x				x	x	x			x		x
		Shimmy	x	x	x	x	x	x	x	x	x	x		x		x	x
		Shudder	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			
	ROAD WHEEL	Noise	x	x	x			x			x	x	x		x	x	x
		Shake	x	x	x			x			x	x	x		x	x	x
		Shimmy, Shudder	x	x	x			x			x	x	x			x	x
		Poor quality ride or handling	x	x	x			x			x	x	x				

x: Applicable

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

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

INFOID:000000005786172

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 SR and SB section of this Service Manual.

WARNING:

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

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

WARNING:

- When working near the Airbag Diagnosis Sensor Unit or other Airbag System sensors with the Ignition ON or engine running, DO NOT use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the Ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

General Precautions

INFOID:000000005434651

- After removing and installing the opening/closing parts, be sure to carry out fitting adjustments to check their operation.
- Check the lubrication level, damage, and wear of each part. If necessary, grease or replace it.

PREPARATION

< PREPARATION >

PREPARATION

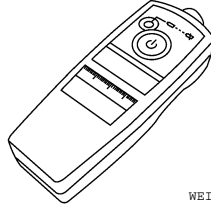
PREPARATION

Special Service Tool

INFOID:0000000005434652

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

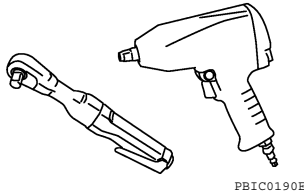
Tool number (Kent-Moore No.) Tool name	Description
KV991B1000 (J-45295) Transmitter activation tool	<ul style="list-style-type: none">• Transmitter wake up operation• ID registration procedure



Commercial Service Tools

INFOID:0000000005434653

Tool name	Description
Power tool	Loosening bolts and nuts



ON-VEHICLE MAINTENANCE

ROAD WHEEL

Inspection

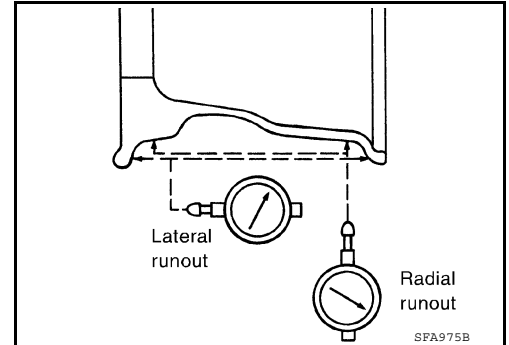
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ALUMINUM WHEEL

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 figure.

Wheel runout (Dial indicator value):

Refer to [WT-69](#).



STEEL WHEEL

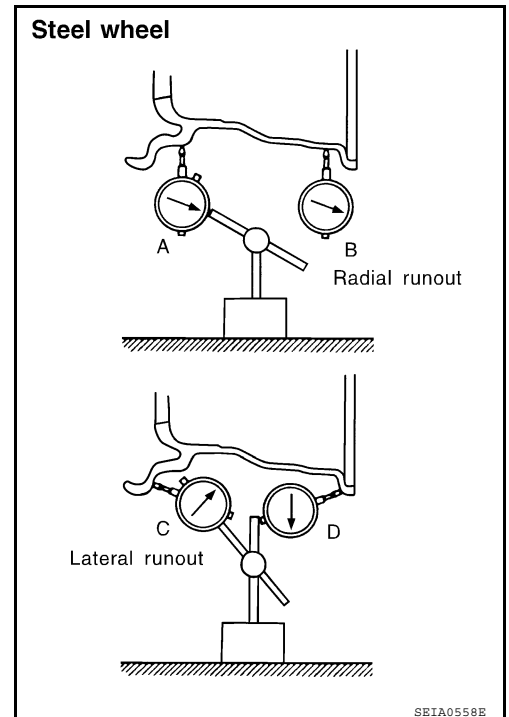
1. Check tires for wear and improper inflation.
2. Check wheels for deformation, cracks and other damage. If deformed, remove wheel and check wheel runout.
- a. Remove tire from steel wheel and mount on a tire balance machine.
- b. Set two dial indicators as shown in the figure.
- c. Set each dial indicator 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-69](#).



TIRE PRESSURE RECEIVER

< ON-VEHICLE REPAIR >

ON-VEHICLE REPAIR

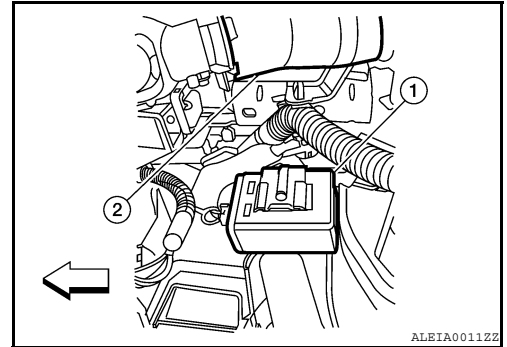
TIRE PRESSURE RECEIVER

Removal and Installation

INFOID:000000005434655

REMOVAL

1. Remove instrument lower cover (LH). Refer to [IP-10. "Exploded View"](#).
2. Locate tire pressure receiver (1) to the right of the steering column (2) and disconnect tire pressure receiver electrical connector.
⇐: Front
3. Remove tire pressure receiver (1) from bracket using a suitable tool to release the bracket.



INSTALLATION

Installation is in the reverse order of removal.

ROAD WHEEL TIRE ASSEMBLY

< ON-VEHICLE REPAIR >

ROAD WHEEL TIRE ASSEMBLY

Adjustment

INFOID:000000005786173

BALANCING WHEELS (ADHESIVE WEIGHT TYPE)

Preparation Before Adjustment

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

CAUTION:

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

Wheel Balance Adjustment

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

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

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

Calculation example:

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

NOTE:

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

Example:

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

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

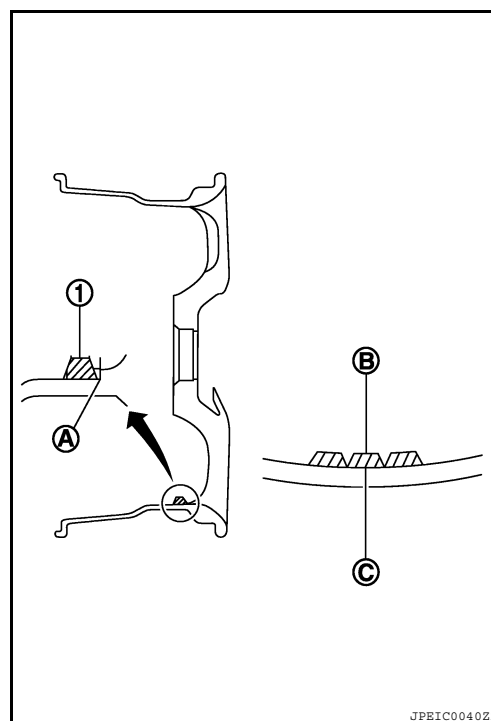
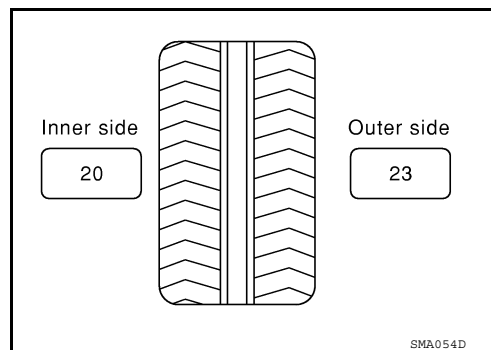
3. Install balance weight in the position shown.

CAUTION:

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

CAUTION:

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



ROAD WHEEL TIRE ASSEMBLY

< ON-VEHICLE REPAIR >

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

CAUTION:

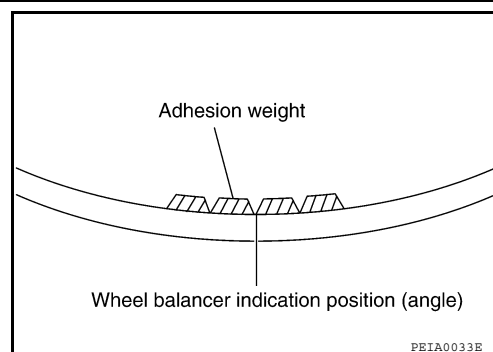
Do not install one balance weight sheet on top another.

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

CAUTION:

Do not install more than two balance weights.

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



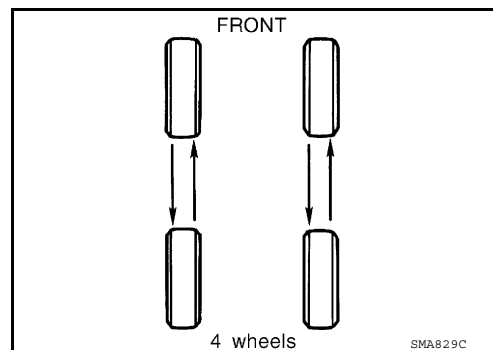
Wheel balance	Dynamic (At flange)	Static (At flange)
Maximum allowable imbalance	Refer to WT-69, "Road Wheel" .	

TIRE ROTATION

- Follow the maintenance schedule for tire rotation service intervals. Refer to [MA-5, "FOR NORTH AMERICA : Explanation of General Maintenance"](#).
- When installing the wheel, tighten wheel nuts to the specified torque.

CAUTION:

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



Wheel nut tightening torque : 113 N·m (12 kg-m, 83 ft-lb)

- Perform the ID registration, after tire rotation. Refer to [WT-6, "ID Registration Procedure"](#).

TRANSMITTER

< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

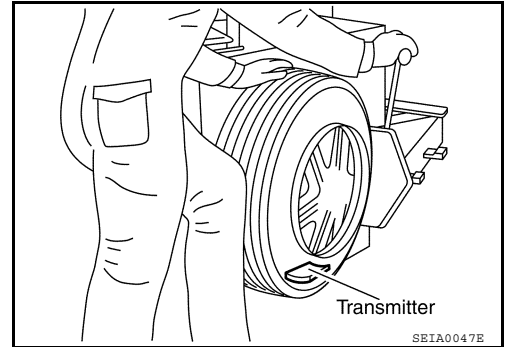
TRANSMITTER

Removal and Installation

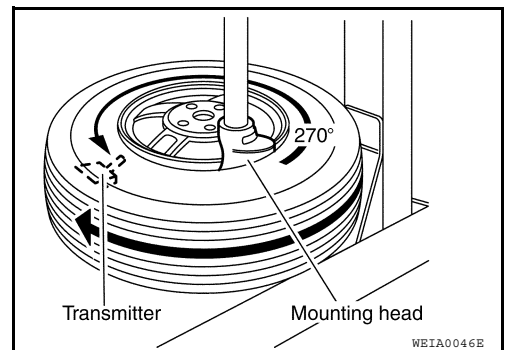
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REMOVAL

1. Remove wheel and tire using power tool.
2. Deflate tire. Unscrew transmitter retaining nut and allow transmitter to fall into tire.
3. Gently bounce tire so that transmitter falls to bottom of tire. Place wheel and tire assembly on tire changing machine and break both tire beads. Ensure that the transmitter remains at the bottom of the tire while breaking the bead.

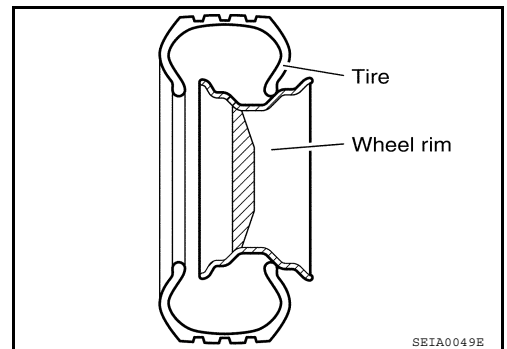


4. Turn tire so that valve hole is at bottom, and gently bounce the tire to ensure transmitter is near valve hole. Carefully lift tire onto turntable and position valve hole (and transmitter) 270 degrees from mounting/dismounting head.
5. Lubricate tire well, and remove top side of tire. Reach inside the tire and remove the transmitter.
6. Remove the second side of the tire as normal.



INSTALLATION

1. Place first side of tire onto rim.



2. Apply suitable silicone lubricant to new transmitter seal then install seal on transmitter. Refer to [MA-15](#). **"FOR USA AND CANADA : Fluids and Lubricants".**

NOTE:

Always replace the seal after every disassembly.

TRANSMITTER

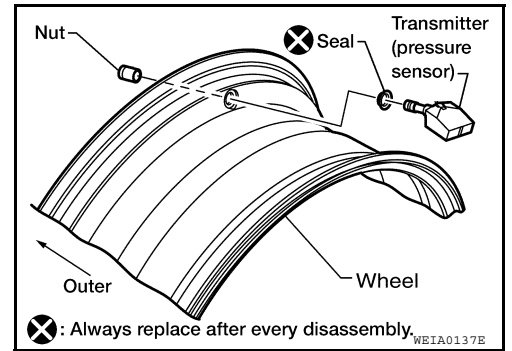
< REMOVAL AND INSTALLATION >

3. Mount transmitter on rim and tighten nut at a maximum speed of 10 rpm.

NOTE:

Make sure no burrs exist in the valve stem hole of the wheel.

Transmitter nut : 7.7 N·m (0.79 kg-m, 68 in-lb) tightening torque



4. Place wheel on turntable of tire machine. Ensure that transmitter is 270 degrees from mounting/dismounting head.

NOTE:

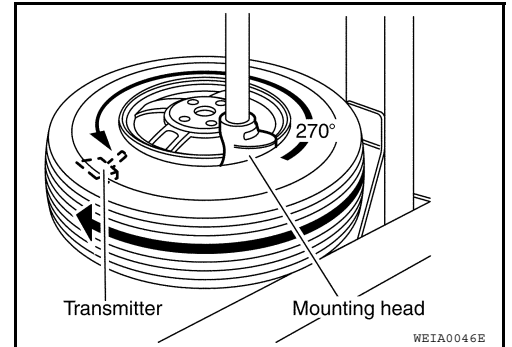
Do not touch transmitter with mounting head.

5. Lubricate tire well, and install second side of tire as normal. Ensure that tire does not rotate relative to rim.
6. Inflate tire and balance the wheel and tire assembly. Refer to [WT-65, "Adjustment"](#).
7. Install wheel and tire assembly in appropriate wheel position on vehicle. Refer to [WT-65, "Adjustment"](#).

NOTE:

If replacing the transmitter, then transmitter wake up operation must be performed. Refer to [WT-5, "Transmitter Wake Up Operation"](#).

8. Adjust neutral position of steering angle sensor. Refer to [BRC-66, "ADJUSTMENT OF STEERING ANGLE SENSOR NEUTRAL POSITION : Special Repair Requirement"](#).



SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Road Wheel

INFOID:0000000005434658

Standard item		Allowable value	
		Aluminum	Steel
Maximum radial runout limit	Lateral deflection	Less than 0.3 mm (0.012 in)	Less than 1.5 mm (0.059 in)
	Radial 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 g (0.18 oz) (one side)	
	Static (At rim flange)	Less than 10 g (0.35 oz)	

Tire

INFOID:0000000005796917

Unit: kPa (kg/cm², psi)

Tire size	Air pressure	
	Front tire	Rear tire
P215/60R16	220 (2.2, 32)	220 (2.2, 32)
P215/55R17	230 (2.3, 33)	230 (2.3, 33)
P235/45R18	230 (2.3, 33)	230 (2.3, 33)
T135/70R16	420 (4.2, 60)	420 (4.2, 60)
T135/90D16	420 (4.2, 60)	420 (4.2, 60)