DTC	C2165/65	Abnormal Temperature Inside ID1 Tire

DTC	C2166/66	Abnormal Temperature Inside ID2 Tire

DTC	C2167/67	Abnormal Temperature Inside ID3 Tire

DTC	C2168/68	Abnormal Temperature Inside ID4 Tire

DESCRIPTION

Each tire pressure warning valve and transmitter measures the internal temperature of its tire as well as tire pressure, and transmits the information to the tire pressure warning ECU along with the transmitter ID. If the measured temperature is out of the specified range, the tire pressure warning ECU recognizes it as a malfunction, outputs DTCs, and illuminates the tire pressure warning light after blinking for 1 minute.

DTC No.	DTC Detection Condition	Trouble Area
C2165/65 C2166/66 C2167/67 C2168/68	Temperature inside the tire exceeds 119°C (246.2°F).	• Tires • Tire pressure warning valve and transmitter • Tire pressure warning ECU

HINT:
It is necessary to perform the procedure to identify the tire pressure warning valve and transmitter that is malfunctioning because it cannot be identified by the output DTC.

INSPECTION PROCEDURE

NOTICE:

- **When replacing the tire pressure warning ECU, read the IDs stored in the ECU using the intelligent tester and note them down before removal.**
- **It is necessary to perform initialization (See page TW-23) after registration (See page TW-20) of the transmitter IDs into the tire pressure warning ECU after the ECU and/or valve and transmitter have been replaced.**

1	CHECK TIRES

(a) Check the tire is not flat, and there is no indication of air pressure drop.
OK:
Tire is normal.
HINT:
If a tire is damaged, the tire pressure warning valve and transmitter may also have been damaged at the same time.

NG → **REPLACE TIRE AND TIRE PRESSURE WARNING VALVE AND TRANSMITTER (See page TW-84)**

OK

2	IDENTIFY TRANSMITTER CORRESPONDING TO DTC

(a) Set the tire pressure to the specified value.

Cold tire inflation pressure

Tire Size	kPa (kgf/cm^2, psi)
P215/65R16	240 (2.4, 35)
P225/60R17	

(b) Make sure that the ignition switch is off.
(c) Connect the intelligent tester to the DLC3.
(d) Turn the ignition switch to the ON position.
(e) Display the "TIREPRESS" data for each wheel using the intelligent tester.
(f) Rapidly reduce the tire pressure for each wheel at least 40 kPa (0.41 kg/cm^2, 5.8 psi) within 30 seconds.
(g) Check the DATA LIST.

TIRE PRESSURE:

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
TIREPRESS1	ID1 tire inflation pressure (Absolute pressure) / min.: 100 kPa (1 kgf/cm^2, 14 psi) max.: 449.35 kPa (4.5 kgf/cm^2, 63 psi)	Actual tire inflation pressure	If 100 kPa (1 kgf/cm^2, 14 psi) for absolute pressure is displayed, the data has not been received.*
TIREPRESS2	ID2 tire inflation pressure (Absolute pressure) / min.: 100 kPa (1 kgf/cm^2, 14 psi) max.: 449.35 kPa (4.5 kgf/cm^2, 63 psi)	Actual tire inflation pressure	If 100 kPa (1 kgf/cm^2, 14 psi) for absolute pressure is displayed, the data has not been received.*
TIREPRESS3	ID3 tire inflation pressure (Absolute pressure) / min.: 100 kPa (1 kgf/cm^2, 14 psi) max.: 449.35 kPa (4.5 kgf/cm^2, 63 psi)	Actual tire inflation pressure	If 100 kPa (1 kgf/cm^2, 14 psi) for absolute pressure is displayed, the data has not been received.*
TIREPRESS4	ID4 tire inflation pressure (Absolute pressure) / min.: 100 kPa (1 kgf/cm^2, 14 psi) max.: 449.35 kPa (4.5 kgf/cm^2, 63 psi)	Actual tire inflation pressure	If 100 kPa (1 kgf/cm^2, 14 psi) for absolute pressure is displayed, the data has not been received.*

HINT:
*: It may take about 5 to 6 minutes until the values are displayed. If the values are not displayed after a few minutes, perform troubleshooting according to the inspection procedure for DTCs C2121/21 to C2124/24 (See page TW-42).

(h) When the "TIREPRESS" data (ID1 to ID4) has changed, repeat this procedure to identify the tire pressure warning valve and transmitter that corresponds to a DTC.
(i) When all of the "TIREPRESS" data (ID1 to ID4) have changed, identify the malfunctioning tire pressure warning valve and transmitter based on the recorded ID numbers and output DTC.

Result

Condition	Detection Condition
One of "TIREPRESS" data (ID1 to ID4) changed.	Normal
No "TIREPRESS" data changed.	Transmitter corresponding to DTC

NOTICE:

- **It may take about 5 to 6 minutes to display the updated data.**

- **When no "TIREPRESS" data has changed, reset the tire pressure to the appropriate specified value and rotate the tire 90 to 270 degrees. Then forcibly transmit the transmitter ID and recheck it.**
- **Record the transmitter ID and position that is normal condition.**

NEXT

3	REPLACE TIRE PRESSURE WARNING VALVE AND TRANSMITTER

(a) Replace the identified tire pressure warning valve and transmitter with a new one (See page TW-84).
HINT:
- Before installing a new tire pressure warning valve and transmitter, read and write down its transmitter ID.
- The IDs for the tire pressure warning valve and transmitter which are not replaced should be checked using the tester and recorded.

NEXT

4	CHECK REGISTRATION OF TRANSMITTER ID

(a) Register the transmitter ID for 4 tires (See page TW-20).

NEXT

5	PERFORM INITIALIZATION

(a) Perform initialization (See page TW-23).

NEXT

6	READ VALUE ON INTELLIGENT TESTER

(a) Make sure that the ignition switch is off.
(b) Connect the intelligent tester to the DLC3.
(c) Turn the ignition switch to the ON position.
(d) Select "TIREPRESS" by following the prompts displayed on the intelligent tester.

TIRE PRESSURE:

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
TIREPRESS1	ID1 tire inflation pressure (Absolute pressure) / min.: 100 kPa (1 kgf/cm^2, 14 psi) max.: 449.35 kPa (4.5 kgf/cm^2, 63 psi)	Actual tire inflation pressure	If 100 kPa (1 kgf/cm^2, 14 psi) for absolute pressure is displayed, the data has not been received.*
TIREPRESS2	ID2 tire inflation pressure (Absolute pressure) / min.: 100 kPa (1 kgf/cm^2, 14 psi) max.: 449.35 kPa (4.5 kgf/cm^2, 63 psi)	Actual tire inflation pressure	If 100 kPa (1 kgf/cm^2, 14 psi) for absolute pressure is displayed, the data has not been received.*

Tester Display	Measurement Item/Range	Normal Condition	Diagnostic Note
TIREPRESS3	ID3 tire inflation pressure (Absolute pressure) / min.: 100 kPa (1 kgf/cm^2, 14 psi) max.: 449.35 kPa (4.5 kgf/cm^2, 63 psi)	Actual tire inflation pressure	If 100 kPa (1 kgf/cm^2, 14 psi) for absolute pressure is displayed, the data has not been received.*
TIREPRESS4	ID4 tire inflation pressure (Absolute pressure) / min.: 100 kPa (1 kgf/cm^2, 14 psi) max.: 449.35 kPa (4.5 kgf/cm^2, 63 psi)	Actual tire inflation pressure	If 100 kPa (1 kgf/cm^2, 14 psi) for absolute pressure is displayed, the data has not been received.*

HINT:
*: It may take about 5 to 6 minutes until the values are displayed. If the values are not displayed after a few minutes, perform troubleshooting according to the inspection procedure for DTCs C2121/21 to C2124/24 (See page TW-42).

Result

Result	Proceed to
Tire pressure values are not displayed.	**A**
All tire pressure readings are equal to specified values.	**B**

B → **END**

A

REPLACE TIRE PRESSURE WARNING ECU (See page TW-87)