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
DTC	C2169/69	Abnormal Temperature Inside ID5 Tire

### **DESCRIPTION**

The tire pressure warning valve and transmitter measures tire internal temperature as well as tire pressure, and transmits the information to the tire pressure monitor receiver 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 blinks the tire pressure warning light.

DTC No.	DTC Detection Condition	Trouble Area
C2165/65	Tire internal temperature is outside -40 to	Tire
C2166/66	120°C (-40 to 246°F)	Tire pressure warning valve and
C2167/67	, , ,	transmitter
C2168/68		
C2169/69		

# TW

## 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:

It is necessary to register an ID code after replacing the tire pressure warning valve and transmitter and/or the tire pressure warning ECU (see page TW-9).

# 1 IDENTIFY TRANSMITTER (CORRESPONDING TO DTC)

(a) Set the pressure of each tire to the specified value. **Standard pressure:** 

# 220 kPa (2.2 kgf/cm<sup>2</sup>, 32 psi)

- (b) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (c) Turn the ignition switch ON.
- (d) Select TIREPRESS by following the prompts displayed on the intelligent tester.

### Tire pressure warning ECU

Item	Measurement item / Range (Display)	Normal Condition	Diagnostic Note
TIREPRESS1	ID1 tire pressure / min.: 0 kPa (0 kgf/cm <sup>2</sup> , 0 psi), max.: 637.5 kPa (6.48 kgf/cm <sup>2</sup> , 92.2 psi)	Actual tire pressure	-
TIREPRESS2	ID2 tire pressure / min.: 0 kPa (0 kgf/cm <sup>2</sup> , 0 psi), max.: 637.5 kPa (6.48 kgf/cm <sup>2</sup> , 92.2 psi)	Actual tire pressure	-

Item	Measurement item / Range (Display)	Normal Condition	Diagnostic Note
TIREPRESS3	ID3 tire pressure / min.: 0 kPa (0 kgf/cm <sup>2</sup> , 0 psi), max.: 637.5 kPa (6.48 kgf/cm <sup>2</sup> , 92.2 psi)	Actual tire pressure	-
TIREPRESS4	ID4 tire pressure / min.: 0 kPa (0 kgf/cm <sup>2</sup> , 0 psi), max.: 637.5 kPa (6.48 kgf/cm <sup>2</sup> , 92.2 psi)	Actual tire pressure	-
TIREPRESS5	ID5 tire pressure / min.: 0 kPa (0 kgf/cm <sup>2</sup> , 0 psi), max.: 637.5 kPa (6.48 kgf/cm <sup>2</sup> , 92.2 psi)	Actual tire pressure	-

- (e) Rapidly release the tire pressure from any tire by 40 kPa (0.4 kgf/cm<sup>2</sup>, 5.8 psi) for 30 seconds or more.
  - Identify the malfunctioning tire pressure warning valve and transmitter by rapidly releasing the tire pressures from each tire.
  - Record which TIREPRESS data (ID1 to ID5) corresponds to each tire.
- (f) Check the DATA LIST.



#### Result

Condition	Detection Condition	
One of TIREPRESS data (ID1 to ID5) changed	Normal	
No TIREPRESS data changed	Transmitter corresponding to DTC	

### NOTICE:

- It may take up to 1 minute to display the updated data.
- When the TIREPRESS data (IDs 1 to 5) changes, reset the tire pressure of the tires to the specified value, rotate the tires 90 to 270° and recheck..
- When the transmitter is normal, record the tire location and the transmitter ID.
- (g) When one of the TIREPRESS data (IDs 1 to 5) changes, repeat the same procedure on the rest of the tires (one by one) to identify which tire pressure warning valve and transmitter the DTC corresponds to.
- (h) When the TIREPRESS data (IDs 1 to 5) has been changed, identify the malfunctioning tire pressure warning valve and transmitter by using recorded ID numbers and output DTC.
- (i) Set the pressure of each tire to the specified value. **Standard pressure:**

220 kPa (2.2 kgf/cm<sup>2</sup>, 32 psi)



2 CHECK TIRE

(a) Check that the tire is not punctured, and there is no indication of air pressure drop.

### OK:

Tire is normal.

NG REPLACE TIRE AND TIRE PRESSURE WARNING VALVE AND TRANSMITTER



REPLACE TIRE PRESSURE WARNING VALVE AND TRANSMITTER

