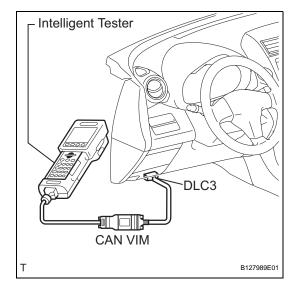


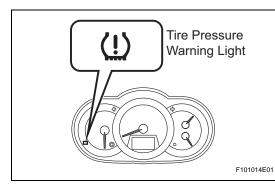
# DIAGNOSIS SYSTEM

#### 1. CHECK DLC3

The ECM uses ISO 15765-4 for communication. The terminal arrangement of the DLC3 complies with SAE J1962 and matches the ISO 15765-4 format.

Symbols (Terminals No.)	Terminal Description	Condition	Specified Condition
SIL (7) - SG (5)	Bus '+' line	During transmission	Pulse generation
CG (4) - Body ground	Chassis ground	Always	Below 1 Ω
SG (5) - Body ground	Signal ground	Always	Below 1 Ω
BAT (16) - Body ground	Battery ground	Always	11 to 14 V
CANH (6) - CANL (14)	HIGH-level CAN bus line	Ignition switch OFF	54 to 69 Ω
CANH (6) - Body ground	HIGH-level CAN bus line	Ignition switch OFF	1 M $\Omega$ or higher
CANH (6) - CG (4)	HIGH-level CAN bus line	Ignition switch OFF	1 M $\Omega$ or higher
CANL (14) - Body ground	LOW-level CAN bus line	Ignition switch OFF	1 M $\Omega$ or higher
CANH (6) - CG (4)	LOW-level CAN bus line	Ignition switch OFF	1 M $\Omega$ or higher





If the result is not as specified, the DLC3 may have a malfunction. Repair or replace the harness and connector.

HINT:

Connect the cable of the intelligent tester (with CAN VIM) to the DLC3, turn the ignition switch ON and attempt to use the tester. If the display indicates that a communication error has occurred, there is a problem wither with the vehicle or with the tester.

- If communication is normal when the tester is connected to another vehicle, inspect the DLC3 on the original vehicle.
- If communication is still not possible when the tool is connected to another vehicle, the problem is probably in the tester itself. So consult the Service Department listed in the tester's instruction manual.

## 2. DIAGNOSIS SYSTEM

- (a) Warning light
  - (1) The tire pressure warning light blinks when there is a malfunction in the tire pressure warning system.

## NOTICE:

When the malfunction has been corrected, the tire pressure warning light does not turn on.

- (b) DTCs (Normal mode)
  - DTCs are memorized in the tire pressure warning ECU. These DTCs can be read by checking the blinks of the tire pressure warning light or by using the intelligent tester (see page TW-20).

Tire Pressure

Warning Light

F101014E01

(!)

- (c) Test mode
  - (1) By switching from normal mode to test mode (input signal check), you can inspect the tire pressure monitor receiver, each tire pressure warning valve and transmitter and vehicle speed sensor (see page TW-12).

## 3. CHECK TIRE PRESSURE WARNING LIGHT

- (a) Turn the ignition switch ON.
- (b) Check that the tire pressure warning light turns on for 3 seconds.

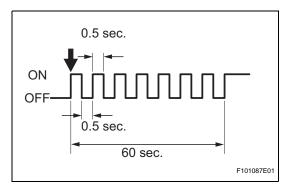
If the warning check result is not normal, proceed to the troubleshooting for the tire pressure warning light circuit.

Trouble Area	See page
Tire pressure warning light circuit	TW-47

#### 4. TIRE PRESSURE WARNING LIGHT CHART HINT:

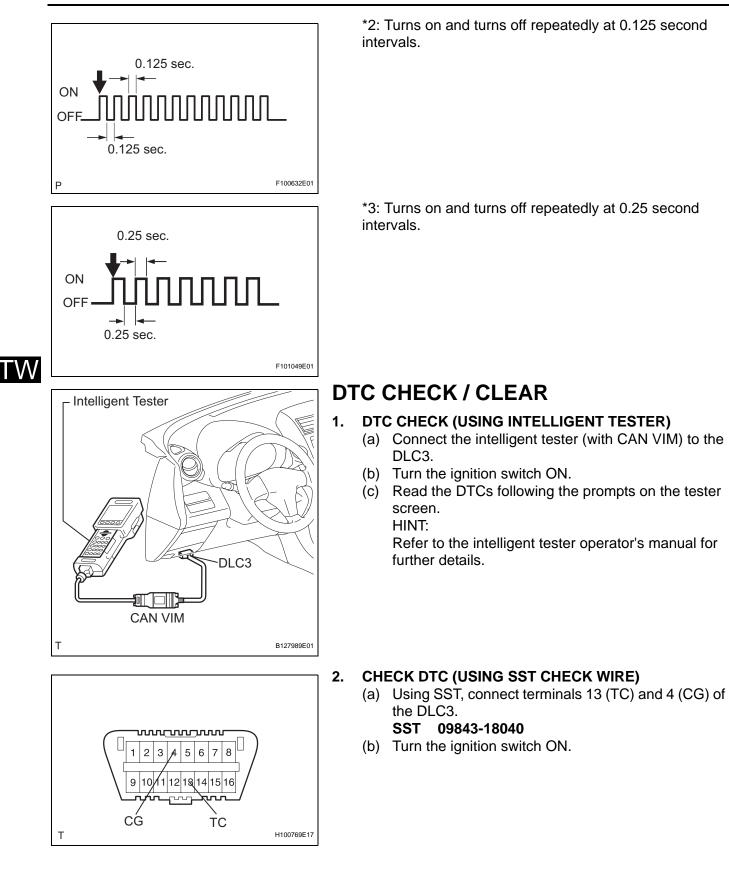
The table below indicates the state of the tire pressure warning light after the ignition switch is turned ON.

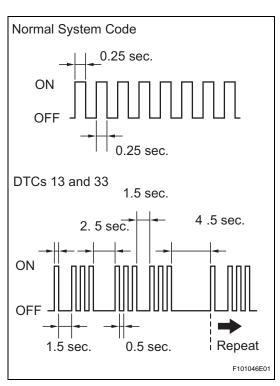
	Immediately after turning the ignition switch ON Turns on for 3 seconds	Always						
		Warning light output pattern						
		Turns off	Turns on	Flashes for 1 minute and then illuminates (*1)	Blinks (*2)	Blinks (*3)	Output DTC	
Normal	0	0						
Low tire pressure	0		0					
System fail	0			0				
Test mode	0				0			
ECU connector poorly connected	0			0				
TC ground (DTC is output)	0						0	
TC ground (DTC is not output)	0		0					

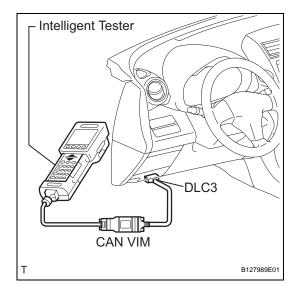


\*1: Turns on and turns off repeatedly at 0.5 second intervals.

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- (c) Read and record any DTCs from the tire pressure warning light on the combination meter. Refer to the illustration for examples of a normal system code and DTCs 13 and 33. HINT:
  - If the tire pressure warning light does not blink to indicate any DTCs or the normal system code, inspect the tire pressure warning light circuit or 13 (TC) and 4 (CG) terminal circuits.

Trouble Area	See procedure		
Tire pressure warning light circuit	TW-47		
TC and CG terminal circuit	TW-51		

- If 2 or more malfunctions are indicated at the same time, the lowest numbered DTC is displayed first.
- (d) Refer to the Diagnostic Trouble Code Chart for DTC information (see page TW-22).
- (e) After completing the check, turn the ignition switch OFF and remove SST from the DLC3.

#### 3. CLEAR DTC (USING INTELLIGENT TESTER) HINT:

After repairing the malfunctions, clear the DTCs.

- (a) Connect the intelligent tester (with CAN VIM) to the DLC3.
- (b) Turn the ignition switch ON.
- (c) Erase the DTCs following the prompts on the tester screen. HINT:

Refer to the intelligent tester operator's manual for further details.