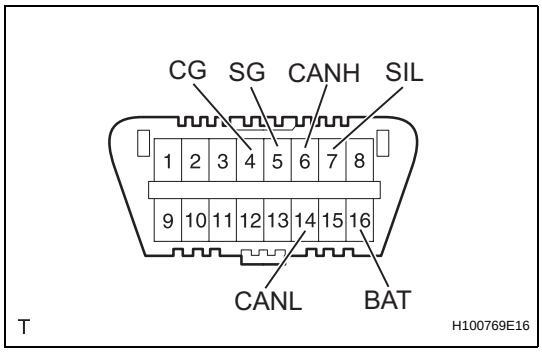
DIAGNOSIS SYSTEM

1. CHECK BATTERY VOLTAGE

Standard voltage:

11 to 14 V

If the voltage is below 11 V, recharge the battery before proceeding.



2. CHECK DLC3

(a) The ECU uses the ISO 15765-4 for communication protocol. The terminal arrangement of the DLC3 complies with SAE J1962 and matches the ISO 15765-4 format.

Symbols (Terminal 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 positive	Always	11 to 14 V
CANH (6) - CANL (14)	CAN bus line	Ignition switch off*	54 to 69 Ω
CANH (6) - CG (4)	HIGH-level CAN bus line	Ignition switch off*	200 Ω or higher
CANL (14) - CG (4)	LOW-level CAN bus line	Ignition switch off*	200 Ω or higher
CANH (6) - BAT (16)	HIGH-level CAN bus line	Ignition switch off*	6 kΩ or higher
CANL (14) - BAT (16)	LOW-level CAN bus line	Ignition switch off*	6 kΩ or higher

NOTICE:

***: Before measuring the resistance, leave the vehicle as is for at least 1 minute and do not operate the ignition switch, any other switches or the doors.**

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

HINT:

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

- If communication is normal when the tester is connected to another vehicle, inspect DLC3 of the original vehicle.
- If communication is still not possible when the tester is connected to another vehicle, the problem may be in the tester itself. Consult the Service Department listed in the tester's instruction manual.

3. DIAGNOSIS SYSTEM

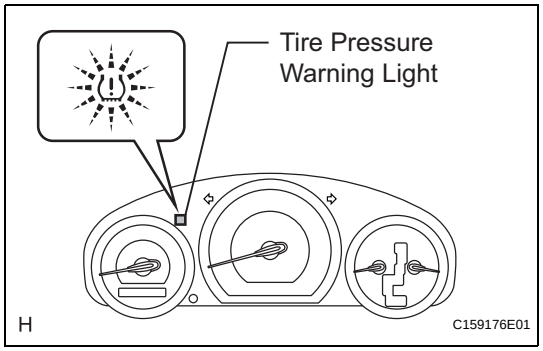
(a) DTCs (Normal mode)

(1) DTCs are memorized in the tire pressure warning ECU and read by the blinks of the tire pressure warning light or by using the intelligent tester (See page TW-34).

(b) Test mode

(1) By switching from normal mode into test mode (input signal check), you can inspect the tire pressure warning antenna and receiver, each tire pressure warning valve and transmitter, and vehicle speed sensor (See page TW-25).

(c) When there is a problem with the tire pressure warning system, the tire pressure warning light blinks at 0.5-second intervals, and turns on after 1 minute.



4. CHECK TIRE PRESSURE WARNING LIGHT

(a) Turn the ignition switch to the ON position.

(b) Check that the tire pressure warning light comes on for 3 seconds.

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

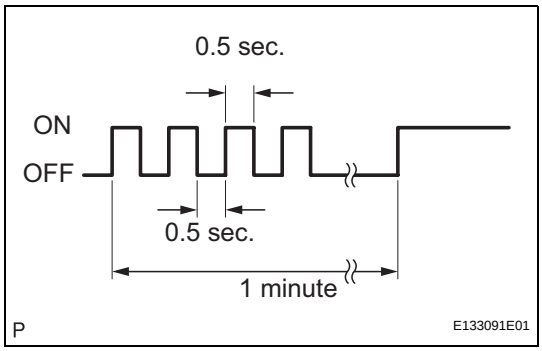
Trouble Area	See page
Tire pressure warning light circuit	TW-74

5. TIRE PRESSURE WARNING LIGHT AND INDICATOR CHART

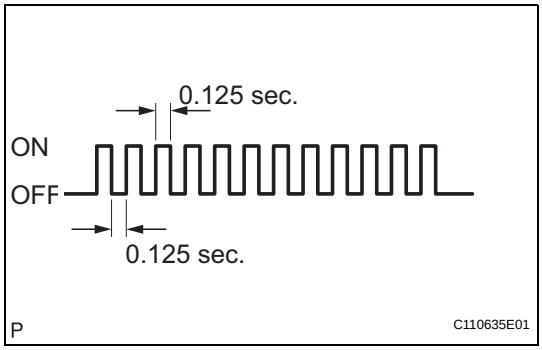
HINT:

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

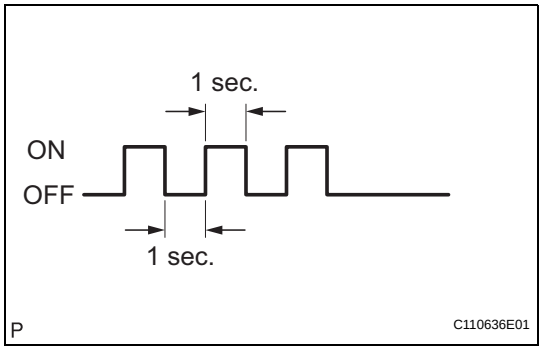
	Immediately after turning the ignition switch ON	Always						
		Warning light output pattern						
	Comes on for 3 sec.	Goes off	Comes on	Blinks (*1)	Blinks (*2)	Blinks (*3)	Blinks (*4)	Outputs DTC
Normal	○	○	-	-	-	-	-	-
Low tire pressure	○	-	○	-	-	-	-	-
System fail	○	-	-	○	-	-	-	-
Test mode	○	-	-	-	○	-	-	-
Initialization	○	-	-	-	-	○	-	-
ECU connector poorly connected	-	-	-	○	-	-	-	-
TC ground (DTC is output)	○	-	-	-	-	-	-	○
TC ground (DTC is not output)	○	-	-	-	-	-	○	-



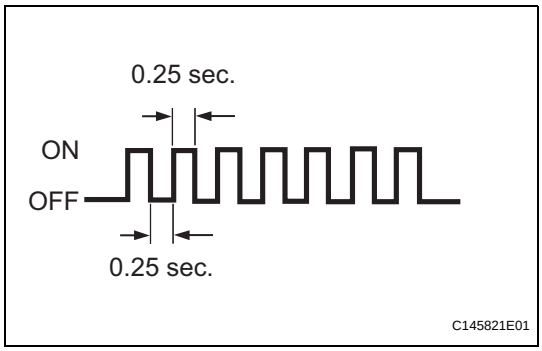
*1: Comes on and goes off repeatedly at 0.5-second intervals, and comes on after 1 minute.



*2: Comes on and goes off repeatedly at 0.125-second intervals.



*3: Blinks 3 times (1 second on, 1 second off).



*4: Comes on and goes off repeatedly at 0.25-second intervals.