

REGISTRATION

1. DESCRIPTION OF CODE REGISTRATION

It is necessary to register the transmitter ID in the tire pressure warning ECU when replacing the tire pressure warning valve and transmitter and/or tire pressure warning ECU.

Prepare all transmitter ID data before starting registration.

(a) Before registration

(1) In case of tire pressure warning ECU replacement.

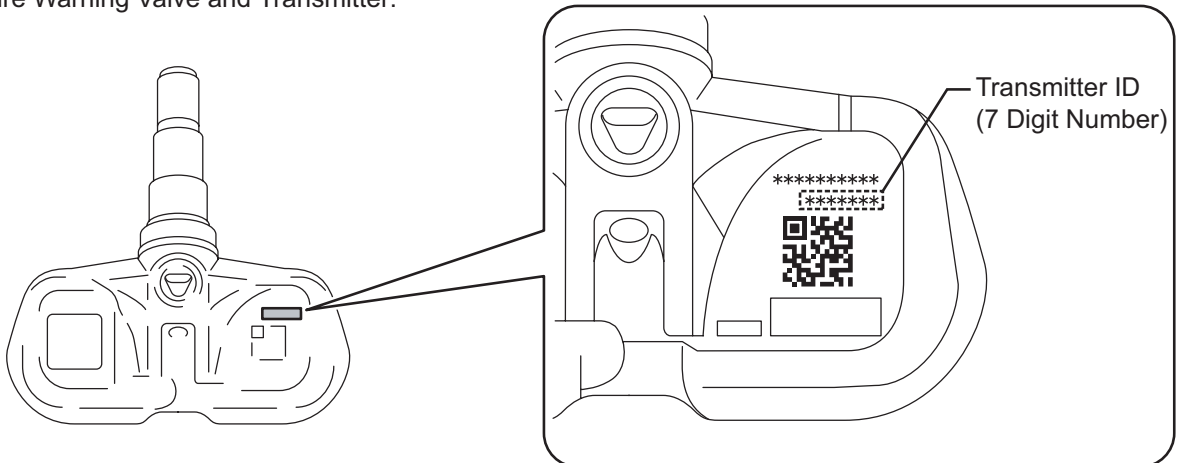
- Read the registered transmitter IDs that are stored in the old ECU using the intelligent tester and note them down.
- If reading stored transmitter IDs is impossible due to malfunctions of components such as the tire pressure warning antenna and receiver, remove the tires from the wheels and check the IDs located on the tire pressure warning valves and transmitters (see page TW-3).

(2) In case of tire pressure warning valve and transmitter replacement.

- Take a note of the 7 digit number (transmitter ID) written on the tire pressure warning valve and transmitter.

TW

Tire Pressure Warning Valve and Transmitter:



H

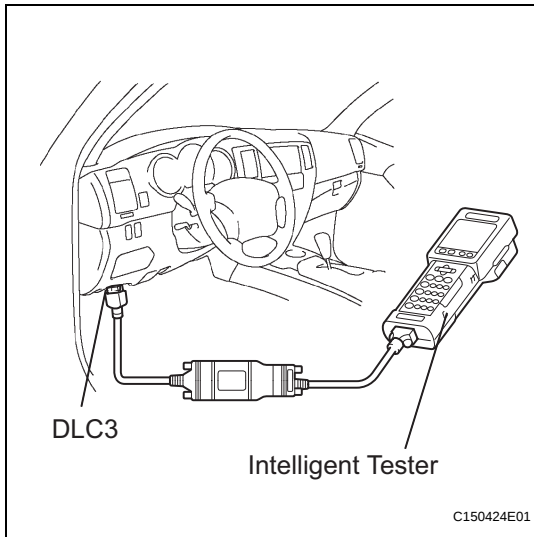
E128762E10

NOTICE:

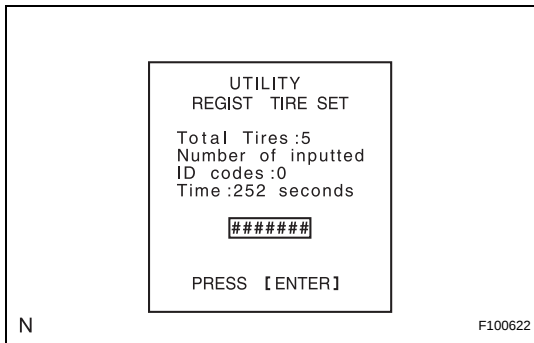
The transmitter ID is written on the tire pressure warning valve and transmitter. It will be unable to be read after installing the tire pressure warning valve and transmitter on the tire and wheel. Therefore, take a note of the transmitter ID before installing the tire pressure warning valve and transmitter.

2. REGISTER TRANSMITTER ID

- (a) Set the air pressure of all wheels to the specified value (see page [TW-1](#)).
- (b) Connect the intelligent tester to the DLC3 (Procedure "A").
- (c) Turn the ignition switch ON (Procedure "B").
- (d) Select the REGIST TIRE following the intelligent tester screen (UTILITY - REGIST TIRE) (Procedure "C").



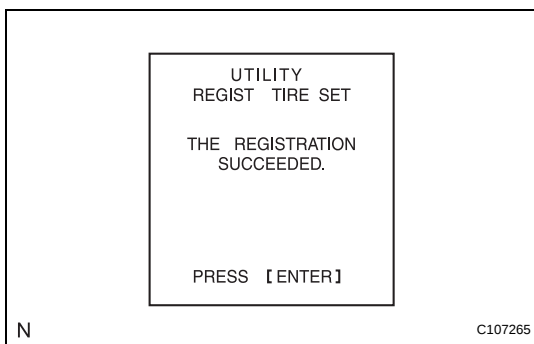
- (e) Input the IDs (ID1 to ID5) using the intelligent tester and transmit them to the tire pressure warning ECU (Procedure "D").



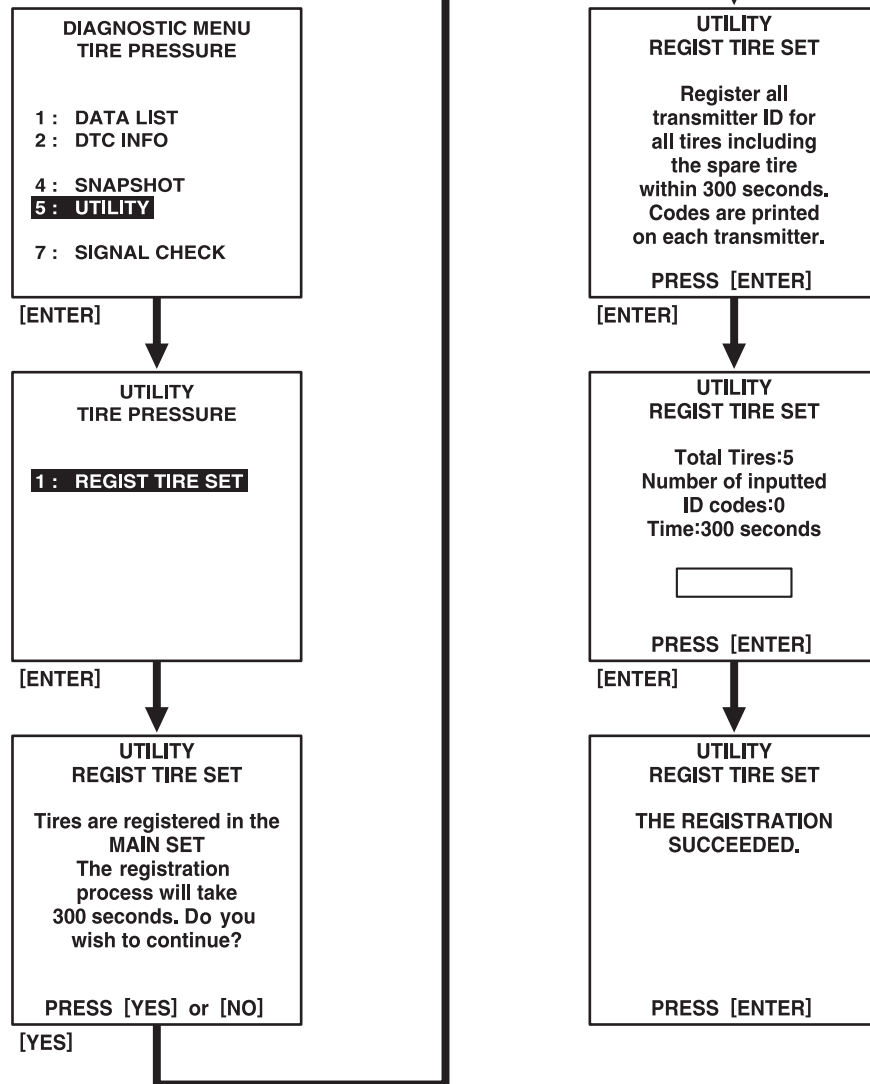
- (f) Set the ID transmission condition to "ID Registration is complete" (Procedure "E").

HINT:

- The previously registered IDs will be deleted from the memory when the registration is completed.
- If the procedures "C" to "D" are not completed within 5 minutes, the mode will return to normal operation mode.



Registration Procedure



C153431E01

3. CONFIRMATION OF TRANSMITTER ID REGISTRATION

- Connect the intelligent tester to the DLC3 (ignition switch is OFF).
- Turn the ignition switch ON.
- Select "TIREPRESS" by following the prompts displayed on the intelligent tester.

- (d) Confirm that the data of tire pressure of all tires (including the spare tire) are displayed on the intelligent tester screen.

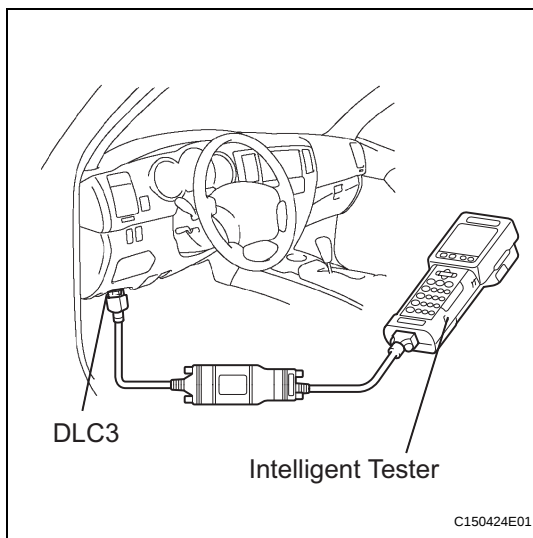
NOTICE:

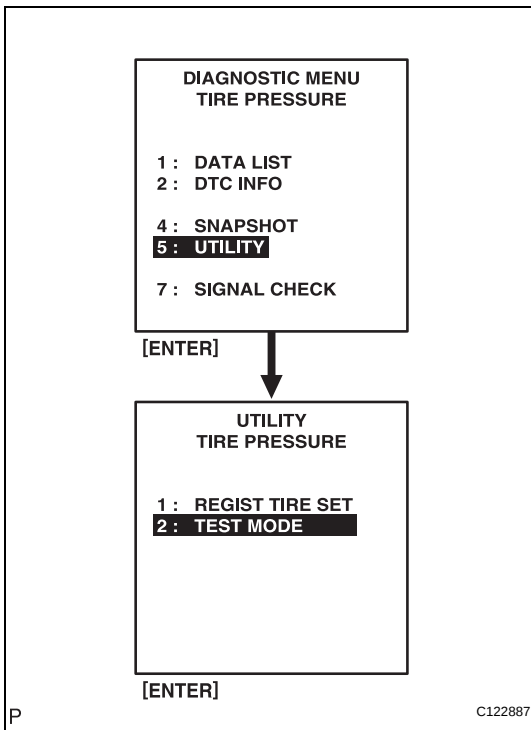
- It may take up to about 2 or 3 minutes to update the tire pressure data. If the values are not displayed after a few minutes, perform troubleshooting according to the inspection procedure for DTCs C2121/21 to C2125/25 (see page [TW-34](#))
- DTC C2171/71 is set in the tire pressure warning ECU if all of the following occur: 1) the IDs have not been registered for 51 minutes or more; 2) vehicle speed of 8 km/h (5 mph) or more is detected; and 3) no signals are received for another 12 minutes or more.
- If normal pressure values are displayed, the IDs have been registered correctly.
- If the tire pressure values are not displayed after a few minutes, the IDs may be incorrect or the system may have a malfunction.

TEST MODE PROCEDURE

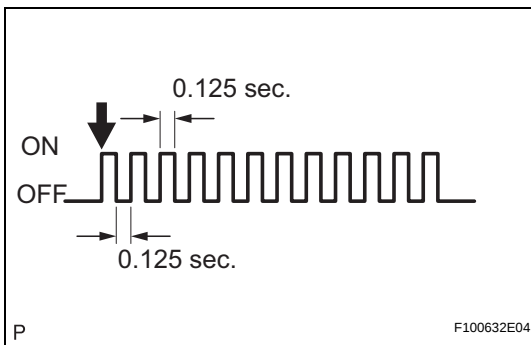
1. ENTER TEST MODE

- (a) Make sure that the ignition switch is OFF.
- (b) Connect the intelligent tester to the DLC3.
- (c) Turn the ignition switch ON.
- (d) Check that the tire pressure warning light comes on for 3 seconds and then goes off.





(e) Select the TEST MODE on the intelligent tester.



(f) Confirm that the tire pressure warning light in the combination meter blinks at 0.125 second intervals.

2. PERFORM SIGNAL CHECK

HINT:

- When entering signal check mode, the tire pressure warning ECU sets all the signal check DTCs first. After completing the signal check for each inspection item, the DTCs for systems that are determined to be normal by the tire pressure warning ECU will be erased.

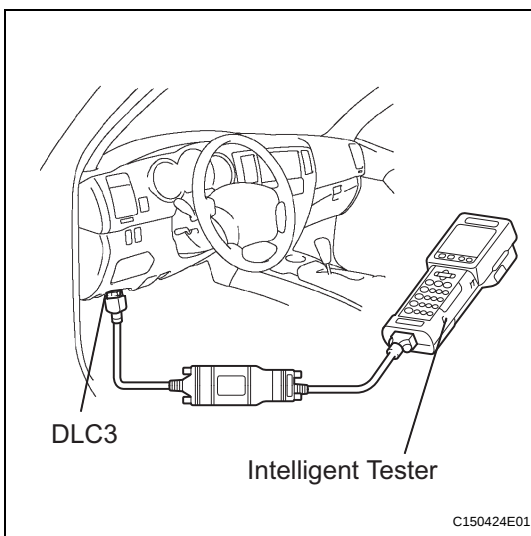
The DTCs for other inspection items may not be erased when only a certain signal is inspected.

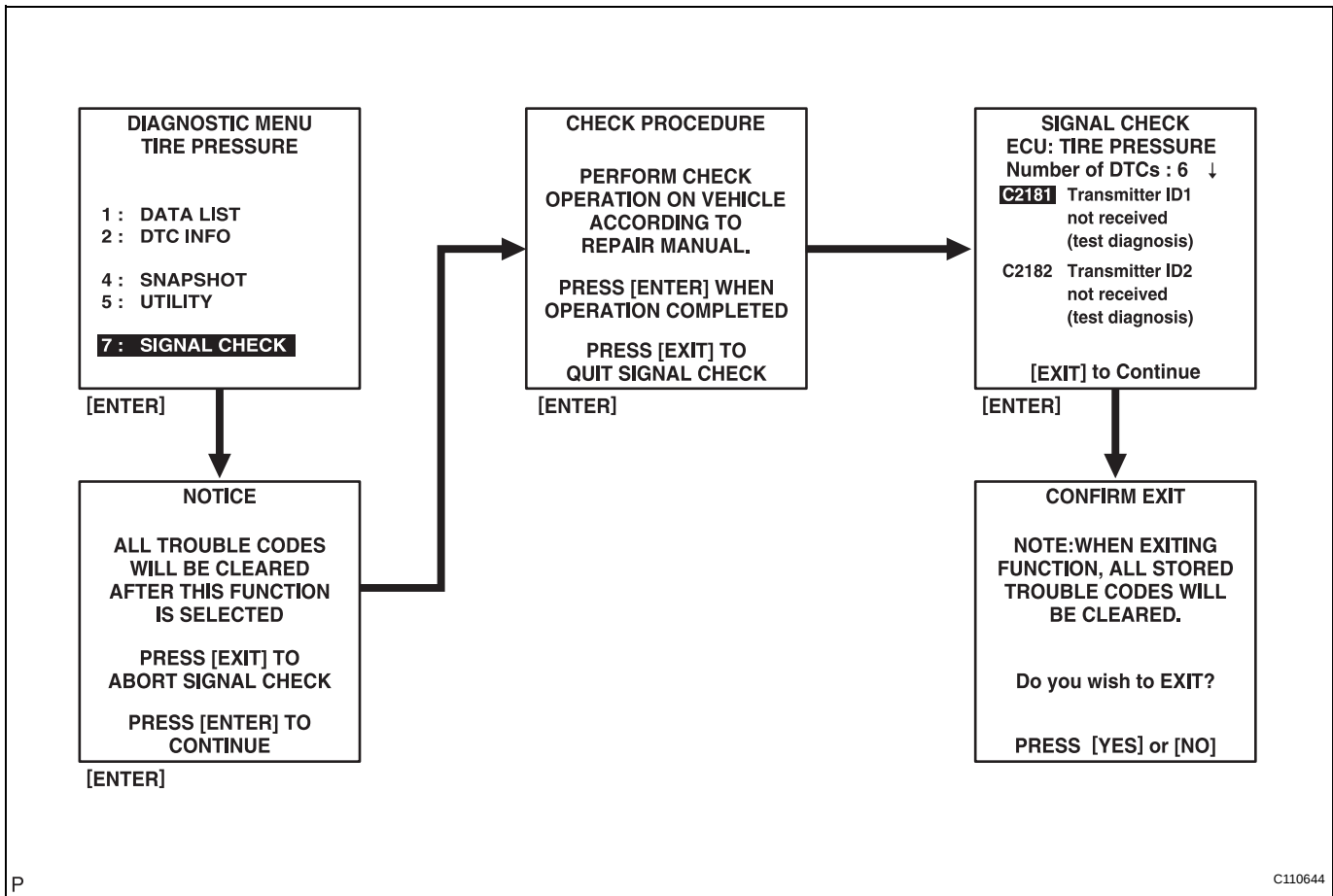
- When signal check returns to normal mode, all the signal check DTCs will be erased.

- Make sure that the ignition switch is OFF.
- Connect the intelligent tester to the DLC3.
- Turn the ignition switch ON.
- Select the SIGNAL CHECK on the intelligent tester.

HINT:

Every time the test mode DTC erasure conditions are satisfied, the tire pressure warning light comes on for 1 second. Then, the tire pressure warning light blinks at 0.125 second intervals.





- (e) Drive the vehicle at 20 km/h (12 mph) or more for 10 seconds or more to check the vehicle speed signal (C2191/91).
- (f) Loosen the valve core and rapidly reduce the pressure (at least 40 kPa (0.4 kgf/cm², 5.8 psi) within 30 seconds or more) to check the transmitter data (C2181/81 to C2185/85).
- HINT:
The transmitter ID can be transmitted by rapidly reducing the tire pressure.
- (g) Check that the tire pressure warning system test mode DTCs are erased.

Test Mode DTC	Test Signal	Test Mode DTC Clear Condition
C2181/81 to C2185/85	Transmitter Data	Receive data from the transmitter which has a registered ID in the tire pressure warning ECU
C2191/91	Vehicle Speed Signal	Vehicle speed of 20 km/h (12 mph) or more is detected for 3 seconds or more

- (h) Result
- HINT:
After the signal check is completed, check for a signal check DTC to confirm the system status.

Condition	Procedure
Test mode DTC is output	Repair the faulty part and enter SIGNAL CHECK again
Test mode DTCs are cleared	No problem

- (i) End of SIGNAL CHECK
After completing the test mode (SIGNAL CHECK), turn the ignition switch OFF and disconnect the tester.
- (j) DTC of SIGNAL CHECK (TEST DIAGNOSIS)
If a trouble code is displayed during the test mode DTC check, check the circuit listed for that code. For details of each code, refer to the "See page" below.

DTC No.	Detection Item	Trouble Area	See page
C2181/81	Transmitter ID1 not received	• Tire pressure warning valve and transmitter • Tire pressure warning antenna and receiver • Wire harness or connector • Tire pressure warning ECU	TW-34
C2182/82	Transmitter ID2 not received	• Tire pressure warning valve and transmitter • Tire pressure warning antenna and receiver • Wire harness or connector • Tire pressure warning ECU	TW-34
C2183/83	Transmitter ID3 not received	• Tire pressure warning valve and transmitter • Tire pressure warning antenna and receiver • Wire harness or connector • Tire pressure warning ECU	TW-34
C2184/84	Transmitter ID4 not received	• Tire pressure warning valve and transmitter • Tire pressure warning antenna and receiver • Wire harness or connector • Tire pressure warning ECU	TW-34
C2185/85	Transmitter ID5 not received	• Tire pressure warning valve and transmitter • Tire pressure warning antenna and receiver • Wire harness or connector • Tire pressure warning ECU	TW-34
C2191/91	Vehicle speed signal error	• Vehicle speed sensor • Combination meter assembly • Wire harness or connector • Tire pressure warning ECU	TW-56