



Technical Service BULLETIN

March 16, 2004

Title:

DIRECT TIRE PRESSURE WARNING SYSTEM

Models:

'04 – '07 4Runner

REVISED

PG001-04

PRODUCT GENERAL INFORMATION

TSB REVISION NOTICE:

- December 21, 2006: 2007 model year has been added to Applicable Vehicles.
- August 19, 2005: 2006 model year has been added to Applicable Vehicles. The "Required SSTs" section has been updated to the current software version.
- January 12, 2005: Applicable Vehicles has been updated to include 2005 model year. Previous versions of this TSB should be discarded.

NOTE:

Read this TSB in its entirety **BEFORE** performing any diagnosis to the Tire Pressure Warning System.

Introduction

A direct Tire Pressure Warning System (TPWS) is now standard equipment on all 2004 – 2007 model year 4Runner vehicles.

A tire pressure sensor (or tire pressure monitor) is attached to each wheel directly sensing the air pressure of each tire. The Tire Pressure Warning System detects the pressure of each tire, including the spare tire, and illuminates a Tire Pressure Warning Light (!) to inform the driver of low tire pressure.

Each pressure sensor has a unique ID number. When tires are swapped, wheels changed, or any work is performed on a tire, these ID numbers must be recorded. In the event that the IDs are not recorded when service is performed, it will be necessary to register the pressure sensor ID numbers.

Individual tire pressure sensors need to be registered when:

- Tire pressure monitor ID numbers of the Data List are incorrect.
- Replacing the tire pressure monitor valve sub-assembly.
- Replacing the tire pressure monitor ECU.
- Performing a tire swap from vehicle to vehicle.

Applicable Vehicles

- **2004 – 2007** model year **4Runner** vehicles.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
N/A	Not Applicable to Warranty	–	–	–	–



Required
SSTs

ITEM NO.	SPECIAL SERVICE TOOLS (SSTs)	PART NUMBER	QTY	DRW**
1	Toyota Diagnostic Tester Kit* NOTE: • All components from this kit/set are required • 12 Megabyte Diagnostic Tester Program Card (P/N 01002593–005) with version 13.0a Software (or later) is required 	TOY220036	1	9
2	CAN Interface Module Kit* NOTE: • All components from this kit/set are required 	01002744	1	9

* Essential SSTs.

** Refers to drawer number in SST Storage System.

NOTE:

Additional Diagnostic Tester Kits, CAN Interface Modules, Program Cards, or other SSTs may be ordered by calling SPX/OTC at 1-800-933-8335.

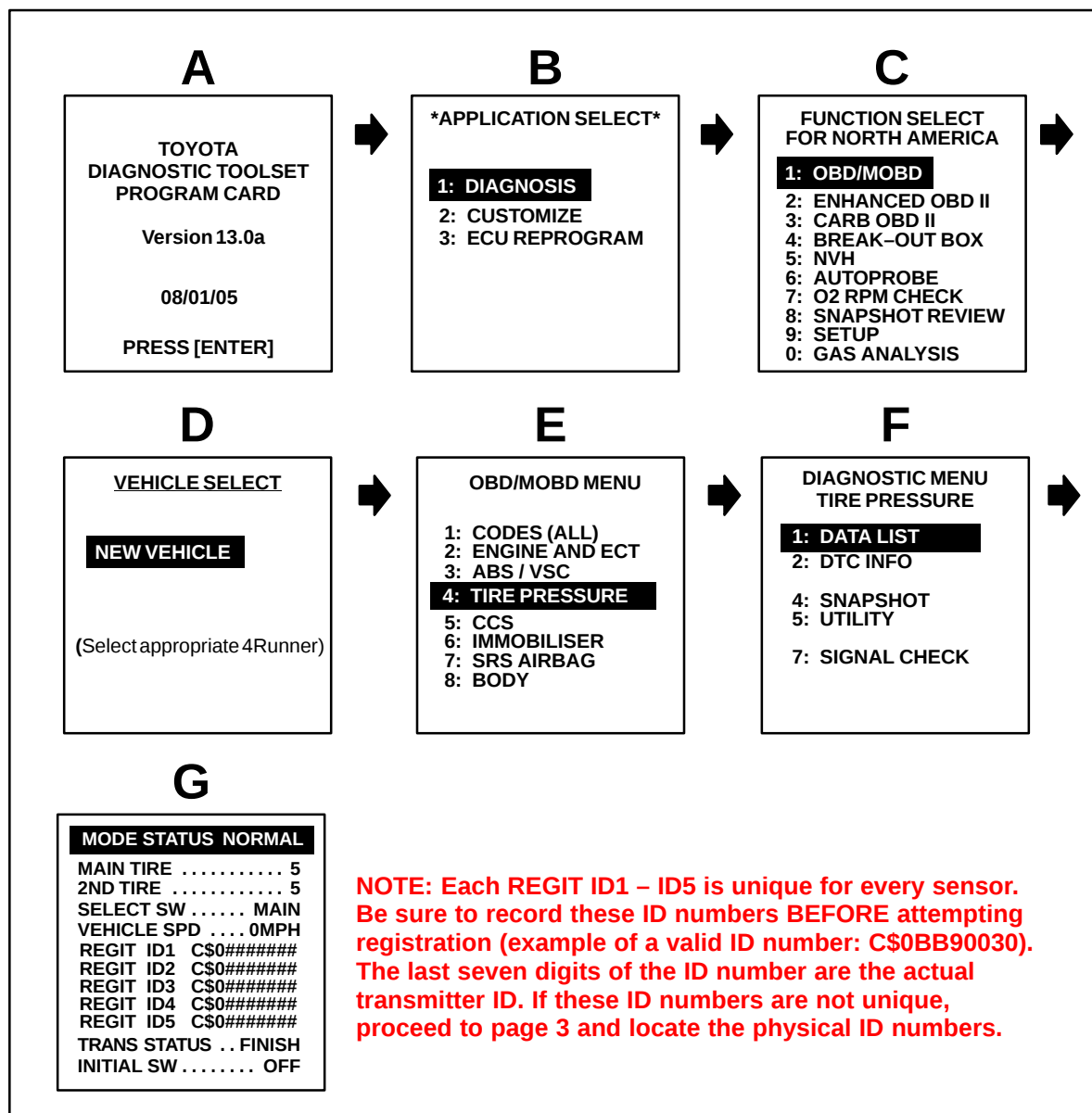
Tire Pressure Adjustment Procedure

Locating the Tire Pressure Sensor ID

It may be necessary to physically locate the tire pressure sensor ID numbers if:

- You are replacing one or more tire pressure sensors.
- No tire pressure sensor ID numbers are present in the Data List.
- Tires have been swapped for any reason and original ID numbers were not recorded.

Follow the screen flow below to locate and identify the current tire pressure sensor ID numbers.



**Tire Pressure
Adjustment
Procedure**
(Continued)

Scroll through the Data List to the REGIT ID1, ID2, ID3, ID4 and ID5. These are the ID numbers that are currently registered to the vehicle. Write down the transmitter ID numbers from the Data List, or use the transmitter ID numbers that were obtained from each tire pressure sensor. If replacing one sensor, the current transmitter ID numbers must be written down **BEFORE** the registration procedure can be performed. If REGIT ID1, ID2, ID3, ID4 and ID5 display all zeros or “#” signs, there are no current ID numbers registered in the Tire Pressure Monitoring System. Follow the steps below if there are no codes present on the Data List.

If the ID numbers were present, proceed to “Tire Pressure ID Registration Procedure” on page 5.

Follow the procedure below to locate the tire pressure sensor ID numbers on each sensor:

1. Deflate tire and break the top bead.

CAUTION:

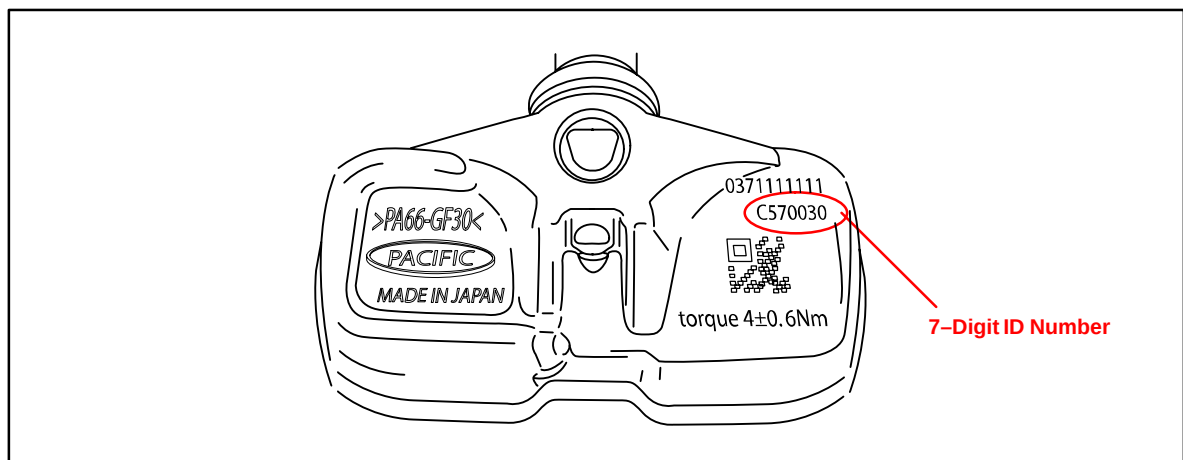
Extreme caution must be used to ensure that the tire removal arm does not break the tire pressure sensor while attempting to break the bead on the rim.

2. Depress the tire enough to inspect the tire pressure sensor.

NOTE:

It is not necessary to remove the tire from the rim to inspect for this ID.

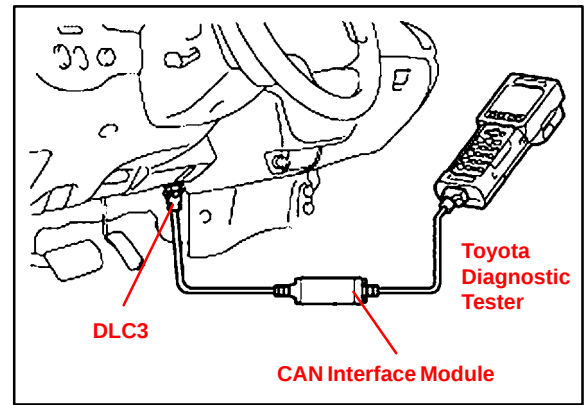
3. On the front of the sensor there is a 7–digit ID number as shown in the figure below. Write this number down for future reference (it will be input using the Diagnostic Tester).



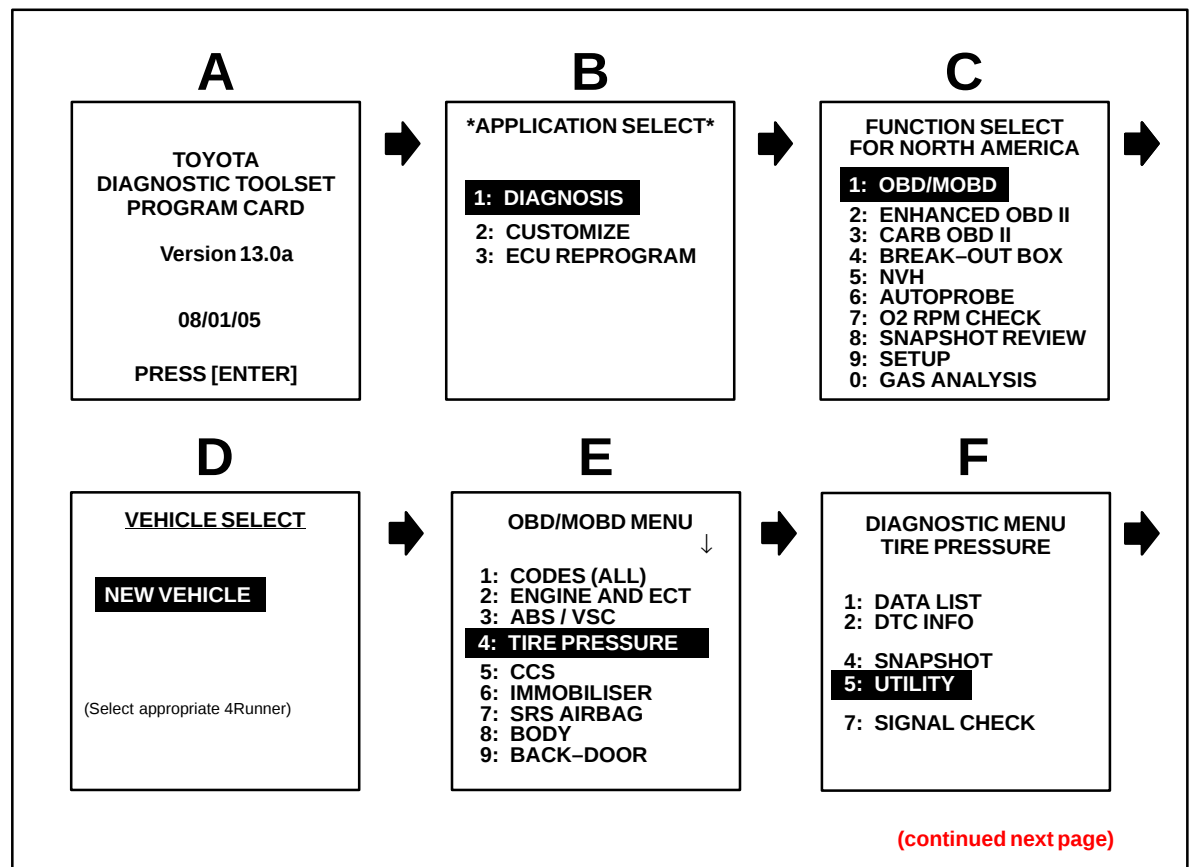
4. Reseat the tire back to the wheel and set the tire pressure of all wheels to the specified value.
5. Remount the tire and wheel assembly to the vehicle.
6. Torque all wheels to the vehicle according to vehicle recommendations.
7. Go to the “Tire Pressure ID Registration Procedure” on page 5.

**Tire
Pressure ID
Registration
Procedure**

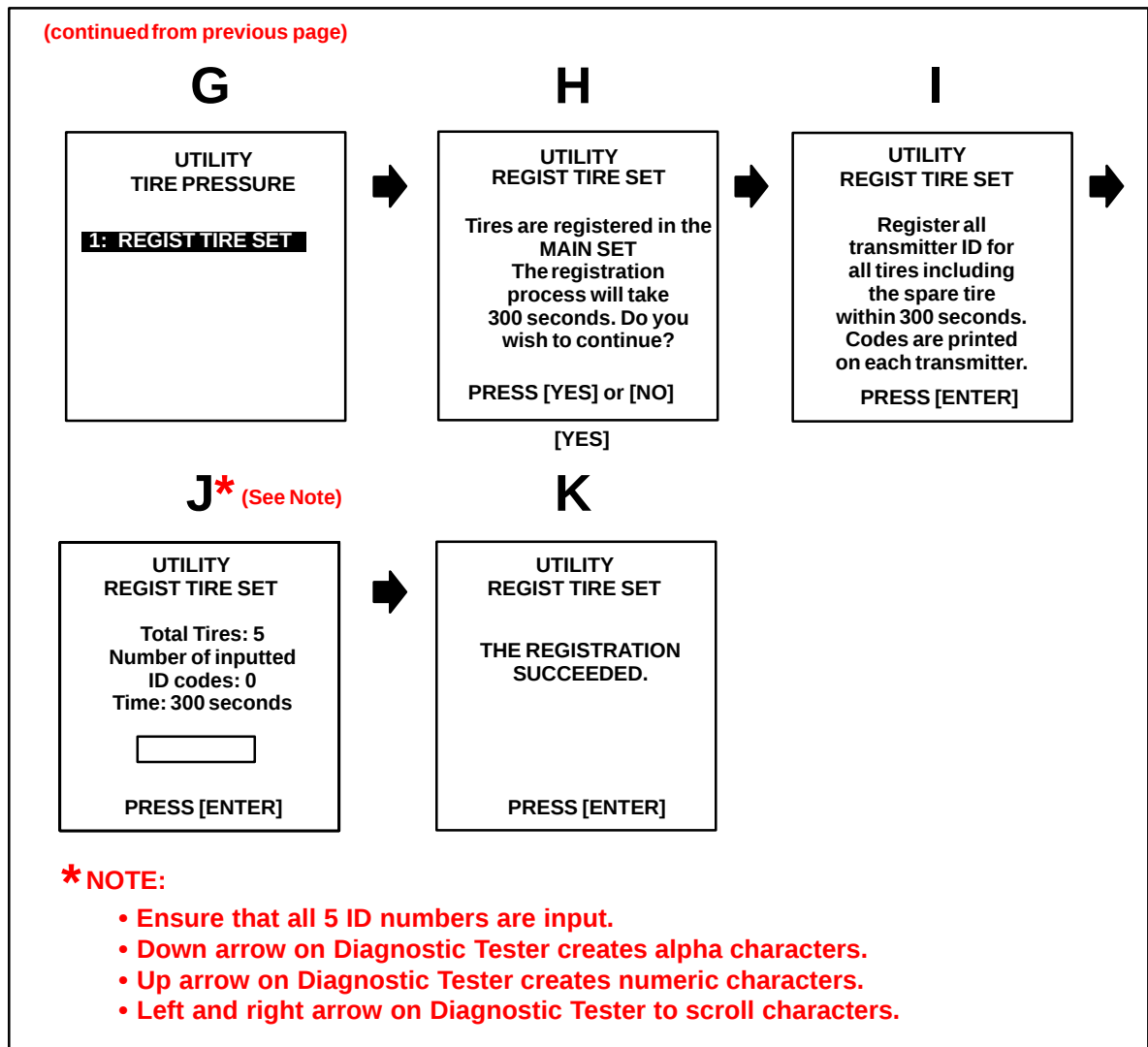
1. Connect the Diagnostic Tester to DLC3.
2. Turn the ignition switch to the ON position.



Follow the screen flow below:



**Tire
Pressure ID
Registration
Procedure**
(Continued)



3. View Data List and ensure that all tires are reading tire pressure and temperature correctly. Drive the vehicle and ensure that the tire pressure warning light (!) does not illuminate.