



Technical Service BULLETIN

September 26, 2005

Title:

DISMOUNTING TIRES WITH DIRECT SYSTEM PRESSURE SENSORS

Models:

'04 – '05 4Runner, '05 Sequoia & Tundra, &
'06 Land Cruiser & Tacoma

REVISED

PG010-05

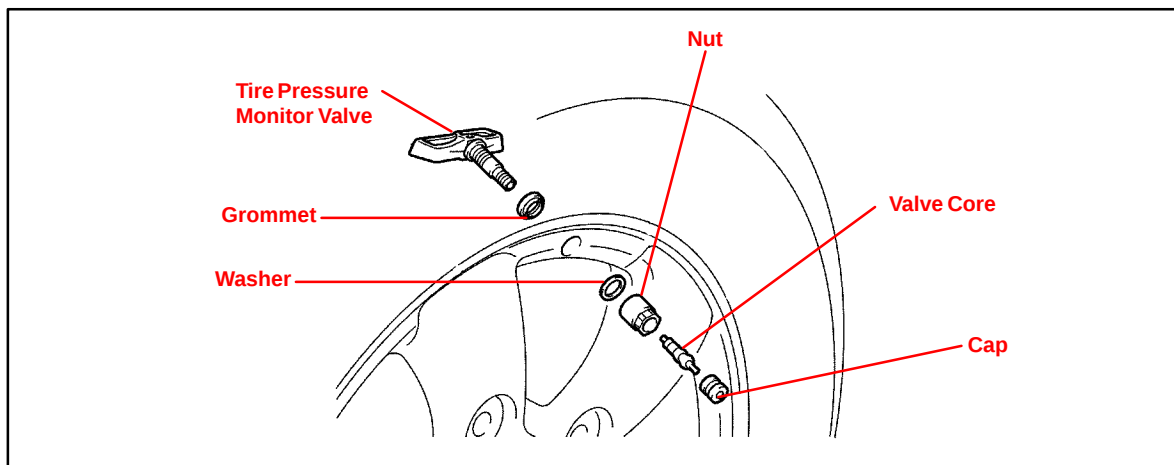
PRODUCT GENERAL INFORMATION

TSB REVISION NOTICE:

- February 15, 2006: 2006 model year Tacoma has been added to Applicable Vehicles. The Parts Information table has been removed. Step 6 of the Repair Procedure has been updated.

Previous versions of this TSB should be discarded.

Introduction A direct Tire Pressure Warning System has been adopted as standard equipment on 2004 – 2005 model year 4Runner vehicles, 2005 model year Sequoia and Tundra vehicles, and 2006 model year Land Cruiser and Tacoma vehicles. The Tire Pressure Warning System uses a sensor that is mounted in the wheel directly behind, and as part of, the valve stem. Care must be taken when dismantling the tires on this vehicle to not damage the sensor.



Applicable Vehicles

- 2004 – 2005 model year **4Runner** vehicles.
- 2005 model year **Sequoia** and **Tundra** vehicles.
- 2006 model year **Land Cruiser** and **Tacoma** vehicles.

Warranty Information

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



Toyota Supports ASE Certification

**Repair
Procedure****NOTE:**

- Observe ALL safety warnings.
- Use approved safety equipment and exercise extreme caution before performing any tire repair or replacement.
- Review ALL warnings and instructions provided by tire and mounting equipment manufacturers.

1. To prevent sensor damage, drop the sensor into the tire by following these steps.
For sensor removal procedures, refer to the Technical Information System (TIS):
 - 2004 or 2005 model year 4Runner Repair Manual: *Tire & Wheel: Tire Pressure Monitor Valve Sub-Assy: Replacement.*
 - 2005 model year Sequoia Repair Manual: *Suspension And Axle: Tire Pressure Monitor Valve: Replacement.*
 - 2005 model year Tundra Repair Manual: *Suspension and Axle: Tire Pressure Monitor Valve: Replacement.*
 - 2006 model year Land Cruiser Repair Manual: *Tire And Wheel: Tire Pressure Monitor Valve: Components, Replacement.*
 - 2006 model year Tacoma Repair Manual: *Tire And Wheel: Tire Pressure Warning Valve And Transmitter: Components, Removal, Installation, Disposal.*
 - A. Remove the valve core and release the air pressure.
 - B. Remove the nut and washer from the sensor stem. Then let the sensor drop into the tire.
2. Dismount the top tire bead from the wheel.
 - Use tire lube as recommended by the tire manufacturer.
 - Carefully separate the tire bead from the wheel, following the tire equipment manufacturer procedures.
3. Locate and remove the sensor from the tire.
4. Dismount the bottom tire bead from the wheel.
5. Inspect the tire, wheel, and sensor for damage.
6. Inspect the Tire Pressure Monitor Valve grommet. Replace the Tire Pressure Monitor Valve Fitting Kit **ONLY** if the grommet is damaged.
7. Install the sensor.
 - A. To properly install the sensor, follow the procedure in the applicable model year vehicle Repair Manual reference listed in step 2.
 - B. Torque the sensor to the recommended torque specification.
Torque: 3.4 – 4.6 N•m (35 – 47 kgf•cm, 30 – 41 in.•lbf)

**Repair
Procedure**
(Continued)

8. When mounting the tire onto the wheel, position the wheel to avoid damaging the sensor on the mounting machine.
- If rotation of the wheel is clockwise, rotate the wheel until the sensor is at the 7 o'clock position.

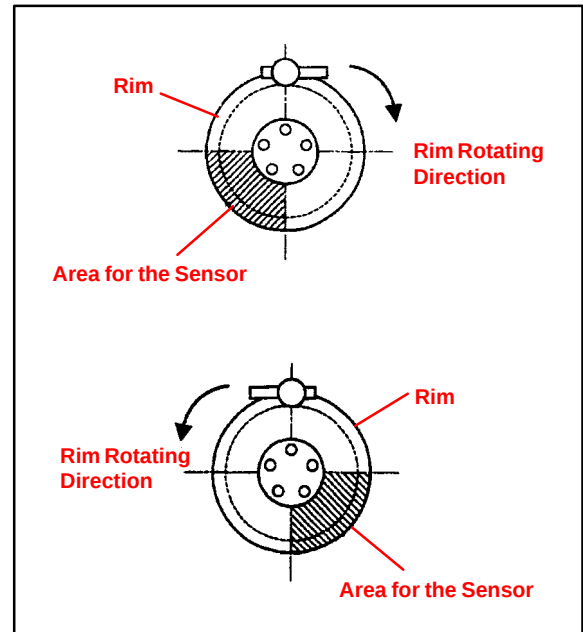
NOTE:

Always consider the mount/dismount head as the 12 o'clock position.

- If rotation of the wheel is counterclockwise, rotate the wheel until the sensor is at the 5 o'clock position.

NOTE:

Follow this procedure to ensure that the sensor is NOT damaged when the tire is reinstalled.



9. Mount the bottom bead.
Mount the bottom bead following the tire equipment manufacturer's procedures.
Use caution to prevent damaging the sensor.
10. Mount the top bead.
Mount the top bead following the tire equipment manufacturer's procedures.
Use caution to prevent damaging the sensor.
11. Inflate the tire.
Inflate the tire to seat the beads, deflate, and then inflate to the recommended cold inflation pressure.
The run flat tire may need higher pressure than normal tires to seat the tire beads.

NOTE:

Never exceed tire manufacturer recommended pressure to seat the tire beads.