



TPMS

Tire Pressure Monitoring System

TPMS continuously monitors tire pressure. On most vehicles, electronic sensors are mounted to the inside of the tires.

The Importance of TPMS:

TPMS is designed to ensure the safety of passengers, much like a seatbelt or airbag. Proper air pressure has also proven to increase fuel economy, handling, braking and extend the life of its tires.

TPMS Service Procedure:

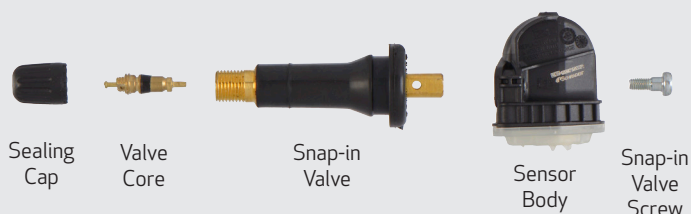
A TPMS will first be inspected using a "Test-Before-Touch" process. Test-Before-Touch includes a complete visual and electronic inspection of the vehicle's TPMS, and an audit report will be supplied to the customer with the results. This report will be reviewed with the customer, along with any recommendations for service. The customer is then able to make an informed decision and remain in control of the repair process.

Services to Expect:

Repairs may include replacing worn components such as valve stems, valve caps, valve cores, rubber grommets and aluminum nuts. It may also include sensor replacement if it is no longer transmitting. The system is tested before and after the vehicle's TPMS service.

Types of TPMS Sensors

Snap-in Sensor Service Kit



Clamp-in Style Sensor, Aluminum Stem Service Kit



Compression forces, high temperatures and corrosion can damage any of these components. Failure to replace these parts can lead to slow tire leaks, causing the Indicator Light to appear more frequently. For this reason, all of these parts should be replaced anytime a tire is removed from the wheel.

Step-By-Step Best Practices in TPMS



1. Check for the Light: The TPMS indicator light should illuminate on the dashboard during start-up. If the light appears and then disappears, the system is operational.



If the light stays on and is solid, this indicates that one or more tires are at least 25% below the recommended placard pressure. Adding air to meet the recommended placard pressure will fix this issue.



A flashing light indicates a system malfunction. The light will flash for 30-90 seconds, then remain solid. In most cases, a flashing light indicates a dead sensor battery, missing sensor, broken sensor or an incorrect sensor for the vehicle type.

2. Inspect Valve Cap: A missing or improper valve cap can lead to an avoidable situation where the valve stem becomes corroded and bonds to the valve core, and therefore, cannot be removed. When this happens, the TPMS valve must be replaced to prevent failure and rapid deflation. Improper valve caps include: chrome plated plastic caps, metal valve caps and vanity caps.

3. Check TPMS Sensors: Using a specialized scan tool, each installed sensor is tested. Remember: A flashing light may have already signalled that there is a faulty sensor; this test confirms that alert.

4. Access Vehicle Computer: Some vehicles allow direct access through an On Board Diagnostics port. A scan tool is used to check for any Diagnostic Trouble Codes (DTC's) related to the vehicle's TPMS system. These DTC's provide a sensor history and assist in identifying system faults.

5. Review Audit Report (Check Tool Capability): After service on the vehicle is completed, a print out of a detailed "health check" should be provided. The report shows the status on the TPMS system. Notes will also be included on a physical inspection and service recommendations.

VIN-TO-YEAR CHART

The VIN (Vehicle Identification Number) is a unique serial number used to identify an individual vehicle.

The 10th character in the 17-character VIN represents the vehicle model-year.

- This standard applies to vehicles built in or after 1981. (Prior to 1981, the VIN format was not standardized and varied by manufacturer.)
- VINs do not include the letters I(i), O(o), Q(q), U(u) or Z(z), or the number 0, to avoid being confused with similar looking characters.

A	1980	L	1990	Y	2000	A	2010
B	1981	M	1991	1	2001	B	2011
C	1982	N	1992	2	2002	C	2012
D	1983	P	1993	3	2003	D	2013
E	1984	R	1994	4	2004	E	2014
F	1985	S	1995	5	2005	F	2015
G	1986	T	1996	6	2006	G	2016
H	1987	V	1997	7	2007	H	2017
J	1988	W	1998	8	2008	J	2018
K	1989	X	1999	9	2009	K	2019