## TPMS Service Components....All Are Important!!



Seals crack and leak over time = replace the sealing grommet

Nickel plating strips off the valve cores leading to galvanic corrosion and seized cores = replace the valve core

Hex nut plating wears off over time on the threads leading to corrosion when road salt is present = replace the hex nut

Washers take a set and will not conform to the rim in the same manner after being disassembled = replace the washer

Caps accumulate dirt that can inhibit the seal and make the appearance poor = replace the valve cap



## OEMs such as Chrysler require kit replacement:



DAIMLERCHRYSLER MOTORS COMPANY LLC

#### INSTRUCTION SHEET K6855511 TPM SENSOR REPLACEMENT

This procedure is to be used when replacing or removing and reinstalling the TPM Sensor.

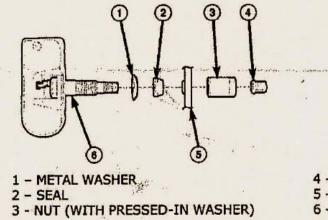
#### REMOVAL

The tire and wheel assembly removal must be followed as outlined in the Service Manual (Refer to Group 22 - TIRES/WHEELS – SENSOR – TPM - REMOVAL).

#### INSTALLATION

NOTE: Before reinstalling an existing TPM Sensor, replace seal and metal washer at base of valve stem. The nut and valve core must also be replaced to ensure proper sealing.

1) The part assembly sequence is shown in Figure 1.



4 - CAP (WITH SEAL) 5 - SECTIONAL CUTAWAY OF WHEEL 6 - TPM SENSOR

### Sensor makers such as VDO require kit replacement:

### SIEMENS VDO

Automotive

#### 1.3 Conditions d'utilisation – Use conditions

Température d'utilisation	Temperature Range	-40°C to +100°C
Pression maximum de fonctionnement	Maximum operating pressure	1 MPa(10 bars)
Température de stockage avant montage (12 heures mini)	Storage temperature before mounting (12 hours minimum)	+25°C ± 10°C
Gaz de gonflage	Inflating gas	Air ou Azote Air or Nitrogen
V Max du véhicule	Maximum vehicle speed	350 Km/h (215 Mph)
Couple de serrage de l'écrou : Visseuse programmable	Automatic screwing torque for nut	§ 2.1.2
Couple de serrage manuel de l'écrou	Manual screwing torque for nut	§ 3.3.2
Couple de serrage du mécanisme de valve	Valve core s crewing torque	0.2 to 0.4 Nm
Couple de serrage du bouchon	Valve cap screwing torque	0.2 to 0.35 Nm
Température de stockage recommandée	Advised storage temperature	+0°C/+35°C

Si le mécanisme de valve est démonté, il doit être changé et remplacé par le mécanisme fourni dans le kit de maintenance de Siemens VDO.

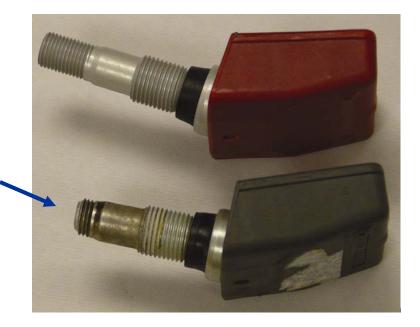
A chaqu e changement de pneumatique ou si l'on procède au démontage complet du capteur, il est OBLIGATOIRE de remplacer le joint d'étanchéité, sa rondelle d'appui, l'écrou et le mécanisme de valve, par les pièces fournies dans le kit de maintenance de Siemens VDO (décrit dans le document ref : S228 815 001). Cette opération est détaillée au § 3.3.1 (page 17)

Note : Tout desserrage d'écrou est considéré comme un démontage complet When the valve core is removed from the valve, it has to be replaced by the valve core available in the Siemens VDO service kit.

Each time tire is changed or if the sensor is removed, it is MANDATORY to replace the valve seal, its washer the nut and the valve core by the ones available in the Siemens VDO service kit (described in the document ref: S228 815 001). See § 3.3.1 (page 17)

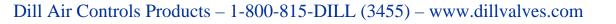
Note: All nut unscrewing is equivalent to a complete disassembly.

## I forgot to replace the valve core, what's the big deal?



Whoops! The core corroded and you need a new sensor!

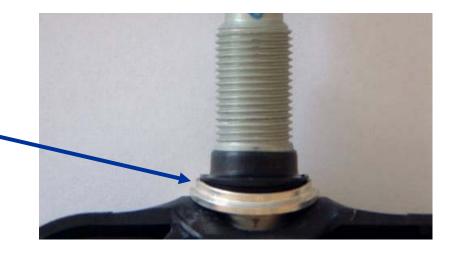
The nickel plating on the valve core wears off, exposing brass. The brass galvanically corrodes to the aluminum valve stem, causing it to seize. When this happens you damage the whole sensor because the core will break the valve.





## The washer is not important, right?

If you re-use me, I won't properly conform to the rim profile which will lead to a slow leak!



The unique Siemens adjustable valve design allows the sensor to fit many rim profiles, however, if the washer is reused it will not conform again correctly and the seal will not be held in place = LEAK!



## A nut is a nut right?

Wrong! cracking of the nut can result in a recall Summary:

NISSAN IS RECALLING CERTAIN MODEL YEAR 2008-2010 VEHICLES ORIGINALLY SOLD IN OR CURRENTLY REGISTERED IN THE STATES OF CONNECTICUT, DELAWARE, IOWA, ILLINOIS, INDIANA, MASSACHUSETTS, MAINE, MARYLAND, MICHIGAN, MINNESOTA, MISSOURI, NEW HAMPSHIRE, NEW JERSEY, NEW YORK, OHIO, PENNSYLVANIA, RHODE ISLAND, VERMONT, WASHINGTON D.C., WEST VIRGINIA AND WISCONSIN. THE MATERIAL IN THE NUT USED TO SECURE THE SENSOR-TRANSMITTER OF THE TIRE PRESSURE MONITORING SYSTEM (TPMS) MAY CORRODE AND POTENTIALLY CRACK IN AREAS WITH HEAVY CONCENTRATIONS OF ROAD SALT. IF THIS OCCURS, THE NUT MAY COME OUT OF THE SENSOR-TRANSMITTER AND THE TPMS LAMP WILL ILLUMINATE.

#### Consequence:

IF THE TPMS LAMP IS DISREGARDED AND THE VEHICLE CONTINUES TO BE DRIVEN IN THIS CONDITION, THE TIRE WILL QUICKLY LOSE AIR PRESSURE AT A CONSISTENT RATE RESULTING IN A FLAT TIRE INCREASING THE RISK OF A CRASH.

#### Remedy:

THE DEALER WILL REPLACE THE TPMS NUT WITH A NEW, MORE ROBUST NUT. THIS SERVICE WILL BE PERFORMED FREE OF CHARGE. THE RECALL IS EXPECTED TO BEGIN ON OR BEFORE NOVEMBER 9, 2009. OWNERS MAY CONTACT NISSAN AT 1-800-647-7261 AND INFINITI AT 1-800-662-6200.

Makes/Models/Model Years:

INFINITI/M35/2008-2010 INFINITI/M45/2008-2010 NISSAN/CUBE/2009 NISSAN/MURANO/2009 NISSAN/ROGUE/2008

NHTSA Campaign Number: 09V-393

Mfg's Report Date: October 1, 2009

Components: TIRES: PRESSURE MONITORING AND REGULATING SYSTEMS

Potential Number of Units Affected: 143,223



## A nut is a nut right....wrong, recall summary:

#### 1. Manufacturer:

Nissan North America, Inc.

#### 2. Vehicles Potentially Involved:

Model	Dates of Manufacture	
MY 2008 Nissan Rogue	May 29, 2008 to July 3, 2009	
MY 2009 Nissan Murano	May 29, 2008 to July 3, 2009	
MY 2009 Nissan cube	February 10, 2009 to July 4, 2009	
MY 2008, 2009 and 2010 Infiniti M35/45	April 14, 2008 to August 28, 2009	

Vehicles manufactured before or after these dates are not affected because different materials were used for the nut. No other Nissan or Infiniti vehicle uses this type of nut.

The name and address of the manufacturer of the subject nut is:

Schrader-Bridgeport Inc. 205 Frazier Road PO BOX 668 Altavista, VA 24517 Tel: (434) 369-4741 Fax: (434) 369-6592



## How do I sell service kits?

Use a sellable service kit bag with all the necessary components.



## Don't cheat your customer by just selling one piece!





Dill Air Controls Products - 1-800-815-DILL (3455) - www.dillvalves.com

How do I know which grommet to use?



## Hmmm...they all look similar but are not interchangeable!!

# Dill color codes the service kits so you use the correct grommet every time = satisfied customers!



Products

Dill Air Controls Products - 1-800-815-DILL (3455) - www.dillvalves.com