

Document Name: TIRE CHANGING INSTRUCTIONS FOR TIRES WITH

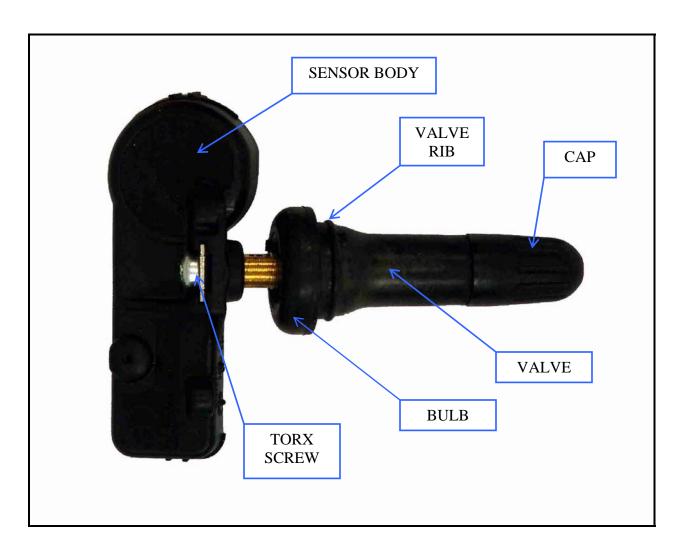
SCHRADER SNAP-IN TPMS SENSORS

Release Date: 10/26/06 Originator: J. Poparad Department: SBII TPMS After Market Doc. No.: DOP-11-104

Revision Date: Rev Level: REL

<u>PURPOSE</u>

1. This bulletin instructs the tire changing technician how to properly mount and dismount a tire that has a Schrader TPMS snap-in sensor.



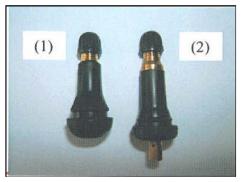
SCHRADER OF TPMS SNAP-IN SENSOR



WORKSHOP PROCEDURES FOR SCHRADER SNAP-IN TPMS REPLACEMENT SENSOR

HOW TO RECOGNIZE A TPMS SNAP-IN SENSOR VALVE

- 1. Remove the cap to inspect the valve.
- 2. On a regular tubeless tire valve, the rubber is molded all the way up to the nose thread (1).
- 3. On an OE installed Schrader TPMS snap-in sensor valve, the molded rubber on the valve does not reach the thread, leaving a section of brass between the rubber and the OE cap (2). The OE valve may have a long cap also.
- 4. On an after-market replacement TPMS snap-in sensor valve, the exposed section of brass is present, but is covered completely when the long cap is fully screwed onto the stem (3). Some OE snap-in valves may have the long cap also.





WHAT NOT TO DO DURING ASSEMBLY

- 1. **NEVER** install a damaged Snap-In sensor or valve to a wheel rim.
- 2. **DO NOT** mount the tire to the rim unless you are sure that the valve has been installed correctly.
- 3. <u>NEVER</u> re-use an old screw or Snap-In valve. Always make sure that a new Schrader screw and a new Snap-In valve is attached to the transmitter.
- 4. **NEVER** fit a Snap-In transmitter to unapproved wheel rims.

STORAGE CONDITIONS

- 1. Schrader TPMS Snap-In sensors should be stored in a dry, room temperature place, where wet and extreme temperatures do not exist.
- 2. Storage temperatures should be between 0°F and 100°F.



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DISMOUNTING PROCEDURES USING A TIRE CHANGING MACHINE

STEP 1

Remove valve core and deflate the tire. Place wheel on the tire changing machine and break both beads. Make sure the sensor body is kept away from the bead buster. Break the bead at 90°, 180° and 270° to the valve.



STEP 2

When removing the tire, make sure that the sensor body is at 12 o'clock relative to the head of tire changing machine. Rim should travel in the clockwise direction.



STEP 3

When the top bead is off, place the sensor body at 12 o'clock relative to tire changing machine and remove the bottom bead. Rim should travel in a clockwise rotation.



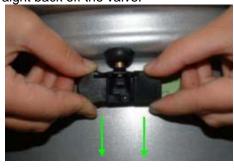
STEP 4

To remove sensor, remove the screw using a T10 torx screwdriver.



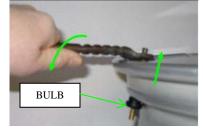
STEP 5

Carefully and firmly pull the sensor body straight back off the valve.



STEP 6

Cut the rubber bulb. Attach a standard TTV removal tool to the valve. Remove the valve from the rim by pulling the valve through the rim.





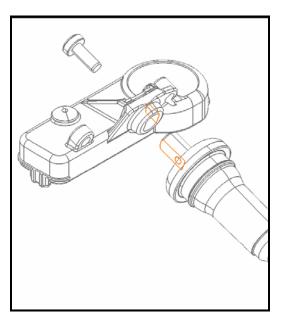
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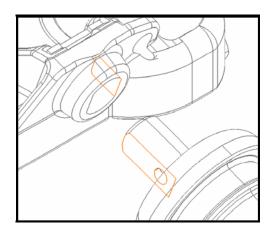
MOUNTING PROCEDURES USING A TIRE CHANGING MACHINE

STEP 1

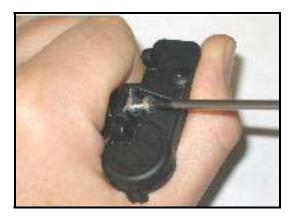
A. Attach a <u>NEW</u> valve to the Snap-In sensor body using a preset T10 torque screwdriver and a <u>NEW</u> Schrader screw.

<u>IMPORTANT!</u> Make sure that the flat of the valve lines up with the flats of the Snap-In enclosure as shown in the pictures below.





- B. Grip the valve stem and body in the hand and start the screw for the first couple of threads.
- C. Grip the valve stem only and tighten the screw.
- D. DO NOT hold the Snap-in enclosure while fixing the screw as this will lead to over tightening.
- E. Tighten the screw to a torque value of **1.3Nm** using the preset Schrader torque screwdriver.
- F. Make sure that the screw is installed correctly by looking at the head of the screw. The head of the screw **MUST** be in contact with the metal tag in the body.







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STEP₂

Apply tire soap or lube solution to rubber portion of the valve stem.



STEP 3

Line sensor up with rim hole as shown and attach a standard TTV pull in tool to the end of the valve ready for pull in.



STEP 4

Using a standard TTV pull in tool, pull the valve stem straight through the valve hole and **NOT** at an angle.



STEP 5

The picture below shows the correct fit for the sensor. Note the rubber bulb of valve resting against rim and the front face of the sensor body is NOT touching the rim.



STEP 6

This picture shows a TPMS sensor with a bad fit. Note that the rubber bulb is not resting on rim, and will not seal.



STEP 7

Apply tire soap or lube solution to top and bottom tire beads.





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STEP 8

To fit the bottom bead of the tire, make sure that the sensor is 90° from the tire changing head in the clockwise direction as shown below. This will protect the sensor when the bottom bead seats.



STEP 9

Fit the bottom bead of the tire by rotating the wheel clockwise, and push down on the bead in the position shown so that it does not hit the sensor when the bead seats.



STEP 10

Once the bottom bead is on the wheel, rotate the wheel so the sensor is at the 9 o'clock position in order to fit the top bead.



STEP 11

Fit the top bead of the tire by rotating the wheel clockwise, and pushing down on the bead in the position shown so that it does not hit the sensor.



STEP 12

Inflate tire until the beads seat.



<u>STEP 13</u>

Inflate tire per vehicle recommendation.





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Rev	Rev Date	Revision Description	Initiated By	Approved By
REL	10/26/06	Released for Distribution	J. Poparad	D. Weber