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If You Don't Care About
Customers, Do You Think
Your Employees Will? 18

PROGRAMMABLE SENSORS

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There is no denying the fact that servicing some TPMS vehicle applications can be a little difficult. Technicians are faced with many challenges when it comes to installing new TPMS sensors into today's vehicles. Some of these challenges may include finding the right part number and then learning the new sensor ID to the vehicle. Depending on the vehicle, the sensor learn process may be as simple as driving the car above a certain speed for a set number of minutes or may require the use of an OBD-II diagnostic tool to register the new sensor ID number in the vehicle's Engine Control Unit (ECU). There are some new technological advances in the world of TPMS that can help technicians service vehicles quicker and easier, and with less part numbers and vehicle relearns to sort through.

Orange Electronics has created the Orange Programmable Sensor System (OPSS), which utilizes "blank" sensors that can be programmed

with the ID number of the non-functional sensor, thus eliminating the need to use an OBD-II tool for sensor registration. This new sensor now has the ID number of the non-functional sensor, so the car still thinks that the old sensor never left, and an ID relearn is not necessary. Here is how the system works, according to Orange Electronics: "The user places the appropriate Orange writable sensor into the cradle of the ID programming tool, keys in the OE ID sensor number, and hits the "TX" button to transfer the information to the new sensor. The new sensor is now ready to be installed onto the vehicle. The new Orange sensor duplicates the ID number from the OE sensor, and is recognized by the vehicle's ECU as the original OE sensor, thus eliminating the need to initiate any vehicle re-train or re-learn procedure." Orange has condensed many part numbers, so dealers will not have to stock as many SKU's in their inventory. These writable sensors are also of an adjustable-angle, clamp-in type design to allow fitment in multiple types of rim contours.

Schrader® is developing the EZ-Sensor™ system (expected availability later this year), which will eventually include three part numbers based on sensor signal: 315MHz, 433MHz, and 314.9MHz. EZ-Sensor™ can utilize either Schrader's snap-in design (allowing for multiple rim contour fitments) or a new specifically designed and validated clamp-in stem; both options utilize the same sensor body. These sensors can be programmed using any Bartec-manufactured OBD-II TPMS diagnostic tool (including Bartec's Tech400+, NAPA's 92-1520/21, OTC's TPR, and Schrader's 21230).



Copycat TPMS parts are a ticking time bomb.



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Here's why you should avoid TPMS parts that haven't been OE engineered and validated to meet the requirements set by NHTSA.

Because TPMS is a safety system, failure to properly and safely maintain it puts your customers' safety at risk – and puts you in danger of legal action that could ruin your shop.

Unlike many competitors, all VDO TPMS products use only OE-validated parts that meet the functional requirements set by NHTSA in FMVSS No. 138. From the valve cores to the full sensor assemblies, VDO TPMS Replacement Parts are identical to the original for performance, ease of installation, and safety.

And, they're manufactured in the same ISO-certified facilities to the same quality standards as our OE parts.

Don't jeopardize your customers' safety and your own bottom line – choose VDO.

Sensor Assemblies (Valve-type and Valveless)
Service Kits | Stainless Steel Mounting Bands



VDO

A technician can replace a non-functional TPM sensor with a new EZ-Sensor™ by flashing programming onto the “blank” sensor, using the appropriate tool, and then relearn the new sensor ID to the vehicle; or, the technician can assign the ID number from the non-functional sensor to the new EZ-Sensor™, and an ID relearn is not required. According to Schrader®, their EZ-Sensor™ will eventually allow dealers to have “90% of vehicle coverage,” while only stocking three SKU’s in inventory.

It is important to note that sometimes a TPMS repair includes replacing a TPMS sensor that is either badly

damaged, destroyed entirely, or not there at all. For these common occurrences (when the existing ID is not easily known), the EZ-Sensor™ system gives the technician two valuable options for flashing sensor ID’s:

1. Flash an EZ-Sensor™ with a NEW, UNIQUE ID using the TPMS tool – then you can program it to the BCM; or
2. Flash an EZ-Sensor™ with the EXISTING ID by retrieving the ID from the vehicle’s BCM (which is a quick way to create a “winter set” of sensors).

Both of these systems help tire dealers condense the amount of money, time, and effort needed to service some of today’s TPMS-equipped vehicles, and, as this technology continues to advance, we are seeing the once-



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feared world of TPMS starting to become a profit center for today’s tire dealers. For more information about these systems, you can contact Orange Electronics at 888-407-8767 or visit www.orange-tpms-usa.com, and information on Schrader’s EZ-Sensor™ can be found at www.ez-sensor.com.



Feel free to contact me at smackinnon@tireindustry.org, or by calling 800.876.8372, ext.136 if you have any questions concerning these systems. **TTI**