### TIRE PRESSURE MONITORING SYSTEM (TPMS) Highlights



Full line of OE-Match pre-programmed TPMS Sensors are ready-to-install right out of the box



QWIK-SENSOR<sup>®</sup> Multi-Frequency TPMS Sensors combine 314.9MHz - 434MHz applications into one single Sensor program



Our blended program offers 99% coverage plus a full line of service kits & TPMS tools



### What's in your box?™



When OE Fails . . . Trust Standard<sup>®</sup>





# Growing Market

Tire Pressure Monitoring Systems (TPMS) first started appearing on vehicles in 2004, and in 2008 it became mandatory that all new light vehicles sold in the U.S. have this important safety system.

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### Vehicles on the Road with TPMS Systems



Source: SMP Internal Data

#### **W**

generally last 5-10 years before the original batteries fail. From 2013 to on new TPMS-equipped vehicles were added to the road – that represents placement opportunities (even more if the spare requires service).





### **TPMS SENSORS** Sales **Opportunities**

TPMS sensors are sealed units powered by batteries, with the typical lifespan of these batteries being 5-10 years. When new tires are being installed, reusing old sensors doesn't make sense, as they're susceptible to failure.

#### **Standard® Pro Training Tip**

Canned tire sealants can cause immediate damage to TPMS sensors. If any type of sealant has been used, a new TPMS sensor should be installed.

### When it's time for the third set of tires, it's time for new TPMS sensors.









**TPMS Sensors** 

### **Original Set of Tires**

On the vehicle from 0 to 35,000-50,000 miles or around 4-5 years

### **Second Set of Tires**

On the vehicle until the odometer reads 75,000-100,000 miles or the vehicle has been on the road for 8-10 years

### Third Set of Tires

Typically installed on an 8 to 10-year-old vehicle, when the TPMS Sensors are nearing the end of their service life Change the TPMS sensors!



### Impact on Vehicle **Systems**



Low air in a tire can lead to safety issues like the risk of hydroplaning, diminished brake performance, delayed steering response, and a chance of a blowout



**TPMS Sensors** 



**Underinflated tires can cost** a motorist more than \$200 more in fuel per year



A sensor relearn procedure should be performed on any vehicle with TPMS after every tire rotation or replacement



# What's New

TPMS sensors have now become common vehicle safety equipment. Standard<sup>®</sup> is committed to regularly introducing new TPMS Sensors to cover new applications.

For the most recent applications, check the online catalog at StandardBrand.com.



**TPM392** Dodge / Jeep SUVs (2023-21) **VIO: 889K** 





**OE-Match TPMS Sensors** 





**TPM186A** Alfa Romeo Cars & SUVs (2022-17) **VIO: 93K** 

**TPM391** Acura / Honda Cars & SUVs (2023-21) **VIO: 252K** 









# **Top Movers: TPMS Sensors**





**QS106M Multi-Frequency Universal** Metal Valve Stem







**TPM45RA** 

GM Cars, Trucks & SUVs (2020-04)



**TPM82A** Lexus / Toyota Cars, Trucks & SUVs (2017-03)



**TPMS Sensors** 



#### **QS106R Multi-Frequency Universal**

**Rubber Valve Stem** 



**TPM197RA** Chrysler, Dodge, Jeep, RAM Cars, Trucks, & SUVs (2021-10)



**TPM106A** Honda / Acura Cars & SUVs (2017-08)



**TPM199** Ford Cars, Trucks & SUVs (2022-15)





# Manufacturing

Standard<sup>®</sup> TPMS Sensors are designed and manufactured using the latest technology to meet OE performance in compliance with all SAE2657 specifications.

Every Sensor is precision engineered for application-specific operation and a long service life.



### **Did You Know**

Our facility produces more than a million Sensors annually, earning international and national certifications including U.S. FCC, European E-Mark, Canada IC, and Taiwan NCC while meeting FMVSS138, SAE J2657, ISO9001, and IATF 16949 quality standards.



**TPMS Sensors** 

# Testing and Validation

Each Standard<sup>®</sup> TPMS Sensor undergoes extensive testing to ensure performance and durability.

We subject our Sensors to SAEJ2657 certification standards including operational temperature, thermal shock, extreme temperature, humidity, frost, proof pressure, rapid deflation, contamination, salt fog, drop, centrifugal force vehicle speed, and mechanical vibration testing.

#### **Did You Know**

Our results are validated by live 168-hour on-vehicle testing at independent labs.

### Standard<sup>®</sup> TPMS Accelerated Life Test

During normal usage, TPMS sensors are only active for a few hours per day. To make sure our sensor batteries last, we subject them to an Accelerated Life Test.

Next, we run the test 24 hours a day, 7 days a week.

running.



First, we load the TPMS Sensors in the testing chamber.

The result is a TPMS sensor battery that lasts, keeping this important safety feature







# Standard® Quality

QWIK-SENSOR<sup>®</sup> Multi-Frequency TPMS Sensors combine all frequencies into a single sensor, eliminating duplication of inventory. Available with a factoryinstalled rubber or metal valve stem.

Faster programming times and longer battery life are enhancements engineered into the QS106.

#### **Did You Know**

The required sensor programming can be completed before or after installation, and while under pressure.

**QS106**R With factory-installed rubber valve stem

**QS106M** With factory-installed aluminum valve stem

Independently tested to match OE protocols for precise form, fit and function – including LOCSYNC, PAL, POD, and WAL advanced TPMS technologies |



**QWIK-SENSOR® TPMS Sensors** 

#### One Single Sensor is All You Need.

315/433 MHz

**Application Specific Integrated Circuit** (ASIC) features an accelerometer which uses multi-axis positioning, allowing the **TPMS system to accurately display POD** (Pressure on Demand)

Surface-mounted, dual-band antenna enhances signal integrity and reliability without compromising battery life to ensure data is transmitted accurately

Works on both domestic and import applications with 314.9MHz - 434MHz **TPMS** systems



# **Standard**<sup>®</sup> Quality

With more than 250 SKUs, Standard® OE-Matching TPMS Sensors provide 99% coverage – the best in the industry.

Pre-programmed from the factory with exact vehicle-specific OE application software, Standard<sup>®</sup> TPMS Sensors can be directly installed.

**Compatible with OE valve** stem rebuild kits and works with all major OE and aftermarket TPMS tools



**OE-Match TPMS Sensors** 

#### **OE-Match, Ready-to-Install Right Out of the Box.**



### **STANDARD® TPMS PROGRAM Service Tools**

In addition to the industry's strongest blended TPMS program, Standard<sup>®</sup> offers the right tools to program and service today's TPMS systems.

#### **Did You Know**

Standard<sup>®</sup> offers promotional TPMS Programming Tool Kit bundles that include our latest tools and advanced QWIK-SENSORs. Ask your Standard<sup>®</sup> representative for more information.



Programs popular universal and multi-coverage sensors

Integrated VIN scanner ensures application accuracy

Built-in TPMS relearn procedures speed-up the repair process

Hi-res color touch screen displays all sensor info on one screen

Reads and displays TPMS Diagnostic Trouble Codes (DTC)



**TPMS Program** 

### **T57000**



### **T48000**

Works with all Standard<sup>®</sup> OE-Match and QWIK-SENSOR<sup>®</sup> Multi-Frequency TPMS Sensors, as well as other popular universal and multi-coverage sensors

Comprehensive make, model, year-specific relearn procedures speed up repair process

Built-in OBD module for quick-connect cable and simple OBDII transfers – no additional accessories needed



# Live Sensor Feature

Live Sensor Technology enables the Standard<sup>®</sup> team to update software as needed. Updates can be rolled out the same day, in as little as a few hours.

For example, a tech needed to program a sensor for a 2021 Toyota CH-R. This application was originally missing from the tool, but after a short review, our team was able to add the coverage, and the technician was able to program the sensor that same day.

**TPMS Tools** 









#### **Initial Release**

#### 2 Weeks Later

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### **STANDARD® TPMS SENSORS** Related Parts

In addition to QWIK-SENSORs and our OE-Match Sensor line, Standard<sup>®</sup> also provides technicians with all necessary TPMS service items such as individual, application-specific service kits plus bulk packs of valve stems, cores, and more.

We also offer TPMS Service and Valve Kit Assortments, providing technicians with the most popular components for a complete repair solution.

**TPMS Sensors** 



#### **OE-Design TPMS Sensor Service Kits**

**Application-specific, these kits** typically include a valve core, seal, washer, retaining nut, and cap

50+ SKUs available



**Tire Pressure Monitoring Valve Cores** 

**Electroless nickel-plated** construction

Sold in packs of 100







#### **QWIK-SENSOR® TPMS Sensor Service Kits**

Specifically designed for our multi-frequency Sensor, these kits include all necessary service components



### **TPMS Valves**

68 SKUs available for **QWIK-SENSOR®** and **OE-Match Sensors** 

**Bolt-on installation** 



### Valve Caps

Available in black or grey Sold in packs of 100



#### **TPMS Sensor Cradle**

**Bracket to mount TPMS Sensor** on Ford / Lincoln / Mercury wheels up to 2011



# Standard® Pro Training Tech Tip

Every time a tire is removed from the wheel, the TPMS service parts such as valve stems, seals, nuts, washers, valve cores, and caps should be replaced, as these parts are all exposed to extreme weather, corrosion, and aging.

#### **Standard<sup>®</sup> Pro Training Tip**

A relearn should also be done each time tires are reinstalled to ensure that the proper tire location is detected.



**TPM6201SK** Service Kit Assortment

### **Standard® TPMS Service Kit Assortments and Tool Kits**

TPMS Service Kit Assortments from Standard<sup>®</sup> include the most popular service and valve kits, including valve stem rebuild kits, nickel-plated valve cores, valve caps, and valve core torque tools. Standard® also offers TPMS Tool Kits like TPM5020 for an easy TPMS service.



**TPMS Sensors** 

#### **TPMS Service Kits**



**TPM6202VK** Valve Kit Assortment

**TPM5020 Tire Pressure Monitoring** System Tool









# Standard® Professional Training

### Award-Winning In-Person, Live Virtual, and Online Learning

Standard<sup>®</sup> Pro Training delivers accredited classes that educate technicians in the latest automotive repair technologies, and techs can earn CEU credits.

An extension of Standard<sup>®</sup> training, our extensive YouTube video library has over 500 technical and installation videos.





**Available Classes** 

**TPMS Fundamentals** 





**TPMS Sensors** 



**Available Classes** 

**TPMS Diagnosis and Learning** 

**Body Control Electronics Diagnosis** 

For information on replacing TPMS and related components, search "TPMS" on the **StandardBrand** YouTube channel

VSPG\_2023\_TPMS\_7-26

StandardBrandTraining.com

