SEE THE LIGHT?
WE CAN HELP!

NAPA® Echlin® OE-Matching TPMS Sensors,
Mounting Hardware, Service Kits,
Shop Tools, and QWIK-SENSOR™
Universal Programmable Sensors

NSF® REGISTERED

NAPA® ECHLIN®

OE-Match TPMS SENSORS

QWIK sensor™ UNIVERSAL Programmable TPMS Sensors

The industry's best blended TPMS program with 99% coverage. 2 Universal Sensors cover PAL, WAL, and Auto-Locate technologies. Our OE-Match sensors are direct-fit and ready-to-install right out of the box. And both programs are the only 3rd-party tested TPMS in the industry.

NAPA ECHLIN® | OE-Match TPMS SENSORS | QWIK sensor™ UNIVERSAL Programmable TPMS Sensors

TPMS PROGRAM HIGHLIGHTS

- **Basic manufacturer in TPMS category**
  - All makes & models – domestic and import covered
- Our OE-Matching and QWIK-SENSOR™ Universal **Programs cover 99% of the vehicles** you will service in your shop today
- **Full line of OE-matching sensor valve stems and service kits** for your tire replacement & service needs
- **Complete line of advanced TPMS diagnostic service and programming tools**
- Our **best-in-class marketing and sales support** provides real clarity and support that helps shops profit from TPMS
  - To help increase sales, point of sale marketing materials are available for customer education and awareness
  - Best-in-class field sales and technical training support
  - TPMS technical and product tech help lines
    NAPA® Echlin® Product Help Line: 800-732-4832
- **Quality above the rest** – first manufacturer to have all of our sensors registered with NSF® International
  - NSF® registered and independently tested to provide third-party assurance to shops and consumers that all of our sensors are tested to fit and function exactly like the OE sensor being replaced
- **Future growth category**
  - More than 590 million TPMS sensors on the road with a 100% failure rate that will need to be replaced in the future

ABOUT TIRE PRESSURE MONITORING SYSTEMS

An Important Safety Warning Light Goes Unnoticed

During the past 10 years, more than 147 million vehicles were sold with Tire Pressure Monitoring System (TPMS). That means there are more than 590 million sensors with a 100% failure rate that will need to be replaced in the future. TPMS is a safety device that measures, identifies and warns motorists when one or more of their tires are significantly under-inflated. If the system finds a tire with low air pressure, a sensor with a dead battery, or a system malfunction, it will illuminate the TPMS warning light on the dash.

While this is common knowledge to technicians, it isn't as well-known among motorists, as evidenced by the results from a recent survey on TPMS:

96%

Drivers who consider under-inflated tires an important safety concern

25%

Vehicles that have at least one tire significantly underinflated

89%

Drivers who believe properly inflated tires and a warning light system could save their lives

19%

Drivers who properly check and inflate their tires

42%

Drivers who were unable to identify the TPMS symbol

0.3%

Gas mileage that is lowered for every 1 pound per square inch (psi) drop in pressure

TESTING AND PRODUCT VALIDATION

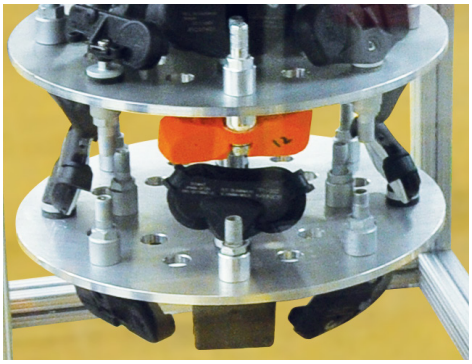
We're committed to quality testing and product validation for all of our TPMS sensors. We subject our TPMS sensors to extensive environmental testing using SAEJ2657 specifications. As a result, we're able to manufacture TPMS sensors that will perform accurately and have a long service life.

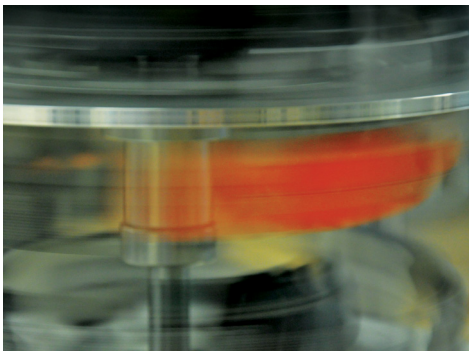
TPMS Accelerated Life Test

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

- First, we load the TPMS sensors in the testing chamber
- Next, we run the test for 24 hours a day, 7 days a week

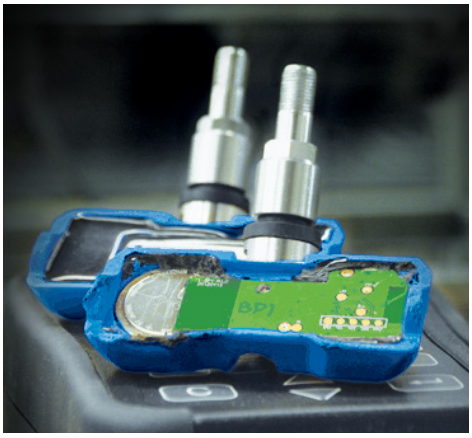
The result is a TPMS sensor battery that lasts, which keeps this important safety feature running.





Environmental Testing Using SAEJ2657 Certification Standards

- On-vehicle live test for 168+ hours
- Operational temperature test
- Thermal shock test
- Extreme temperature test
- Humidity test
- Frost test
- Proof pressure test
- Rapid deflation test
- Contamination test
- Salt fog test
- Drop test
- Vehicle speed test (centrifugal force)
- Mechanical vibration test



NSF® REGISTERED TPMS SENSORS

NSF® REGISTERED PRODUCT

NAPA® Echlin® OE-Match and QWIK-SENSOR™ Universal TPMS Sensors are now registered with NSF® International. In fact, NAPA® Echlin® is the first manufacturer to have a TPMS system or sensor receive NSF® registration.

What is NSF® International?

NSF® International is a leading independent, accredited organization that tests and verifies the functionality of products and systems for manufacturers, regulators and consumers. To receive registration, NSF® International extensively tests our TPMS sensors to ensure functionality, performance, and compliance with Federal Motor Vehicle Safety Standards.

What NSF® Registration Means for You

When you purchase a NAPA® Echlin® TPMS sensor, you receive third-party assurance to consumers, shops, and insurance companies that it will meet all applicable federal requirements and will fit and function properly in a manner equivalent to the OE sensor on the vehicle(s) intended for use.

- Compliance with FMVSS 138 (Federal Motor Vehicle Safety Standards). Testing is performed on at least one (1) vehicle per protocol for each sensor
- Functionality and performance testing which includes accurate location reporting, sensor accuracy, low pressure warning repeatability, sensor ID write test for sensors with cloning capabilities, and service functionality such as tire rotation
- Compliance with Code of Federal Regulations Title 47 Part 15 “Radio Frequency Devices”

Benefits of TPMS Registration

With NSF® Registration, we demonstrate to technicians and motorists that our TPMS sensors can be trusted to fit, function, and perform properly. But that’s not all. In addition to being listed on NSF® International’s website, our TPMS sensors will appear in Tiremetrix’s TPMS Manager®, a popular software used by tire shops to identify high-quality TPMS sensors.

NAPA® Echlin® is the first manufacturer to receive NSF® registration for TPMS sensors

NAPA® ECHLIN® OE-MATCH TPMS SENSORS

Install pre-programmed NAPA® Echlin® OE-Match TPMS Sensors right out of the box

OE-Relearn Procedure

Once installed, follow the OE-Relearn Procedure using any major TPMS programming tool

In addition to the OE-Relearn Process, the top selling NAPA® Echlin® OE-Match TPMS Sensors can be ID-cloned, technician's choice

- NAPA® Echlin® OE-Matching Sensors come **pre-programmed** in the box from the factory with the exact OE application software, so you can **simply install**, perform the OE manufacture **relearn** procedures, and you're done!
- Engineered to **match the original for fit, form, and function** of the original sensor
- NAPA® Echlin® OE-Matching Sensors provide **99% coverage – best in industry**
- **ID Copy/Clone-able technology built-in**
  - Top selling Standard® OE-Matching TPMS Sensors are ID Copy/Clone-able
  - Suffix "C" after part number = ID Copy/Clone-able (e.g. 92-1179RC)
- Can be used with our OE valve stem rebuild kits
- **Work with all major OE and aftermarket TPMS tools**
- **Registered with NSF® International**

Our full TPMS program includes TPMS service kits, accessories, mounting hardware, tools, and the perfect TPMS solution: OE-Match Direct-Fit TPMS Sensors. With 120+ units providing more than 99% coverage, these sensors are engineered to match the fit, form, and function of the vehicle's original sensor.

QWIK-SENSOR™ UNIVERSAL TPMS SENSORS

Program Sensor Before Installation

Program application software to QWIK-SENSOR™ TPMS sensors before installation using a compatible TPMS programming tool

Programming Procedure

Once the software is programmed to the QWIK-SENSOR™ (containing the exact matching OE protocol), it can be installed

OE-Relearn Procedure

Once installed, follow the OE-Relearn Procedure using any major TPMS programming tool

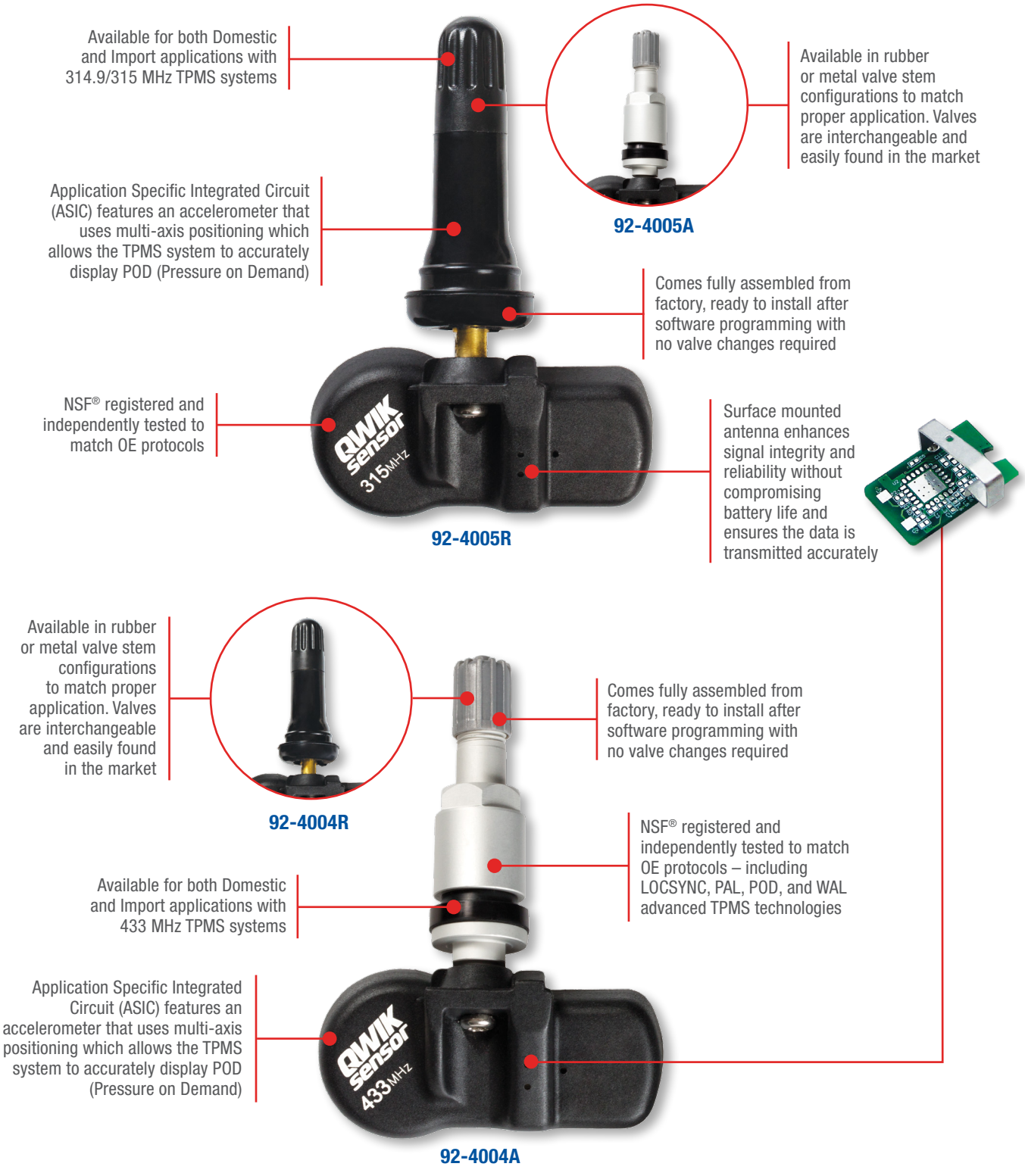
In addition to the OE-Relearn Process, QWIK-SENSOR™ TPMS sensors can be programmed with all major TPMS tools

QWIK sensor™ UNIVERSAL
Programmable TPMS Sensors

- QWIK-SENSOR™ Universal Programmable TPMS Sensors **complement our OE-Match line** by reducing missed sales due to OE-Match parts proliferation
- 2 sensors, **available in 314.9/315 and 433 MHz**, provide coverage for both **Domestic and Import Applications**
- Sensors must be software programmed for the specific vehicle application prior to installation with a compatible TPMS tool
- Software programmed to sensors by all major TPMS tools
- Once programmed, sensors **can be OE-relearned or ID copy/cloned** – it's the technician's choice
- Available with **interchangeable rubber (snap-in) or metal (clamp-in) valves** that are found at most parts stores
  - Suffix "R" = Rubber Valve Stem (e.g. 92-4005R)
  - Suffix "A" = Metal Valve Stem (e.g. 92-4004A)

NSF® REGISTERED PRODUCT

Complementing our NAPA® Echlin® OE-Match TPMS Sensors, our line of QWIK-SENSOR™ Universal Programmable TPMS Sensors gives technicians ease of programming, advanced technology, and 94% coverage for domestic and import vehicles.



KNOW YOUR TIRE PRESSURE MONITORING SYSTEM

Check it out. A TPMS system check is as easy as getting into the car and turning the ignition on. If the TPMS indicator light turns off, the TPMS system is functioning properly and you're on your way. If it remains on or flashes, you may have an issue.

SOLID TPMS LIGHT

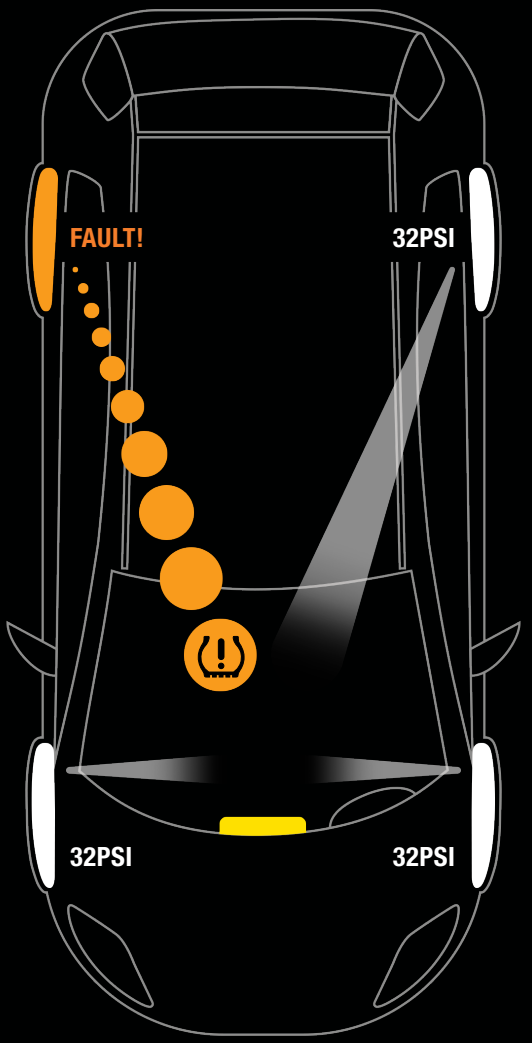
If the light stays on, check the tires for proper inflation or damage.

FLASHING TPMS LIGHT

There is a system failure and more than likely a bad sensor. Further TPMS diagnostics will need to be completed.

How TPMS Sensors Communicate

TPMS sensors wirelessly transmit a protocol specific to the vehicle and a unique ID serial number that identifies the tire location. A replacement sensor must match the original protocol and the vehicle needs to learn each new sensor's ID – this typically requires a relearn process.



What can cause TPMS Sensor Failure?

- Collisions, potholes, curbs, and other road hazards
- Sensor battery failure – sensor batteries are not serviceable or replaceable and will become discharged and fail – with a life expectancy of approximately 7-10 years or over 100K miles

What can trigger a TPMS Light?

- When any tire is 25% over- or under-inflated
- Rotating tires without resetting the TPMS
- TPMS sensor failure in one or more tires

What are the Risks of Ignoring the TPMS Light?

- Poor fuel efficiency and shorter tire life
- Compromised vehicle handling
- Diminished braking performance
- It is a violation of federal law to render a TPMS system inoperative

WHAT YOU NEED TO KNOW ABOUT YOUR TIRE SERVICE

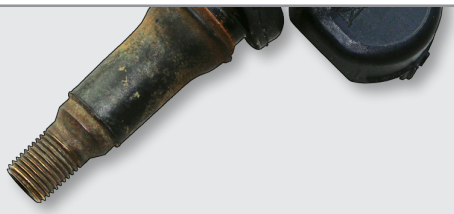
TPMS Sensors Require Service

These items wear out and are intended for a one time use – valve stem, seal, washer, nut, valve core, and cap. Just like your wiper blades, there are parts of the TPMS sensor that are made of rubber and break down over time. Failure to replace these parts can lead to slow tire leaks or catastrophic tire failure.

Industry leading professionals like TIA & RMA as well as the OE vehicle manufacturers recommend that **EVERYTIME** a tire is removed from the wheel, the **TPMS SENSOR WEAR ITEMS SHOULD BE REPLACED**.

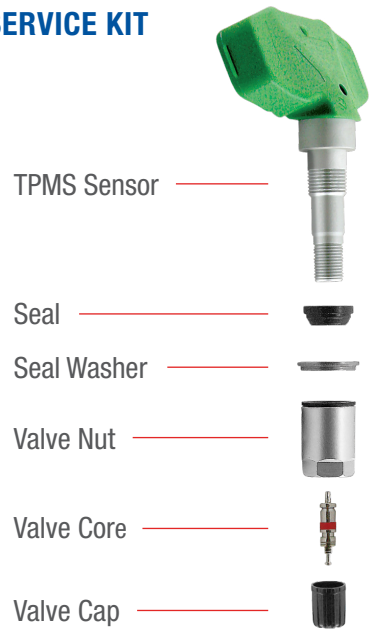
DID YOU KNOW:
The entire vehicle weight rests on this little valve and rubber seal

GALVANIC CORROSION

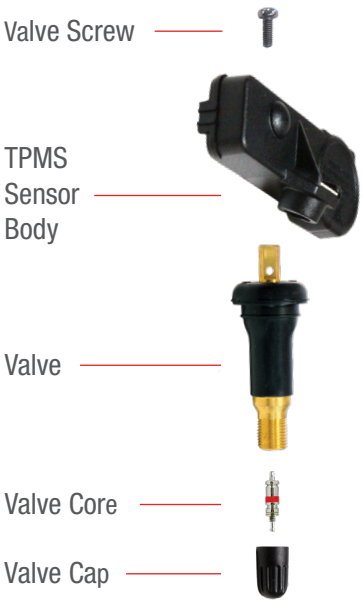


RUBBER DRY-ROT

TPMS SENSOR WITH ALUMINUM VALVE STEM AND SERVICE KIT



TPMS SENSOR WITH RUBBER VALVE STEM AND SERVICE KIT



TPMS TECHNOLOGIES

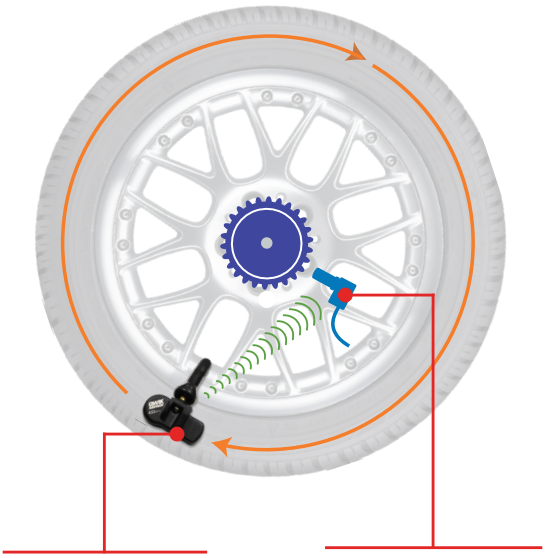
How Auto-Relearn Technology Works

Auto-Relearn automatically identifies each TPMS sensor, determines its position on the vehicle, and then wirelessly transmits the information to the receiver for display on the dash — all without human intervention. For a better understanding, here are two popular Auto-Relearn technologies:

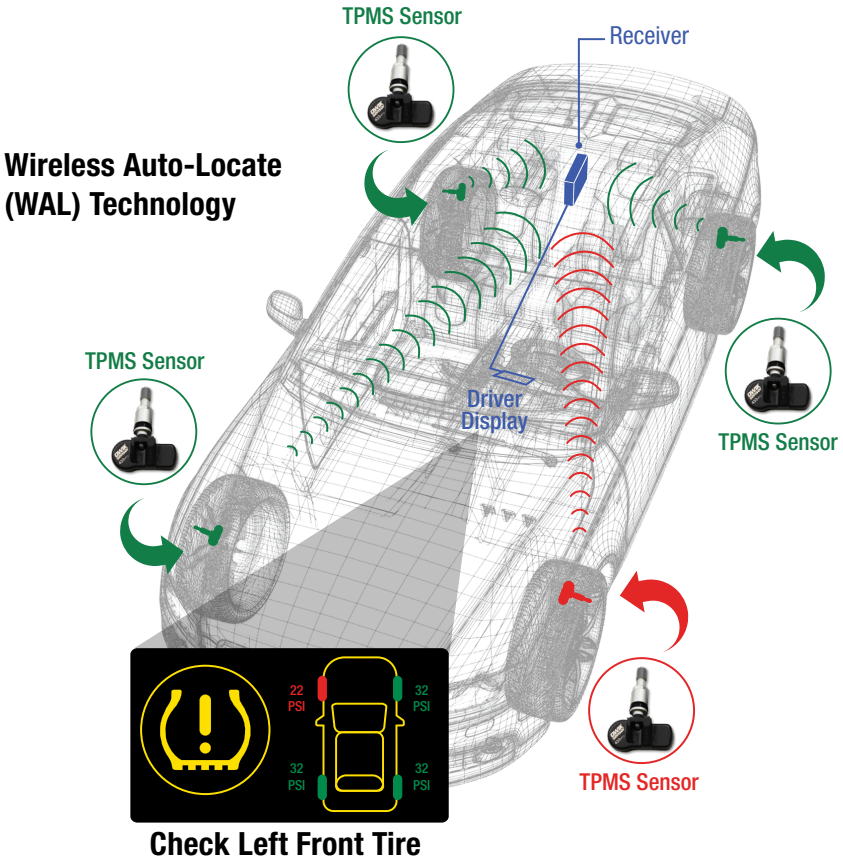
Phase Angle Location (PAL) Technology

Phase Angle Location uses additional ABS data along with TPMS sensor data to transmit tire pressure, temperature, position, and directional rotation while the vehicle is being driven. Vehicles equipped with Phase Angle Location systems utilize the data to accurately identify the TPMS sensors' location and pressure, which is displayed on the driver display.

Phase Angle Location (PAL) Technology



Wireless Auto-Locate (WAL) Technology



Wireless Auto-Locate (WAL) Technology

Wireless Auto-Locate systems use advanced TPMS technology along with RF signal strength to determine sensor location after installing a new sensor or tire rotation.

COMPLETE LINE COVERAGE FOR TPMS SENSOR SERVICE KITS AND VALVE STEMS

NAPA® Echlin® OE-Match TPMS Service Kits Have You Covered with Everything You Need to Service TPMS Equipped Wheel Assemblies

- Kit coverage for over 99% of the market
- OEM fit form and function
- Kit and valve shop assortment kits

92-0232
Chrysler, Dodge, Jeep – Open Key

92-0228
Ram, Jeep – Square Key

92-0175
Audi, BMW, Mercedes

92-0145
Ford, GM, Chrysler – Parallel

92-0166
Hyundai, Kia

92-0171
Chrysler, Dodge, Jeep

92-0261
BWW, Mini

92-0233
Ram Dually Trucks

92-1323
Various Domestic, Asian, European

QWIK-SENSOR™ Universal TPMS Service Kits Have You Covered with Everything You Need to Service TPMS Equipped Wheel Assemblies

92-0445
Rubber Valve

92-0447
Metal Valve

92-0448
Metal Valve Service Kit

TPMS SERVICE TOOLS

92-1551 TPMS Service Tool Kit

92-1551 TPMS Service Tool Kit is an advanced TPMS tool that provides comprehensive coverage for domestic, European, and Asian vehicles, which allows you to offer complete TPMS service management

- Built-in TPMS relearn procedures speed-up the repair process and save you time
- "Sync-ID" patented technology provides the best OBD relearn coverage available on the market
- Programs universal and multi-coverage sensors
- Industry-first VIN scanner ensures fast application accuracy
- High-resolution 4.3" color display allows for easy navigation and displays all sensor information on one screen
- World-class TPMS technical support
- Supports optional Tire Tread Depth Tool, and IR Printer with Docking Station accessories

92-1541 TPMS Service Tool Kit

92-1541 TPMS Service Tool Kit gives you everything you need to perform efficient TPMS repairs and service

- All-inclusive TPMS diagnostic, relearn and programming tool
- Comprehensive make/model/year-specific relearn procedures built into the tool, which speeds up the repair process and saves you time
- Programs universal and multi-coverage sensors
- Supports optional Tire Tread Depth Tool
- PC-based software ensures that the tool stays up-to-date
- Full-color, icon-based screen allows for easy navigation
- "Sync-ID" patented technology provides the best OBD relearn coverage available on the market

92-1541TO TPMS Programming Tool

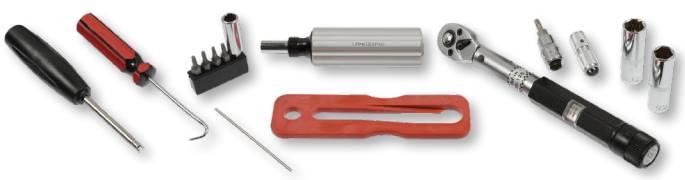
92-1541TO TPMS Programming Tool programs most universal programmable TPMS sensors, speed up the repair process and saves you time

- Comprehensive make/model/year-specific relearn procedures built into the tool
- Programs universal and multi-coverage sensors
- Supports optional Tire Tread Depth Tool
- PC-based software ensures that the tool stays up-to-date
- Full-color, icon-based screen allows for easy navigation

92-9000 TPMS Service Tool Kit

This high-quality TPMS Service Tool Kit contains all the tools necessary to manage your TPMS service

- 1/4" Torque Wrench 30-150 in/lbs
- 1/4" Torque Screwdriver
- Valve Core Torque Tool
- Rugged Tool Case
- And more!



Key Kit Components

TPMS SERVICE TOOL ACCESSORIES

92-1500TG Tire Tread Depth Tool

(Use with 92-1551 or 92-1541)

- Professional grade tool allows you to quickly detect worn tires, tire damage, and even poor alignment, resulting in additional service and tire sales opportunities
- Connects to the powerful 92-1551 diagnostic toolkit, which lets you perform a complete tire and TPMS sensor check during routine maintenance
- Capable of displaying results on the 92-1551 tool screen or transferring results to a PC to share with customers
- Green, yellow, and red color coding effectively illustrates wear against safety thresholds, which helps promote customer service and tire sales

92-1551DS Docking Station

(Use with 92-1551)

- Houses and charges 92-1551 TPMS Programming Tool and 92-1551P IR Thermal Pinter
- Wall mountable for easy access
- Allows you to charge battery while using tool
- Premium components ensure performance

92-1551P IR Thermal Printer

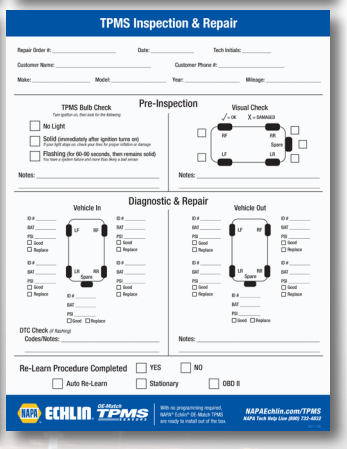
(Use with 92-1551 and 92-1551DS)

- Allows easy and convenient printing of detailed TPMS sensors service info and tire tread depth data
- Must be used with 92-1551DS Docking Station for 92-1551 TPMS Programming Tool

MARKETING AND SALES SUPPORT FOR SUCCESS

NAPA® Echlin® helps to increase sales by providing world-class TPMS marketing and support materials:

- TPMS Countermat
- TPMS Counter Display
- "See the Light" Poster
- Technician Bay Banner
- TPMS Inspection Form



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MEMBER TIA TIRE INDUSTRY ASSOCIATION

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napaechlin.com

napaechlin.com/qwiksensor

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