

TPMS Service – Embrace the opportunity.

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Emerging automotive technology is both exciting and challenging at the same time. There are many new opportunities for additional passenger vehicle service, one that’s been around for more than fifteen years is Tire Pressure Monitoring Systems [TPMS]. Thanks to people hanging on to their used cars much longer, we are now past the point where the average aged vehicle on the road will have direct TPMS. That means more vehicles with TPMS in your shop and more opportunity to sell TPMS service. Do you know all the points of service and more importantly are you trained in them and ready for your customers?

There are seven points of service for TPMS, ranging from Pre-Inspection to Vehicle Relearn, to providing service information to your customer. Each is a very important step and should be the basis for your business’ service plan.

| Service | Interval |
|---------------------------------------|---|
| Test Before Touch [pre-inspection] | Before every wheel and tire service event |
| Sensor Service Kit | Each time the tire is removed from the wheel |
| Sensor Replacement | When battery fails or sensor is otherwise damaged |
| New Sensor Install | Any time a new or alternate wheel is installed where no sensor is present |
| Recommended Inflation Pressure Change | When up-fitting or plus sizing changes the recommended inflation pressure |
| TPMS Relearn | Every time a sensor is replaced, or tires rotated |
| Data Management | Provide a report with every TPMS service |

1. Test Before You Touch

Today’s auto repair shop had better be practicing “Scan in and Scan Out.” Scan In means accurately identifying the customer, their vehicle and all issues BEFORE work begins! As this relates to TPMS, before any wheel and tire service begins, **check the sensors and check the system.** TPMS sensors with dead batteries can sometimes take days to show up as a TPMS MIL [flashing light]! Do yourself and your business a favor and make sure you and your customers know the status of their TPMS sensors. This also means the physical condition of the sensors. A visual inspection of the TPMS sensors can let your customer know when their sensors are damaged or heavily corroded.



Heavily corroded sensor



Sensor with cracked nut

Testing the sensors and checking for system fault codes not only uncovers potential service opportunities, it provides a baseline of service or in other words, prevents you from owning someone else’s problem. Best practices also include tire inspection, tread depth measurement and collecting the tire identification number in addition to the TPMS check. Presenting this critical safety information to the consumer protects them and your business!

2. Sensor Service Kit Replacement

Another industry best practice is to ALWAYS replace the wear items commonly found on most TPMS sensors. For the same reason the rubber valve stem is replaced, so should you replace the seals, grommets and other items found on TPMS sensors. UTMA, TIA and many vehicle OE’s all say that every time a tire is taken off the wheel, these items should be replaced. The question is really, why wouldn’t you? Rubber seals break down over time and are very prone to leaking if the sensor is moved or twisted during the tire dismounting/mounting process. Replacing the service kit with regular tire service will maximize the life of the TPMS sensor and prevent customer dissatisfaction due to leaks and flats. Don’t forget, TPMS service kits will protect the investment of your customer, representing a great opportunity to add revenue to your business.



3. Sensor Replacement

Sensor batteries fail. As I previously mentioned, the number of sensors on the road is growing, and the average aged vehicle has TPMS, and is more than twelve years in age. The sensors themselves get damaged either while driving or during service. The fundamental component of the vehicle safety system otherwise known as TPMS, is the sensor! If it's broken, fix it! Keep the TPMS operating and keep your customers safe, and of course limit liability.

4. New Sensor Install

Not entirely different from sensor replacement is New Sensor Install. Typically, the customer wants a different set of wheels and tires for their ride. Or it may just be a set of winter tires, either way, we know that keeping a TPMS operating is a requirement, so in this scenario we install new sensors into the alternate wheel/tire package. Many times, these sensors can be one of the many alternatives available in the aftermarket. The most common aftermarket offerings are programmable, multi-protocol and direct fit. Programmable offers great flexibility but requires a programming device. Multi-protocol sensors have similar flexibility without the programming step, however it's not uncommon to have more SKU's. Direct fit sensors are the traditional "part for part" equivalents.



5. Adjusting Recommended Inflation Pressure

Many know this as "placard." Prior to TPMS, we could "get away with" a bit more in terms of how we selected wheels and tires for our cars. If you need any evidence of that, I urge you to visit the Global Tire Expo at SEMA, where the creativity of wheel design and fitment seemingly has no bounds! That said however, serious wheel and tire professionals have always known that maintaining proper load carrying capacity of a car or truck is critical; and THAT is directly tied to recommended inflation pressure and the proper wheel and tire fitment. Recommended inflation pressure is what drives the TPMS. A low pressure [solid] TPMS light means one or more of your tires is below 75% of recommended inflation pressure. There are situations that whether it be plus sizing or up-fitting tires that the recommended inflation pressure and placard label need to be adjusted.

| TIRE AND LOADING INFORMATION | | | |
|---|---------------|--------------------|---|
| SEATING CAPACITY | | TOTAL | 88 |
| | | FRONT | 8 |
| | | REAR | 88 |
| The combined weight of occupants and cargo should never exceed XXXX kg or XXXX lbs. | | | |
| TIRE | ORIGINAL SIZE | COLD TIRE PRESSURE | SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION |
| FRONT | P235/60R17XL | 200 kPa, 29 PSI | |
| REAR | P235/60R17XL | 200 kPa, 29 PSI | |
| SPARE | P235/60R17XL | 200 kPa, 29 PSI | |

6. TPMS Relearn

The process of programming new sensor ID's or repositioning existing ID's in the vehicle control module. This should always be done after sensor replacement and when necessary, after rotation. This is the "finishing step" once wheel, tire and sensor service is complete. Not only does the relearn get new ID's programmed to the vehicle, it creates a baseline for the next service visit.



7. Data Management

Finally, to bring all this information together along with the service data, don't forget the Point of Sale or Shop Management systems. Linking the customer information to the data collected from your tools, to repair results, means you can paint a complete picture to your customer. Inspection and service reports like the one shown make it easy to help your customer understand the status of their vehicle, what services you can provide, and most importantly give the confidence of a job well done! TPMS service is made up of six basic steps, and successful shops will embrace them all, and tie them together with a solid shop management system.

Customer: [Name] Registration: [State] Vehicle: [Year] [Make] [Model] [Year]

Date: 07/16/2017 1:53:00 PM Mileage: [Miles] *Tire Type: Standard

| | |
|---------------------------------------|---------------------------------------|
| <p>11845509</p> <p>35.8</p> <p>OK</p> | <p>11813978</p> <p>37.1</p> <p>OK</p> |
| <p>11845394</p> <p>33.4</p> <p>OK</p> | <p>11845434</p> <p>38.5</p> <p>OK</p> |

OK 37.3" and up Tire OK for use

Replace Soon 37.3" to 41.1" Tire is worn. Consider purchasing new tires.

Replace Today 37.3" and below Tire is no longer safe. Tire must be replaced.

In you are in the auto repair and service business, particularly wheel and tire, these are the services that need to be listed on your menu of services. Performing these services at the proper interval takes commitment and investment in tools, training, and inventory. Providing these services will add value to your customer, add to your bottom line and increase business. TPMS service is most certainly an area of opportunity to increase customer satisfaction, and increase your revenue stream, so embrace it!