Old TPMS Tools - Boat anchors or trade bait?

Scot Holloway, CEO & General Manager – Bartec USA May 2019

Technology is always changing and in nearly all cases, improving. The result sometimes is an accumulation for the "old technology." How many of us still have a "tube" television or VCR in the basement? Or even more likely, a junk drawer full of flip phones, Blackberries and Palm Pilots? What can we do with all of these out dated devices? Can they be repurposed, or how do we properly dispose of them? That answer is sometimes complicated and it depends on the device. You may want to hold onto that VCR until you get all of your family videos transferred to digital! How does this relate to TPMS? I will explain, but first a brief history lesson....

TPMS service tools have been available since 2000. In the beginning, these tools were primarily used in automotive and wheel assembly plants. Early days, the volume of vehicles with TPMS was low and many wheel and tire assemblers used hand tools to test the sensors after assembly. On the vehicle assembly side, these same tools would be used to program the vehicles. It was a bit later that automated TPMS equipment would become part of the automotive assembly line.



Soon after the OE plants adopted equipment to deal with TPMS, Service Tools were being made for the OE Dealers and later still, the Aftermarket. To help understand the tool types, I've classified the range of tools by generation. Currently there are four generations of tools. Early TPMS tools were very basic in operation. Most often these tools had simple interfaces like LED lights and buzzers. When there were only a couple of different

sensor protocols, and limited ways to relearn a vehicle, these tools were more than adequate for service. However, by 2009, sensor technology [and relearn requirements] had evolved and it was soon very obvious that TPMS Tools had to offer more features in order to properly diagnose and service vehicles equipped with TPMS.

At a minimum TPMS tools needed a display to facilitate proper tool set up and to see the data that was being transmitted from the TPMS Sensors. TPMS Tools that included an OBDII connection

	GEN 1	GEN 2	GEN 3	GEN 4
Interface	Buttons & LEDS	Keypad & Display	Keypad & Display	Touchscreen & Wireless VCI
Туре	Activation Only	Activation Only	Combination Activation & OBDII	TPMS Scan Tool
Example		EXT.		200

were quickly becoming the norm, as most imported vehicles required that the sensor ID relearn process be done through the OBDII port. Today's TPMS Tools need to be able to do much more through the OBDII connection. VIN scanning, DTC detection and decoding, reading out of the TPMS ID's, TPMS Relearns, and Recommended Inflation Pressure [placard] adjusting. Each of these are key in the successful diagnosing and serving of a TPMS vehicle.

The market today is demanding tools that help service providers provide better customer service and improve the bottom line. The desire for Wi-Fi updating, wireless connectivity, printed inspection reports and data management are driving the next wave of TPMS tool technology. So as we enter into the fourth generation TPMS tool, what about those older TPMS Tools that you invested in?

The first generation tools have very limited use and value. Most if not all of them are no longer supported with software updates, and because they have LED interfaces, will in most cases lead to technician confusion. It would be very common at this stage, for these tools not to work with the large array of aftermarket sensor technology. Bear in mind, when Gen 1 tools were first introduced, there were only OE, direct fit sensor

replacements. Today there many type of aftermarket sensors and activation protocols. The Gen 1 tools are not very capable when it comes to dealing with all of today's aftermarket sensors.

Recommendation: Dispose

Gen 2 tools are not much better, again because of their age and the newer sensor technologies. The display does give the technician the understanding of which make, model and year are being worked on, so if you service older, domestic vehicles with TPMS, these tools can still be useful. Gen 2 tools can still be handy with vehicles that require a stationary relearn [put the car in relearn mode, and activate the sensor with a tool]. The Gen 2 tool can still activate sensors, and because it is a stationary relearn [and assuming the vehicle is operational], the vehicle will let you know if the process is successful with a "horn honk."

Recommendation: Limited Use

Gen 3 tools are currently the largest population of tools and are the most common tools in use today. That said, there are many iterations and versions and the older Gen 3 are not as capable as the later ones. Usefulness will depend on whether they're still under support from the manufacturer. Because these tools can perform more complicated services that rely on up-to-date coverage, it may prove difficult to work on later model vehicles. It is critical to keep Gen 3 tools up to date because of sensor programming changes, relearn changes, and placard changing. Five years seems to be a very common service life for technology related tools. Anything past that time, and you run the risk of not having current software support. Gen 3 tools that are newer [less than five years old] still have a place in the workshop. This is becoming truer as the number of vehicles [with TPMS] on the road continues to climb. With more vehicles having TPMS comes a greater need for multiple TPMS tools in the tire shop. The newer Gen 4 tool fits this purpose!

Recommendation: More than 5 years old, Limited Use / Trade in Less than 5 years old, Continue to use

Of course much of this can be subjective, and in the end, one must consider the investment made in current tools before deciding what to do with them. If you still using the older technology tools like a Gen 1 or Gen 2 tool, it is definitely time to make the jump to the newer TPMS Tools. The features and benefits as well as the speed of today's tools are certainly worth the investment. If you have a newer Gen 3 tool, keep using it and think about how many TPMS tools are right for your operation. If it's an older Gen 3 that you have, you may consider trading it in for a new tool, as the trade in value now likely exceeds the useful value.