



TRIBLUE

Tire Pressure Monitoring System

Tips and Advice

Another Premium Product From:



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Tips and Advice

- 1) Make sure your TB41 Tool is always up to date.
- 2) Make sure to check the tool for updates every week, if the software indicates there is an update, download it, if not then you are good until the next week.
- 3) ALWAYS keep the tool fully charged. If it is not fully charged, it could affect programming and relearning procedures.
- 4) Please be gentle with the tool and do not drop it or toss it around the shop. You may not see any external damage, but there could be internal damage that affects the tool's ability to function properly.
- 5) If you lose or damage the cable used to update and charge the tool, you can go to Amazon or your local store to buy a new one for under \$7. It is just a USB 2.0B printer cable.
- 6) If you are having trouble programming or doing the relearn procedure, Follow the steps below in the VIN Decoder section to get the OE part Number, see what other vehicles use the exact same OE part number and try to program the new Tri-Blue sensor under that vehicle and do the relearn. The general rule of thumb is, same OE part number, same protocol. So, you may have a 2020 Chevy Camaro using the same sensor as a 2019 Chevy Cobalt, etc. So, the programming will be the same.
- 7) Make sure you do not store the sensors next to anything electrical such as power adapters, power supplies, main power switch, etc. The signals emitting from these devices can possibly cause the sensors to basically "stay awake" and drain the battery in them and when they finally go to use them, they won't work because the battery is dead.
- 8) Please, please, please, NEVER use Fix-A-Flat in a tire with TPMS. The chemicals used in this solution can seep into the TPMS housing and damage the sensor, thus rendering it inoperative.
- 9) Remember, you are liable if a vehicle leaves your shop with a TPMS warning light on. If a customer is simply looking for you to turn off their TPMS light without fixing the underlying cause, this type of situation can create unnecessary liability for you and your shop. If you turn off the light without fixing the issue, you are violating the NHTSA's "make inoperative" provision, which then leaves shops legally responsible for disabling the TPMS. It is your responsibility to explain this to your customer, and to refuse service if they decline to have the issue properly fixed.

- 10)Reminder that TPMS run on batteries, and all batteries will die eventually. The general rule is that the batteries last 5-7 years. So, if there is a warning light on, and the tires have the right amount of pressure in them, this could be caused by one or more of the sensor batteries being dead. If they are all the same age, they should replace all 4 at this time.
- 11)If you think, “I don’t want to sell sensors, I just swap out the original ones.” Reminder that the time and labor it takes to swap them out, is probably not worth it compared to just putting in 4 new sensors. It will also save you time and money in the long run since if you decide to put the OE back on in the winter or when you get rid of the vehicle, you won’t have to worry about paying more money to swap them back.
- 12)TPMS generally have a threshold of 10%-20%, meaning if the air pressure in the tires is 10%-20% above or below the tire pressure listed on the driver door placard, it will cause the warning light to trigger on the dash. It does not always mean the tire is flat, it does not always mean the sensor is bad, but you still should pull over and check the tire. Remember, Tire pressure can decrease about 1 PSI (pounds per square inch) for every 10 degrees the temperature drops. It’s not due to air escaping, but rather the air inside the tire condensing. Once it does that, it takes up less space inside the tire. When a tire drops below the recommended fill pressure, the TPMS light comes on. **Please Note:** Tires routinely lose 1 PSI per month as air escapes around the edge of the rim and through the tread itself. This is completely normal, which is why you should have your **tire pressure checked and topped off every month**. A similar thing happens during the summer months or in hot climates when the temperature rises, the pressure will increase. This happens when you have been driving at higher speeds for long periods of time, the air in the tire warms up, affecting the pressure readings.
- 13)It does not matter what type of valve the OE sensor uses. You can replace it with either rubber or aluminum. It is strictly a cosmetic issue and will not affect performance.
- 14)Our Rubber valve stem for our Tri-Blue sensor is the same stem used by OE and is standard in the market. Brass base that screws from the bottom.
- 15)What is the difference between a TPMS reset tool, TPMS activation or trigger tool, and TPMS decoding tool?
- A TPMS reset tool can be used to reset or reprogram the OEM or Aftermarket TPMS sensor to the vehicle’s ECU whenever tires are replaced or changed from summer to winter tires, tire is replaced, tire rotation, etc.
 - A TPMS activation or trigger tool allows the user to “wake up” or activate the sensors while in “sleep mode” or while inactivated.

- c) A TPMS decoding tool can trigger or activate sensors, receive TPMS sensor information and send the TPMS sensor information to the vehicle's ECU. The TPMS sensor information received by the TPMS decoding tool includes the pressure within the tire, the temperature of the TPMS sensor, the wheel rotating speed, the TPMS sensor unique ID, the battery status of the TPMS sensor, and more.

16) Tires larger than 37" may require the sensors to be programmed and relearned before installing them in the wheel. Place the sensor on the top of tires and go through the relearn process. Then install the sensors into each wheel and mount them on the vehicle in the same position.

17) Tips for Dodge Ram Relearns

- a) Program the sensors for the vehicle
- b) Install in the wheels and inflate the tires to the EXACT PSI listed on the placard on the driver door.
- c) Turn the IGNITION ON, Engine OFF
- d) Lower the driver's side window completely.
- e) Choose "Service TPMS" on the tool.
- f) Enter correct vehicle information.
- g) Choose "Manual Relearn"
- h) Read all the instructions and then press OK.
- i) Choose the number of wheels.
- j) Now Scan all the sensors in order.
- k) Leave the IGNITION ON, Engine Off, and let the vehicle sit for 20 minutes.
- l) After the time passes, you can now start the engine and drive the vehicle for up to 20 minutes.

18) Keep in mind that sometimes there has been a Service Bulletin issued from the Manufacture for pre-existing problems with the TPMS and it may be a software or OE computer issue. Always check with the Vehicle Manufacturer if that is the case and see if there are any bulletins issued. Below are just some of the more common bulletins issued.

Factory TPMS Bulletins

2014 Chrysler Town & Country

Bulletin Reference #: 14V632000

Issue: TPMS receiver may be in incorrect mode therefore the TPMS light will stay illuminated.

Action: Dealership must change the receiver's mode.

2014 Dodge Grand Caravan

Bulletin Reference #: 14V632000

Issue: TPMS receiver may be in incorrect mode therefore the TPMS light will stay illuminated.

Action: Dealership must change the receiver's mode.

2014-2015 Ferrari LaFerrari

Bulletin Reference #: 15V306000

Issue: In the event of a tire puncture, 'Low Tire Pressure-Max speed 50 mph' will display.

Action: Dealership must update the vehicle so 'Low Tire Pressure-Do not proceed' displays.

2015-2016 Fiat 500

Bulletin Reference #: 08-122-15

Issue: TPMS light is illuminated along with DTC's CI 012-88 and/or CI 015-88 are present.

Action: Dealership needs to reset the system.

2014 Honda Civic

Bulletin Reference #: 1005597 4

Issue: TPMS light illuminates when pressures are correct.

Action: Dealership must update Indirect TPMS software.

2015 Honda CR-V

Bulletin Reference #: 14-065

Issue: TPMS warning light is illuminated and OTC C0077 or C0078 is present, yet the tire pressures are correct.

Action: Dealership will update the vehicle's VSA control unit software.

2016 Honda Pilot

Bulletin Reference #: 15V668000

Issue: TPMS warning lights may not illuminate if there is a problem unless the vehicle is restarted.

Action: Dealership will update the vehicle's combination meter software.

2014 Jeep Wrangler

Bulletin Reference #: 14V632000

Issue: TPMS receiver may be in incorrect mode therefore the TPMS light will stay illuminated.

Action: Dealership must change the receiver's mode.

2016 KIA Optima & Sorento

Bulletin Reference #: SA213

Issue: TPMS malfunction light flashes at start-up and DTC's are present yet the tire pressures are correct.

Action: Dealership will replace the sensors.

2013-2014 Land Rover UM, 2014 Range Rover, 2014 Range Rover Sport

Bulletin Reference #: 14V618000

Issue: OE sensors won't register to the vehicle.

Action: Dealership must update TPMS receiver software on all models. In addition to updating, the 2013 LR4 will receive all new sensors.

2014-2015 Mazda MAZDA6

Bulletin Reference #: 14V675000

Issue: Indirect TPMS software cannot inform driver if all tire pressures drop the same level at the same time.

Action: Dealership must update Indirect TPMS software.

2015 MINI Cooper Hardtop (2dr & 4dr)

Bulletin Reference #: SI-M36-01 -15

Issue: A TPM Failure message displays on instrument cluster along with DTC's related to sensor signal reception.

Action: Dealership will replace antenna/antennas under warranty.

2014 RAM ProMaster

Bulletin Reference #: 14V633000

Issue: Receiver could illuminate the wrong location of a low tire.

Action: Dealership must update TPMS module software.

2014-2015 RAM 2500, 3500 SRW, & 3500 DRW

Bulletin Reference #: 22-002-15 REV. A

Issue: "Service Tire Pressure System" message appears along with DTC's related to sensor mechanical failure.

Action: Dealership will replace all four or six sensors under warranty.

2012-2013 Volkswagen CC

Bulletin Reference #: 10051380

Issue: OE sensors won't register to the vehicle.

Action: Dealership must replace sensors with updated version.

Other Tips

Vehicles: Most Ford, Lincoln, and Mercury models.

Problem: After installing and registering new sensors, Remote Keyless Entry (RKE) fobs stop working.

Explanation: The processes for entering key fob training mode and manual TPMS relearn mode are very similar. A slight alteration in the manual TPMS relearn process can inadvertently enter the vehicle's key fob retraining mode. Once this happens, all previously stored key fobs are erased.

For example, on a 2013 Ford Focus:

- To enter the key fob training mode, cycle the ignition 4 times.
- To enter TPMS relearn mode, cycle the ignition 3 times, tap brake, then cycle ignition 3 more times.

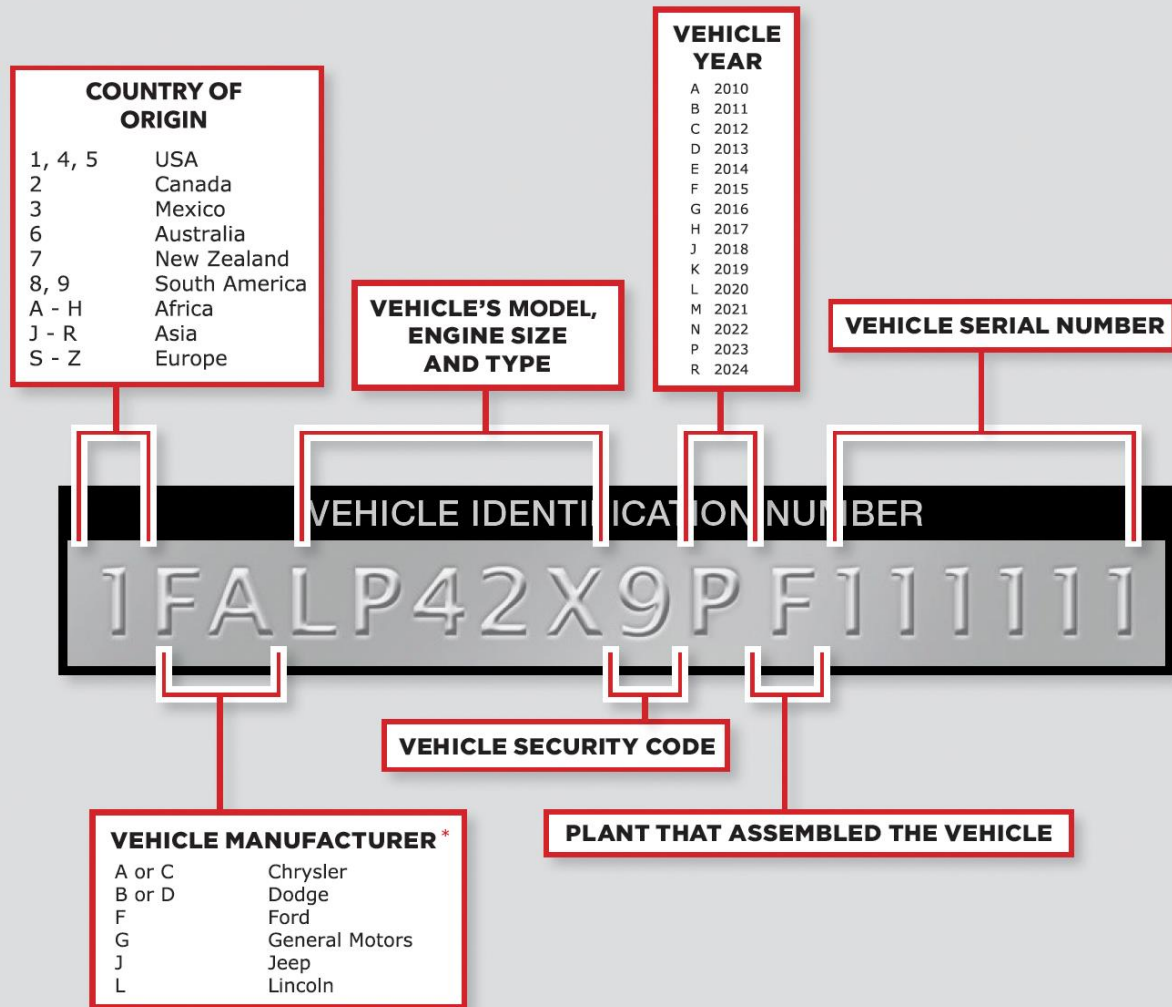
Solution: Follow the RKE retraining instructions to train the key fobs back to the vehicle. Contact your dealer or see the owner's manual.

Smart Key or Intelligent Key Some vehicles will have 2 different frequency options listed depending on whether it has a "Smart Key" or "Intelligent Key". If the vehicle has a Push Button Start and has a passive entry system, also known as a Smart-Key or I-Key.

Determining Frequency To determine a sensor's frequency without removing the tire you will need a TPMS diagnostic tool with an RF listening mode, commonly referred to as an RKE Test which is available on the TB41 tool. With the tool listening, a pressure drop of 10psi will force most sensors to transmit within one minute.

VIN DECODER SECTION

What's in a VIN?



* The 2nd character denotes vehicle manufacturer.
The 3rd character varies by manufacturer and can represent vehicle type or division.

Country of Origin Character Codes

The 1st character in a car's vehicle identification number indicates the **country** in which it was manufactured.

Some of the country codes include:

- 1, 4, 5: United States
- 2: Canada
- 3A-37: Mexico
- J: Japan
- VF-VR: France
- 9: Brazil
- WA-W0: West Germany
- S: Great Britain

Model Year

The 10th character in the 17-character VIN represents the vehicle model-year. This standard applies to vehicles built in or after **1981**. Before **1981**, the VIN format was not standardized and varied by manufacturer.

Code Year	Code Year	Code Year	Code Year
A: 1980	N: 1992	4: 2004	G: 2016
B: 1981	P: 1993	5: 2005	H: 2017
C: 1982	R: 1994	6: 2006	J: 2018
D: 1983	S: 1995	7: 2007	K: 2019
E: 1984	T: 1996	8: 2008	L: 2020
F: 1985	V: 1997	9: 2009	M: 2021
G: 1986	W: 1998	A: 2010	N: 2022
H: 1987	X: 1999	B: 2011	P: 2023
J: 1988	Y: 2000	C: 2012	R: 2024
K: 1989	1: 2001	D: 2013	S: 2025
L: 1990	2: 2002	E: 2014	T: 2026
M: 1991	3: 2003	F: 2015	V: 2027

Here are a couple of VIN Decoder Websites you can use to acquire information.

<https://driving-tests.org/vin-decoder/>

<https://vpic.nhtsa.dot.gov/decoder/>

<https://www.mdecoder.com/> (FOR BMW)

You will also need the VIN to research those vehicles that are made with either 315Mhz or 433Mhz in the same year. This can be done a few ways:

1. Call the appropriate dealer, ask for the parts department, tell them you are replacing your TPMS and need to know the correct frequency. (Some dealers will be reluctant to give you this information and sometimes even act annoyed, but most will help out.) They usually ask for the last 8 digits of the VIN, if they won't give you the Frequency, ask for the OE part #.
2. Sometimes easier is to Google a manufacturers parts website, i.e., "Chevrolet Parts", find and click on one of the parts sites, find the spot to input the Lookup by VIN, find the TPMS in the available parts menu, sometimes under Tire and Wheel, sometimes Electrical, at this point, they might list the frequency right in the description. If not, do the following:
 - a. Copy the OE part #
 - b. Go to Ebay.com
 - c. Paste the part # in the search box preceded by something like "GM part # or Ford part # or Toyota part#"
- d. Scroll down the listings, you might see the frequency listed in the header, you might need to open a listing and search the listing for the frequency, and lastly, you may need to click on the actual picture of the sensor, zoom in and the Frequency is stamped on the body of the sensor. Not always the easiest way to find it, but it may be your only way sometimes.