



TRIBLUE

Tire Pressure Monitoring System

Troubleshooting Guide

Questions and answers

Another Premium Product From:



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Troubleshooting Questions and Answers

When you have a problem with your TPMS, these are the first and most common questions you should be asking:

- 1) **When was the last time your tool was updated?** Customers need to make sure the tool is running the most up to date software. Just like your cell phone, your TPMS tool needs regular updates. Even though there are major updates done quarterly, I would suggest customers plug in their tool every Friday just to see if there might be a minor update. If no, unplug and move on, if yes, then perform the update.
- 2) **What pressure are the tires set at?** It is important that the tires of the vehicle are inflated to the EXACT pressure listed on the Driver Door placard. Some vehicles are sensitive enough that even a few pounds off can cause an issue. Anything above or below 10% of that value can trigger the TPMS warning light to come on and you may not be able to do the relearn procedure if the pressure is too high or too low.
- 3) **How did you come by the year of the vehicle?** Are you sure it is the year you stated? Most people will go by the production date listed on the door placard but that is not always accurate. A vehicle manufactured in 2022 could be a 2023 model year. You MUST get it from the VIN of the vehicle. The 10th digit on the VIN will give you the year of the vehicle. (See VIN decoder section of this guide)
- 4) **Did the vehicle come from the factory with a spare tire with a TPMS?** If so, you must take that into account when doing the Relearn Procedure. The computer is looking for 5 sensors, and you might only be showing it 4.
- 5) **Is the TPMS light on the dash solid or flashing?** When you first start the car, if the TPMS warning light flashes and then turns solid after a few minutes that means it is a TPMS error – TPMS has not properly been relearned, programmed, or is just not communicating with the vehicle, or can be a dead sensor. If the TPMS warning light is solid the entire time, then it is an air pressure issue – could be set too high or too low, or it could be the spare tire TPMS was overlooked.
- 6) **Did you verify the make and model of the vehicle?** Some vehicles will use different protocols or frequencies between trim levels. Verify on the tool which trim level is required. You may need to verify using the VIN # sometimes, especially vehicles that offer both 315mhz and 433mhz for the same model year. (We will show you how in a later section)

- 7) **What is the difference between Hi-Line and Lo-Line?** Some vehicles are listed in the same year having either Hi-Line or Lo-Line. Hi-Line means that the vehicle will show all 4 individual tire pressures on the dashboard. Lo-Line means that there will only be a single indicator light on the dashboard. This could be due to the fact that higher trim levels offer more advanced features. Common in Toyota, Jeep, Chrysler, Dodge.
- 8) **What country was the vehicle manufactured in?** Some vehicles will use different protocols or frequencies depending on the country of origin. Sometimes this is found on the driver door placard, but if not, this information can be obtained from the VIN. (See VIN decoder section of this guide). Some examples are Toyota/Lexus having USA or Japan Models.
- 9) **When doing relearn, vehicle does not detect the new sensors.** This is a common problem, and there are several items that can cause this.
- (a) Verify all sensors are programmed correctly using the correct Year, Make, Model, Frequency, Etc.
 - (b) Make sure there are no other TPMS within 4ft of the vehicle.\
 - (c) Verify if the vehicle has a spare tire with a sensor.
 - (d) Make sure tire pressure is EXACTLY as listed on the Driver Door Placard.
 - (e) Move the vehicle to an outdoor area, away from other vehicles.
 - (f) Disconnect any USB or Bluetooth devices as this may interfere with the RF receiver in the vehicle, i.e., cell phone chargers, Bluetooth radio devices, Bluetooth on your cell phone, smart watch, tablet, headphones, Bluetooth powered lights, etc.
 - (g) If the vehicle has aftermarket tint, lower all the windows as some of the tint used today is ceramic and has metal particles in the film which could block the signal coming from the sensor.
 - (i) Most Stellantis vehicles, (Dodge, Ram, Jeep, Chrysler) REQUIRE you to lower the driver's side window to activate auto-relearn mode.
 - (ii) Also lowering the windows is recommended for large trucks/SUVs with lifts or plus size wheels and tires.
 - (h) Opening the rear doors during relearn also helps when servicing larger trucks with lifts or plus size wheels/tires.
 - (i) There are a lot of vehicles that have trouble entering "Relearn Mode" and cannot find the new sensors. One fix for this is, after programming and installing your new Tri-Blue sensors, let the vehicle sit with the engine off for 20 minutes. Do not activate any features on the vehicle. When you do this, the TPMS enter "Park" mode and shut down transmitting to conserve battery. When the vehicle starts up again, they start transmitting again. After the 20 minutes, activate the sensors with the tool, and then do the relearn procedure.
 - (j) All Toyota/Lexus/Scion models 2009 and down will require you to Unlock the ECU before relearning.
 - (i) On the tool choose "Main Menu > Service TPMS > Select Toyota/Lexus/Scion > ECU Unlock. After Unlock, then complete OBDII Relearn.
 - (ii) Loop Mode – The TPMS system for the Toyota vehicles uses a button labeled "Set" which is usually located below the steering column area or in the glove box,

this button resets the system. After the button is pressed, the computer is looking for the sensor ID's that were previously stored in memory. **DO NOT** press this button until AFTER completing the relearn procedure on the new TPMS or the ECU will lock up in "Loop Mode". You can use "ECU Unlock" feature if the vehicle is stuck in Loop Mode.

(iii) The "Set" button is not to be used in place of proper TPMS tools and servicing. DO NOT press this button until AFTER completing OBDII Relearn to avoid problems.

(k) Sometimes just spinning the tire or moving the vehicle to put the sensor in a different position during relearn can help with the process.

(l) Some vehicle production dates fall between 2 different relearn protocols. If does not work, try the year before or the year after.

10) **Tool indicates "Duplicate Sensor"** The tool is picking up multiple sensors with the same serial number. Read each sensor to find the duplicate and reprogram and make sure there is a new ID number.

11) **Tool indicates "Communication Failure" when programming new sensors.** This can be caused by several issues.

a) Tool software is not updated to the latest version.

b) Too many sensors nearby are causing interference.

c) Bad Sensor (not common)

d) Bad Tool (not common)

e) The sensor is not close enough to the tool to receive the transmission.

f) Tool battery is not charged enough.

g) Antenna within tool is broken (almost always caused by customer dropping the tool too many times)

12) **Did the relearn procedure, the light went out, but came back on 20-30 minutes later.**

Generally, this means that the relearn procedure did not have enough time to finish, or the wrong protocol was used. Verify you chose the proper Year, Make, and Model. Keep in mind that a lot of these relearn instructions indicate to drive the vehicle above a certain speed for a certain time. If the customer stops or slows down before that time ends, the countdown starts again.

13) **When I try to trigger a sensor, it does not respond.**

- a) Check if the vehicle is equipped with sensors, or with an indirect system.
- b) If you cannot detect the sensor, change the position of the tool against the tire. Wait until at least 35 seconds. Change the distance between the tool and the wheel.
- c) Try ALL the car's sensors. It is VERY rare that ALL sensors are dead. If the others respond, the sensor can be considered defective. Please replace.
- d) If all else fails, the TPMS protocol used in the tool's database may be wrong.
- e) The tool battery is low. A low battery on the tool will affect the signal strength coming from the tool. Always keep fully charged.
- f) Make sure you are using the left side of the tool's antenna; the signal is strongest from the left side.

14) **OBDII Relearn screen is stuck and won't begin.**

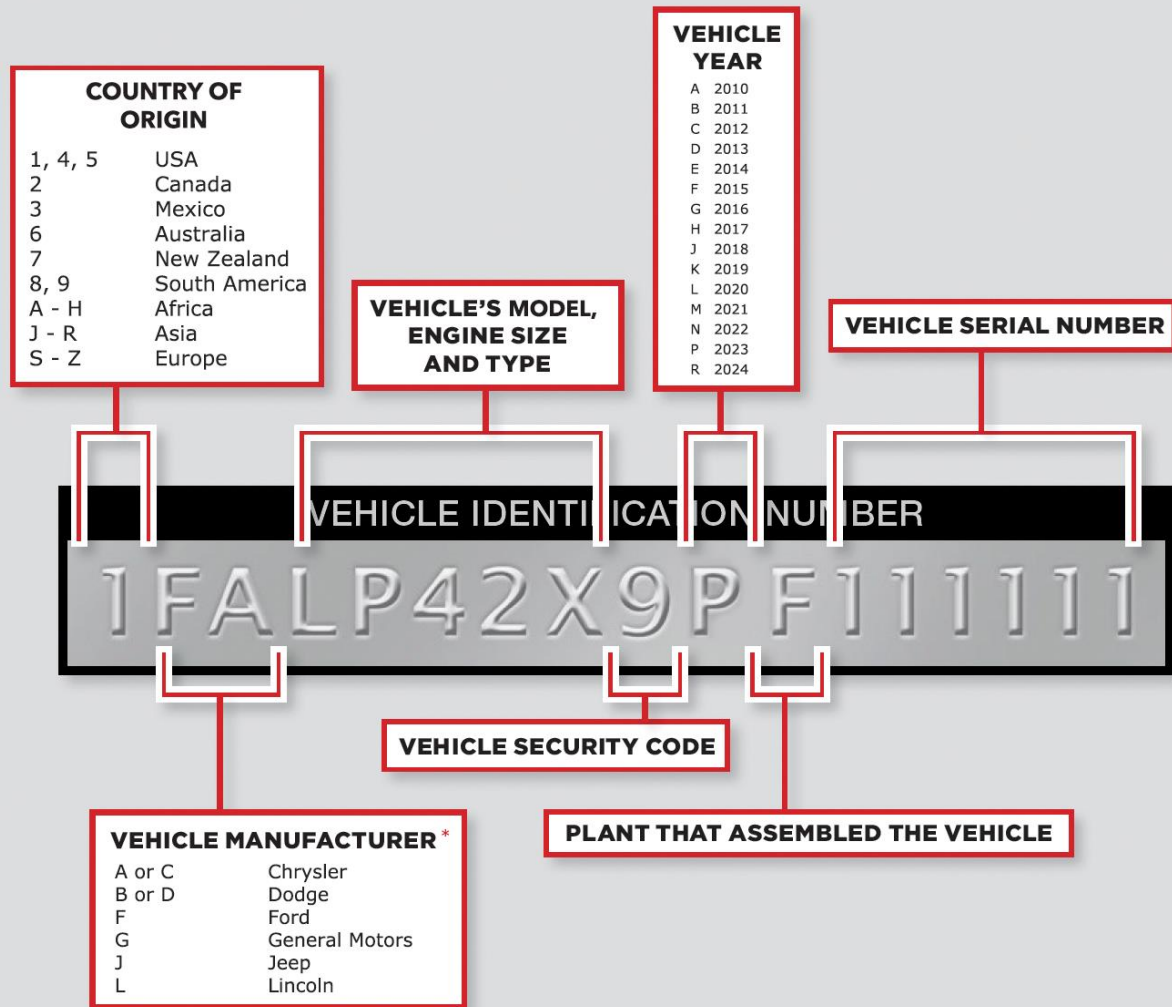
- a) Your OBDII cable was plugged into the vehicle. You must follow proper procedure, trigger the sensors, then connect the OBDII cable to the tool, and then connect it to the vehicle.
- b) The OBDII indicator light must be SOLID Green, if RED then there is an error.
- c) The ignition must only be in the "On" position (ACC Only) – DO NOT Start the engine.

15) **Auto Relearn Failed and will not sync.** You need to reset the sensors.

- a) Install the sensors.
- b) Park the vehicle, and let it sit for 15-20 minutes without any movement. Some vehicles will need to have the IGNITION ON, ENGINE OFF during this time. Any movement during this time will require you to start the time over.
- c) After the time has passed, do the relearn again.

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.