

TST Tire Pressure Monitoring System

TechnoRV Learning Series

The TST Tire Pressure Monitoring system is a highly sophisticated piece of technology that is going to ensure that you are updated on the condition of your tires as you travel. Whether you are in a pop-up camper or a 45-foot motorhome, the TST system will give you peace of mind as you travel. The leading indicators of potential tire failure are high and low PSI and rising tire temperatures. These conditions can indicate you have brakes or bearing heating up to a dangerous level, or that you just have a slow leak that could soon turn into a blow-out. Having up to date psi and temperature information of each tire position will put you in control of your own safety.

TechnoRV not only sells the TST brand exclusively, but as full-time RVers, we use this very system. We have tested other brands and we are confident that we have chosen the best TPMS system on the market to present to you.

We want you to be successful with this new piece of technology, and that is why we have created the TechnoRV Learning Series. This guide will walk you through the set-up process and give you all the trouble shooting measures that you may need down the road. TechnoRV not only sells the TST system, but we also support the system. In addition, TST has a great support team that you can reach out to as well, should you need assistance.

*** Links to videos of each step follow the written directions.

What Should Your Tire Pressure Be?

One of the key points of information you will need to know before installing your TST system is what your tire pressure is set at. It is a good exercise to go ahead and make sure all of your tires are exactly where they are supposed to be before installing the TST system. The correct PSI for your tires should not be a random guess, but a more calculated exercise. No one knows more of what the pressure of your tires should be than the manufacturer of your tires. Each tire manufacturer provides a tire inflation chart on their website, and this will be the first place to start to determine the proper PSI for you tires. Your tires are rated for a certain pressure based on the weight that it is carrying. Therefore, the only way to truly know the proper PSI level is to get your RV weighed. The best way to get weighed is at each tire. Weighing of RVs occurs at many of the RV shows and Rallies around the country. In the meantime, you can run through a travel center that has the CAT scales and get weighed by the axle. Once you know your weight, just apply that to the manufacturers tire inflation chart and then you will know the correct PSI for your tires. Under inflation can create heat, and heat is the enemy to your tires. You are better off being over inflated than under inflated. With that said, if you have not been weighed and are unsure of your weight, just go with the max pressure rating on the tire until you can get weighed. Your ride may be a little stiff if you are over inflated, but again, it is better than under inflation.

All tire pressure ratings are based on your tires' cold pressure. This means that you want to set the pressure in your tires when they are cold, not after driving all day. Now that you know the proper tire pressure for your tires, and you have double checked to make sure that is the PSI level that you have in your RV tires, let's get started installing your TST system.

What is in your TST kit?

Your kit has the newest version of TST sensors!

- TST monitor
- USB power supply
- Tire sensors
- Sticker sheet
- Suction cup window mount
- Rubber dash mount
- Small bag of brass nuts and tool
- Manual
- Warranty Card

Simple Steps to Programming and Installing Your TST System

Step 1: Register your TST 507 system with TST! It is very important that you register your system within 30 days of purchase to activate TST's great 3-year warranty. Click the link below to register your TST purchase.

[TST Warranty Registration](#)

Step 2: To make things easy, the first step we recommend is to set the sensors on a table in the formation that they will be programmed in the monitor, and of course, this will be the same positions that you put the sensors onto the valve stems of the tires. In other words, if you program a sensor into the TST monitor for the front right tire, then that is the tire position that the sensor will need to be installed on. Once you lay the sensors out in the correct formation, get the sticker sheet from the kit and place numbers on the sensors so you will know where they go. It is a good idea to draw this on a sheet of paper, so you will know where to place them when it is time to install.

Step 3: Turn the TST monitor on. The on/off switch is on the right side of the monitor. Just push the switch up and the monitor will light up. You will see an outline of the RV and tow and you will see a "C" for Celsius, and "BAR" for pressure. Later, we will change those to Fahrenheit and PSI if you would prefer.

Step 4: It is time to program the sensors into the correct position of the monitor. Press and hold the SET button until it beeps. You will see "Hi Pressure Set" blinking.

Step 5: Press the plus (+) button 5 times until you see “Learn ID” show up on the screen. Once you see this, press the SET button. You will see the screen with all 38 tires on the screen. If this is your first time to program the monitor, then you will see 6 F’s on the screen. Anytime you see 6 F’s, this indicates that there is no sensor programmed into this position. Use the plus (+) and minus (-) button to scroll to the tire that you would like to first program.

Step 6: Once you arrive at the tire that you would like to program, press the SET button and the F’s will start to blink. Take the sensor that you will program into this position and hold it to the bottom of the monitor and tap the GO button. The unit should beep and a 6-digit code will appear. Once the 6-digit code appears simply press SET to save the code. Use the plus (+) and minus (-) buttons to move to the next tire and repeat the process until all tires are programmed.

NOTE: if you press the GO button to program a sensor and the 6-digit code does not appear, try it again. If you hear a double beep, then this means the code was not programmed. In this case, press the GO button again.

[VIDEO OF ERIC PROGRAMMING SENSORS INTO MONITOR](#)

Program a sensor into the wrong tire position? Watch this video how to delete a tire position from your monitor.

[VIDEO OF ERIC DELETING A SENSOR FROM THE MONITOR](#)

Now that all your sensors are programmed, it is now time to set the high and low tire pressure settings. You should already know what the cold tire pressure of your tires should be at this point. Remember, you want the same tire pressure across an axle, so when programming this in you will be programming per axle, not per tire. Before we program this, if you would like we can change the reading to PSI and Fahrenheit, instead of Celsius and Bar.

Changing Monitor to Read PSI:

1. Press and hold the SET button until it beeps.
2. Press the plus (+) button 3 times. (You should see the word SET and the BAR/PSI will be blinking)
3. Press the SET button again and then press the plus (+) button to change between BAR and PSI. Once you have selected PSI then just press the SET button again and press the back button to go back out of the program mode.

Changing Monitor to read Fahrenheit:

1. Press and hold the SET button until it beeps
2. Press the plus (+) button 4 times. (You should see the word SET and the F and C will be blinking)
3. Press the SET button again and then press the plus (+) button to change between Fahrenheit and Celsius. Once you have selected PSI then just press the SET button again and press the BACK button to go back out of the program mode.

[VIDEO OF ERIC CHANGING THE UNITS OF MEASUREMENT](#)

Now that you have the readings the way you want them, let's set the tire pressure parameters into the monitor. We recommend that you set the low-pressure warning at 10% below what the cold tire pressure of your tire should be and about 20-25% above what the cold tire pressure should be. (If you tend to be in hotter environments then set it at 25% above the cold tire pressure rating.)

Setting the LOW Tire Pressure Parameters (Always start by setting your low pressure)

1. Press the SET button until it beeps
2. Press the plus (+) button once (Low Pressure set will be blinking on the monitor.)
3. Press the SET button.
4. Press the GO button until the axle shows up that you would like to adjust the low-pressure alarm. When you get to the axle that you want to set the low pressure, just use the plus (+) and minus (-) button to adjust the low pressure.
5. Once you are done with that axle then press the GO button to move to the next axle. Do this until you are complete and then press the SET button to go back to the menu. You can press the back button to go back to the main driving screen.

Setting the HIGH Tire Pressure Parameters:

1. Press the SET button until it beeps (High Pressure Set should be blinking.)
2. Press the SET button.
3. Press the GO button until the axle shows up that you would like to adjust the high-pressure alarm. When you get to the axle that you want to set the High pressure, use the plus (+) and minus (-) button to adjust the low pressure.
4. Once you are done with that axle, press the GO button to move to the next axle. Do this until you are complete and then press the SET button to go back to the menu. You can press the back button to go back to the main driving screen.

Now you have the sensors installed and the high and low pressures entered. The only thing left is to program the temperature that you would like to be alarmed. If your tires begin to heat up due to an unusual circumstance such as brakes locking up or bearings seizing, then you will be alarmed. The monitor comes preset at 158 degrees and it is recommended that you just leave it at this alarm setting. If you would like to adjust this to a different setting, then you can do so.

Adjusting the High Temperature Alarm Setting

1. Press the SET button until it beeps
2. Press the plus (+) button 2 times (You will see Hi Temp Set blinking.)
3. Press the SET button and now use the plus (+) and minus (-) button to adjust the high temperature setting.
4. Once you have adjusted the setting then press the SET button to save the new setting.
5. Now you can press the BACK button to go back to the main screen.

[VIDEO OF ERIC CHANGING THE PRESSURE AND TEMPERATURE PARAMETERS](#)

The Final step it to now go put the sensors onto the valve stem of the tires. Again, be sure that you are putting the sensor on the correct tire that you programmed it into the monitor.

Installing CAP sensors (Follow this if you purchased CAP Sensors)

In your CAP sensor kit, you should have a small wrench tool and a brass nut for each sensor. The small tool is used to tighten the brass nut up to the cap sensor to lock it onto the valve stem. It is not necessary to use the brass nut to lock the sensor on, this is an anti-theft feature, and if you do not do this then the cap sensor will work without it just fine. Here are the steps for this:

- 1) Screw the brass nut onto the valve stem. Screw it on far enough so that the cap sensor can screw on after it all the way.
- 2) Screw the cap sensor onto the valve stem
- 3) Use your fingers to unscrew the brass nut until it reaches the cap sensor. Now use the small tool to tighten the brass nut up against the cap sensor. If you did this correctly then when you try to unscrew the sensor from the valve stem you will not be able to.

NOTE: There can be some interesting valve stem configurations. If you are finding it hard to access the valve to put the sensor on, don't give up. You may need to buy a valve extender or an extender that turns the valve stem, so you can easily access it. TechnoRV has several different configurations of valve extenders. We only sell Wheel Master brand as we find them to be the best. Your other option would be to get a tire professional to reconfigure your valve stems, so they are more easily accessible. In most cases, this will not be an issue.

NOTE: If you have braided valve extenders, be sure they are anchored at the end. I have seen many RVers that have braided valve stems that are not anchored and the sensors just flop around on the rim as they are traveling.

Installing Flow Thru Sensors (Follow this if you purchased the Flow Thru sensors)

The anti-theft feature on the Flow Thru sensor is pretty much the same as the anti-theft feature on the cap sensor except that the tool looks different. Each flow thru sensor should have a brass nut that came with the kit. Remember, you do not have to use the anti-theft brass nuts as the flow thru will work fine without it, but if you want the anti-theft feature then follow these steps.

- 1) Screw the brass nut onto the valve stem. Screw it on far enough so that the flow thru sensor can screw on after it all the way.
- 2) Screw the flow thru sensor onto the valve stem
- 3) Use your fingers to unscrew the brass nut until it reaches the flow thru sensor. Now use the claw tool to reach around the flow thru sensor and tighten the brass nut up against the sensor. If you did this correctly then when you try to unscrew the sensor from the valve stem you will not be able to.

NOTE: Flow Thru sensors should only be used on metal valve stems. The little bit of extra length on these sensors can create stress on a rubber valve stem and eventually the valve stem could fail. If you have rubber valve stems then you can easily get a tire center to put metal valve stems on for you.

Now that your sensors are installed, and the monitor is programmed and turned on, you will begin to see the information from each tire populate to the monitor. This can take a little bit of time each time you turn the unit on. All my sensors populate within about 10 minutes. I turn my TST monitor on before I leave for a trip and as I am doing my pre-trip procedures. By the time I am ready to start driving, all my information is ready for me. The great thing about the TST system is the sensors are pressure activated. This means you will have proper information before you start traveling, and do not need for the wheels to be rotating for the information to populate to the monitor.

[VIDEO OF ERIC INSTALLING THE FLOW THRU SENSOR WITH ANTI-THEFT FEATURE](#)

Dropping Sensors from the Monitor When Parked

[VIDEO OF ERIC DROPPING SENSORS WHEN PARKED](#)

Installing the TST Repeater

The repeater boosts the signal from the back sensors forward to the monitor. The TST repeater needs 12-volt power, and it is best to install the repeater far away from the monitor. If you are in a motor home, then install the repeater towards the back of the RV. If you are in a towable, mount the repeater at the front of the towable. If you ever have communication issue from the sensors to the monitor, then the repeater will clear this up. There are many ways to install the repeater to 12-volt power. Some people hard wire the repeater into their 12-volt system i.e., into a light fixture). The way that I installed my repeater was to buy two small battery clamps from the hardware store and connect them to the lead ends of the repeater. Then I just clamp these onto my RV batteries. Here is a video of how I did this:

[VIDEO OF ERIC INSTALLING A TST REPEATER](#)