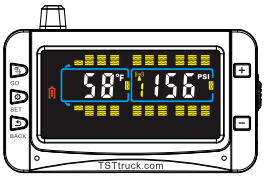
A PRESSURE SYSTEMS INTERNATIONAL COMPANY

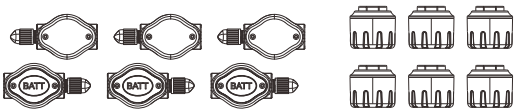
TST TRUCK SYSTEM TECHNOLOGIES

Wireless Tire Pressure and Temperature Monitoring System Instruction Manual

Model#: TM-507 Wide Screen Display
507 Flow-through and Cap Sensors

Thank you for purchasing a TST Tire Pressure Monitoring System(TPMS). With minimal care, your new TPMS will provide reliable service for many years. Please read and understand the information contained within this manual. Keep this manual for future reference.





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Website: www.TSTtruck.com

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SENSOR FEATURES

1) The sensors easily install on the valve stem.
2) Sensors are water resistant.
3) Pressure and temperature data is read every five (5) minutes.
4) Removal of a sensor (0 PSI pressure) will shut off the sensor battery.
5) The sensor batteries last approximately one (1) year and are user replaceable.
6) Tire leaks and high temperatures are detected quickly.
7) Tires can be inflated without removing the sensor.
8) Each sensor has a unique, six (6) digit code for programming.
9) Sensors feature an anti-theft design using the included hex nuts.

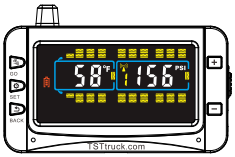
DISPLAY FEATURES

1) Large, wide screen LCD display of pressure and temperature.
2) Suction cup and cradle mount included.
3) Integrated lithium battery that is rechargeable with provided cord.
4) Wake-up activation of display when in motion.
5) Automatic monitor illumination in dark conditions.
6) Programmable high and low pressure alarm thresholds.
7) Programmable high temperature alarm.
8) Visual and audible warning alarms when temperature or pressure exceeds thresholds.
9) Multiple pressure units: PSI or BAR.
10) Selectable temperature unit: °C or °F.
11) Program up to 110 tires.
12) Tire pressure and temperature is displayed simultaneously for quick viewing of each tire.
13) When not in use the trailer tires can be hidden from the TPMS display.
14) The towing vehicle tires can be electronically removed from the screen when parked.
15) Push button programming.

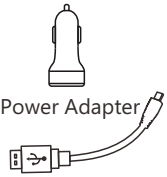
16) A fully charged display will continuously operate 5-7 days on battery power.
17) Temperature and pressure settings are configured "per axle".

SYSTEM COMPONENTS IN KIT

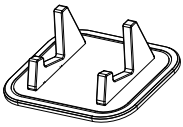
Display and components

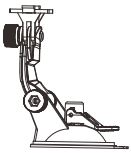


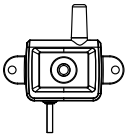
Color Display



USB Cable

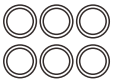

Cradle Mount


Suction Cup Mount

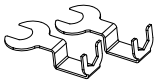

Repeater

Cap Sensors components


Cap Sensors

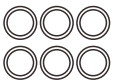

Extra "O" rings


Hex Nuts

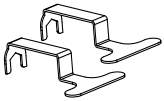

Cap Wrenches

Flow - through Sensors Components

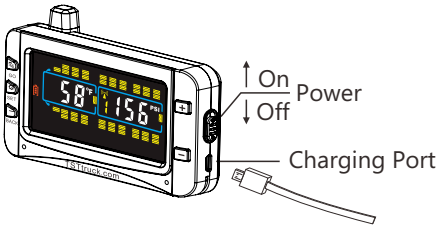
FT Sensors

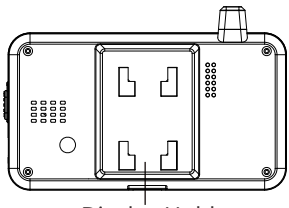

Extra "o" rings

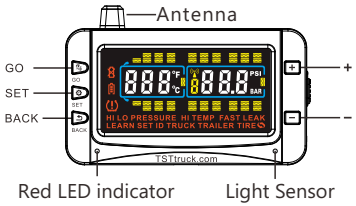

Hex Nuts


FT Wrenches

DISPLAY CONTROLS




Display Holder



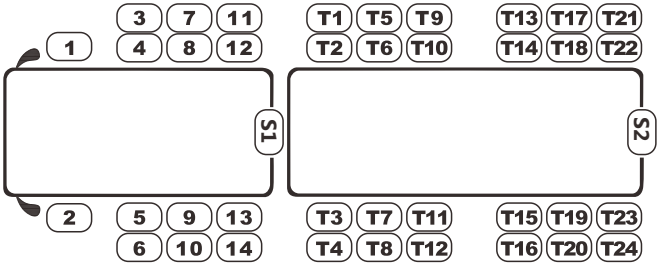
Pressure unit: BAR or PSI, user-selectable.
Temperature unit: °C or °F, user-selectable.

Icon	Description
≋	Tire
(!)	Warning
°F / °C	Temperature unit (Selectable)
BAR / PSI	Pressure unit (Selectable)
	Sensor low battery
	Display battery indicator
	Repeater active

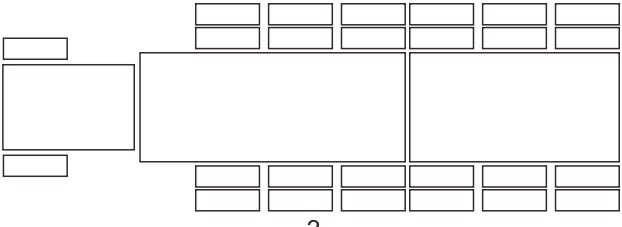
PROGRAMMING SENSOR CODES INTO THE DISPLAY

Note: Your sensors will begin reading as soon as they are coded into the display. Returning to the Main Screen by pushing the "BACK" button twice, you may hear an alarm and see a pressure reading of "0". This is "normal". Once the high/low settings are in place and set up is complete, these alarms will not sound. Simply press the (+) button quickly to silence the alarm.

Note: It is recommended to label each sensor <u>first</u> with the provided numbering code stickers, similar to the following pattern, before you code the sensors. This allows you to know which sensor is programmed to which tire position. You can also write in your sensor number pattern.



Or use your own numbering pattern:



AUTOMATIC CODE LEARNING (Option#1)

Note: Code all the sensors to the display BEFORE screwing them on to the tire valve stem unless otherwise noted.

1. Push and hold the "SET" button until it beeps. You are now in the programming mode. The "HI PRESSURE SET" parameter will blink at the bottom of the screen. Push the (+) button and scroll through the parameters until "LEARN ID" appears.
2. Quickly press and release the "SET" button. The first tire on the display will blink. If you want to program a different tire, press the (+) button to move to the correct tire. Push the "SET" button again and "FFF FFF" will flash. Touch the desired sensor for that tire position to the bottom of the display, just to the left of the TSTtruck.com web address and then press the "GO" button. The display will capture the sensor code and show it on the screen. Press and release the "SET" button to save the code to that position. When coded correctly, a six (6) digit unique code will be shown.
3. Use the (+) button to move to the next tire position you want to program. Press and release the "SET" button and "FFF FFF" will flash. Put the sensor for that tire position next to the display, as in #2 above, and press the "GO" button to capture the sensor code. Press "SET" again to save. Continue this process for each tire position/sensor.
4. When you have finished learning the codes on all sensors, pressing the "BACK" button twice will take you to the main screen. (Your sensors will begin reading "0" pressure and an alarm will sound. This is part of the normal set up process. Press the (+) button to silence the alarm while you continue your set up).

Note: To delete a single sensor code:

Press and hold the "SET" button until it beeps (approx. 3 seconds). Push the (+) button and scroll through the parameters until "LEARN ID" appears. Press and release the "SET" button. Use the (+) or (-) buttons to scroll to the tire you wish to remove. Press the "SET" button to select that tire. The sensor code will start flashing. Press and hold the "BACK" button for 3 seconds. You will hear 3 beeps. The code will change to "FFF FFF" which will be flashing. Press "SET" once. The flashing will stop and the ID code will be deleted. If you do not want to delete the code, push the "BACK" button.

Note: To delete all the tire sensor codes and start over:

To delete all the sensor codes when in the "LEARN ID" mode, press and release the "SET" button on any tire. Press and hold the "BACK" button. You will hear 3 quick beeps, a pause and then 6 beeps. "DEL ALL" will appear on the screen. Press "SET" once. "FFF FFF" will appear on the screen. All the

sensor codes and tire icons are now deleted. This does not affect the parameters set in the display. Press the "BACK" button to go to the Main Screen.

Note: When in the coding mode, the display will time-out within approximately one (1) minute if no buttons are pushed. At that point, you will have to start the coding process again.

Note: Be sure to keep the sensors you are not currently coding 2-3 feet away from the display and the sensor you are now coding.

PRESSURE CODING (option #2)

1. Be sure your sensors are numbered. Screw the sensors partly onto each valve stem in the order you numbered them. Do NOT screw them down far enough to hear air hissing out.
2. Press and hold the "SET" button until it beeps. You are now in the programming mode. The "HI PRESSURE SET" parameter will blink at the bottom of the screen. Push the (+) button and scroll through the parameters until "LEARN ID" appears.
3. Quickly press and release the "SET" button. The first tire on the display will blink. If you want to program a different tire, press the (+) button to move to the correct tire. Push the "SET" button again and "FFF FFF" will flash.
4. Tighten the sensor down on the corresponding tire valve stem. The ID code will display and flash.
5. To save the ID code setting. Press "SET" once. It will beep and the sensor code is saved.
6. To remove the ID code setting, Press "BACK" once. "FFF FFF" will re-appear. The setting will not be saved.
7. Press "BACK" twice to return to the Main Screen when done.

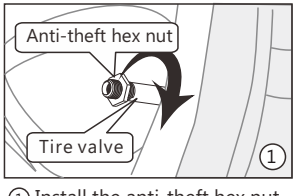
MANUAL CODING (option #3)

Note: This method is mainly used to program sensor codes from an old display to a new display if you do not have the sensors available. This method is not recommended for programming a new system.

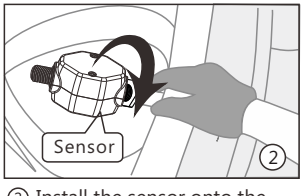
1. Push the "SET" button until it beeps. You are now in the programming mode. The "HI PRESSURE SET" parameter will blink at the bottom of the screen. Push the (+) button and scroll through the parameters until "SET ID" appears.
2. Quickly press and release the "SET" button. The first tire on the display will blink. If you want to program a different tire, press the (+) button to move to the correct tire. Push the "SET" button again and the first digit of "FFF FFF" will flash. Press the (+) button to select the correct number or letter. Press "GO" to move to the next position. Press the (+) button to change to the correct number or letter. Continue this procedure until all six digits are changed.
3. Press "SET" once to save the new codes. You will hear a beep and the code will stop flashing. Press the (+) button to move to the next tire position, if desired.
4. To stop the coding for any position, press "BACK" once. "FFF FFF" will reappear. No settings will be saved.
5. Press "BACK" twice to return to the Main Screen.

SENSOR INSTALLATION - Flow-through Sensor

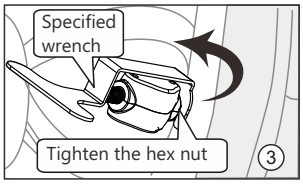
1. Screw the hex nut onto the valve stem threads until it bottoms out.
2. Screw the correctly marked sensor onto the valve stem for that tire position. Tighten the sensor until the air stops leaking and the sensor bottoms-out on the valve stem. Then give it a quarter turn more to seat it. Do Not Over Tighten!
3. Use your fingers to screw the hex nut up to the bottom of the sensor. Using the provided wrench, tighten the hex nut against the bottom of the sensor. This will prevent the sensor from being removed. Keep the wrench in a safe place for future use.
4. You can now inflate or deflate the tire through the 507FT sensor without removing it.



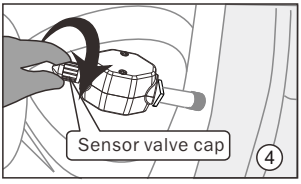
① Install the anti-theft hex nut onto the tire valve.



② Install the sensor onto the tire valve clockwise.



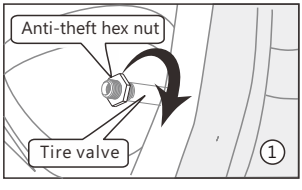
③ Tighten the anti-theft hex nut counterclockwise until the nut is tightened against the sensor.



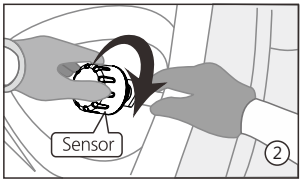
④ Install the sensor valve cap onto the sensor.

SENSOR INSTALLATION - Cap Sensor

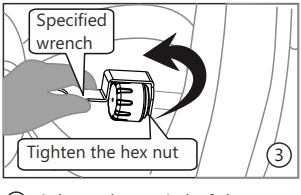
1. Screw the hex nut onto the valve stem threads until it bottoms out.
2. Screw the correctly marked sensor onto the valve stem for that tire position. Tighten the sensor until the air stops leaking and the sensor bottoms-out on the valve stem. Then give it a quarter turn more to seat it. Do Not Over Tighten!
3. Use your fingers to screw the hex nut up to the bottom of the sensor. Using the provided wrench, tighten the hex nut against the bottom of the sensor. This will prevent the sensor from being removed. Keep the wrench in a safe place for future use.
4. To inflate or deflate the tire, you must remove the cap sensor.



① Install the anti-theft hex nut onto the tire valve.



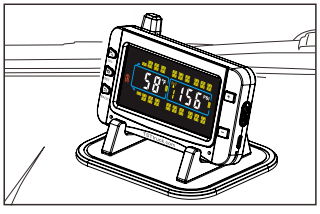
② Install the sensor onto the tire valve clockwise.

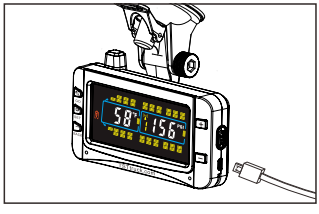


③ Tighten the anti-theft hex nut counterclockwise until the nut is tightened against the sensor.

DISPLAY INSTALLATION

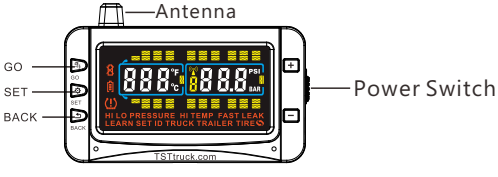
1. The provided suction cup mount can be used on the windshield, side window or directly on any smooth nonporous surface. Snap the mount into the back tabs on the display to use. Alternately, use the dash cradle to hold the display. Be sure you do not cover either hole on the displays' lower bezel with the cradle legs.
2. Plug the power cord into the vehicle's cigarette lighter/power port and then into the side of the display to charge the internal lithium battery. Charge display for four (4) hours the first time.





DISPLAY BUTTONS

- There are five (5) programming buttons on the display. They are: "GO", "SET", "BACK" on the left side of the display and (+) and (-) on the right side of the display.
- The power slide switch is located on the right side of the display. Slide it up to turn on the display. Slide it down to turn off the display.



Note: The side power switch will not turn off the display when constant power is applied to the unit.

PARAMETER SETTINGS (Setting the sensor alarms)

Note: The factory default settings are:

Pressure Unit: PSI

Temperature units: °F

High Pressure: 175 PSI

High Temperature: 158°F (70°C)

Low Pressure : 100 PSI

Note: Be sure your display is ON and it is showing the Main Screen.

PRESSURE PARAMETERS

To choose the Pressure Parameter, press and hold the "SET" button until it beeps. Press the (+) button three (3) times and "SET" will appear at the bottom of the screen and BAR/PSI will be blinking on the screen. Press the "SET" button again and then use the (+) button to select "PSI" (or "BAR"). Press "SET" again to save it. Press "BACK" to go back to the Main Screen. The default setting is PSI.

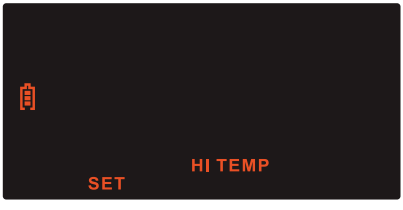
TEMPERATURE PARAMETERS

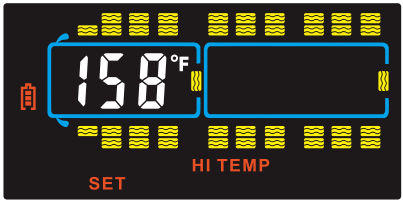
To set the Temperature Parameters (°F or °C), press and hold the "SET" button until it beeps. Press the (+) button four (4) times and "SET" will appear at the bottom of the screen and °F / °C will appear on the screen, blinking. Press the "SET" button again and then use the (+) button to select °F or °C. Press "SET" again to save it. Press "BACK" to go back to the Main Screen. The default setting is °F.

HIGH TEMPERATURE ALARM SETTINGS

To set the High Temperature Alarm, press and hold the "SET" button until it beeps. Press the (+) button twice and "HI TEMP SET" will appear. Again, press the "SET" button to enter that mode. Use the (+) or (-) buttons to adjust the High Temperature parameter, if desired. Press "SET" to save. When done press the "BACK" button.

Note: We recommend leaving this temperature setting at the default 158°F for all types of tires.

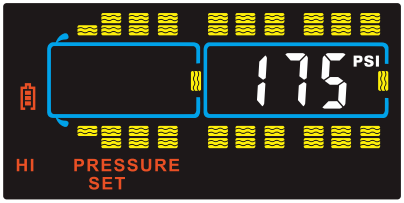




HIGH PRESSURE ALARM SETTINGS

To set up the High-pressure Alarm, press and hold the "SET" button until it beeps. "HI PRESSURE SET" will appear at the bottom of the screen. Again, press the "SET" button to enter that mode. Press the "GO" button to select the appropriate axle. Use the (+) or (-) buttons to adjust the high-pressure alarm to 20 or 25% over your normal tire pressure for that axle. Press the "GO" button to move to the next axle. When done setting each axle that you have sensors on, press the "SET" button to leave that parameter and go back to the menu. When done, press the "BACK" button to go to the Main Screen.

When you get to the Trailer section of the display, it is set up in three axle groups. See Page 14 of this manual for more information.

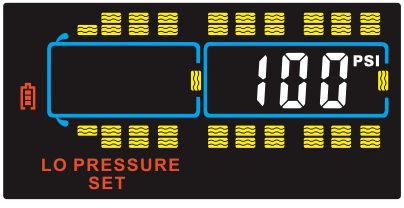


LOW PRESSURE ALARM SETTINGS

To set up the Low-pressure Alarm, press and hold the "SET" button until it beeps. Press the (+) button once and "LOW PRESSURE SET" will appear. Press the "SET" button again to enter that mode. Press the "GO" button to select the appropriate axle. Use the (+) or (-) buttons to adjust the low-pressure alarm 10% below your normal tire pressure for that axle. Press the "GO" button to move to the next axle. When you get to the trailer section of the display, all the trailer axles on that section will flash in groups of three. You can set the Low Pressure for that group. Press "GO" again to move to the next group or the next trailer. The trailer number will appear in the middle of the screen (#1 to #4). When done, press the "SET" button to save all the parameters for Low Pressure. Press the "BACK" button to return to the Main Screen.

Note: If your tire pressure is below 100 PSI, you must set the low-pressure alarms first and then, when done, set the high-pressure alarms. The high pressure cannot go below the default low pressure of 100 PSI until the low pressure is reduced.

* Follow your tire manufacturers recommended cold tire pressure setting for the actual weight on each tire of your vehicle/trailer/RV. Tire pressure data charts are available on your tire manufactures website. The low tire pressure alarm should be set approximately 10% below that setting. The weight on each individual wheel can be determined by fully loading your vehicle/Trailer/RV as it would be for a trip and having each wheel position weighed individually.



RESTORE PARAMETERS TO FACTORY DEFAULT SETTINGS

First, turn off the display. Hold the "BACK" and "SET" buttons at the same time and turn the display back on. You will hear one beep. The display will power back on and original factory parameters will be restored. Tire codes will not be erased or changed.

DISPLAY ALERTS

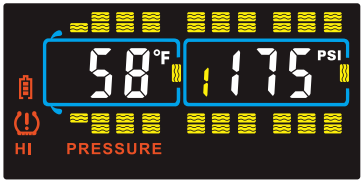
Out of Parameter Alert

The sensors send the tire pressure and temperature readings to the display every five (5) minutes. If a tire is outside of the parameters that were set, the audible alarm will sound and the red LED light will immediately flash. The tire in question, pressure or temperature for that tire, and warning type will also flash. The audible alarm can be silenced for a short while by pushing any of the buttons on the front of the display. The red warning light will continue to flash until the pressure or temperature issue is resolved and brought back into your preset levels.

High Pressure Alert

(**e.g.:** High pressure threshold is 175 PSI)

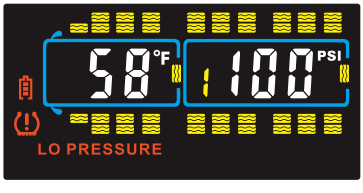
Note: <(!)>&<HI PRESSURE>displayed, the faulty tire pressure is too high, deflate the tire to the normal pressure.



Low Pressure Alert

(**e.g.:** Low pressure threshold is 100 PSI)

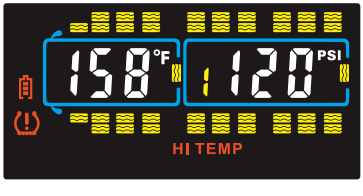
Note: <(!)>&<LO PRESSURE>displayed, the faulty tire pressure is too low, inflate the tire to the normal pressure.



High Temperature Alert

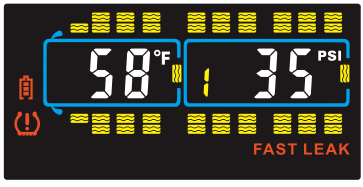
(**e.g.:** High temperature threshold is 158°F)

Note: <(!)>&<HI TEMP>displayed, the faulty tire temperature is too high, stop vehicle to cool down to the normal temperature.



Fast Leak Alert

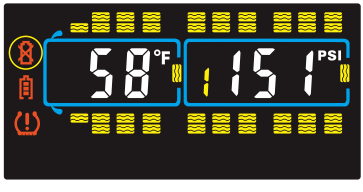
When a fast tire leak is detected, the sensor will send that data immediately to the display, The audible alarm will sound and the red LED light will immediately flash. The tire in question, pressure for that tire, and "FAST LEAK" will also flash. The audible alarm can be silenced for a short while by pushing any of the buttons on the front of the display. The red warning light will continue to flash until the pressure or temperature issue is resolved and brought back into your preset levels.



Sensor Low Battery Alert

The sensor low battery indicator will display when the sensor battery is low. The tire affected will flash along with the pressure and temperature read-out and the low battery symbol and ((!)) on the left side of the display. Replace with a new battery as soon as possible.

Note: This low battery alert will display for only a short time until the battery is exhausted. If you do not have the display on often, the indicator signal will be sent but not show on the display, since it was off. If your sensor is not reporting to the display, check the battery voltage. If it is below 2.95 volts (normally 3+ volts), you will have to change the sensor battery.



OTHER FUNCTIONS

Normal Display Scrolling

The tire icons on the display will automatically scroll/cycle through, one by one. Each tire will be displayed for approximately 5-6 seconds. You can manually cycle through the displayed tires by pushing the (+) or (-) buttons on the display. The display will show the tire you choose for approximately 10 seconds before continuing to cycle.

Backlighting and Motion Detection
The display is equipped with a light sensor and a motion sensor. The backlight will turn on when the vehicle is in motion and there is little ambient light. If the vehicle has stopped for a while and the display is on the internal battery, the display will "go to sleep" until the vehicle resumes motion.

Disconnecting and Reconnecting a Vehicle
When a towed vehicle is displayed on the screen and you want to temporarily remove it (example: leaving a trailer at a campground), momentarily press the "GO" and (-) buttons, the trailer section of the display will disappear, the sensors on the trailer will not be read. To add the trailer back onto the display, again, momentarily push the "GO" and (-) buttons and the towed vehicle will reappear.

When a towing vehicle is displayed on the screen and you want to temporarily remove it (example: leaving a truck or car at a campground and using another vehicle to move the RV), momentarily press the "GO" and (+) buttons, the truck (towing) section of the display will disappear, the sensors on the towing vehicle will not be read. To add the truck (towing) section back onto the display, again, momentarily push the "GO" and (+) buttons and the towing vehicle will reappear.

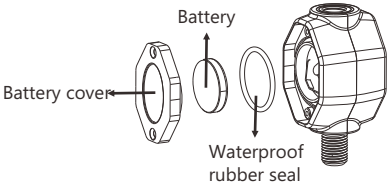
Trailer Selection
Four different trailers with sensors can be programmed into the display and each trailer can be selected to be viewed on the screen and designated by numbers 1 to 4. On the Main Screen, press the "GO" button to select different trailers and trailer wheel groups you have programmed sensors to. Note that when in the High or Low Pressure areas, pushing the "GO" button will move you through the four main axles, the front spare tire, the trailer 1 front - 3 axle group, the trailer 1 - rear axle group and spare, then to trailer 2, 3 and 4 with the same pattern. After trailer 4, the front steer axles will again highlight. Each flashing tire group on the trailer can have its own High or Low Pressure setting.

Charging the Display
The display is powered by a non-replaceable, lithium-ion battery. A battery level indicator is located on the left side of the display. When the indicator shows one bar, it is recommended you charge the display as soon as possible to avoid disruption when in use. It will take approximately four (4) hours to fully charge. Display run time is 5-7 days on a full charge.
Do not keep a fully charged display plugged in constantly.

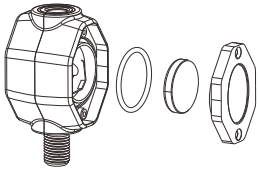
REPLACING THE FLOW-THROUGH SENSOR BATTERY (CR1632)

(1) Remove the sensor from the tire valve stem.

(2) Using a jewelers Phillip's screwdriver, remove the two screws from the battery cover on the side of the sensor. The "+" side of the battery can now be seen.



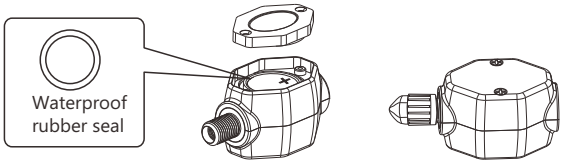
(3) Remove the CR1632 battery and check that the metal contact points in the sensor are not corroded. To clean the contact points, use a pencil easer and lightly rub the two metal battery contacts in the sensor.



(4) Install a new battery. Be sure the "+" (positive) side is facing out.

Note: It is recommended that you check the voltage of the new battery before installation. It should read 3+ volts when new. Do not install if the battery reads less than 3 volts.

(5) Check the "O" ring that surrounds the battery compartment. This is the waterproof seal. Replace if old or damaged. Additional "O" rings are provided in your 507FT kit or can be purchased from TST by calling 770-889-9102.



(6) After the new battery installation replace the battery compartment cover and snugly tighten the two screws. Do not Over Tighten.

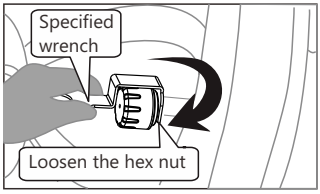
(7) Screw the sensor on to the correct tire position.

Note: Changing the battery in the sensor does NOT affect the sensor programming in the display. You will not have to reprogram the sensor into the display.

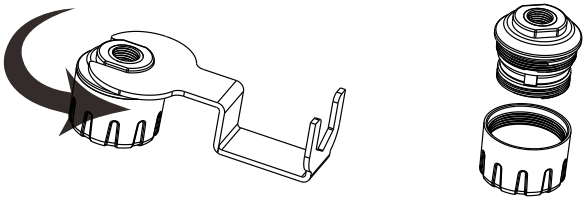
Note: When removing a stubborn battery cover screw, first tighten the screw to break it loose (you will feel a slight "pop") and then try loosening the screw.

REPLACING THE CAP SENSOR BATTERY (CR2032)

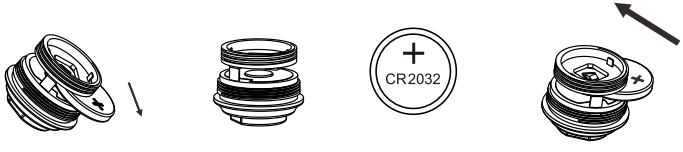
(1). Remove the sensor from the tire valve stem.



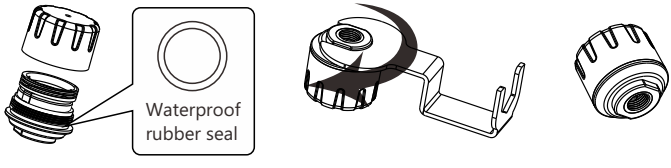
(2). Use the specified wrench to open the sensor cap counterclockwise.



(3). Slide the battery out of the cage sideways. Note that the (+) side is up. Replace with a new CR2032 battery that is 3+ volts.



(4). At this time check the "O" ring at the base of the threads. Be sure it is in place. If it is worn or broken, replace it.



ADDITIONAL FUNCTIONS

Swap Tire Sensor Positions

- Press and hold the "SET" button until the display beeps and then release.
- Press and release the (+) button 7 times until "TIRE ⟳ " appears. Press "SET".
- Use the (+) or (-) buttons to select the tire sensor code you want to swap.
- Press "SET" and then select the tire you want to swap the code to using the (+) or (-) buttons.
- Press "SET" to move the sensor code to the new tire.
- Press the "BACK" button twice to get back to the Main Screen.

Set ID Truck (Three Digit ID Identifier)

- Press and hold the "SET" button until the display beeps, then release.
- Press the (+) button 8 times until "SET ID TRUCK" appears.
- Press the "SET" button to enter that mode.
- Press "SET" again, the first digit will blink.
- Use the (+) or (-) buttons to set the first digit. Press "GO" to move to the next digit.
- Again, press the (+) or (-) buttons to select the next digit. Continue for the final (3rd) digit.
- When done, push the "SET" button to save.
- Push the "BACK" button twice to get back to the Main Screen.

Set ID Trailer (Three Digit ID Identifier)

- Press and hold the "SET" button until the display beeps, then release.
- Press the (+) button 9 times until "SET ID TRAILER" appears.
- Press the "SET" button to enter that mode.
- Press the "GO" button to select the trailer (1-4) to set the ID.
- Press "SET" again, the first digit will blink.
- Press "GO" to go to the first digit on the trailer section on the screen.
- Use the (+) or (-) button to set the 1st digit. Press "GO" to select the next digit. Continue for the final (3rd) digit.
- Press "SET" to save the 3 digit code. To select the next trailer, press the "GO" button.
- When done, press the "SET" button to save.
- Push the "BACK" button twice to get back to the Main Screen.

TROUBLESHOOTING TIPS

- Label all of your sensors with the provided stickers first so you will know which sensor goes in which tire position.
- If a sensor is not allowing air to pass through it, or if the sensor is not reading, or reading a lower pressure, try unscrewing the valve core in the valve stem slowly until you hear air leaking a little. Stop unscrewing the core and screw it back in slightly, just enough to stop the air leak. This will allow more air to get to and through the sensor. CAUTION...Do not stand in front of the valve stem when performing this procedure with a valve core tool!
- It may take up to 15 minutes for the sensor data to appear on the display the first time you set up the system. Leave the display on until all sensor data appears. After the sensor data is received the first time, subsequent system use should only take minutes to acquire the sensor information.
- Do not over tighten the sensors on the valve stems. Make sure they are snug and be sure to tighten the hex lock nut to the bottom of the sensor.
- When done programming the Parameters into the display, remember to quickly push the "SET" button to save the Parameters. Push the "BACK" button twice to go back to the Main Screen.
- If your tire pressure is under 100 PSI, you will have to program the Low-Pressure alarm first and then program the High-Pressure alarm. The high pressure cannot go lower than the low-pressure setting, which defaults to 100 PSI.
- When the display is on and reading, you can press the (+) or (-) buttons to quickly scroll through the tires on your display. The automatic scrolling function will resume after 10 seconds when no buttons are pushed.
- If your display is plugged into a constant power source, the sliding power switch on the side will not function. To turn the display off, unplug the power supply and the switch will now operate.
- To extend the life of the sensor battery, remove the sensor from the valve stem. The internal pressure switch will shut the battery off. Note that, even though the battery is off, it will still degrade with time.
- If your sensor is not transmitting data to the display, try recoding the sensor to the same tire position. See Automatic Code Learning (Option #1) on page 4.

COMMON QUESTIONS

- **What do I do if my sensor is not reading?**

1) Check the battery in the sensor. If you have a voltmeter, be sure the battery is reading over 3 volts. If not, replace with a new battery. We recommend testing a new battery as well to be sure it is above the 3-volt minimum parameter.

2) Unscrew the sensor off the valve stem and then reinstall it. The sensors are pressure sensitive and will reset once reinstalled.

3) If it still does not read, try placing a working sensor from another tire on that valve stem. Keep in mind, the sensor you just moved will continue to read in its original tire position on the display. If that sensor does not read normally, you may have a valve stem problem. Try unscrewing the valve core as described above in the Troubleshooting Tips section. If the switched sensor reads normally, it may be a sensor issue. Call 770-889-9102 or go to the TST website at www.TSTtruck.com for more troubleshooting help.

4) If your sensor is not transmitting data to the display, try recoding the sensor to the same tire position. See Automatic Code Learning (Option #1) on page 4.

- **Why does my display sometimes "drop" sensor data from a tire position?**

1) If you have a vehicle(s) that exceeds 30' in length, you may need a repeater to amplify the sensor signals from the tires to the display. This issue is not limited to the rear tires on a vehicle. An RV with a metal shell also needs a repeater. Please ensure that the repeater/signal booster that comes with your TST 507 kit has been properly connected to a positive power source and a good ground source.

2) Be aware that an indoor/outdoor thermometer with an external temperature sensor may interfere with the TST TPMS. Temporarily remove all the batteries in the display AND exterior sensor and see if the problem is corrected. A thermometer with a higher frequency (915 MHZ) may be required. Atomic clocks can also cause interference with the sensors.

- **Why does my display sometimes alarm while I am sitting still in the evening?**

  As night approaches and outdoor temperatures decrease, your tire pressures may drop below the parameters you have set, thus causing an out of spec alarm. When temperatures drop, turn your display off overnight. As the air temperature rises the next day or as you start driving, the tires will also heat up and come back into your parameters. You can also add air to your tires to bring them back into the parameters you set up.

- **Why can't I set a lower pressure than 100 PSI for the High Pressure alarm?**

  The high-pressure alarm cannot go lower than the low-pressure alarm setting. If your tire pressure settings are below 100 PSI, you must first set the low-pressure alarm settings and then set the axles' high-pressure settings. When done, be sure to press and release the "SET" button to save all the parameter settings.

- **What conditions cause the display to alarm?**

  The display will alarm for the following reasons:

  1) A rapid leak ("FAST LEAK" at bottom of screen).
  2) A low sensor battery (upper left battery icon flashes).
  3) An overheating tire, increasing the temperature ("HIGH TEMP" at bottom of screen).
  4) A high or low-pressure reading (be sure your parameters are set correctly).

  In every instance, the tire Pressure and Temperature numbers will also flash when the tire with the problem blinks.

- **How do I remove my trailer from the display screen when I am not using it?**

  To electronically disconnect the trailer tire icons from the screen:

  1) Momentarily press the "GO" and (-) buttons at the same time.
  2) The trailer section on the display will disappear.
  3) To electronically reconnect the trailer section, momentarily press the "GO" and (-) buttons again.

- **How do I remove my towing vehicle from the display screen when it is parked?**

  To electronically disconnect the towing vehicle tire icons from the screen:

  1) Momentarily press the "GO" and (+) buttons at the same time.
  2) The towing vehicle section on the display will disappear.

3) To electronically reconnect the towing vehicle section, momentarily press the "GO" and (+) buttons again.

- **How do I remove an unwanted tire icon from the display?**

1) To delete a single sensor code:

2) Press the "SET" button until it beeps (approx. 3 seconds). Push the (+) button and scroll through the parameters until "LEARN ID" appears. Press and release the "SET" button. Use the (+) or (-) buttons to scroll to the tire you wish to remove. Press the "SET" button to select that tire. It will start flashing. Press the "BACK" button until you hear 3 beeps. The code will change to "FFF FFF" which will be flashing. Press "SET" once. The flashing will stop and the ID code will be deleted. To cancel the function, press the "BACK" button. This will keep the original code.

Note: To delete all the sensor codes when in the "LEARN ID" mode, select any tire icon and press the "SET" button so the 6 digit code blinks. Press and hold the "BACK" button. You will hear 3 quick beeps, a pause and then 6 beeps. "DEL ALL" will appear on the screen. Press "SET" once. "FFF FFF" will appear on the screen. All the sensor codes and tire icons are now deleted. This does not affect the parameters set in the display. Press the "BACK" button to go to the Main Screen.

REPEATER

The repeater is used to strengthen/amplify the sensor signal forward to the display. A repeater is packaged with this system.

The repeater comes with two wires, one red (+) and one black (-). Simply tie the red wire to a positive source and black wire to a ground or negative source. The repeater is weather resistant. There is no set-up needed for the repeater.

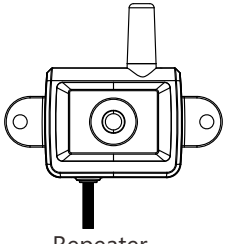
Motorhome: We recommend installing the repeater in one of the rear basement compartments where there is a 12v power source. Mount the unit inside the bay but against the outer wall. Do not put the repeater in the engine compartment because of excessive heat. Do not put the repeater in the rear closet because the metal in the mirror will block the repeaters RF signal.

5th Wheel: We recommend installing the repeater in or near the battery compartment under the front overhang. Mount it with Velcro or two-sided tape to the inner, exterior 507FT-RV WSD Manual ChangesRV wall. An alternate mounting place is on the top of the pin-box. Use industrial two-sided tape and mount the repeater on the upper slope of the pin-box. Run the positive lead to the break-away switch (which has 12v power while driving). Ground the negative lead to complete the circuit.

Travel Trailer: We recommend installing the repeater in the battery box on the front of the trailer. If the battery box is metal, hook the lines to the battery, then run the lines outside of the box and mount on the side of the battery box or the front tongue of the travel trailer.

Be sure in all cases the red indicator light is glowing and every 2-3 minutes (with the display on) the red light blinks. DO NOT push the button the red light is mounted in!

If the light is not on, check your connections, source power or the in-line fuse on the positive lead of the repeater for issues.



Repeater

SPECIFICATIONS

Sensor specifications

Temperature Operating Range	-40°F - 176°F / -40°C - 80°C
Storage Temperature Range	-40°F - 185°F / -40°C - 85°C
Pressure Range	0-196 PSI / 0-13.5 BAR
Pressure Accuracy Range	+ / -3 PSI / + / - 0.2 BAR (with a digital gauge)
Temperature Accuracy Range	+ / -3°F
Transmission Power	<10 dBm
Transmission Frequency	433.92 MHz
Approximate Battery Life	1-1.5 years
Physical Sensor Size - Flow-through	2.2'' (L) x 1" (W) X 0.9" (H) 52 (L) X 26 (W) X 23.5 (H) mm
Physical Sensor Size - Cap	0.96'' (D) x 0.91" (H) 24.4 (D) X 23.1 (H) mm
Sensor Weight - Flow - through	0.77 oz. / 22 grams
Sensor Weight - Cap	0.59 oz. / 16.8 grams

Display specifications

Temperature Operating Range	-4°F - 176°F / -20°C - 80°C
Storage Temperature Range	-22°F - 185°F / -30°C - 85°C
Charger Input Voltage	5~24V DC
Frequency	433.92 MHz
Size	4.6'' (L) x 2.99" (W) X 1.06" (D) 117(L) X 76 (W) X 27 (D) mm
Sensor Weight - Cap	4.4 oz. / 125 grams

This system is designed to monitor air pressure and temperature within the tire. It is only for added safety and not meant to replace regular tire maintenance and exercise of reasonable care when operating a motor vehicle. The system cannot prevent accidents nor will TST be responsible for damage or injury due to (a) improper use, (b) failure to follow the product instructions or to perform any preventative maintenance, (c) unauthorized repair or modifications, (d) use of products beyond their useful life, or (e) external causes such as accidents, abuse, or other actions or events beyond TST's reasonable control.

Notes:

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www.TSTtruck.com

Implementation Standard: Q/YAT001-2017