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The **TireTraker™ TT-700** is a highly sophisticated electronic device. Please take the time to read this entire manual as it will help you better understand the operation of the system.

Introduction

The **TireTraker™ TT-700** is a full time wireless electronic tire pressure monitoring system (TPMS) designed for Motorcycles to monitor and display tire pressures from 0 psi up to 72.5 psi, and also to monitor tire temperatures from 14°F to 185°F. It is capable of displaying current tire pressures and temperatures as you cruise down the road.

The **TT-700** is a monitoring system only, and will not prevent tires from losing pressure or failing. However, low pressure is the leading cause of premature tire failure and the **TT-700** can provide early notice of potential problems and assist in maintaining proper pressures in motorcycle tires.

The **TT-700** consists of two basic components: Tire Sensors (Transmitters), which screw onto the wheel valve stems, and a Monitor (Receiver) located near the vehicle operator. Sensors transmit a coded RF signal and alert if pressure drops, pressure increases or temperature increases. The Monitor displays each tire's pressure and temperature per tire position and will display an audible and visual alert if pressure or temperature changes.

When used properly, the **TT-700** will inform the operator of the tire pressures and temperatures on the motorcycle so the operator may have the opportunity to make any necessary adjustments before a serious problem occurs. Tires and valve stems should be inspected thoroughly prior to installation of the system to ensure that they are in good condition and inflated properly. It is not uncommon to find valve stems that need replacing when installing your system. **Note - Metal valve stems are highly recommended because of the additional weight of the sensor on the valve stem**.

The **TT-700** does not prevent low tire pressure, high tire pressure or high tire temperature; it alerts when the pressures or temperatures have changed, allowing action to be taken. A damaged sensor or valve can cause pressure loss. Inspect your tires regularly.

Metal valve stems are highly recommended because of the additional weight of the sensor on the valve stem.

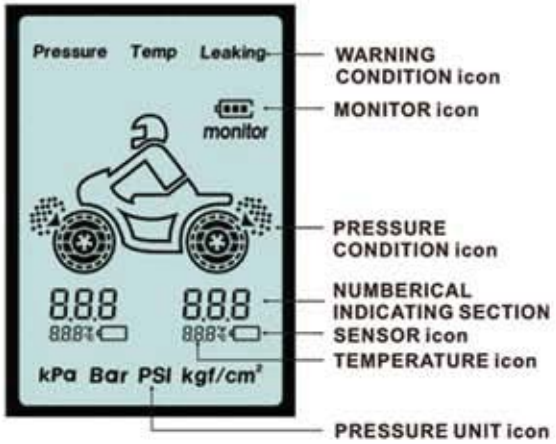
Components and General Overview

The **TT-700** TPMS consists of a wireless Monitor/Receiver that will display tire pressures from 0 psi up to 72.5 psi, and also to monitor tire temperatures from 14°F to 185°F. A sensor with an interior transmitter is programmed into the Monitor and then attached to each wheel's valve stem in sequence. Once sensors are programmed to each wheel position, the Baseline Pressures (usually that is the recommended cold tire pressures) are then programmed into the Monitor for each respective tire.

Various levels of warnings are issued for pressure changes, both under and over, high temperatures and low battery status.

The Monitor/Receiver comes precharged so you can begin programming the system immediately. It can at times become discharged during shipment. If so, simply plug it in for 30 minutes using the supplied power cord. You can also begin programming while the Monitor is connected to the power source.

The Monitor is initially programmed to measure tire pressure in 'psi' and temperature in Fahrenheit (°F). However, the **TT-700** can be modified to suit your preferences (page 16).



Monitor Power On/Off and Low Battery

Power On:

Press & Release the Center Button to turn on the Monitor. The unit will now begin to receive information from all sensors once the sensors are programmed.

The Monitor should have a minimum charge. During shipment, the battery may become discharged. Use the suppled Power Cord and charge the monitor for approximately 30 minutes to allow enough charge for programming. You may begin programming with the Monitor plugged in.

Power Off - Should Be Done Every Night:

After 15 minutes of no activity, the **Monitor** will enter **'Sleep Mode'**. It is not Fully Off. We recommend that you turn **Monitor** off completely. To turn off, **Press & Hold the Center Button** for 8-9 seconds continuously. DO NOT RELEASE after the first 'Beep'. Hold until screen goes dark.

DO NOT leave Monitor plugged in at all times. Charge for a maximum of 12 hours and then disconnect from power source

Monitor Battery Indicator:

The Monitor has a built-in Lithium-Ion rechargeable battery, which under normal circumstances may function for up to 30 days before requiring a recharge. The level of charge is displayed in the center of the screen. We recommend that you recharge the unit when only one bar is remaining. To recharge, simply use the supplied 12/24V USB car charger. A full charge will take approximately 6-8 hours.

Power Cord - Fuse:

If the **'GREEN'** light is not illuminated on the power cord, unscrew power cord tip and check fuse. Replace with 2 amp fuse if necessary.

Battery Installation - Sensors

Each tire sensor is powered by a **CR1632** Lithium Battery. We have found that these batteries are usually available at most discount Pharmacies and battery stores. If you have difficulty obtaining these, they can be purchased directly from TireTraker™.

The **CR1632** batteries should be installed prior to mounting any sensors on the vehicle(s) wheels. Under normal use, the CR1632 batteries will usually last approximately 1 year.

Installing The Batteries

1. Remove the black cap on the sensor by unscrewing the cap (counter-clockwise).
3. Slide the battery **UNDER** the metal bridge, with the positive (+) side up. The battery can only slide in from one side.
4. Continue sliding the battery in until it rests against the 2 metal tabs that are pointing down on the opposite side of the bridge.
5. Replace the black cap by screwing the cap on (clockwise).
6. Cap should be hand tight only - **DO NOT** use force to tighten cover.

Figure 1

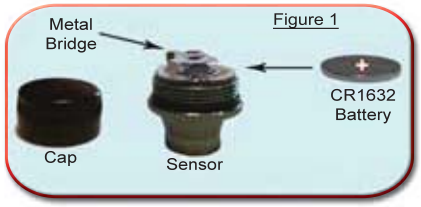
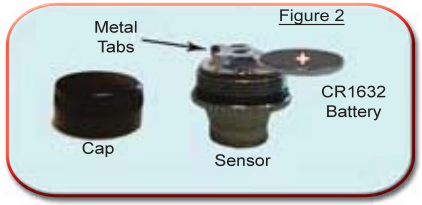
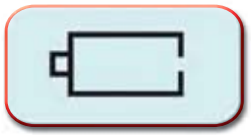


Figure 2



Low Battery Warning

When a sensor battery is low on power, an outline of a battery with **'sensor'** will appear on the Monitor. The tire position will also flash and the Monitor will 'beep' for 10 seconds. Replace battery as indicated above.



Note - It is common to see this warning when the vehicle(s) motion is stopped. This is normal because the system has entered the 'SLEEP' mode.

Sensor Locks - Theft Deterrent Devices

The **TT-700** system includes sensor locks (theft deterrent devices) designed to be installed with each of the sensors.

These sensor locks are designed to be Theft Deterrent devices only. It is your option whether you wish to use or install the sensor locks.

A small Hex Key is used to secure the sensors locks to the valve stem. For your convenience, we have included this Hex Key to aid in installing the sensor locks. Please store in a convenient location for future use.

Installing the Sensor Locks

1. Be sure all set screws are inserted into the black locking ring.
2. Slide the locking ring over the valve stem insuring that the two (2) locking tabs on the ring are facing outward.
3. Screw the sensor on the valve stem. Be sure it is only hand tightened.
4. Slide the locking ring up to the bottom of the sensor and align the two (2) locking tabs with the two (2) indents on the bottom of the sensor.
5. Tighten the 3 set screws with the supplied Hex Key.
6. To remove the sensors, simply reverse the procedure.

Figure 1

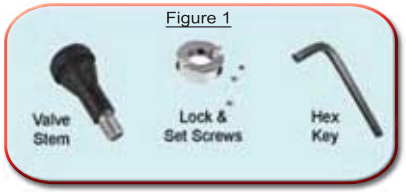


Figure 2

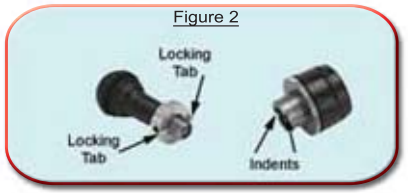
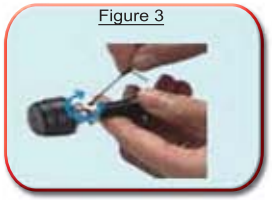


Figure 3



The Sensor Locks are not required for operation of the system. In our experience, most customers do not use the Locks, and theft has not been a major problem.

Programming and Installation - Sensors

With a **CR1632** Battery installed in each sensor, we can now begin Sensor Programming.

Each sensor has its own unique Electronic ID Signature, and once installed on each tire, will memorize the installed position in reference to the Monitor. Even with the Monitor and sensors removed, the locations will remain in memory on the Monitor.

Once sensors are programmed to a specific location, any time you remove that sensor, it should be placed back to onto its original position. If you do not, and are unsure of the sensor respective locations, you will need to follow these directions to reprogram the sensors.

Programming and Installing the Sensors

1. Turn Monitor on - **Press & Hold Top Right Button** for 5 seconds until Monitor display illuminates.
2. Once on, **Press and Hold the Left & Right Buttons** simultaneously for 5 seconds, the Monitor will “Beep’, then release both buttons. The Red Led light will be on at the top, and the Front Tire will be flashing **(Figure 1)**.
3. Install a sensor now at this position. Within 10 seconds, The **RED** Led will turn **Green**, the flashing tire will stop flashing and the current PSI and temperature for that tire will display at the top **(Figure 2)**.
4. To move to the Rear Tire, **Press Right Button** once and stop at that tire **(Figure 3)**. That position will now be flashing - The flashing indicates the tire you are currently on.
5. Install a sensor now at this position. Within 10 seconds, The **RED** Led will turn **Green**, the flashing tire will stop flashing and the current PSI and temperature for that tire will display at the top
6. Once all sensors are installed, you **MUST EXIT** the program. **Press and Hold the Left & Right Buttons** simultaneously for approximately 5-6 seconds. Monitor will revert to the monitoring mode **(Figure 4)**.

Note - The RED Led will be ‘Flashing’ after inital sensor installation. This is normal and will stop after Baseline Programming!

Programming and Installation - Sensors (continued)

Figure 1

Figure 2

Figure 3

Figure 4

Programming - Baseline Pressures

The **TT-700** allows the operator to program the baseline pressure into the Monitor, which is the Recommended Cold Tire Pressure that each tire should be inflated to**.**

The **TT-700** cannot prevent tire/wheel overload. Overloading any tire is extremely dangerous and can cause failure of any suspension component, not just tires. A vehicle should never be operated if the weight on any wheel is greater than the design specification. A correctly inflated tire can fail if overloaded.

A **Low Pressure Alarm** will alert when any tire's pressure initially drops by 15% psi below that tire's baseline pressure setting which you entered.

A **High Pressure Alarm** will alert when any tire's pressure rises by 20% psi above that tire's baseline pressure setting which you entered.

These percentages cannot be changed. However, by changing the baseline pressure settings, you can adjust the alarm to alert quicker. Example: Baseline is set at 50.0 psi - alert will occur at 42.5 psi (15% below baseline). By changing the baseline setting to 55 psi, an alert will occur at 46.8 psi (now only a 8.2 psi loss from your normal 50 psi).

Programming the Baseline Pressures

1. **Press and Hold the Center Button** for 5 seconds. You will hear a 'Beep', the Front Tire will be flashing and the default psi of 36.2 will be displayed **(Figure 1)**.
2. **Press the Left Button** to decrease the pressure setting **(Figure 2)**. **Press the Right Button** to increase the pressure setting **(Figure 3)**. Holding the buttons will cause the pressures to scroll faster (just like an Alarm Clock).
3. Once at the desired pressure, press the **Center Button** once to scroll to next position.
4. Repeat Steps 2 & 3 above for the Rear Tire.
5. Once all baseline pressures are programmed, you **MUST EXIT** the program. **Press and Hold the Center Button** for 5 seconds. Monitor will 'Beep" and revert to monitoring mode **(Figure 4)**.
6. There should now be no LED light illuminated. If there is a Red LED light, simply unscrew and remount each sensor to force an immediate update. The Red LED light should then disappear.

Programming - Baseline Pressures (continued)

Figure 1

Figure 2

Figure 3

Figure 4

Checking Pressures and Temperatures

The **TT-700** is activated by movement of the motorcycle. When motion is stopped, the system enters a 'SLEEP' mode to preserve battery life. Initially you may notice that the last pressures and temperatures recorded on the tires remain on the monitor. You may then receive a 'no5' or 'noS' (No Sensor) signal at any of the two tires. Also, the 'Low Battery Icon' may flash. These are normal occurrences as the system enters the 'SLEEP' mode **(Figure 1)**.

Figure 1

When movement is initiated again, the sensors will begin to report correct pressures and temperatures within 20 minutes**.**

If you wish to have an immediate update, unscrew each sensor and then reinstall. If signal loss continues to occur, there may be other factors causing this.

Be sure the monitor is not close to any other electronic devices, and sensor batteries (CR1632) are reading at least 3.0 volts.

Figure 2

Checking Pressures and Temperatures

The **TT-700** is continuously displays the pressure and temperature for each tire on the monitor display for quick reference. It is not necessary to push any buttons to see pressures and temperatures **(Figure 2)**.

Alarm Modes - Rapid & Quick Pressure Loss

The **TT-700** monitors tire pressures and temperatures in real time. There are multiple levels of alerts which vary in style and intensity depending on the severity of the abnormality.

Should an alert sound, it is recommended that you safely move your motorcycle to the side of the road away from traffic. Please be cautious at all times.

Rapid Air Pressure Loss Alert - Figure 1

Pressure drops by 6+ psi in less than 2 minutes off of Current Operating Pressure, NOT Baseline

Alert Description:

1. Audible 'Beep' repeatedly 15 times.
2. White LCD screen flashes & **Red** LED flashes.
3. Tire position flashes with current psi.
4. **'Leaking'** icon appears in top right corner.

Figure 1

Quick Air Pressure Loss Alert - Figure 2

Pressure drops by 6+ psi in 2-10 minutes off of Current Operating Pressure, NOT Baseline

Alert Description:

1. Intermittent audible 'Beep Beep'.
2. White LCD screen flashes & **Red** LED flashes.
3. Tire position flashes with current psi.
4. **'Leaking'** icon appears in top right corner.

Figure 2

Alarm Modes - High Temperature & High Pressure

High Temperature Alert - Stage 1

Internal Temperature reaches 167° F

Alert Description - Figure 1:

1. Intermittent 'Beep'.
2. **Red** LED flashes.
3. Tire position flashes with current temperature.
4. **'Temp'** Icon flashes at the top of display.

Figure 1

High Temperature Alert - Stage 2

Internal Temperature reaches 185° F

Alert Description - Figure 2:

1. Constant 'Beep Beep'.
2. **Red** LED flashes.
3. Tire position flashes with current temperature.
4. **'Temp'** Icon flashes at the top of display.

Figure 2

High Air Pressure Alert

Psi increases by 20% over Baseline Setting

Alert Description - Figure 3:

1. Intermittent 'Beep Beep'.
2. **Red** LED flashes.
3. Tire position flashes with current psi.
4. **'Pressure'** Icon flashes - shows pressure expanding.

Figure 3

To Turn Off Audible Alarm, Press Right or Left Button

Alarm Modes - Slow Pressure Loss

Slow Air Pressure Loss Alert - Stage 1

Psi decreases by 15% under Baseline Setting

Alert Description - Figure 1:

1. Intermittent 'Beep' every 15 sec. for 5 minutes..
2. **Red** LED flashes.
3. Tire position flashes with current psi.
4. **'Pressure'** Icon flashes and shows 75% full.

Figure 1

Slow Air Pressure Loss Alert - Stage 2

Psi decreases by 25% under Baseline Setting

Alert Description - Figure 2:

1. Intermittent 'Beep' every 15 sec. for 5 minutes..
2. **Red** LED flashes.
3. Tire position flashes with current psi..
4. **'Pressure'** Icon flashes and shows 50% full.

Figure 2

Slow Air Pressure Loss Alert - Stage 3

Psi decreases by 50% under Baseline Setting

Alert Description - Figure 3:

1. Intermittent 'Beep' every 15 sec. for 5 minutes..
2. **Red** LED flashes.
3. Tire position flashes with current psi..
4. **'Pressure'** Icon flashes and shows Empty.

Figure 3

To Turn Off Audible Alarm, Press Right or Left Button

Sensors - Deleting & Reprogramming

Sensor Delete - One or Both Sensors

1. With monitor on, **Press and Hold the Left & Right Buttons** for 5 seconds until monitor 'beeps' **(Figure 1)**.
2. **Press Right Button** until desired tire position to delete is flashing with a Green LED light at the top. A Green LED light indicates that there is a sensor programmed at that location. A Red LED light indicates that there is no sensor programmed at that location. To delete, the Green LED must turn to Red.
3. **Press & Hold the Center Button** until only **' - - - '** is displayed and LED turns Red **(Figure 2)**.
4. If replacing a sensor at this location, install it now. LED will turn GREEN and current psi will be displayed within 10 seconds **(Figure 3)**. If sensor does not program, remove for 10 seconds and try again .
5. Repeat Step 3 & 4 to delete and reprogram any additional sensors.
6. Once complete, you **MUST EXIT** the program. **Press and Hold the Left & Right Buttons** simultaneously for approximately 5-6 seconds. The monitor will now revert to monitoring mode.

Figure 1

Figure 2

Figure 3

Units of Measure - Customizing the Monitor (psi, bar, °F, °C, etc.)

The **TT-700** monitor is able to read pressures in 'PSI', 'Bar', 'kPa' and ,kgf/cm². Temperatures can be shown in degrees Fahrenheit (°F) or degrees Celsius (°C).I f you live in an area where other units of measure are used, you can reprogram the monitor to change to these units of measure. Or, if you have inadvertently reprogrammed to these units, follow the instructions below.

To Change Units of Measure

1. With the monitor on, simply **Press the Right Button** individually, and you will scroll through the different units of measure - 'kPa', 'Bar', 'PSI' and kgf/cm² **(Figure 1)**.
2 **Stop** at the desired unit of measure**.**

To Change Units of Temperature

1. With the monitor on, simply **Press the Left and Center Button** simultaneously, then release **(Figure 2)**.
2. The degrees Fahrenheit (°F) will change to degrees Celsius (°C). To return to degrees Fahrenheit (°F), **Press the Left and Center Button** simultaneously again.

Figure 1

Figure 2

FAQ's - Frequently Asked Questions (continued)

Does the Monitor need to be continuously powered by a 12 Volt plug?

The monitor should have a minimal charge upon purchase. This will allow for basic programming. However, the monitor may have accidentally discharged in transportation or during shipment. Simply plug into a 12/24V supply to charge. **DO NOT** keep the monitor plugged in, and **DO NOT** permanently wire the monitor directly to a power source. Keeping the monitor on a continuous charge will shorten the monitor battery life. After initial programming, you should charge the monitor for a maximum of 8 hours only. Monitor will operate for approximately 20-30 days before needing a recharge.

What is the Sleep Mode?

After no motion for 15 minutes, the system enters 'Sleep Mode', saving system power. When system 'awakes', the last shown readings will be displayed. Once motion begins, the system will update with current readings. If you wish to have an immediate update, simply unscrew each sensor and reinstall.

What if I need new O-rings, Caps or Gaskets?

O-rings: Under each sensor cap is a rubber O-ring designed to form a seal. The cap should be tightened very lightly, not over-torqued so as not to tear the O-rings. Most problems occur when the cap is screwed on too tightly. Contact us for replacements.

Caps: Check periodically for cracks and breakage. Caps should not be rubbing against any wheel or other surface to prevent damage. Contact us for replacements.

Sensor Seals: Seals are to prevent air leakage between the valve stem and the sensor. Again, lightly tighten the sensor (do not over-torque) to the valve stem to prevent damage to this gasket. Contact us for replacements.

Will the Monitor store the settings if turned off for an extended time?

The monitor will store the 'Baseline Pressure Settings' and 'Sensor Location Information'. No reprogramming is necessary.

What if I remove the Sensors while my vehicle is in storage?

Once setup, the sensors are programmed to each respective tire location. Once removed, it is recommended that the sensors be marked with some type of identification so you will know the position to reinstall.

TireTraker™ TT-700 Motorcycle System

FAQ's - Frequently Asked Questions (continued)

Why does my manual gauge show different pressures than the TT-500?

The **TT-700** is designed to alert the motorcycle operator of changes in pressure or temperature. It is not designed to replace a quality pressure gauge. No TPMS and no reasonably priced tire gauge is 100% accurate. It is important that they are reasonably close and relatively consistent. Many customers choose to rely on their pressure gauge to set and maintain the pressures in their tires, which is totally acceptable It is important to understand that the TPMS will warn you of deviations by a percentage from the Baseline Pressures.

What If I need to change the Baseline Pressure Setting for any tires?

Enter the 'Baseline Pressure Setting' mode (Page 9), and adjust the pressures for the tires desired. The monitor will update to the new settings in about 20 minutes. If you wish to have an immediate update, simply unscrew each sensor and reinstall.

What If I need to change or add a Sensor?

Once the sensors are programmed to their initial position, you must first delete the sensor(s) from its original position (Page 15), and reprogram to a new position. Be sure to adjust the 'Baseline Pressure Settings' if necessary.

What happens when I remove Sensors to inflate or check tire pressures?

When you remove a sensor and adjust the pressure, the monitor will update and display the new pressure reading once the sensor has been reinstalled. No reprogramming is necessary.

Where can I buy replacement CR1632 sensor batteries?

We have found that the best prices and availability are at the discount Pharmacy stores (Walgreen's, Rite-Aid, etc). You can also order directly from us at www.tiretraker.com.

What should I do if an alarm is indicated?

If possible, move the motorcycle to the side of the road immediately. Determine the cause of the alarm. Professional assistance may be required.

Are metal valve stems required?

Metal stems are Highly Recommended. Most valve stem failures occur due to rubber valve stems, and we recommend metal stems in place of rubber stems.

Technical Specifications

Sensor/Transmitter

Dimensions (W x H x D)	0.8” x 0.8” x 0.9“
Weight	0.5 oz
Battery Voltage	3 Volt DC (CR1632)
Battery Life	1 Year
Standby Current	500 nA
Working Current	6 mA
Pressure Range	0 psi to 72.5 psi
Pressure Precision	+/- 2.7%
Temperature Range	-4° F to 185° F
Temperature Precision	+/- 4° F
Signal Transmitting Frequency	433.92 MHz
Operating Distance	Up to 65’

Metal valve stems are highly recommended because of the additional weight of the sensor on the valve stem.

Monitor/Receiver

Dimensions (W x H x D)	2.17” x 3.22” x 0.91“
Battery Life (avg. 4 hrs per day)	Up to 30 days
Standby Current	0.1 mA
Working Current	15 mA
Working Voltage	3 Volt DC
Working Temperature	-4° F to 140° F
Signal Receiving Frequency	433.92 MHz
Power Cord - Input Voltage	12/24 VDC

Product Components

Name	Quantity
Sensor	2 pieces
Monitor	1 each
Mounting Bracket	1 each
12/24V Charger (2 amp fuse in tip)	1 each
Anti-Theft Locking Collars with Allen Wrench	1 set
CR1632 Lithium Battery	2 pieces
User Manual	1 Book

The TT-700 is a device for displaying tire pressures and temperatures, and displaying an alert for changing conditions. As with all devices that use RF signals, the signal can be interrupted. The TT-700 has been designed to work optimally to overcome interference that can block signals.

Warranty

LIMITED ONE YEAR WARRANTY

Subject to the limitations and exclusions set forth in this Limited One Year Warranty, the **TireTraker™ TT-700** system is warranted against defects in materials or workmanship that result in a product failure under normal use during the warranty period following the date of purchase by the original end-user. This Limited One Year Warranty applies only to claims made by the original end-user and cannot be assigned, transferred or conveyed to any subsequent users. The exclusive remedy for any product determined by **TireTraker™ TPMS** to be defective within such period shall, at the sole option of **TireTraker™ TPMS,** be the repair or replacement of such defective product or the refund of the purchase price therefore. No other remedy shall be available.

EXCLUSIONS FROM COVERAGE

This Limited One Year Warranty does not apply to any claims arising from misuse, abuse, unauthorized repair or alteration, circumstances where the **TireTraker™ TT-700** system is improperly installed contrary to the **TireTraker™ TT-700** system instructions; or damage of defect attributable to fire or other casualty, including, without limitation, acts of God or exposure to abrasive or corrosive materials or pollutants, or attributable to collision or other accidents upon which the **TireTraker™ TT-700** system is installed.

LIMITATIONS

This Limited One Year Warranty is expressly in lieu of all other express or implied warranties, including without limitation, the implied warranty of merchantability and the implied warranty of fitness for a particular purpose, and all other obligations or liabilities on the part of **TireTraker™ TPMS.** This Limited One Year Warranty specifically excludes all incidental, special or consequential damages. In no event, and for no cause whatsoever, shall **TireTraker™ TPMS** have any liability to any party in excess of the original purchase price of the product in question. Your dated sales receipt will act as proof of warranty coverage, and the warranty will expire at the conclusion of the established warranty period.

Warranty (continued)

EXCLUSIVE AGREEMENT

This Limited One Year Warranty is a complete and exclusive statement of the warranties which apply to the **TireTraker™ TT-700** system. There are no express or implied warranties beyond those expressly stated above. No employee, agent, dealer or other person is authorized to give any warranties on behalf of **TireTraker™ TPMS,** except as authorized in writing.

STATUTE OF LIMITATIONS

In purchasing the **TireTraker™ TT-700** system, you agree that any action for breach of contract or warranty must be commenced within the specified warranty period.

PROCEDURE

Products determined to be defective within the terms of this Limited One Year Warranty should be returned to **TireTraker™ TPMS,** transportation prepaid. Contact **TireTraker™ TPMS** for return authorization. No unauthorized returns shall be accepted. Sender is responsible for all costs incurred in the removal or reinstallation and shipping of the returned product. A copy of the sales receipt from the point of purchase must accompany the returned product.

APPLICABLE LAW

The internal laws of the State of Texas, USA shall govern this Limited One Year Warranty, and the exclusive venue for any dispute in connection with the purchase or use of the product shall be the state and federal courts of general jurisdiction located in the State of Texas, USA.

For Warranty Return Authorization, Contact;
TireTraker™ TPMS
866-200-9773
info@tiretraker.com

Please register your system at **www.tiretraker.com**
to confirm Warranty coverage