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PRODUCT INFORMATION BULLETIN

DATE ISSUED		PIB #
02/27/2013	SETTING PROPER TIRE PRESSURES AND UNDERSTANDING WARNINGS	36

YEAR / BRAND / TYPE / MODEL #

The intent of this Product Information Bulletin is to inform you of the procedure in setting proper tire pressures and to verify and resolve Trip Tek tire pressure warnings.

These warnings include pressure deviation and lost signal alerts.

Product Information

Please review the attached information from our supplier Core Tronics.

TIRE PRESSURE WARNING PROCEDURE

Trip Tek 2635

Valor

01/14/13

Please be aware:

New units will arrive to the selling dealership with the tire air pressures set to the Max cold PSI.

- Please note that the purchasers will need to load their unit as they will be traveling in the coach, weigh the unit to find each axle weight, and set the tire air pressure to the recommended air pressures per axle for optimal tire wear and ride performance.

Tire Pressure Warning Procedure

TripTek 2635

Valor

1/14/13

This procedure is to verify and resolve TripTek tire pressure warnings. Warnings include Pressure Deviation Alert and Lost Signal Alert.



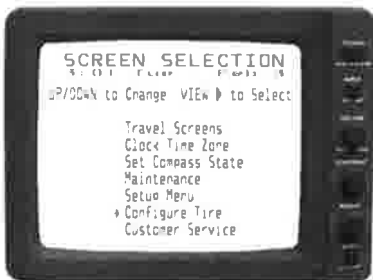
Turn ignition on to display TripTek tire data.

Press **RESET** key to clear "CAUTION" screen.

2635 should be displayed at the top of the "CHECK LIST" screen.

Using the up **△** or down **▽** key in the "CHECK LIST" screen move arrow to Screen Selection.

Press **VIEW** **▶** key to display "SCREEN SELECTION" screen.



Press **SCREEN** key until picture displayed has a white background and black text.

Using the up **△** or down **▽** keys move arrow to Configure Tire.

Press **VIEW** **▶** key to display "CONFIG TIRE" screen.



Using the up **△** or down **▽** keys move arrow to Check Alert Log.

Press **VIEW** **▶** key to display "TIRE LOG" screen.



Look at the first two lines listed under DATA.

The first line should display Error Noted if the **RESET** was activated after the warning.

The second line should display the warning the operator received.

The first letters will specify tire location:

PLF = Primary Vehicle, Left Side, Front Tire

After verifying the warning received press **◀ VIEW** key to return to "CONFIG TIRE" screen

Date/Time: MM/DD/YY/HH:MM time zone, e.g.
12/10/04 12:34 pst

Data:

Use this chart to decipher data in "TIRE LOG".

Vehicle/Tire XYZ (X = Vehicle, YZ = Tire position)

X = P for primary vehicle

T for tow 1

2 for tow 2

3 for tow 3

Y = L for left side

R for right side

1 for front drive

2 for second drive

3 for third drive

Z = F for front

O for outside drive

I for inside drive

T for tag axle

A for left outside drive

B for left inside drive

C for right inside drive

D for right outside drive

M for middle axle

R for rear axle



Vehicle/Axle XA (X = Vehicle, A = Axle)

A = 1 for front axle

2 for 2nd axle

3 for 3rd axle

4 for 4th axle

Alerts: Low psi XXX = Low Pressure Alert @ XXX

Temp. XXX°F = High Temperature Alert

Dev. ± XXX = Pressure Deviation Alert

Fast PSI Drop = Fast Pressure Drop

Programmed: Set CIP XXX = Programmed Cold Inflation Pressure

Set PRES XXX = Programmed Low Pressure

Set TEMP XXX = Programmed High Temperature

Set DEV±XXX = Programmed Pressure Deviation

Set SLP XXX = Programmed Slope Setting

Errors: Signal lost = Not Receiving Signal from Tire

Error Noted = Operator has acknowledged error

RECV DISCONNECT = Receiver Disconnected

SYSTEM DVcCLKS = Check w/ Coretronics, Inc.

VEHICLE LcCTF

RUNTIME BadBit

CLOCK cCZX

LOGVcCI

CONFIG cCB

ERR QUEUE cCDF

TIRE LOG DATA EXAMPLES:

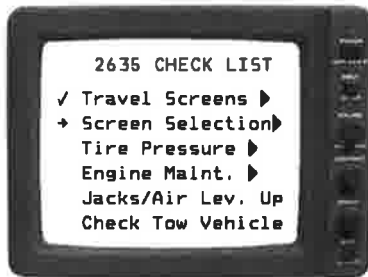
TRR Signal Lost = Towed #1, Right Side, Rear Axle – Not Receiving Signal from Tire.

PLF Low PSI 97 = Primary Vehicle, Left Side, Front Tire – Low Pressure Alert, 97 PSI

P2 Set Temp 200 = Primary Vehicle, Second Axle – Programmed High Temperature for 200°F

T1 Set Pres 35 = Towed #1, Front Axle – Programmed Low Pressure for 35 PSI

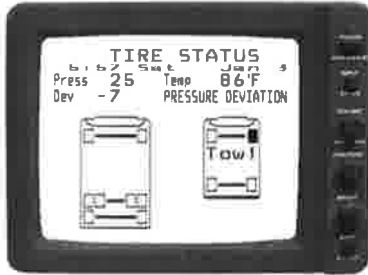
For Pressure Deviation Alert



From "2635 CHECK LIST" screen (reference above)

Using the up Δ or down ∇ key in the "CHECK LIST" screen move arrow to Travel Screens.

Press VIEW \blacktriangleright key to display Travel Screens.



Press VIEW \blacktriangleright key to move through screens to "TIRE STATUS" screen.

Using the up Δ or down ∇ keys move cursor to tire location noted in "TIRE LOG".

Tire should display deviation equal to or greater then preprogrammed deviation alert level.

Check all tires, noting the deviation value. Then check actual tire pressure with hand held tire gauge and change actual pressure utilizing deviation value.

For Signal Lost Alert

From "CONFIG TIRE" screen (reference above)



Using the up Δ or down ∇ keys move arrow to Add/Edit Vehicle Configuration.

Press VIEW \blacktriangleright key to display "VEHICLE SELECTION" screen.



Press VIEW \blacktriangleright key to select Primary vehicle.

Press RESET key to accept and move to "SELECT LAYOUT" screen.

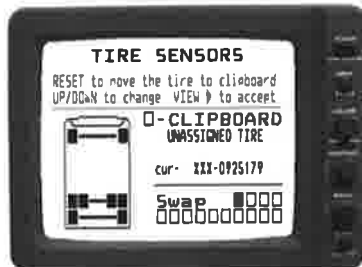


Press VIEW \blacktriangleright key to accept.



All parameters for the operation of the tire system should be complete.

Press **RESET** to accept.



If all tires on pictured coach is blackened in then sensors have been programmed to each tire and continue on to next step.

Press **VIEW** key to accept and continue on to "CONFIG TIRE" screen.

If some or all tires are white then go to the manual reference "Programming Tire Sensor Locations" below.



Using the up **▲** or down **▼** keys move arrow to Check Signal Strength.

Note: If Check Signal Strength is not displayed on "CONFIG TIRE" screen press the following keys in sequence to display line: **RESET**, **DOWN**, **UP**, **DOWN**, **RESET**, press **L+R VIEW** together and release together.

Press **VIEW** key to display "TIRE RECEPTION" screen.



Using the up **▲** and or down **▼** key move to tire demonstrating signal lost.

Look at value after Strength to determine status of tire sensor.

Note: Strength value is updated every 5 minutes.

The maximum signal strength that is possible is 10.

If strength is between 5 and 10 antenna and sensor is good

If strength is between 1 and 5 sensor is good but antenna placement or sensor location relative to antenna is questionable.

If strength is 0 either sensor is bad or antenna is not transmitting signal.

KEYS:

Using the up **▲** and or down **▼** keys will let you scroll through the tires and there signal strength data. The currently selected tire is the one that is blinking..

Pressing the left **◀ VIEW** key will exit the "TIRE RECEPTION" screen.

Pressing the **RESET** key will reset the tire reception screen.

Pressing the **SCREEN** key will change the currently selected parameter. The current parameter is the data item which is blinking. When a parameter is selected, Strength, Average Strength, & S (total of all received signals), each of the bar graphs within the tires of the vehicle will represent the relative strength of the selected parameter. There are 7 possible graduations (from 0 to 6 bars) within the miniature graphs. They are mapped as follows:



Screen Data Items

Strength: (from the last data cycle). This data parameter is not saved at power down. With ignition on this number is reset every 5 minutes with values from 0 to 10. Tires with good reception will occasionally get poor signal strength transmission depending on wheel position of the vehicle during the transmission.

Average Signal Strength: This parameter is the average of every signal strength value for a given tire since the last reset.

Time: (first number). Count down to next data cycle period. This is in the minutes:seconds format. A new transmission cycle resets this timer to 5 minutes. The time is accurate to the nearest 7.5 second boundary.

Time: (second number). Time since the last reset. This parameter is in the hour:minutes format and gives an indication of how long the screen has been running.

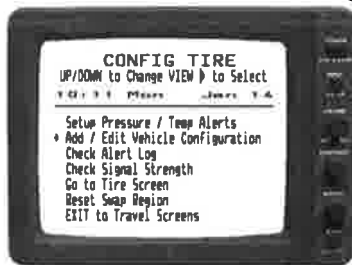
S/T: Total of all received signals/Number of data cycles received since the last reset.

Overflow indicator: (to the right of T data). When 'ovr' appears TireTek has accumulated as much data as it can. Future transmissions will not affect Average Strength, S and T.



Dotted Tire: Adotted tire indicates no new signal strength data is available for this tire.

Bar Graph Tire: Tires for which data exists have a small bar graph contained within them. This represents the currently selected parameter, Strength, Average Strength, And Total of All Received Signals.

Programming Tire Warning Screens



From "CONFIG TIRE" screen (reference above)

Using the up  or down  keys move arrow to Setup Pressure/Temp Alert.

Press VIEW  key to display "Cold Inflate PSI" screen.

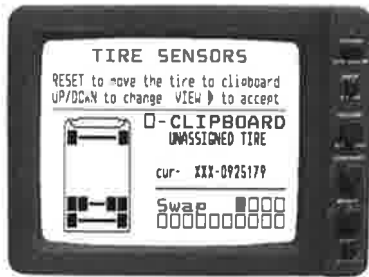


Press SCREEN key to scroll through appropriate screens.

Press VIEW key to move to desired axle.

Press the up  or down  keys to change the value.

Replacing a Wheel Sensor



From "CONFIG TIRE" screen move to Reset Swap Region.

Press **VIEW** ► to accept. Follow instructions to reset swap region..

From "TIRE SENSOR" screen (reference above)

After replacing the wheel sensor the new sensor will be stored in the SWAP region of this screen. Verify sensor numbers documented during sensor installation by matching numbers in SWAP region.

Use the up **▲** or down **▼** keys to move cursor through screen to verify the sensor number has been received and is within the SWAP region.

CLIPBOARD should show a blank tire. If it is filled move the cursor to a blank tire within the swap area and press **RESET**.

With up **▲** or down **▼** keys move cursor to the tire location to be changed.

Press **RESET** to move old sensor from tire location on vehicle to the CLIPBOARD.

With up **▲** or down **▼** keys move cursor to a blank space (tire) in SWAP region.

Press **RESET** to move old sensor from CLIPBOARD to SWAP region.

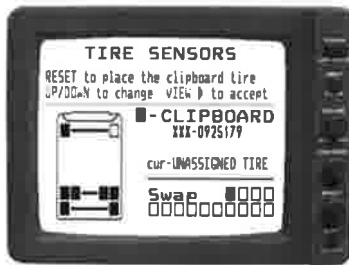
With up **▲** or down **▼** keys move cursor to the new wheel sensor in SWAP region.

Press **RESET** to move new sensor from SWAP region to CLIPBOARD.

With up **▲** or down **▼** keys move cursor to the blank tire on vehicle to be changed.

Press **RESET** to move new sensor from CLIPBOARD to vehicle location.

Press **VIEW** ► to accept.



Programming Tire Sensor Locations

From "TIRE SENSOR" screen (reference above)

With up **▲** and down **▼** keys move cursor to choose appropriate tire sensor within SWAP area. The selected tire will be blinking.

Press **RESET** to move chosen sensor from SWAP region to the CLIPBOARD

With up **▲** and down **▼** keys move cursor to chosen tire on vehicle.

Press **RESET** to move wheel sensor from CLIPBOARD to chosen tire on vehicle.

Continue on with this process until all wheel sensors that are mounted on this vehicle have been transferred from the SWAP region to the appropriate on-screen tire locations.

After all wheel sensors have been successfully transferred to the appropriate tires on the displayed vehicle (all tires are filled in solid), press the **VIEW** ► key to accept.



Cold Inflation Pressure

This function changes the cold inflation pressure for each axle. Cold inflation pressure is the recommended tire pressure at 65°F.

Factory default 100 PSI (Primary vehicle), 30 PSI (Towed vehicles).

Vehicles should be weighed by axle to determine recommended tire pressure by the tire manufacturer.



Programming Steps:

Press SCREEN key to select “COLD INFLATION PRESSURE” screen.

Press VIEW key to scroll to the desired axle. The tires of the selected axle are filled in.

Press the up Δ or down ∇ key to change the value.

Repeat the last two program steps until Cold Inflation Pressure levels are set for all axles as desired.

Press SCREEN key to select next parameter

or

Press RESET to accept and exit.

Cold Inflation Pressure Readings

Tire manufacturers never recommend inflating a tire less than the specified cold inflation pressure. The beads of a commercial tire can unseat if its pressure gets too low resulting in a catastrophic tire failure. The general rule of thumb is to inflate a tire to a pressure proportionately higher than the cold inflation pressure (CIP) value when the ambient tire temperature is hotter than 65°F (18°C) and to the recommended CIP value at temperatures below 65°F.

High Temperature Alert

This function changes the high-temperature alert threshold.

Factory default 194°F (Primary vehicle), 176°F (Towed vehicles)

Note: These values have been selected based on tire manufacturers recommendations and user should only change them to match more up to date manufacturers recommendations.

Programming Steps:

Press SCREEN key to select “HIGH TEMPERATURE ALERT” screen.

Press VIEW key to scroll to the desired axle. The tires of the selected axle are filled in.

Press the up Δ or down ∇ key to change the value.

Repeat the last two program steps until High Temperature Alert levels are set for all axles as desired.

Press SCREEN key to select next parameter

or

Press RESET to accept and exit.



Low Pressure Alert

This function changes the low-pressure alert threshold for each axle.



Factory default 90 PSI (Primary vehicle), 25 PSI (Tow vehicle).

Recommend 15 PSI below Cold Inflation Pressure for primary vehicle (high pressure) and 10 PSI below Cold Inflation Pressure for towed vehicles (low pressure).

Programming Steps:

Press SCREEN key to select "LOW PRESSURE ALERT" screen.

Press VIEW key to scroll to the desired axle. The tires of the selected axle are filled in.

Press the up Δ or down ∇ key to change the value.

Repeat the last two program steps until Low Pressure Alert levels are set for all axles as desired.

Press SCREEN key to select next parameter
or
Press RESET to accept and exit.

Pressure Deviation Alert

This function sets the pressure deviation alert threshold for each axle.

Factory default ± 10 PSI (Primary vehicle), ± 5 PSI (Towed vehicles).

Programming Steps:

Press SCREEN key to select "PRESSURE DEVIATION ALERT" screen.

Press VIEW key to scroll to the desired axle. The tires of the selected axle are filled in.

Press the up Δ or down ∇ key to change the value.

Repeat the last two program steps until Pressure Deviation Alert levels are set for all axles as desired.

Press SCREEN key to select next parameter.
or
Press RESET to accept and exit.



Temperature Compensated Pressure Readings

An important feature of the TripTek® system is that pressure deviation alerts are initiated from a comparison of the temperature compensated pressure to the measured tire pressure read by the sensor.

The "cold inflation pressure" is the air pressure inside the tire inflated at room temperature (64°F) to the vehicle manufacturer's recommendation. When a tire heats up, the air pressure inside the tire can also be expected to increase. For example, a pressure of 34 PSI at 64°F may increase to 39 PSI. at 120°F. Both "required" pressure readings are correct at their respective temperatures.

Deviation from the required pressure (at any temperature) can be read on the "TIRE STATUS" screen.

Set Pressure Slope

The computer establishes a slope for each axle that is derived from the COLD INFLATION PRESSURE values set by the user. If you want to improve the accuracy of pressure deviation at temperature, continue on with this process. Once started, any attempt to bypass this process could greatly affect the accuracy of pressure deviation.

The slope is a value corresponding to the rate of pressure change due to temperature change for a particular tire. This value affects the calculation to determine pressure deviation. The tire type, size and pressure range also affects the slope value. The computer calculates the slope required for a typical tire by utilizing the programmed “Cold Inflation Pressure” (reference above). To improve the deviation accuracy, a slope value will need to be established. With the appropriate “Cold Inflation Pressure” programmed for each axle and the tires filled to that exact desired pressure, the operator will be able to set the slope for each axle.

Programming Steps:

Program COLD INFLATION PRESSURE for all axles.

If tire temperature is within $\pm 10^{\circ}\text{F}$ of 65°F inflate all tires to match preprogrammed cold inflation pressure. If tire temperature is greater then the $\pm 10^{\circ}\text{F}$, then utilize the deviation pressure to set tire pressure.



Press SCREEN key to select “SET PRESS SLOPE” screen.

Set slope to zero (0) for all axles.

With tires at ambient (outside) temperature, start driving or towing the vehicle to be programmed until all tires get up to normal running temperature.

With tires at normal running temperature (aprox. 2 plus hours at speed), pull over and park vehicle. If an adjusted value is not displayed at right of axle continue driving until adjusted slope is displayed.

Press VIEW  key to scroll to the desired axle. The tires of the selected axle will be filled in.

Press the up  or down  key to change slope value to match adjusted value displayed at right of axle. The adjusted value is calculated by the computer as the slope which is expected to give the best accuracy.

Repeat the last two program steps until the slope is set for all axles as displayed.

Press RESET to accept and exit.

Note: To verify the accuracy of this process, tires should be checked for proper inflation pressure at ambient (outside) temperature both at the beginning and after cool down. The outside (ambient) temperature for both initial check and then cool down should be within a few degrees. This will verify that tires have retained their initial set pressure.

