CT62

TIRE INSIGHT

BUS TPMS RETROFIT KIT

TIGHTEN YOUR SAFETY

- 6-wheel Display
- Real Time Tire Pressure & Temperature Monitoring
- Vehicle Battery Power Detection
- Tire Monitoring Pressure Value Up to 203 psi
- Active Alarm
- Steel Strip For Sensor Fixing

Bus TPMS Retrofit Kit User Manual CT62 (VS-68R001-CUEN-T)

1. Warning

1.1 Federal Communication Commission Interference Statement:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

1.2 Product Warning:

1.2.1 Do not operate a TPMS receiver while driving. The company is exempt from all consequences because of driver's careless and improper operation.

1.2.2 The system adopts the wireless transmission of signals. In some special circumstances, interference or erroneous methods of operation or installation method errors may cause weaker signal or its inability to receive signals. If the insulation adhesive sticker of the windshield contains metal material, it will be likely to affect reception conditions. If the tire pressure and temperature readings on the TPMS receiver are displayed as ---, this condition represents the receiver cannot receive signals emitted by the sensors. Drive the vehicle away from the current location (nearby there may be signal interference) or drive the vehicle to a tire shop to check.

1.2.3 If the battery status of the TPMS sensors inside the tire is low, shows "Lo" on the receiver display (because abnormal conditions continue to occur, the battery may make the TPMS sensors continuously emit signals to warn the driver, so that battery life is shorter than the normal life), Please go as soon as possible to the specified service stations to confirm whether the TPMS Sensors need to be replaced.

1.2.4 Temporary resealing or re-inflation products containing internal sealants or propellants in any tire assembly may adversely affect the operation of the sensor/transmitter. The product manufacturer does not assume any liability as a result of these.

1.2.5 Do not leave the sensors in contact with chemicals, it may cause the sensors to fail.

1.2.6 The TPMS needs to be installed by qualified personnel in accordance with the installation manual in order for the TPMS warranty to be valid. If the TPMS sensor is improperly installed or disassembled causing damage to the sensors, the warranty will not cover this type of damage.

2. Product Parts List

NO	Item	Quantity
1	Sensor	6
2	Steel Strip (1680 mm)	6
3	Tire Pressure Monitoring Receiver	1
4	Cigarette Lighter Cable (Vin=12~24V)	1
5	User Manual	1
6	Suction Cup Holder	1
7	Cable Tie	25
8	Screw	4
9	Extended Antenna	2
10	One-for-two connector	1

3. Product Specifications

- Applied Vehicle Type: Bus with 4 or 6 wheels
- Receiver Specification

Item	Specification
Operating Voltage	12V-24V DC ⎓
Operating Current	120mA
Operating Frequency	433MHz
Operating Temperature	-20℃~85℃ (-4℉~185℉)
Storage Temperature	-40℃~85℃ (-40℉~185℉)
Monitored Pressure Range	0~203±1.5 psi (0~1400±10 kPa)
Monitored Temperature Range	-40℃~125℃±3℃ (-40℉~257℉±5.4℉)
Size	116.5 x 53 x 25 mm (4.5" x2.1" x1")
Weight	95g (3.4 Oz)

Note: for kPa as pressure unit, it shows "HI" on the display screen if pressure value is over 999kPa. It shows the value normally for psi, Bar unit.

4. TPM Sensor Installation

4.1 Sensor Assembly Process

Fig 1. Take the tire away from the rim.

Fig 2. Get the steel strip through the gap on the bottom of the sensor holder, and wrap the strip around the inner area of the rim, alight the screw head with the end of the other side.

Fig 3. Cut off the extra length of the strip with tool if necessary, and insert the open end into the gap underneath the screw head.

Fig 4. Move the sensor near the valve area and hold it in place, use torque screw driver (4 Nm) to tight the strip.

Note: after completing installation, do the balance adjustment on the machine if necessary, to avoid shaking on driving.

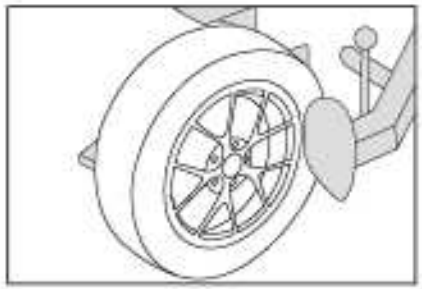


Fig.1

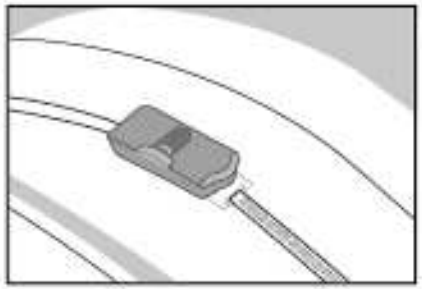


Fig.2

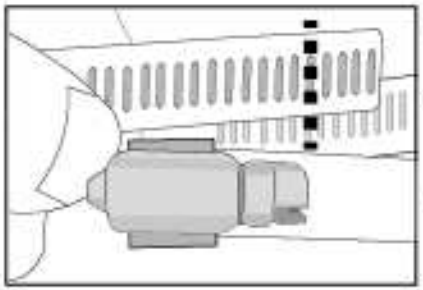


Fig.3

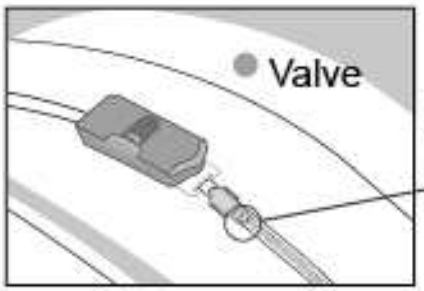


Fig.4

5. TPMS Receiver Installation

5.1 Receiver Appearance

5.2 Installation Steps

5.2.1 Secure the one-for-two connector to the opposite connector on the backside of the receiver with torque 1 kg.cm.

5.2.2 Combine the TPMS receiver with the suction cup holder, adjust to the proper angle and adsorb it on the windshield.

5.2.3 Insert the power cable into the bottom of the receiver. Insert the cigarette lighter side of the power cable into the cigarette lighter socket to supply power.

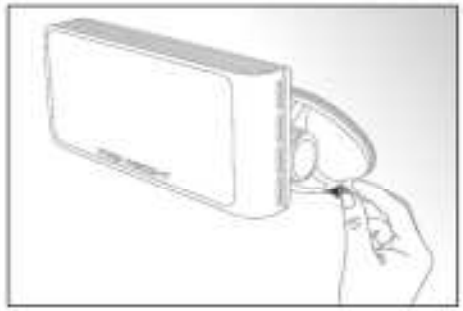


Fig.1

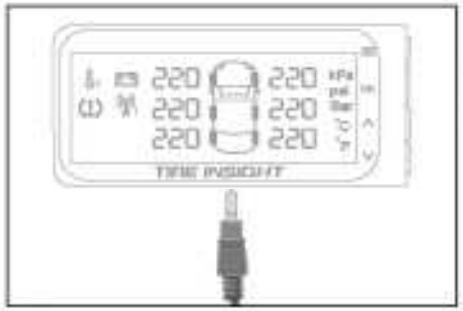


Fig.2

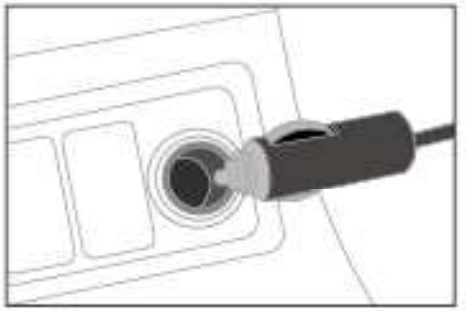


Fig.3

5.3 Antenna Installation

1. Install the short antenna in the area around the front axle, the place of installation is suggested to be at the middle of the bus chassis at the bottom. Use cable ties to attach the antenna body to the plastic covers of the cable harnesses, do not fix it onto the metallic surfaces to ensure good signal receiving conditions. Take the loose end of the antenna along the cable harnesses, insert it into the driving cabin at the dashboard to connect with the receiver monitor. Use cable ties to fix the antenna cable with the cable harnesses to avoid swinging.

Fig 1. The antenna is tied to cable harness.

2. Find an area in front of the rear axle at the bottom of the chassis for the second antenna fixation, it is suggested to be at the middle of the chassis, 2m away from the rear axle. Attach it onto the chassis, use a self-driving screw to secure it (see the Fig 2). The antenna surface faces down, the long edge of the antenna body must be positioned parallel to the bus longitudinal axis, keep the area beneath the antenna clean, avoid shielding by steel beams or protection net of the cable harnesses (see Fig. 4). If it is inevitable to have object shielding, slightly move the antenna location, but keep it close to the middle of the bottom of the chassis as much as possible. Take the other end of the antenna into the driving cabin as it was done for the short antenna.
   Stretch the antenna cable and fix it on the bottom of the chassis, and avoid it getting twisted.

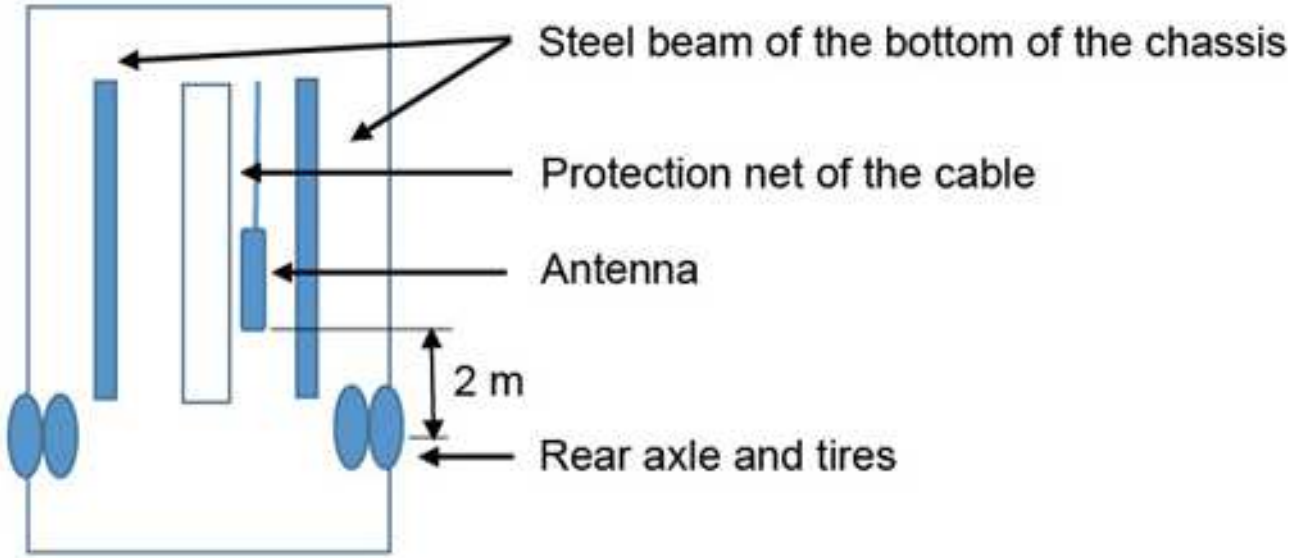


Fig 2. Antenna installation location on the rear axle

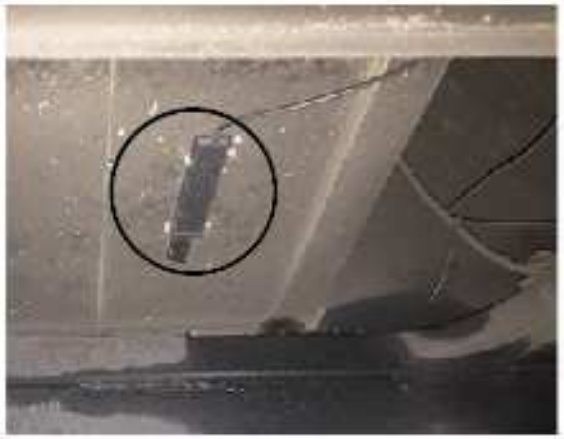
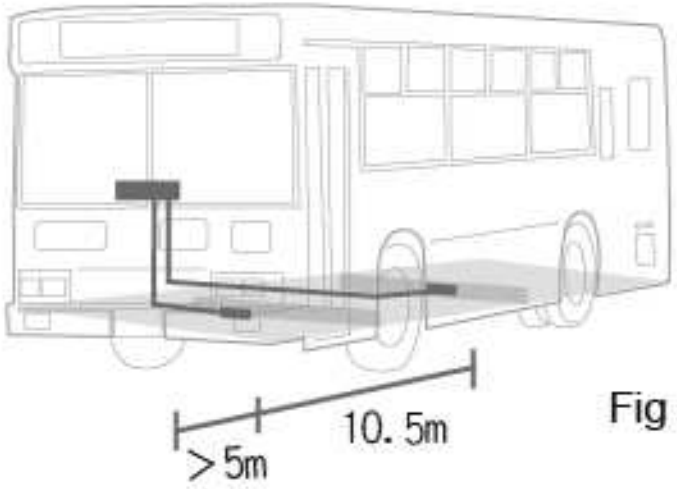
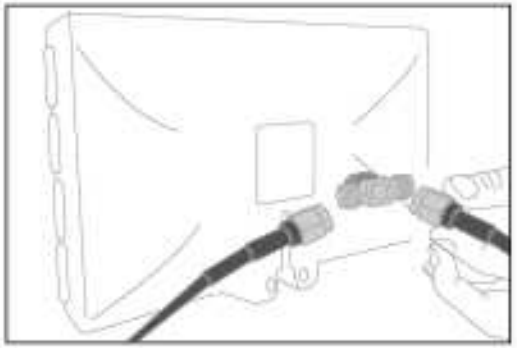


Fig 3. Antenna fixed on the bottom of the chassis.

Fig 4. Antenna is fixed and avoid shielding from beams and protection net.

3.Connect both ends of short and long antennas to the one-for-two connector on the back of the receiver, and tighten it with 1 kg.cm torque with the torque wrench.





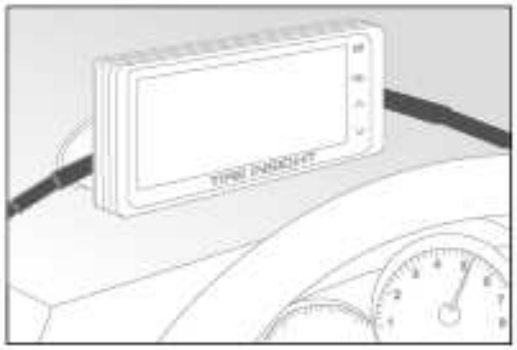
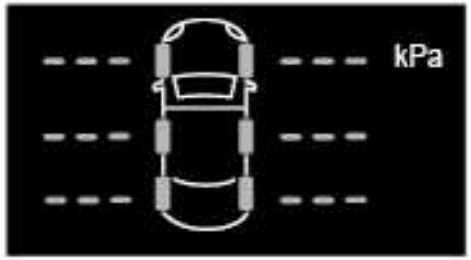


Fig 5. Antenna location and connection with the receiver.

6 Driving Mode



Operating Instruction:

The screen displays tire pressure and tire temperature in rotation under Driving Mode when the power is on. (Rotate every 5 seconds)

6.1 Tire pressure Display: kPa (Pressure units)

During the Driving mode, the default value for tire pressure is set to 120psi.

Press ≡ to limit the screen displays Tire Pressure only.

If you would like to change units, make changes under Setting mode to choose

6.2 Tire Temperature Display : ℃ (Temperature units)

The default value for temperature is set as 80℃

Press ≡ to limit the screen displays Tire Temperature only.

If you would like to change units, make changes under Setting mode to choose.

Pressure units	Default tire pressure value
psi	120
Bar	8. 3
kPa	827

Temperature units	Default tire temperature value
℃	80
°F	176

6. 3 Volume Adjustment

During the Driving Mode, press ^ v to adjust the volume.

6. 4 Mute Alarm

When an alarm occurs，press OK to mute it. Unless a new abnormal condition occurs or other tires issue a warning, the alarm sound will continue. Alternatively, restart the receiver to mute it.

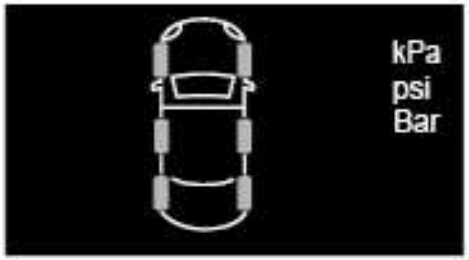
6.5 Screen OFF

Hold OK for 3 seconds to turn off the screen (it will go into sleep mode).

6.6 Screen ON

Press any button to wake the LED display, It will also be lit when a tire alarm appears.

7. Setting mode



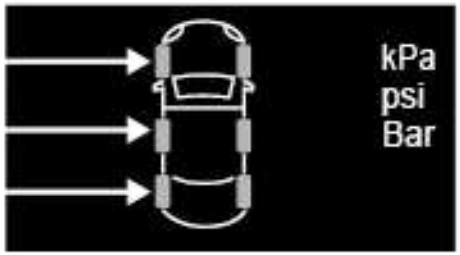
(Press ^ to show the functions below; Press v to go back to the last step.)

1. Tire pressure unit setting
2. Tire temperature unit setting
3. Axle number setting
4. ID Learning
5. Tire Position Rotation Setting

Hold ≡ for 3 seconds to switch back to the Driving mode during the Setting Mode.

7.1 Tire Pressure Unit Setting

1. (LF - Left Front & RF – Right Front)
2. (LR - Left outer & RR – Right outer)
3. (LT - Left inner & RT – Right inner)



7.1.1 The screen will show shows “kPa” “psi” and “Bar” by default.

7.1.2 Press OK then the units will blink, now press ^ v to select desired unit, then press OK to confirm. You will have 60 seconds to make the changes; if no changes are made within that period, the receiver will beep to warn that the settings have not been completed.

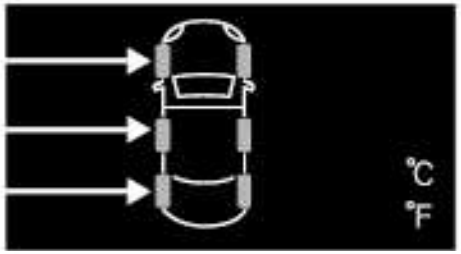
7.1.3 Adjust the desired tire pressure value for each set of tires, press ^ v to increase or decrease.

7.1.4 Press OK once the pressure is set to the desired value.

7.1.5 When you have completed the settings for all tires, you will hear three short beeps indicating that the changes have been saved successfully.

7.2 Tire Temperature Unit Setting:

1. (LF - Left Front & RF – Right Front)
2. (LR - Left outer & RR – Right outer)
3. (LT - Left inner & RT – Right inner)



7.2.1 The screen will show " ℃ " and " °F " by default.
7.2.2 Press OK then the units will blink, now press ^ v to select desired unit, then press OK to confirm.
7.2.3 Adjust to the desired tire temperature value for each set of tires, press ^ v to increase or decrease.
7.2.4 Press OK once the temperature is set to the desired value.
7.2.5 When you have completed the settings for all tires, you will hear three short beeps indicating that the changes have been saved successfully.

7.3. Axle number setting

7.3.1 The screen will show the default axle number.
7.3.2 Press OK and the numbers will start flashing.

【6-Wheel】

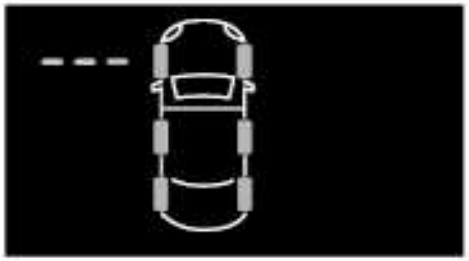
【4-Wheel】

7.3.3 Press ^ v to select the number of axles, and then press OK to confirm.
Pressing ^ will increase one axle.
Pressing v will decrease one axle.
7.3.4 Finally, press OK and the receiver will beep, indicating that the setting has been saved. The receiver will automatically go to the next step.

7.4 ID Learning

7.4.1 The screen will show "---" at the Left Front tire by default.

【6-Wheel】



7.4.2 Press OK and the display " --- "will start blinking for ID learning. Each tire will have 120 seconds to complete the ID learning after the blinking starts. The receiver will emit a long beep and go back to the ID Learning Mode if it doesn't receive any signal from tire deflation within 120 seconds.

7.4.3 Deflate the corresponding tire, the receiver will beep when receiving the signal; the ID learn setting is finished when the screen shows the sensor's ID number.

7.4.4 Press ✓ for the next tire ID learning

6-Wheel:

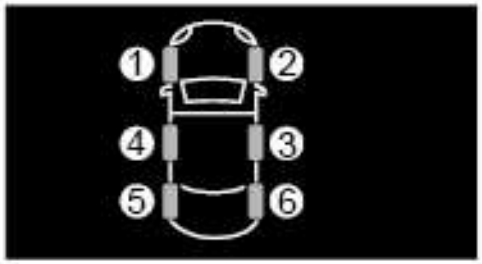
(LF->Left Front, RF->Right Front, RR->Right Outer, LR->Left Outer, TL->Left Inner, TR->Right Inner)

7.4.5 After completing the ID learning for all tires, press .

7.5 Tire Position Rotation Setting

7.5.1 The tire position display will be shown.

【6-Wheel】



7.5.2 Press OK to enter tire position rotation mode, digit 1 at the LF position will blink by default. Then press ^ v to select the original tire position which needs to be changed and then press OK again, and the digit at that selected position will turn green. If no change is made in this mode for 60 seconds, the receiver will beep to warn that setting has not been completed successfully.

7.5.3 Then press ^ v to select the new position to which you want to move the previously selected position, and press OK to confirm, the digit at the new position will also turn green.

7.5.4 The digits at both exchanged positions will remain displayed in green for 3 seconds to show which 2 tires are exchanged. Then they will automatically turn back to red.

7.5.5 Then the screen shows the new positions, if you need to exchange more than one pair of tires, press OK to repeat the procedure.

8. Abnormal Warning and Symbol Illustration

When the TPMS sensor transmits an abnormal signal to the receiver, a warning symbol will be displayed and a continuous beep will be emitted as an alarm. The abnormal value is shown on the corresponding tire on the receiver.

1. **Warning of excessive high tire pressure** indicates tire pressure has been risen to 50% or more of the standard tire pressure value set by the user.
2. **Warning of excessive low tire pressure** indicates that the tire pressure has decreased by 20% or more of the standard tire pressure value set by the user.
3. **Warning of excessive tire temperature** indicates that the tire temperature has risen over the standard tire temperature value set by the user.
4. Climate change could be a factor for tire pressure change, please go to a service shop to do pressure adjustments, in order to avoid the occurrence of false alarms.

Alarm	Definition	Symbol	Alarm Sound
Low Pressure	P ≦ (0.8*standard Pressure value)		Beep (per second)
High Pressure	P ≦ (1.5*standard Pressure value)		Beep (per second)
High Temperature	T ≧ (standard temperature value)		Beep (per second)
TPMS System Alarm	No signal receiving at least 10 minutes. Not activated when vehicle is stopped.		None
TPMS Sensor Low Battery Power	Sensor battery is in low battery power status	"Lo"	Beep (per second)
Low Vehicle Battery	Vehicle Battery Voltage ≦ 11.5V		None

9. Troubleshooting

Issue	Probable Causes	Solution
ID learn failed (TPMS alarm with a long beep in rapid deflation learning setting)	• Wireless signal interference • Tire air Pressure not deflated enough	• Move receiver to another area • Keep deflating the tires for 20~30 seconds
Pressure anomaly warning (TPMS alarm with short beeps)	• Low Tire Pressure	• Please inflate the tires to the correct pressure to prevent an erroneous alarm
No signal received (Screen shows the pressure and the temperature as "---")	• Signal interference. • Vehicle has stopped or moves too slowly • Sensor is damaged or low battery power	• Move the tow vehicle away from the current area. • Keep driving for a few minutes, make tires rotate to capture signals. • Go to a qualified service shop for installation of a new sensor on your wheel.

In the event of any questions and inquiries about warranty, you may contact your local dealer or CUB directly.

Thank you for your support by purchasing TIRE INSIGHT tire pressure monitoring system products. We wish you a safe drive!

TIRE INSIGHT

www.cubautoparts.com