

User Guide

AUTODIAGNOS™ TPMS SE TOOL

1. SPECIFICATIONS

Battery Type:	Rechargeable Lithium-Ion
Battery Life:	Approximately 300 activations per full charge.
Dimensions (Max. L,W,D):	7.9" x 4.7" x 1.6" (20.0 cm x 12.0 cm x 4.0 cm).
Case Material:	High Impact ABS.
Response Frequency:	Main frequencies: 315 MHz and 433.92 MHz (supporting most specific frequencies).
Low Battery Indication:	LCD bar graph display.
Weight :	1.37 lbs.
Temperature:	Operating: -4°F to 131°F (-20°C to +55°C). Storage: -40°F to 140°F (-40°C to +60°C).
Operating Altitude:	Up to 6560 ft (2000 m).



Product content:

- TPMS SE Tool
- USB cable
- Charger with Universal Adapters
- OBD Quick Connect Cable
- Quickstart Guide

2. IMPORTANT SAFETY INSTRUCTIONS

Do not discard. Retain for future reference.

This device complies with:

- Part 15 of the FCC Rules (FCC ID: 2ABSJ-VT46)
- CE / CEM standards
- ROHS standards

Operation is subject to the following two conditions:

1. This device will not cause harmful interference, and
2. This device will accept any interference received, including interference that may cause undesired or improper operation.

WARNING: This product emits electromagnetic and electronically generated waves that may interfere with the safe operation of **pacemakers**.

Individuals that have pacemakers should never use this product.



WARNING:



Do not use on live electrical circuits.

Please read instructions before use.

Wear safety goggles. (User and bystanders).

Risk of entanglement.

Read the Warranty, Safety and recycling information at the end of this user guide.

3. CAUTIONS

PLEASE READ THESE INSTRUCTIONS BEFORE USE

Your Tire Pressure Monitoring (TPM) tool has been designed to be durable, safe, and reliable when properly used.

All **TPMS TOOLS** are intended for use only by qualified and trained automotive technicians or in a light industrial repair shop environment. Please read all instructions below before use. Always follow these safety instructions. If you have any questions pertaining to the safe or reliable use of this tool, please call your local dealer.

1. Read All Instructions

All warnings on the tool and in this manual should be adhered to. All operating instructions should be followed.

2. Retain Instructions

The safety and operating instructions should be retained for future reference.

3. Heed Warnings

Users and bystanders must wear safety goggles and must-read instructions before use. Do not use on live electrical circuits, risk of entanglement.

4. Cleaning

Clean with a soft dry cloth, or if necessary, a soft damp cloth. Do not use any harsh chemical solvents such as acetone, thinner, brake cleaner, alcohol, etc. as this may damage the plastic surface.

5. Water & Moisture

Do not use this tool where contact or immersion in water is a possibility. Never spill liquid of any kind onto the tool.

6. Storage

Do not use or store the tool in an area where it is exposed to direct sunlight or excessive moisture.

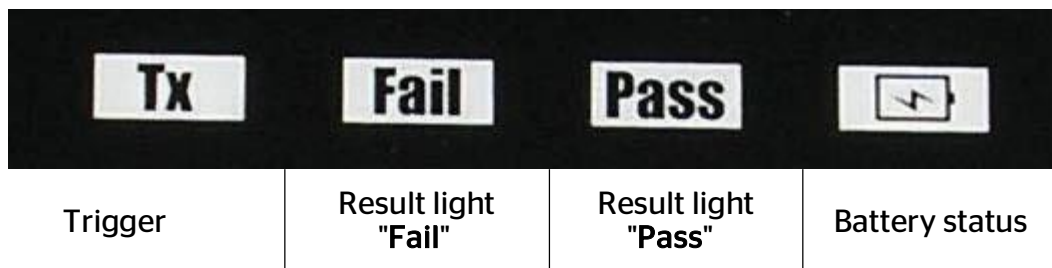
7. Usage

To reduce the risk of fire, do not operate the tool in the vicinity of open containers or flammable liquids. Do not use if the potential for explosive gas or vapors exists. Keep the tool away from heat generating sources. Do not operate the tool with the battery cover removed.

4. TOOL OVERVIEW











4.1. LIGHTS

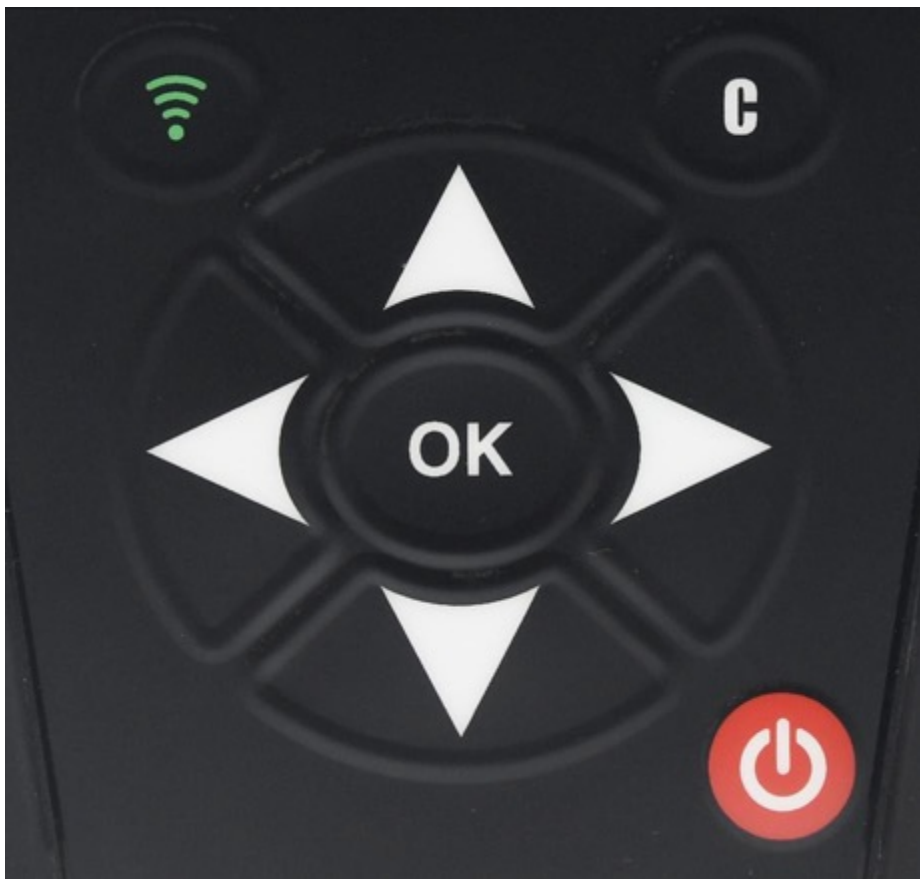


4.2. CONNECTORS




5. FUNCTION KEYS

 <p>Power ON/OFF switch</p>	 <p>Test or trigger sensor.</p>
 <p>Next, continue or confirm.</p>	 <p>Cancel, previous step.</p>
 <p>Navigate to select "up".</p>	 <p>Navigate to select "down".</p>
 <p>Navigate to select "left".</p>	 <p>Navigate to select "right".</p>



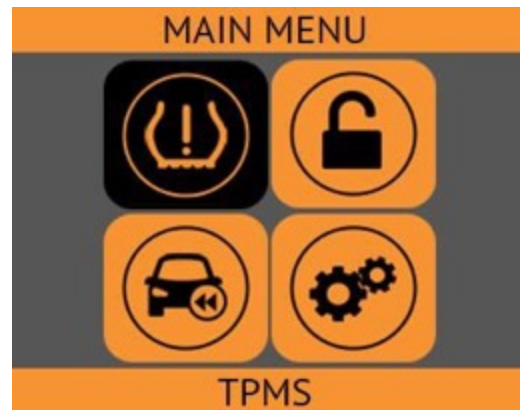
6. POWER ON

Press  to turn on device,

The tool will display the boot logo.



The **MAIN MENU** will then be displayed



7. OPERATING INSTRUCTIONS

7.1. TPMS TOOL OVERVIEW

Note: With most vehicles, when the vehicle is in “learn mode” the vehicle will also confirm that the TPM sensor has communicated with the ECM with a series of horn chirps.

Recommended Vehicle Service Procedure

Read Sensor Test

Before servicing the tires/wheels using the TPMS TOOL, trigger each of the vehicle’s tire pressure sensors to make sure they are working properly.

This will eliminate accountability associated with replacing previously damaged or defective sensors. Triggering sensors will not change the vehicle settings because the vehicle has yet to be put into learn/retraining mode.

Triggering sensors allows damaged or defective sensors to be identified. Some vehicles do not report a damaged or defective sensor condition on the instrument cluster for up to 20 minutes.

Note: If the sensors do not trigger, please refer to the Troubleshooting section of this Guide.

For vehicles that require relearning, please see Section 2.0 below

Learning TPMS Systems

With the vehicle in learn mode, begin by triggering the driver’s front left (LF) wheel sensor.

Note: Many vehicles will provide an audible beep confirming that the sensor ID has been learned by the vehicle on board computer.

The communication between the sensor and the on-board TPM module will also be confirmed on LCD display of the TOOL by showing the sensor ID

Trigger all wheel sensors in a clockwise rotation, until all the vehicle sensors have been retrained. (RF then RR, ending with LR)

After triggering the driver’s rear wheel sensor, some vehicles horns will chirp twice, indicating that the TPM system has been relearned.

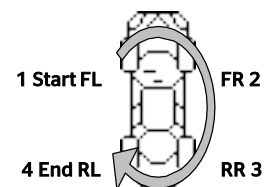


Fig. 5

For vehicles that do not require relearning we recommend you trigger each wheel sensor, one final time, to make sure they are working correctly prior to releasing the vehicle to the customer.

REDI UNLOCK

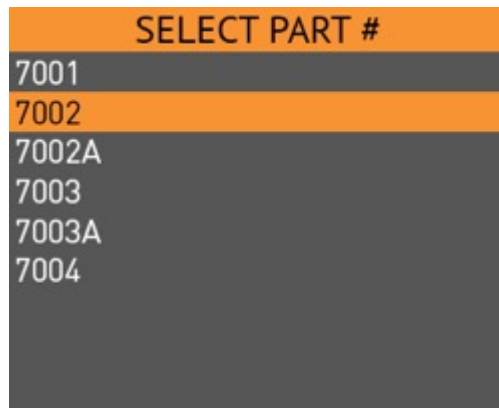
Select REDI Unlock.



Select Part Number



= Continue

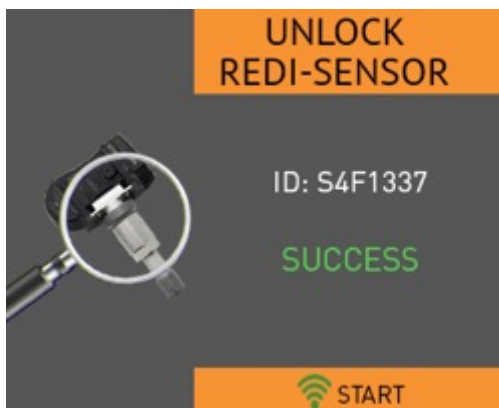


While holding the sensor above the tool's antenna, press the trigger button to unlock



= Unlock

Once unlocked, the REDI Sensor is now ready for use

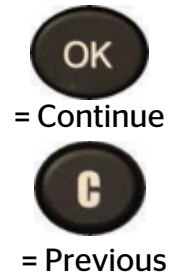
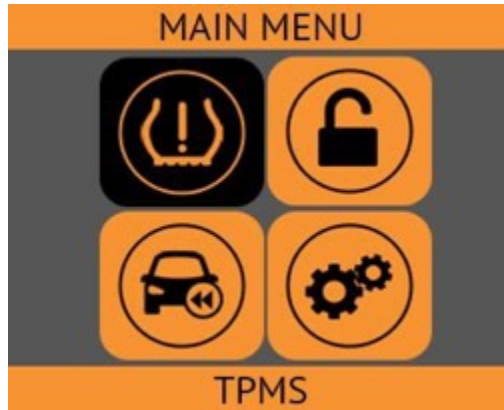


TPMS

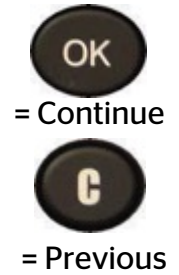
IMPORTANT:

Vehicle specific information in this manual is used as an example and may not represent specific instructions a specific make and model may require. When performing various functions with the tool, it is important to refer to the on-screen prompts and/or repair manual information.

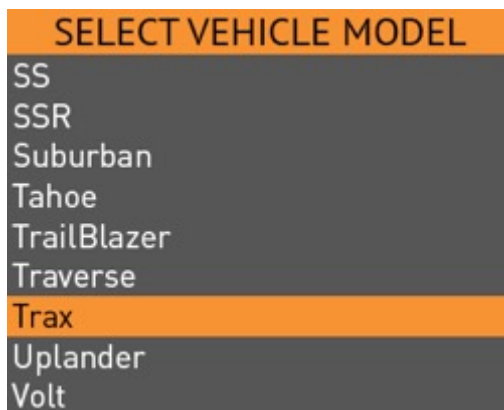
1. TPMS



1.1. SELECT CAR MANUFACTURER



1.2. SELECT CAR MODEL



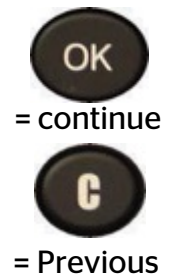
1.3. SELECT YEAR






1.4. SERVICE

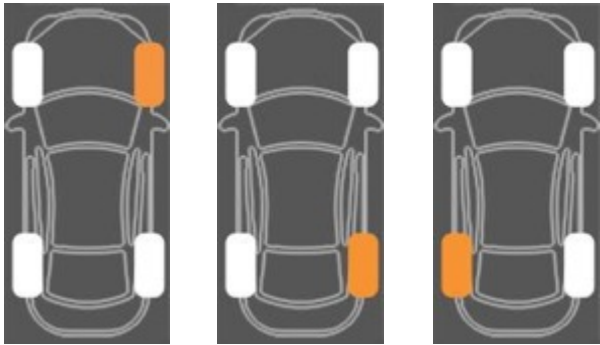




Select Service






To change selected tire

 **RIGHT FRONT**
 **RIGHT REAR**
 **LEFT REAR**
 Trigger all wheels.



 = Continue  = Previous

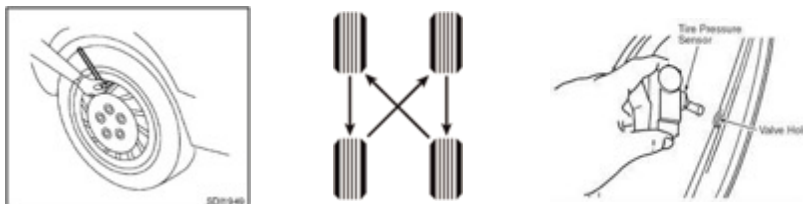
 **Pass**
 **Pass**
 **Pass**

Possible Reasons that the tool does not detect a sensor:

1. Tool Antenna is not positioned correctly on the tire
2. Sensor battery has expired
3. Wrong sensor part number was installed
4. Technician has removed sensor from the tire
5. Aftermarket sensor was not programmed with tool
6. Indirect system works off ABS wheel sensor speed

2. SERVICE TPMS

Servicing TPM System to ensure the dash light is not illuminated maybe required when adding air, rotating tires, or replacing a sensor.



Servicing may require the use of the TPMS trigger tool and a device to access the OBDII Port. Two methods are shown

1. TPMS tool w/optional OBDII Module
2. TPMS tool with an existing diagnostic scan tool.

This section details how to relearn sensors to the ECU.



Select "SERVICE"



= continue



= Previous



Select "Relearn"



= continue



= Previous



Select either Manual or OBDII.



= continue



= Previous

2.1 SERVICE TPMS

MANUAL OR STATIONARY RELEARN SYSTEMS

Use Tool and follow instructions on the screen.

MANUAL RELEARN

- OBDII dongle is not required
- Confirm TPMS sensors are properly installed
- Adjust tire pressures to placard value
- Apply parking brake
- Turn vehicle to ON/RUN
- Use the MENU button to choose

▼ **C** BACK OK NEXT

MANUAL RELEARN

the Vehicle info menu in the DIC

- Scroll thumbwheel until Tire Pressure is displayed
- Push and hold SET/CLR button
- Push SET/CLR button to select YES
- Horn chirps 2x DIC displays TIRE LEARNING ACTIVE

▼ ▲ **C** BACK OK NEXT

MANUAL RELEARN

- Use tool to activate LF sensor
- Single horn sounds
- Repeat for RF/RR/LR
- Horn chirps 2x for relearn complete

TIP: Lowering driver's side window may help to complete this process on larger vehicles.

▼ ▲ **C** BACK OK NEXT

2.2 SERVICE TPMS (OBDII)

OBDII RELEARN



1. Start left front wheel and trigger sensor

→ **11ACE57**
31.4 PSI
315 MHz



2. Next right front wheel and trigger the sensor

→ **11AC923**
31.1 PSI
315 MHz



3. Next right rear wheel and trigger the sensor

→ **11AD0FA**
30.4 PSI
315 MHz



4. Next left rear wheel and trigger the sensor

→ **F198d**
37.6 PSI
315 MHz



5. OBDII



6. Examples of 5th Wheel (spare tire) option depending on the make/model/year; Toyota RAV 4, Tundra, Land Rover, and many Jeeps. Visually inspect the spare, test sensor with TPMS tool, or reference the VIN number with new car dealer. Relearn will fail if spare ID number is not registered; a DTC code may be set.

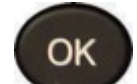
3. PROGRAM SENSOR

This section is to recover a sensor ID in order to enter it in the spare blank sensor. If the "old" sensor can be read, use the "COPY" function to recover the ID. If it cannot be read, use the "CREATE" function to create a randomized ID.

This section details how to relearn the sensor to the ECU with the OBD-II port or to have the part # lookup for all the sensors available for the vehicle.



Select "PROGRAM" menu.

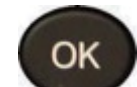
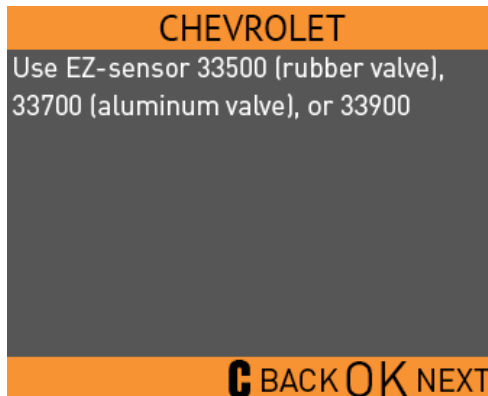


= continue



= previous

The tool will display compatible part number(s) for the selected vehicle.



= continue



= previous

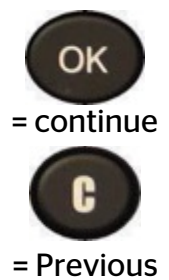
3.1 "COPY ORIGINAL SENSOR"



Wait a few seconds.



ID of the old sensor is displayed.



Hold the new programmable sensor near the device antenna.




To upload data to the blank sensor.

Wait a few seconds.

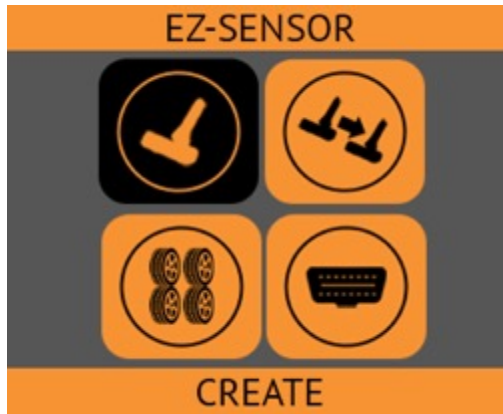


The data is successfully uploaded to the sensor.




= continue

3.2. "CREATE ID"



Hold the new programmable sensor near the device antenna.



Wait a few seconds.



The data is successfully uploaded to the sensor.



4. PLACARD ADJUSTMENT

For adjusting internal placard values when changing tire types or load sizes.



Select Placard

Please read disclaimer regarding proper placard procedures

Connect the OBD Cable to the tool and vehicle, and allow the tool to capture the internal values

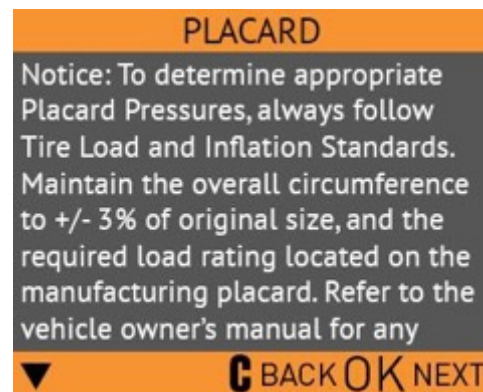
Note: Turn the ignition ON, Keep the engine OFF.



= Continue



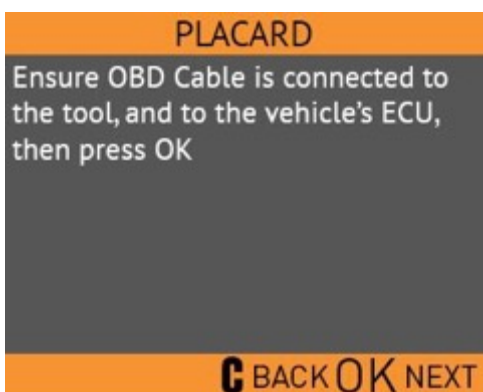
= Previous



= Continue



= Previous



The tool will display the current stored values.



Select the axle you wish to change, then press OK



Change the PSI value using the arrow keys. Select OK



= Continue



= Previous



Once updated, use the trigger button to write the new values to the ECU

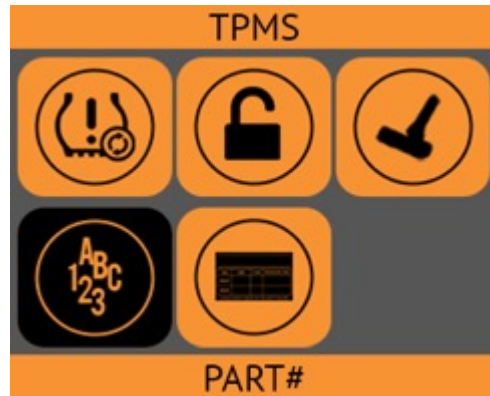


5. PART NUMBER

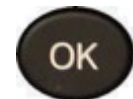
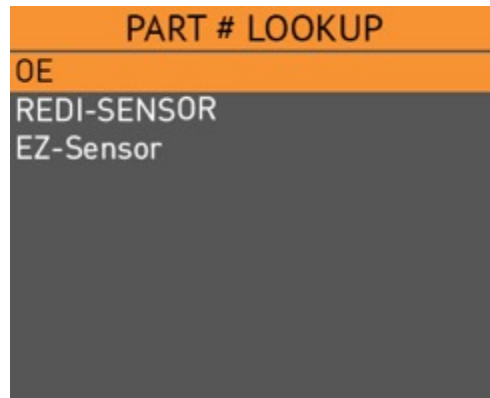
This section is to view compatible sensor part numbers for OE Sensors, REDI-Sensor, and EZ-Sensor.



Select Part Number



Select sensor



SETTINGS

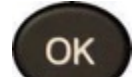
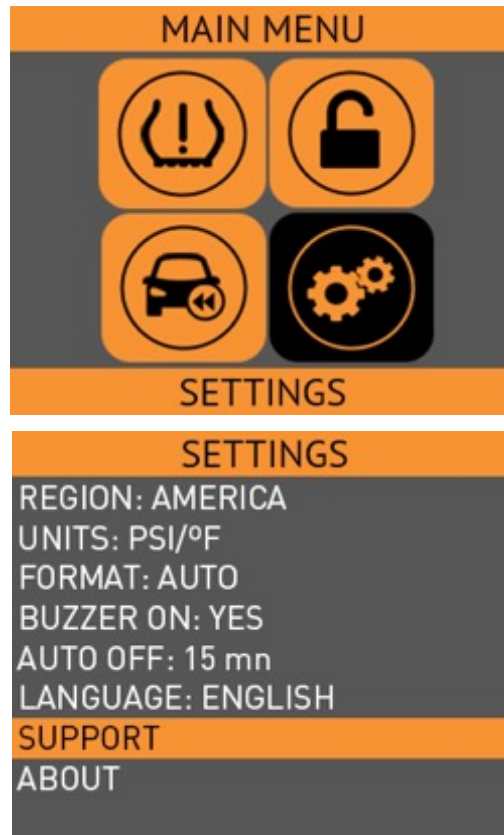
1. ENTER SETTINGS MENU



Select "SETTINGS" menu.



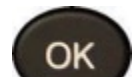
Scroll up and down to select function.



= continue



= Previous



= continue



= Previous

Function Descriptions:

REGION: To select the region of work, **AMERICA** or **EUROPE**.

UNITS: Change the air pressure display units (kPa, Bar or PSI) and temperature display units (F° or C°).

FORMAT: Change the format of sensor ID display. (Decimal or Hexadecimal)

BUZZER: Turn buzzer to ON or OFF (YES or NO).

AUTO OFF: Time to turn off the device automatically after not being operated. (Default: 5min)

LANGUAGE: Select the language of the user interface.

SUPPORT: View technical support information

ABOUT: View device information such as serial number, software version and more.

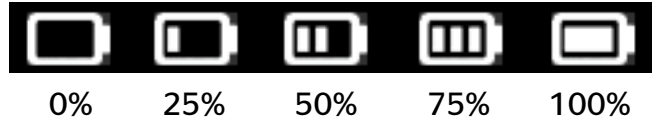
MISCELLANEOUS

1. CHARGE

Low Battery Indication

Your TPMS TOOL incorporates a low battery detection circuit. Battery life is an average of 300 sensor tests per battery charge (approximately 60 to 80 vehicles) this may change depending on the sensor model.

Battery indicator status:



When 0% is flashing, the tool will turn off after 10 seconds.



The battery is charging.

There is an issue with the battery - please contact after sales service.

DO NOT use the tool with low battery status (0-25%) because the transmission and emission may not be reliable.

When charging, the battery light is red and becomes green when the battery is fully charged.



USB Power supply connector

Fig. 6

When the battery is low, the “status bar” appears every 10 seconds. This display will stop when the battery loses power.

Plug the USB cable between the tool and the charger adapter, and then plug the charger adapter into an appropriate outlet. The red LED "CHARGE" light will turn on.

Battery replacement

The tool must be returned to the factory for battery replacement.

Opening the tool or tampering with the seal placed on the tool, if broken, will void the warranty

2. RECYCLING

Do not dispose of the rechargeable Lithium-Ion battery or the tool and/or its accessories to the dustbin.



These components must be collected and recycled.



The crossed-out wheeled dustbin means that the product must be taken to separate collection at the product end-of life. This applies to your tool but also to any enhancements marked with this symbol. Do not dispose of these products as unsorted municipal waste. For further information, please contact **ATEQ**.

3. TECHNICAL SUPPORT

Continental's technical support team is available Monday - Friday 8:00 AM - 5:00 PM ET. When contacting the support team, be prepared to answer the following questions:

- What tool model is it? What is the tool's serial number?
- Is the internal software up to date? Updating your tool solves the majority of issues.
- If you are working on a vehicle, what car make, model and year are you servicing?
- What sensors are you using? Please note the brand and physical appearance of the sensors.

The technical support team may be reached at **800-265-1818** or by email during non-working hours at techsupport-us@continental.com

TIRE PRESSURE MONITORING TECHNICIAN GLOSSARY

Activate- A low frequency (LF) wireless signal is sent through tool antenna to the sensor inside the tire. This allows technician to read tire pressure, id number, temp and battery status without driving the vehicle.

Aftermarket sensor- A replacement sensors supplied by local auto parts stores or tire suppliers. The sensor may not physically look like the OE sensor. Your tool has special programming software based on the specific sensor brand.

Auto relearn- Sensor id numbers are sent to the ecu after driving the vehicle for a specified time. Your tool will indicate the required driving time under service TPMS icon.

Battery life- Sensors have an internal lithium ion battery which cannot be replaced. Typical sensor battery life

is somewhere between 5-10 years. Your tool will display “no sensor detected” on the screen if a sensor’s battery has failed. A DTC may also be set in the TPM ECU.

Cloneable or Cloning- Used only by aftermarket sensor brands to copy the ID number and commonly skip the relearn procedure. Not recommended by OE vehicle manufacturers. Always relearn the TPM system when changing a sensor.

Cross talk- When the TPMS tool signal gets “confused” by another sensor signal. Example: you have replaced an old sensor, but it is in close proximity to the new sensor during your relearn. The old sensor should be removed from the service bay as it maybe transmitting different data and is being detected by the tool.

Delta pressure- A rapid change in tire pressure up or down used as an alternative method to LF activation. Refer to service manual as well as tool on screen instructions. Common on GM prior to 2009 and many European systems.

Diagnostic Trouble Code(DTC)- A diagnostic message indicating a system fault and faulted condition for an observed malfunction; OBDII compliant codes are typically displayed in an a five-character alpha-numeric format.

Direct system- The most common design used by a majority of OEMs is 4 to 6 TPM sensors with valves mounted inside the tire. The pressure of the tire is measured by the sensor mounted inside, which communicates that information to the vehicle’s internal computer via radio frequency (RF).

High line- Vehicle’s fitted with low frequency (LF) transmitters near each wheel that force the TPMS sensors to transmit data to the vehicle. The vehicle dash will display tire pressure by wheel location. Also called an advanced system. Many luxury vehicles show pressure and temperature. Some vehicle manufacturers offer upgrade accessory options including high line. Example: 2015/2016 Toyota Camry is standard with a “low line” system, but an optional colored dash display will be a used in a high line system. Be sure to select the correct sensor(s) for the corresponding system when ordering replacement sensor(s).

Hybrid sensor- a type of programmable aftermarket sensor. The technician selects make/model and year and trigger activation with the TPMS tool within 1-3 seconds.

ID number- A specific decimal or hexadecimal numeric value assigned to each sensor at manufacturing. This number can also be given to programmable sensors via a TPMS tool. This allows ECU to “see” specific tire locations by each sensor for resetting or relearning the TPM system. In many cases the ID number is physically printed on sensor body, but it may not be easy to read. Your tool will display the sensor id number.

Indirect system- This system design does not have a physical sensor with a valve inside the tire. The system instead calculates low pressure from (ABS) anti-lock brake system wheel speed sensor data. Reset instructions are in your tool when air pressure is adjusted. However, a full function diagnostic scan tool with graphing is required to verify/diagnose abs wheel speed sensors.

Learn mode- In learn mode the vehicle’s receiver and ECU are activated to pick up the wireless signals being transmitted from the sensor inside the tire (direct system). Your TPMS tool will show vehicle specific instructions such as using a key fob, cycling ignition switch, pressing brake pedal, etc. during learn mode. A spare tire may have a functioning sensor and can be included in learn mode.

Low line-system - A low line system does not show pressure by wheel location – just a symbol indicating that pressure is low on one of the tires. Low line sensors should not be used on high systems. Example: Hyundai Genesis Coupes use Low line systems, but Genesis Sedans use hi line systems.

Malfunction Indicator Lamp (MIL)- A warning lamp that illuminates on the vehicle’s dash when the TPM system has detected a TPM system issue. A solid light indicates pressure lower than the OE vehicle manufacturer recommends. A relearn or reset is required to turn the light off. A flashing warning lamp indicate component issues.

Multi-application sensor- Aftermarket sensors that are pre-programmed with a variety of manufacturer protocols on the sensor chip. Follow OE, make, model and year relearn procedures when installing these sensors.

OBDII TPMS- using a stand-alone TPMS tool or diagnostic scan tool capture ID numbers to transmit to the vehicle ECU via the OBDII interface and data link connector. These systems are common on Japanese and Korean models and can be used on select domestic vehicles to also put vehicle into learn mode.

OE sensors-pre-programmed with single software protocol.

Placard- A decal on inside of the vehicle driver's door with factory recommended air pressure and tire size specification. Required by TREAD Act for all manufacturers as of 2007

Programmable sensor- A "blank" TPM sensor supplied by aftermarket parts companies. A technician must program the correct make, model and year software protocol using the TPMS tool. Instructions to create an ID or copy an ID will be shown on the tool.

Protocol- The specific OE software inside the sensor chip that is required to match the manufacturer make, model and year.

Radio frequency (RF)- The radio wave specified by FCC for car manufacturers tire pressure monitoring systems in North America. Service and parts catalogs will indicate 314.9,315, 433.92, or 434 MHz These values may also be printed on sensor body. Your TPMS tool will also show the system/sensor frequency in MHZ

Rolling Mode- An electronic mode utilized by TPMS sensors when the vehicle is in motion (defined by a minimum speed). This is the active mode for regular sensor transmission. Sensor transmission frequency during this mode can vary by manufacturer, but is generally every 60 seconds.

Service Kits-A kit of TPMS valve components such as gaskets, grommets, seals, valve cores, screws and caps that need to be serviced during tire changes. Remember, the valve is important to ensuring tire pressure is maintained for safety and fuel economy.

Sleep Mode- Sensor battery life is conserved during periods of time vehicles are not being used. Example: shipment to the new car dealer. The sensor will enter a state of which no information or data is transferred to the vehicle. This may vary by manufacturer and another term is storage mode.

Stationary Relearn Mode- A mode when the vehicle is not being driven.

Example: a vehicle is in your service bay overnight. The transmission of sensor information has been reduced to save battery life. Not every OE uses the same method.

TREAD act-THE US Federal law that mandated all vehicles under 10,000 pounds be have a TPM system beginning in 2007. Many vehicles prior to 2007 are equipped with TPM systems.

Trigger Tool- A generic term used for any hand-held tool with or without a display to activate a direct RPM sensor by a low frequency (LF) wireless signal; also called an activation or exciter tool.

Universal Sensor- An aftermarket parts term used to describe a sensor that can work on more than a single make/model and year.

Vehicle Programming- A term sometimes used in place of term "relearn" or "reset the light".

Vehicle Relearning- The steps performed and shown on the TPMS tool for the technician to follow when adjusting tire pressure, rotating tires or replacing a TPM sensor. Relearns fall into three types: auto relearn, stationary or OBDII

Wireless Auto Locate (WAL)- WAL systems show pressure by tire location. Aftermarket sensor suppliers often list a second part number to cover WAL applications. WAL are used on - Chryslers, Jeeps and Mercedes vehicles where Schrader is the OEM supplier. Using incorrect part number can result in TPMS warning lamps turning on even when tire pressure is correct.