VDO TPMS Pro

User Manual

40/2019 – EN

REVISION OF THE VDO TPMS Pro MANUAL

We continuously work on improving our products. This is why the information contained in this user manual, the tool and the technical specifications may be modified without notice.

Edition / Revision	**Reference**	**Date** (week/year)	**Chapters updated**
First edition	UM-366EVB-F	39/2014	European VDO version
Second edition	UM-366EVD-F	38/2016	Evolution of the firmware to DV1-16
Third edition	UM-DV1-30-11	40/2019	Evolution of the firmware to DV1-30

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VDO TPMS PRO

1. SPECIFICATIONS

Battery type:	Rechargeable Lithium Ion
Battery life:	Approximately 1000 activations per full charge.
Dimensions (Max. L, W, D):	20.0 cm x 12.0 cm x 4.0 cm (7.9" x 4.7" x 1.6").
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:	Approx. 0,9 Kg / 1,98 lbs.
Temperatures:	Operating: -20°C to +45°C (-4°F to 131°F). Storage: -20°C to +45°C (-4°F to 131°F).

Product content:

- VDO TPMS Pro tool
- OBDII cable
- USB data cable
- Charger
- UK adapter for charger
- Quickstart instructions
- User manual and CD
- Transport case

Optional accessories:

- Tire Tread Depth Gauge
- Docking Station
- Thermal Printer

2. IMPORTANT SAFETY INSTRUCTIONS

Keep these instructions in a safe place. Retain for future reference.

This tool complies with:

- Part 15 of the FCC Rules

- CE / CEM standards

- RoHS standards

Operation is subject to the following two conditions:

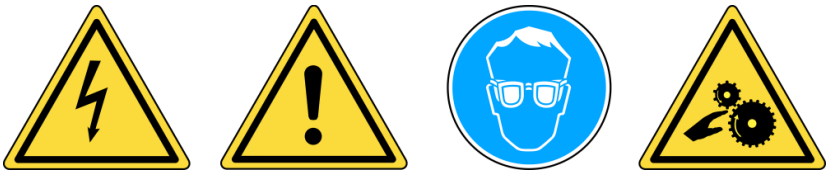
(1) This tool will not cause harmful interference, and

(2) This tool can be affected by any type of interference, including interference that may cause a malfunction.

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

Individuals with pacemakers should never use this product

WARNING:



Wear safety goggles (user and bystanders).

Please read instructions before use.

Do not use on live electrical circuits.

Risk of entanglement.

Read the Warranty, Safety and Recycling information for this product at the end of this user guide.

3. CAUTION

READ THESE INSTRUCTIONS BEFORE USING

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

All VDO TPMS tools are intended to be used only by qualified and trained automotive technicians in a laboratory or a in light industrial or repair shop environment.

Please read all instructions below before use. Always follow these safety instructions. If you have any questions on the safe use of this tool, please contact your local dealer.

1. Read all the instructions

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

2. Keep these instructions in a safe place

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

3. Take heed of warnings

Wear safety goggles. Users and bystanders must read the 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 slightly damp cloth. Do not use any harsh chemical solvents such as acetone, thinner, brake cleaner, alcohol, etc as this may damage the device.

5. Water & moisture

Do not use this tool where contact or immersion in water or any other liquid 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 there is any risk of exposure to explosive gases or vapors. Keep the tool away from heat sources. Do not operate the tool with the battery cover removed.

4. FUNCTION KEYS

	Power ON/OFF		Test or trigger sensor
	Confirm, next menu		Cancel, previous menu
	Navigate "**Up**"		Navigate "**Down**"
	Navigate "**Left**"		Navigate "**Right**"

4.1. STATUS BAR ICONS (AT THE TOP OF THE SCREEN)

The status bar is located at the top right of the screen and shows the status of the tool.


The tool is plugged into the USB port.

The OBD-II module is plugged into the tool.


The tool searches for a WiFi connection (animated icon).


The tool is connected to WebTPM over a WiFi connection.


SD card is inserted.


Battery status.


The optional Tire Tread Depth Gauge accessory is plugged into the tool.

4.1. ACTIONS BAR ICONS (AT THE BOTTOM OF THE SCREEN)

The actions bar is located at the bottom of the screen and shows the various actions available depending on the usage context of the tool.


Back to home screen.


Send sensor data to ECU.


Delete data from the displayed sensors.


Edit / add information on the current task.


Clone sensors.


Save vehicle data in the tool history.


Display tire tread depth gauge screen (TTD).


Back to the vehicle data screen.


Print the sensor information shown on the screen.

5. POWER ON

Press the button to turn on tool.

The tool displays the start screen.

Wait a few seconds for the tool to display the main menu.

The tool is ready to operate.

To power off the tool, press and hold the button (about 3 seconds).

6. OPERATING INSTRUCTIONS

6.1. TPMS TOOL PRESENTATION

Reads and provides diagnostics for TPMS sensors, resets the vehicle TPMS ECU through the OBD-II interface and transfers sensor ID's to the ECU.

***Note**: With some vehicles, if the vehicle is in "learn mode", the vehicle will also confirm that the TPMS sensor has communicated with the TPMS system through a series of horn beeps.*

Service procedure

Section 1.0: Read Sensor Test

Before servicing the tires/wheels, trigger each of the vehicle's sensors by using your VDO TPMS tool to make sure they are working properly.

This will eliminate any concerns over their proper working order and enable preventive replacements to be made to damaged or defective sensors. This procedure will not change the vehicle settings because the vehicle has yet to be put into learn mode. This procedure has no effect on the vehicle TPMS settings.

***Note:** If the sensors do not send any information to the TPMS tool, please refer to the Troubleshooting section of this manual.*

Carry out the wheel or tire maintenance.

For vehicles that require relearning, please see to Section 2.0

Section 2.0: Relearning TPMS sensors

Based on the Make-Model-Year of the vehicle, the tool informs which relearn procedure is required: automatic, manual or OBDII relearning procedure.

For manual and OBDII relearn procedures, follow the instructions displayed on the tool screen. See paragraph 2 - "Service TPMS" menu - for more information.

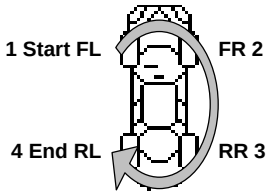


Fig. 1

For vehicles with automatic relearn procedure, where the TPMS system is automatically reset when driving the car, it is recommended to trigger each wheel sensor one final time, to make sure they are in correct working order.

USING THE VDO TPMS PRO

IMPORTANT:

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

Note: *To get the best reading from the TPMS sensors, put the tool next to the side of the tire, just above the sensor.*

1. CHECKING THE SENSORS

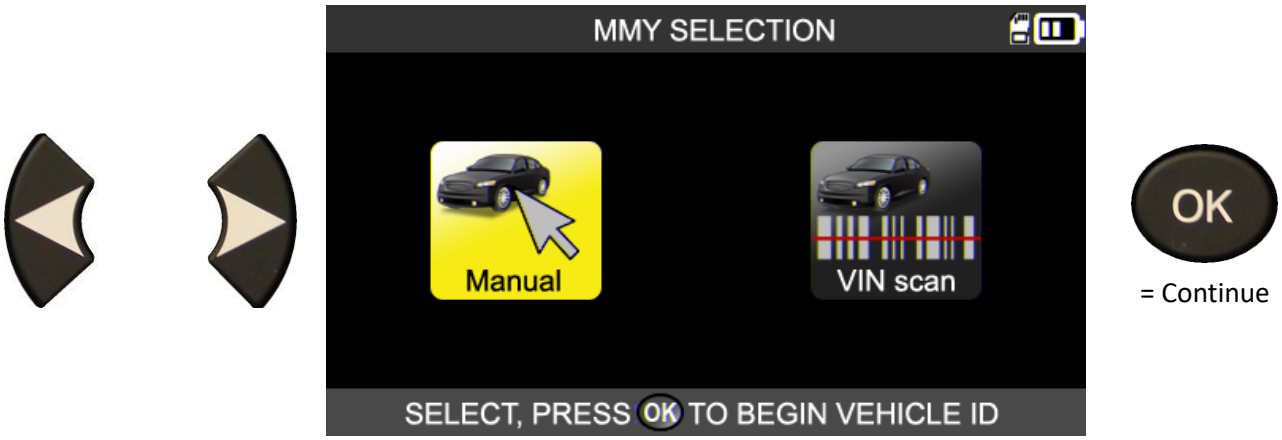
This function reads all the vehicle sensors and reprograms the ID's in the ECU using the OBD port (OBD connector).

= Next

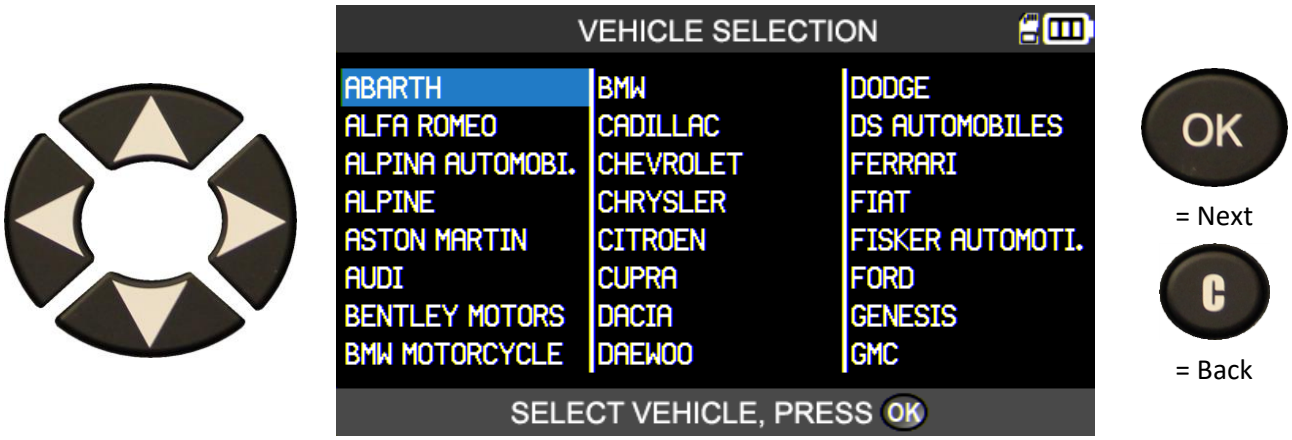
1.1. VEHICLE MAKE, MODEL, YEAR SELECTION MODE

The first time the tool is used, it is necessary to enter the make, model and year of the vehicle, either manually or using the barcode representing the VIN (serial number) of the vehicle.

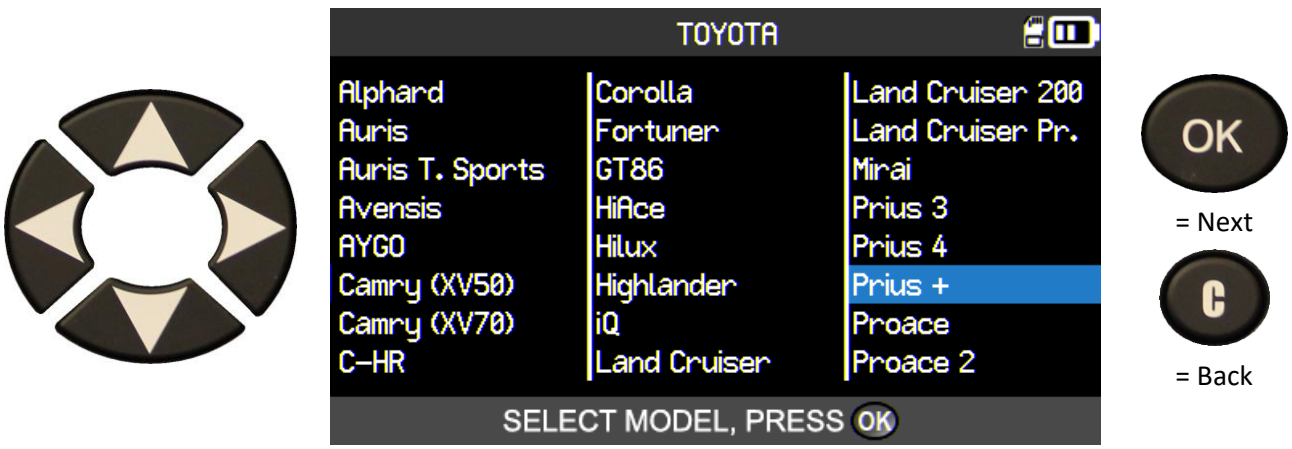
Note: *VIN reading (vehicle serial number barcode) is only available in America.*



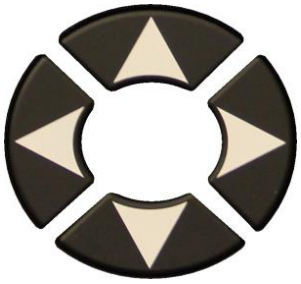
1.2. SELECT MANUFACTURER

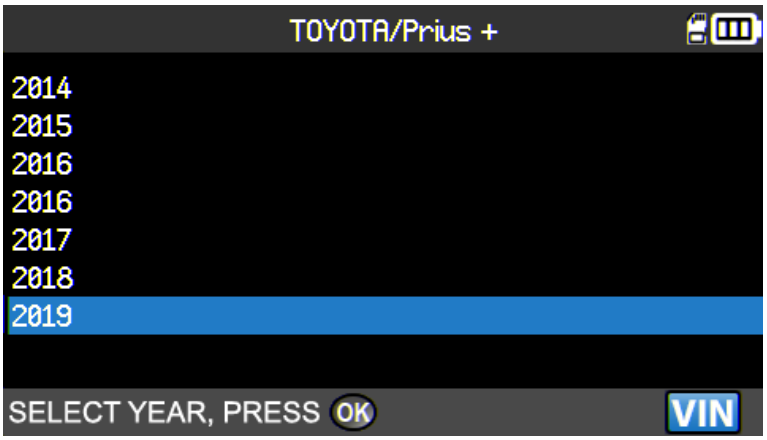


1.3. SELECT VEHICLE MODEL



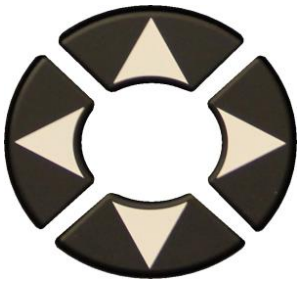
1.4. SELECT YEAR



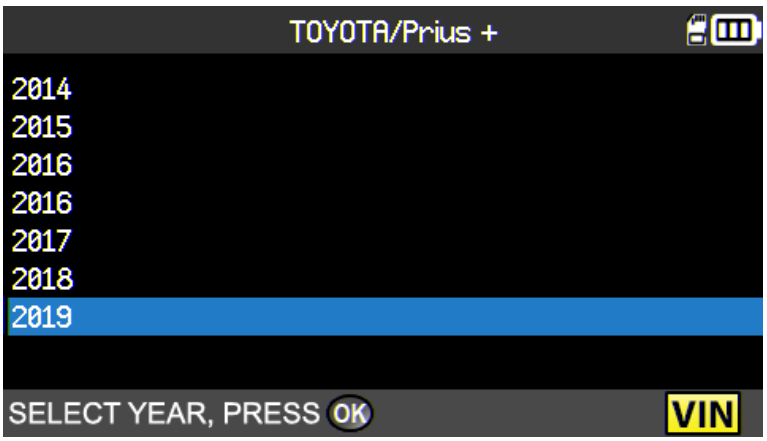


OK = Next

C = Back



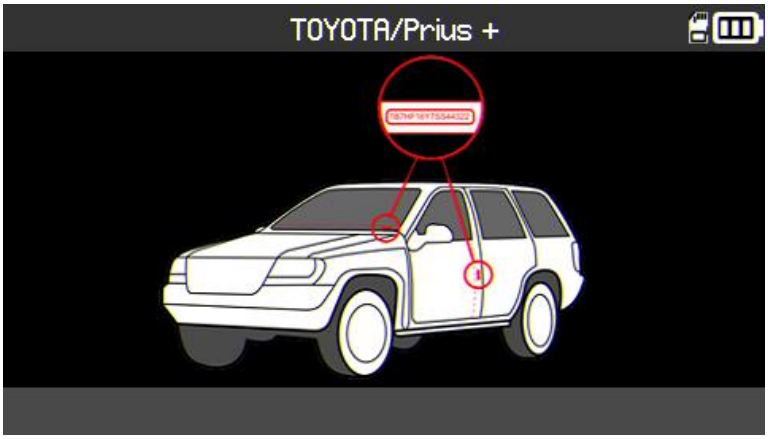
If the year is unknown, select the VIN button.



OK = Next

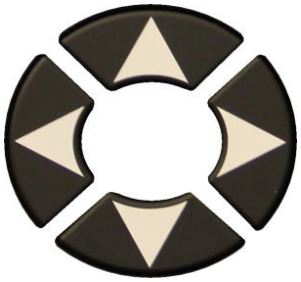
C = Back

The next screen shows the various locations where the vehicle VIN identification can be found.

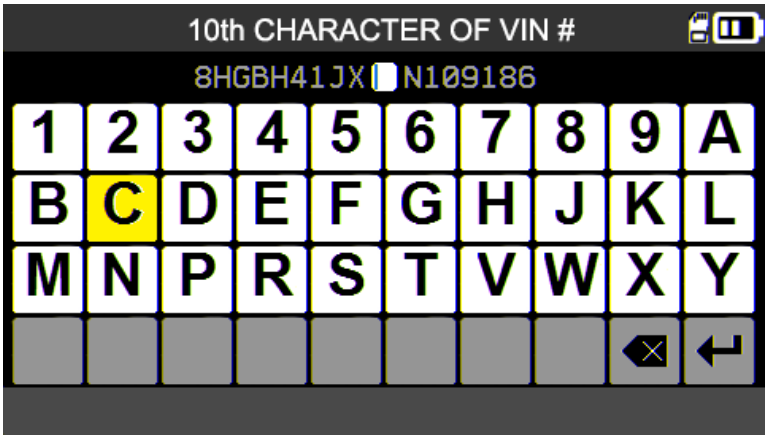


OK = Next

C = Back

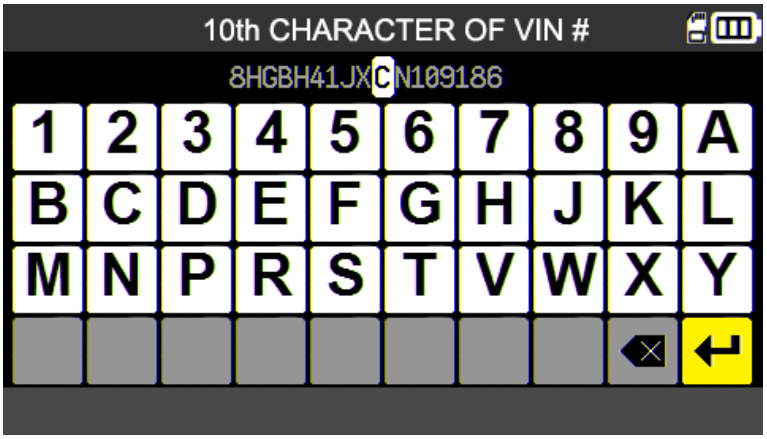


Identify the 10th character of the VIN code, then enter it.



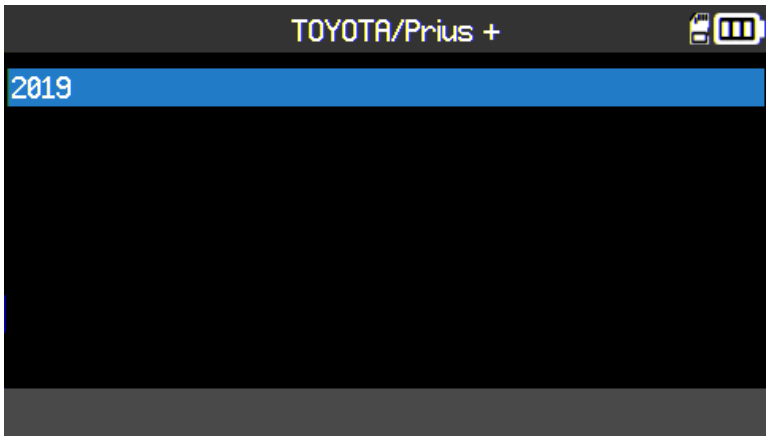
OK = Next

Confirm your entry.



= Next

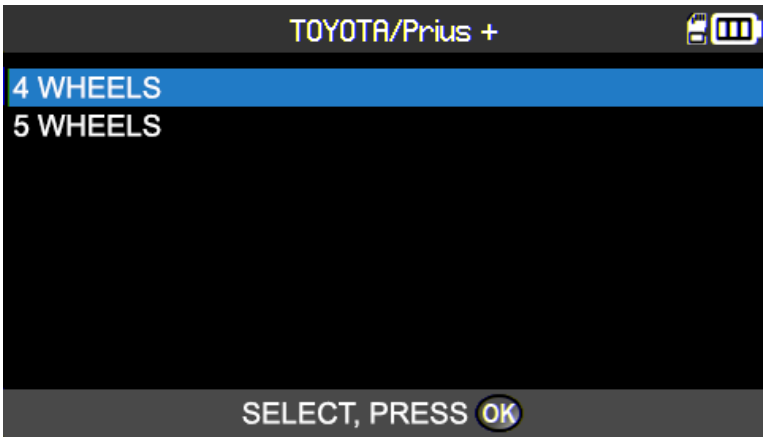
The tool confirms the year of the vehicle.



= Next

= Back

On some vehicles, the tool will ask to confirm the number of wheels fitted with TPMS sensors.

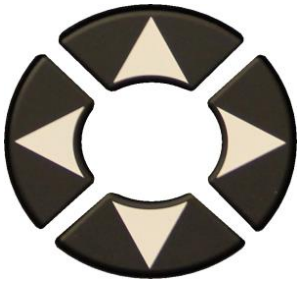


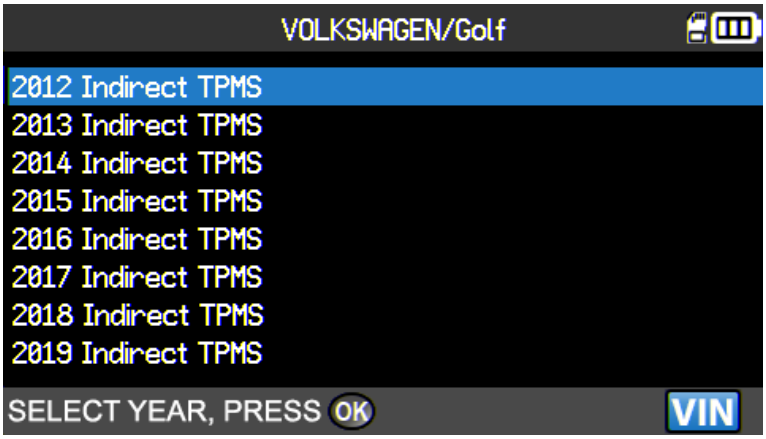
= Next

= Back

1.5. SPECIFIC CASE OF VEHICLES FITTED WITH INDIRECT TPMS

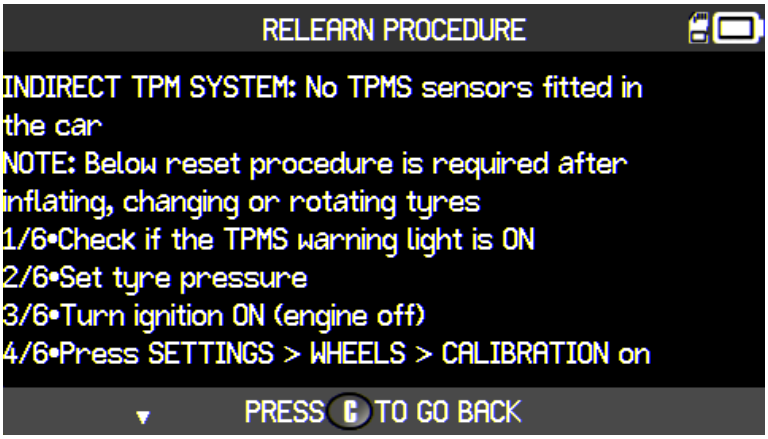
Vehicles fitted with an indirect TPMS system (meaning without a sensor fitted in the tires) are also included in the TPMS tool database. Here are the relearning procedures specific to these vehicles.





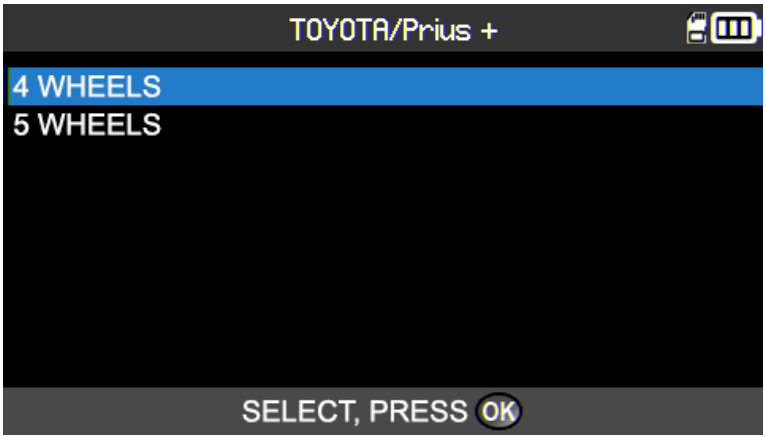
= Next

= Back



1.6. SPECIFIC CASE OF VEHICLES FITTED WITH 5 TPMS SENSORS

Some vehicles are fitted with 5 TPMS sensors (4 for the wheels + 1 for the emergency spare wheel). In this case, this information must be entered in the TPMS tool when prompt.



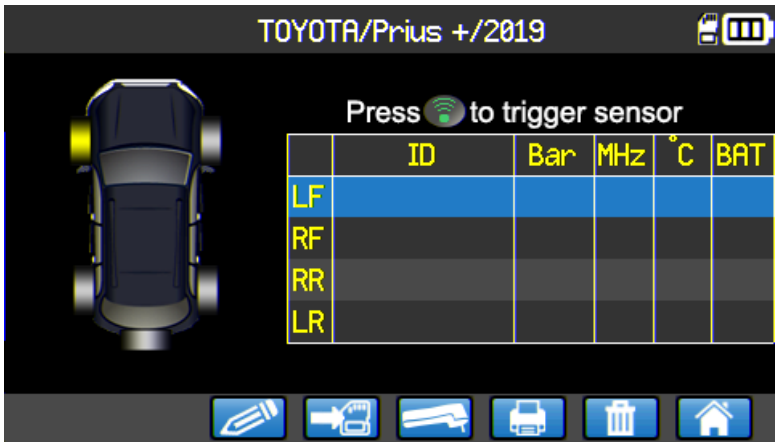
= Next

= Back

1.7. READ THE TPMS SENSOR

The tool is ready to read the sensor.

Use the arrows to change wheel.

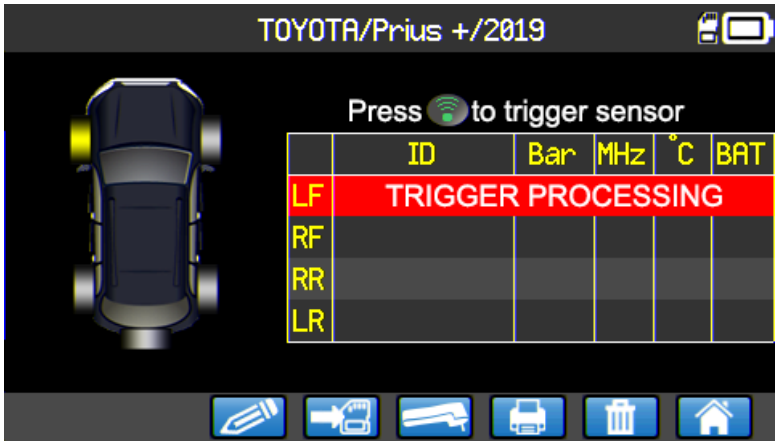


Press  to activate the sensor

The tool comes on and reads the sensor.

 **LF**

(left front)



Pass

The tool comes on and reads the first sensor.

 = Next  = Back and delete results.

 **RF**

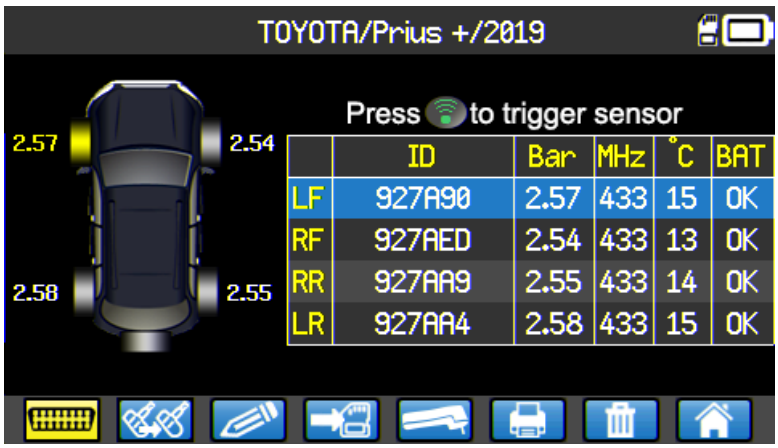
(right front)

 **RR**

(right rear)

 **LR**

(left rear)



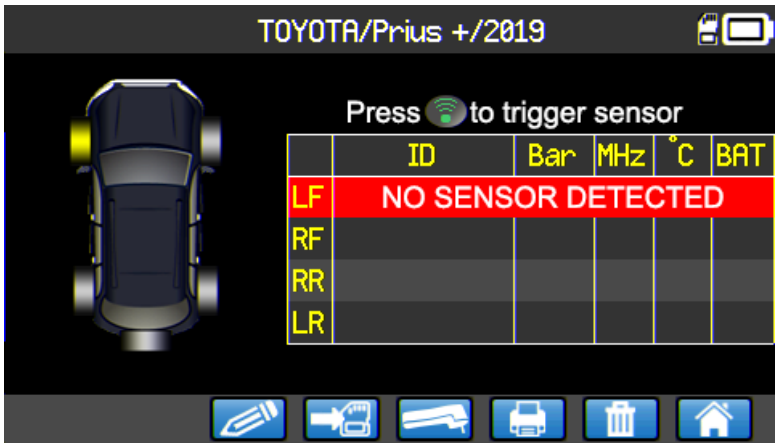
Pass

Pass

Pass

 = Next  = Back and delete results.

(left front)



Fail

The tool has failed to detect a sensor, please try again.

= Next 

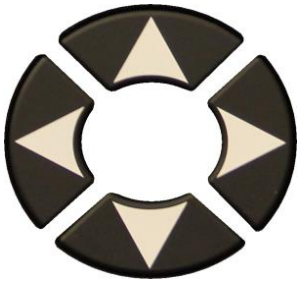
= Back and delete results.

= Next wheel.

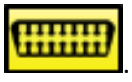
1.8. REPROGRAM ECU USING THE OBD-II MODULE

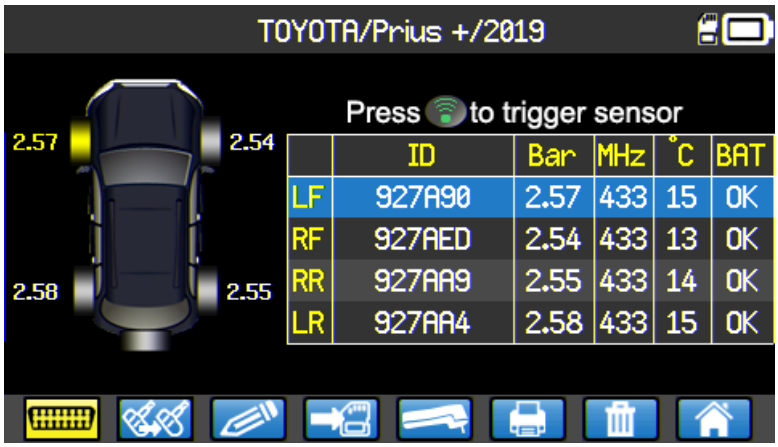
When the identifiers for all the sensors have been read and displayed on the screen, plug the **OBD-II** module into the tool. The **OBD-II** icon appears on the screen to confirm the connection to the module.

Then plug the **OBD-II** module to the **OBD-II** connector on the vehicle, and turn the ignition on.



Select the **OBD** icon

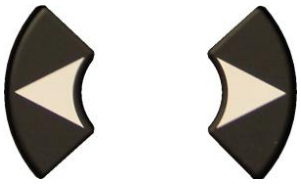




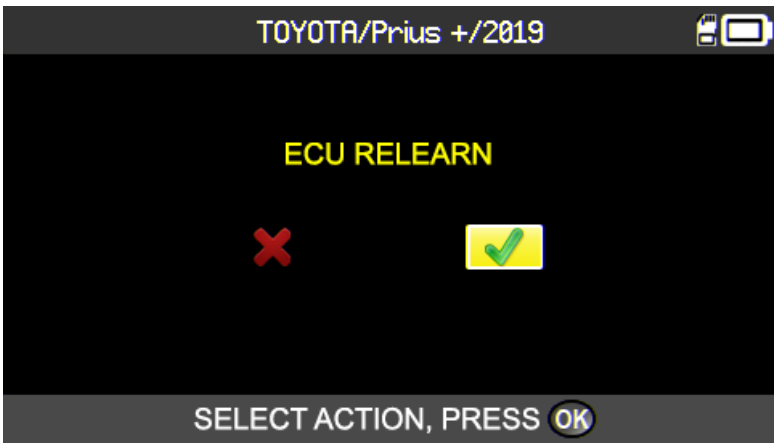
= Next

= Back

The tool will ask you to confirm before continuing.



Select 



= Next

= Back

***Note**: leave the engine switched off while keeping the **ignition switched on**.*

= Next

= Back

Press the right arrow to display right hand drive vehicles

= Next

= Back

Go back to left hand drive vehicles by pressing the left arrow.

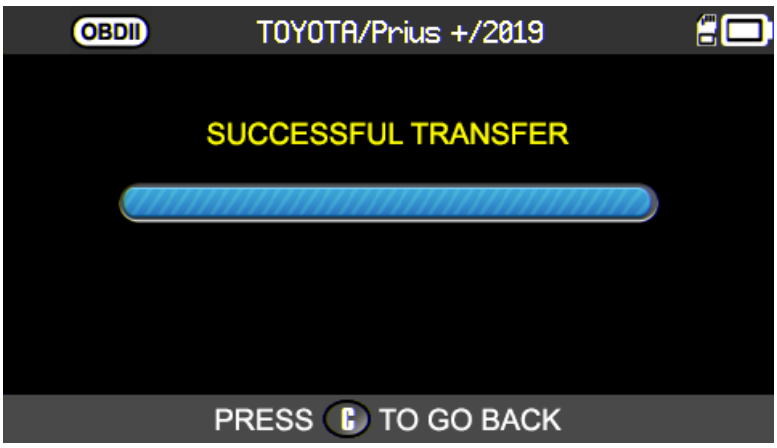
The transfer begins. The following messages briefly appear.

CONNECTED

TRANSFER OK

VERIFICATION OK

TRANSFER SUCCESSFUL



= Back

The information transfer to the on-board computer has been successful. The **OBD-II** module can then be disconnected from the **OBD-II** vehicle connector.

1.8.1. OBD-II errors: description and resolution

In the event of an error, first check that the OBDII logo is properly displayed at the top left of your tool screen. This means the TPMS tool is properly connected to the module. If not, try **disconnecting and reconnecting the module**.
You can also try **restarting** the TPMS tool (switch off and back on again).

If the OBD-II module **LED** flashes **red**, disconnect the module at both the vehicle end and the TPMS tool end, then reconnect at the TPMS end only, after a few seconds. The module should then operate normally and the LED should flash **green** about once a second.

If the **"Check connection / Switch on ignition"** message appears:

- Check that the OBD-II module is connected to the vehicle properly.
- Check that the ignition is in position I (switched on, engine switched off).

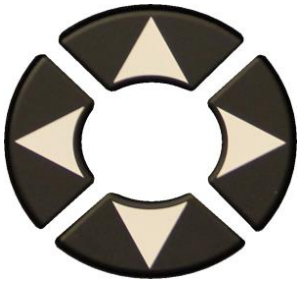
If the above two items are OK, check the battery voltage. The vehicle battery should hold sufficient charge to reprogram the TPMS system.

Check you have the latest version of your TPMS tool software. To do this, use the WebTPM software to update your device. See the specific section on WebTPM in this guide.

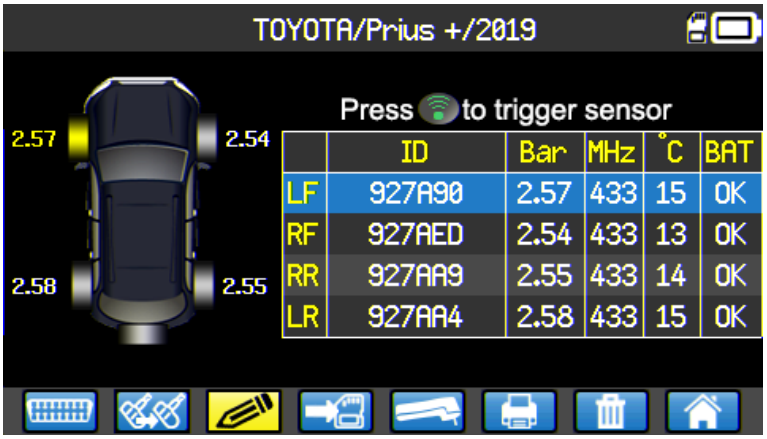
Check that the vehicle diagnostics do not offer an alternative relearning mode (automatic or manual relearning).

1.9. CUSTOMIZE AND SAVE VEHICLE DATA

This function enables the data collected during vehicle diagnostics to be customized and saved. The customer name, registration number, serial number (VIN) and mileage can be entered and saved. This information can also be printed using the printer, available as an option



Select the edit button



= Next

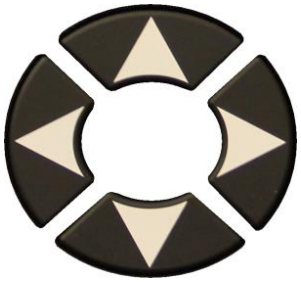
= Back

The entry screen is shown. Press

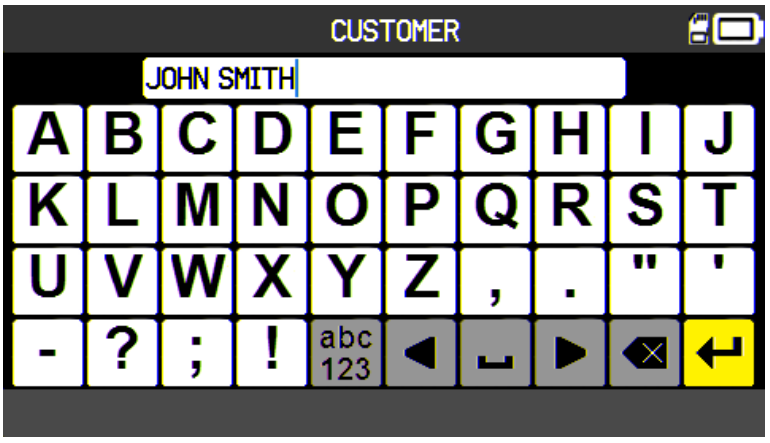
to edit the fields.

= Next

= Back



Use the direction button to select the character.



= to validate the character

= Back

To confirm a field entry.

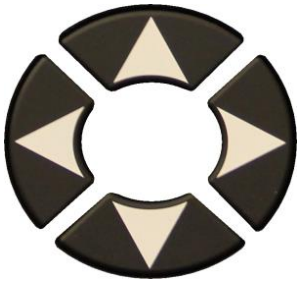
To erase the last character.

To change the keyboard to lower case, numerical and upper case.

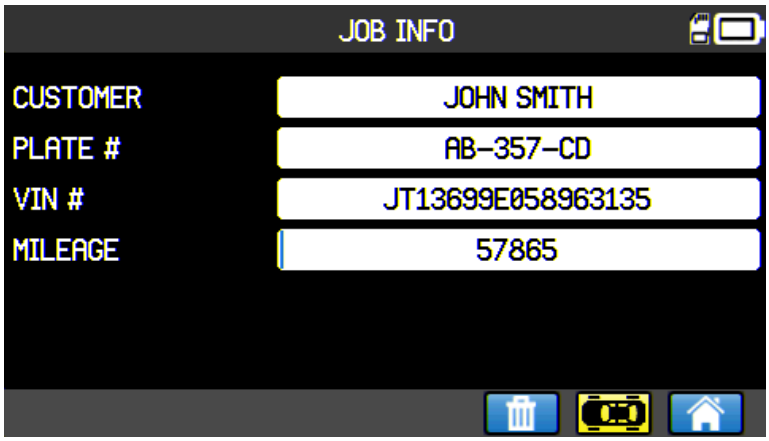
To navigate left and right in the field.

Space.

When the fields have been completed, the screen displays as below (not all fields have to be completed):



to choose the field or the icon.



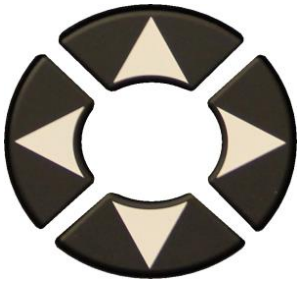
= Next

= Back

This information is particularly useful when using the TPMS tool search function. See "**Search menu**" section.

2. SERVICE TPMS

This menu is for servicing sensors, along with various additional functions such as: ECU relearn procedures, DTC code reading, RF key test, searching for parts references and help.

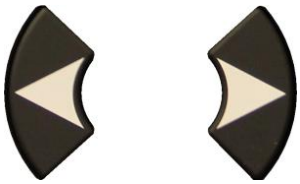


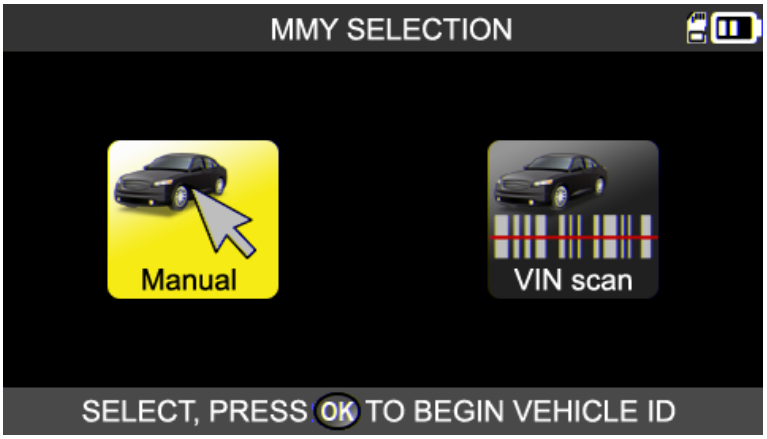
= Next

2.1. VEHICLE MAKE, MODEL, YEAR SELECTION MODE

Enter the make, model and year of the vehicle either manually or by using the barcode corresponding to the vehicle VIN.

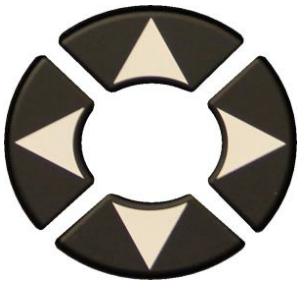
Note: *VIN reading (vehicle serial number barcode) is only available in America.*



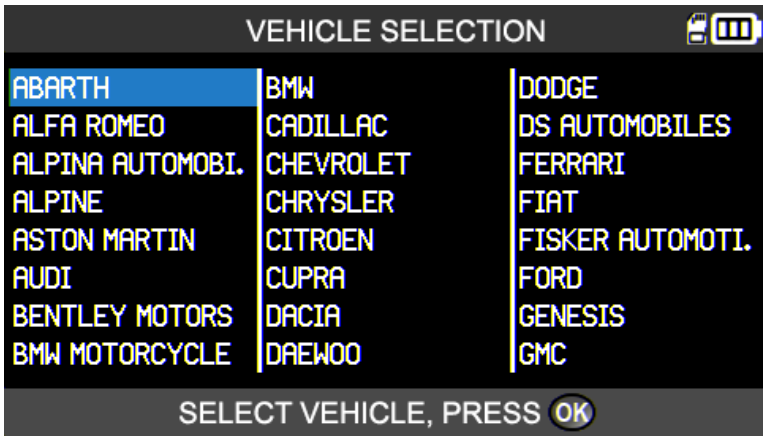


= Continue

2.2. SELECT MANUFACTURER



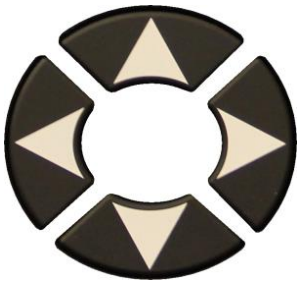
Scroll to select the manufacturer.



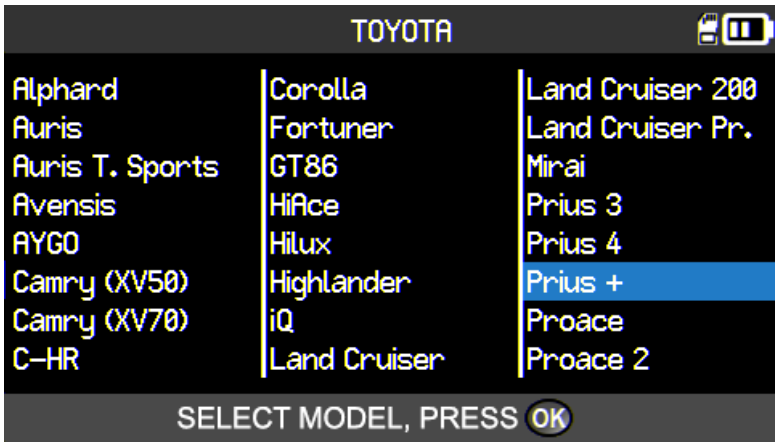
= Next

= Back

2.3. SELECT VEHICLE MODEL



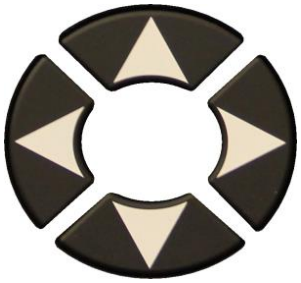
Scroll to select the vehicle.



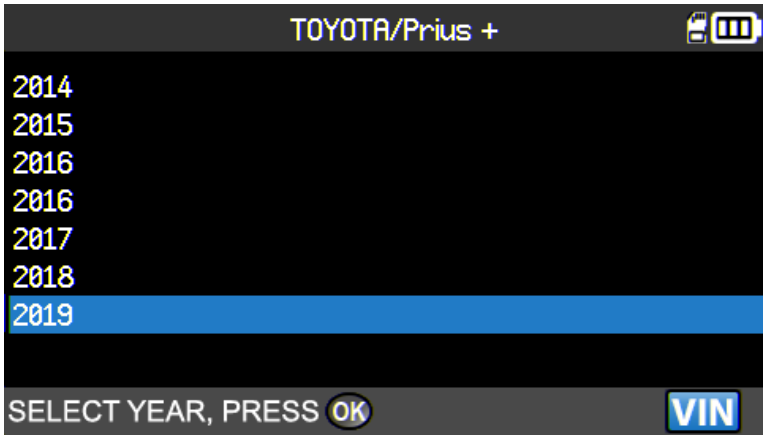
= Next

= Back

2.4. SELECT YEAR



Scroll to select the year.



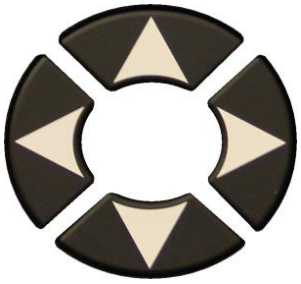
= Next

= Back

2.5. SELECT A SERVICE

The following services are available:

- Relearn procedures,
- DTC code reading,
- Spare parts search,
- RF key test,
- Help.



= Next

= Back

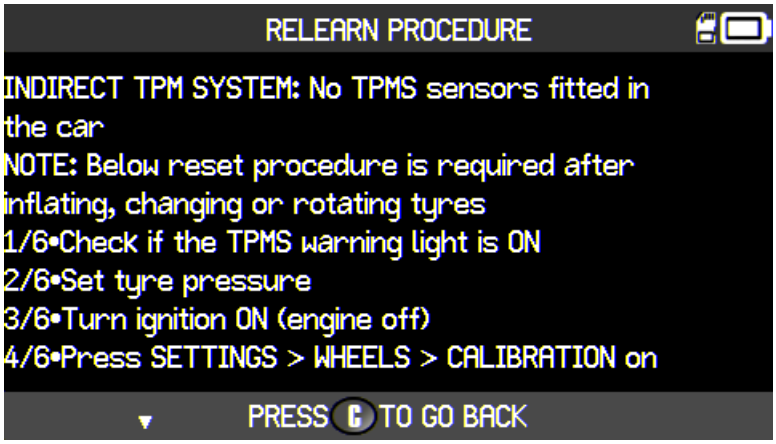
2.5.1. Relearn OBD-II

This menu details the procedure to follow to relearn the new sensors in the vehicle.

= Next

= Back

Follow the on screen instructions.

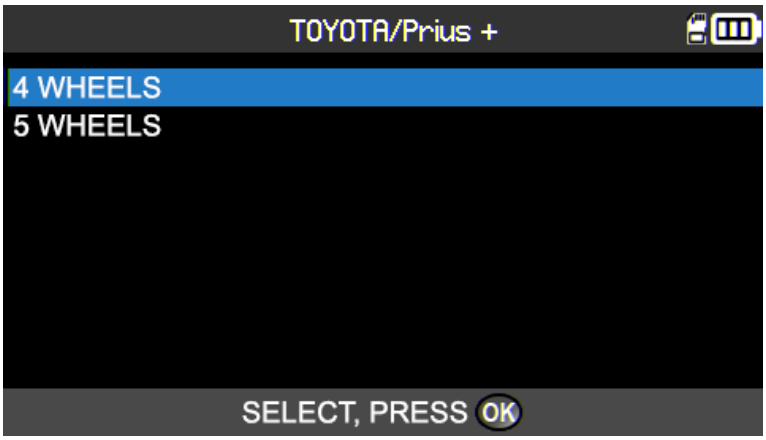


= Next

= Back

2.5.1. 1) Select the number of wheels

For vehicles which need it, enter the number of wheels fitted with TPMS sensors.

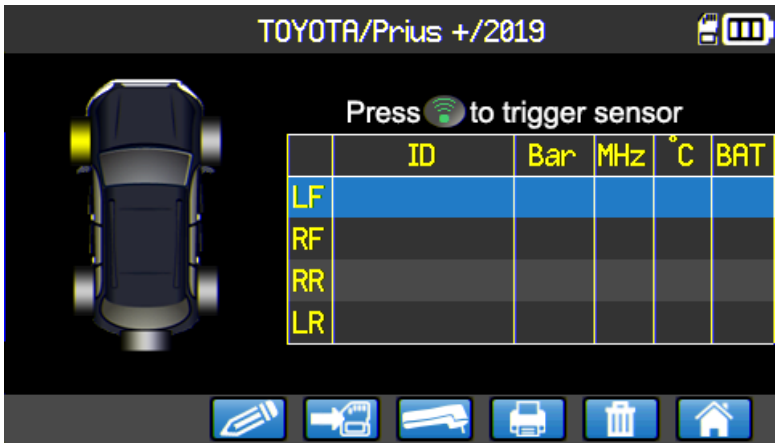


OK = Next

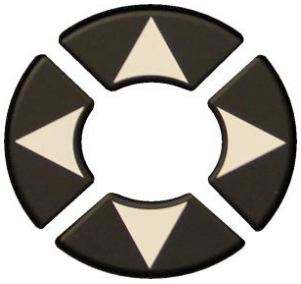
C = Back

2.5.1. 2) Read the sensor

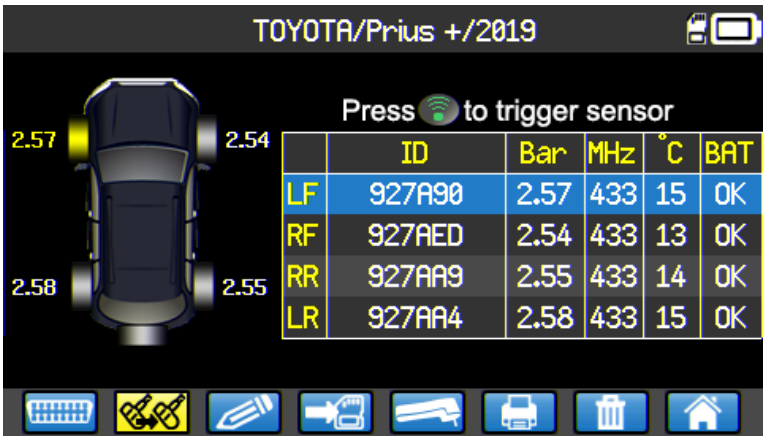
The tool is ready to read the sensor.



Press to activate the sensor



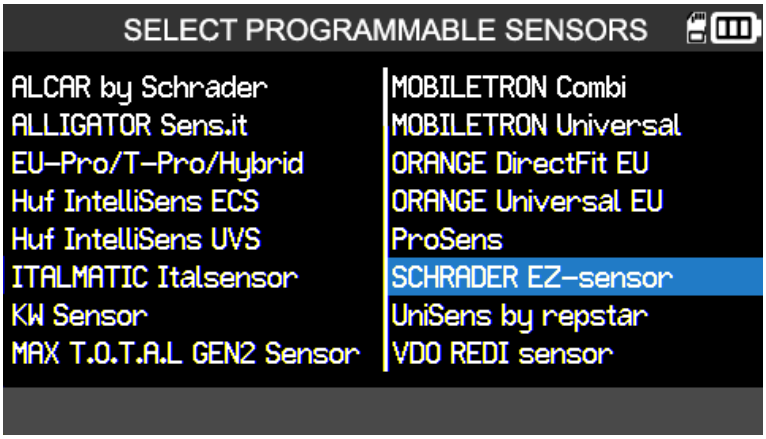
Once all the sensors have been read, select the icon



OK = Next

C = Back

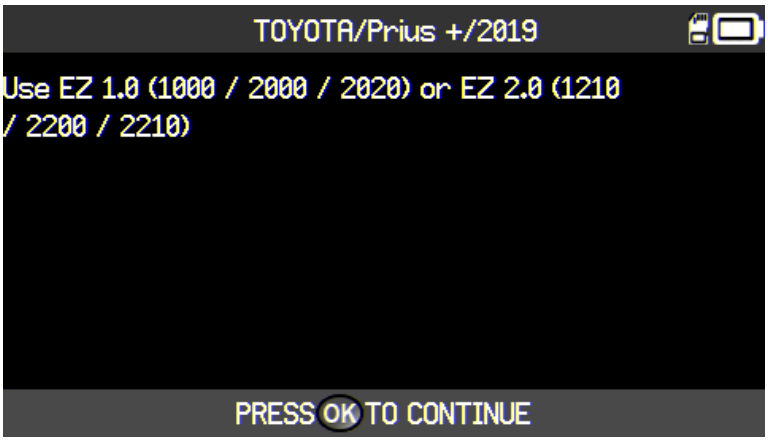
Select the programmable sensor model you have chosen.



= Next

= Back

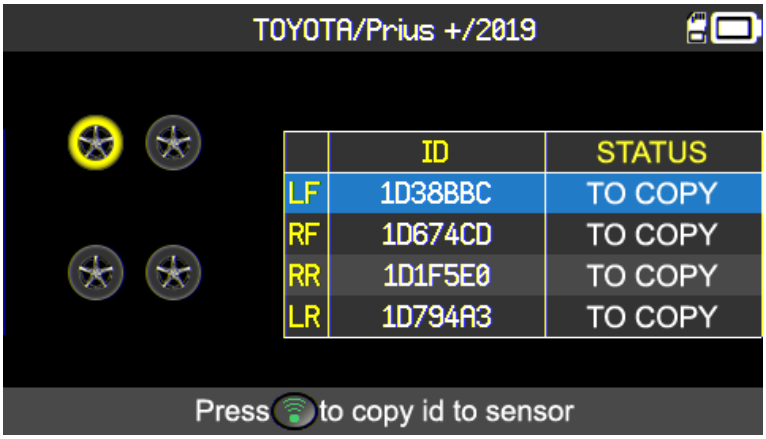
If necessary, the TPMS tool will show the type/model of the programmable sensor compatible with the selected vehicle.



= Next

= Back

Select the wheel.



Press

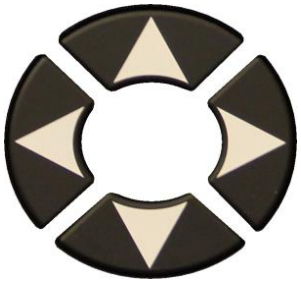
to copy the new sensor

Carry out the "**COPY SENSOR ID**" operation.

2.5.1. Read TPMS DTC error codes

DTC = Diagnostic Trouble Codes.

This function enables the TPMS error codes to be read and is available for the following makes: Acura, Honda, Hyundai, Infiniti, Kia, Lexus, Mitsubishi, Nissan, Subaru and Toyota.



= Next

= Back

***Note**: leave the engine switched off.*

Press the right arrow to display right hand drive vehicles

Go back to left hand drive vehicles by pressing the left arrow.

= Next

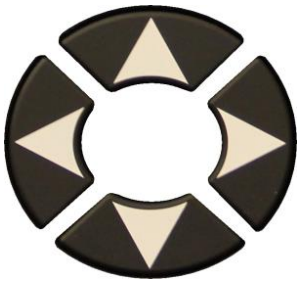
= Back

Connect the **OBD-II** module to the vehicle **OBD-II** port, then switch on the ignition.

The error codes will then be displayed on the screen.

2.5.2. TPMS ECU Unlock

Only available on Toyota and Lexus vehicles, the TPMS ECU Unlock function enables the vehicle TPMS system to be reset. After sending the instruction to the system, the TPMS tool automatically goes back to the "TPMS service" screen.



= Next

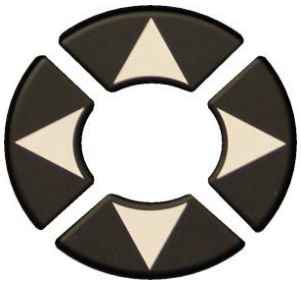
= Back

The screen shows the location of the OBD-II socket.

= TPMS system reset.

2.5.3. Remote key

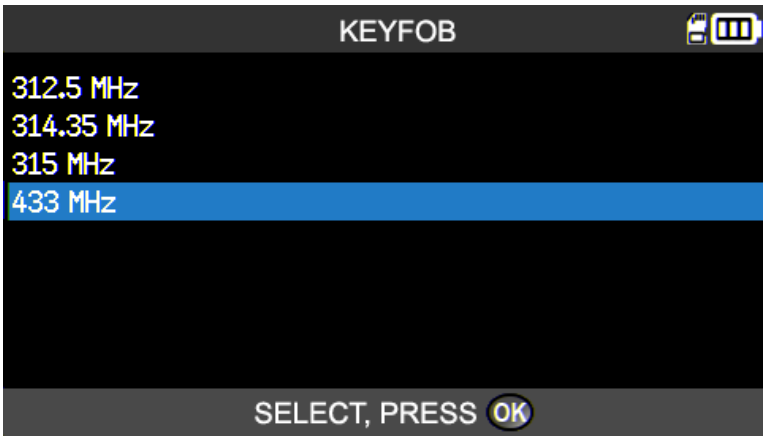
This menu tests the strength of the Radio Frequency (RF) signal of the remote key.



OK = Next

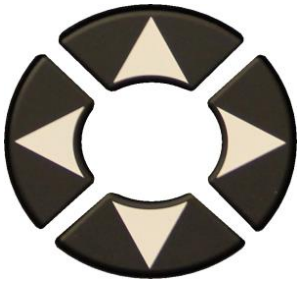
C = Back

Depending on the make and model of the vehicle, the device may ask you to choose the communication frequency for the remote being tested.

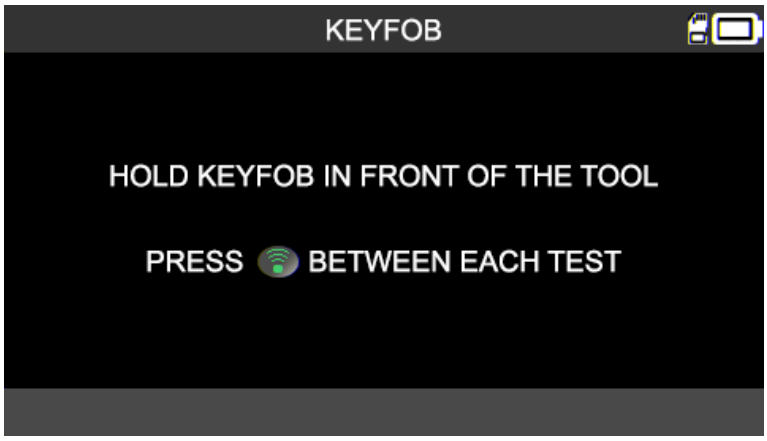


OK = Next

C = Back



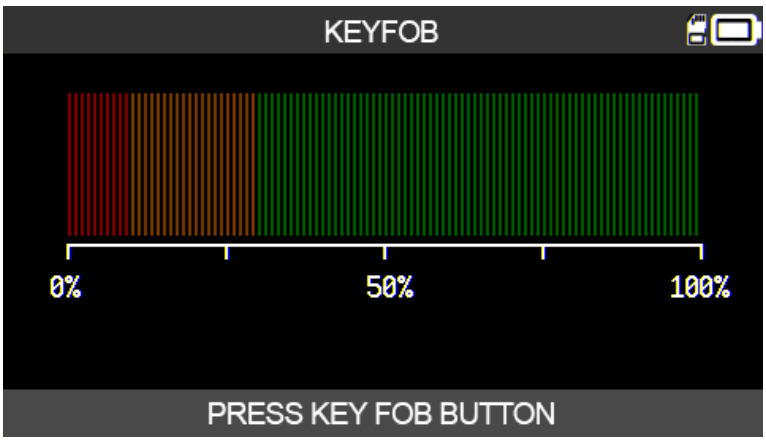
Follow the on screen instructions.



OK = Next

C = Back

Press buttons on remote key.

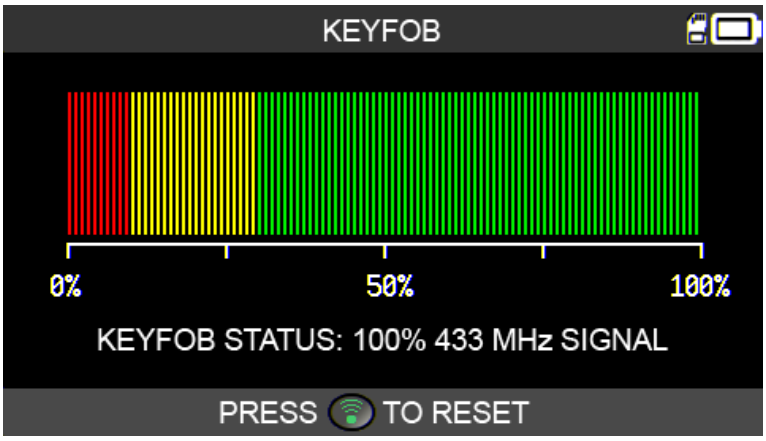


Reset the measurement and start a new test.

The tool waits for a radio signal and then displays the strength of the signal it receives.

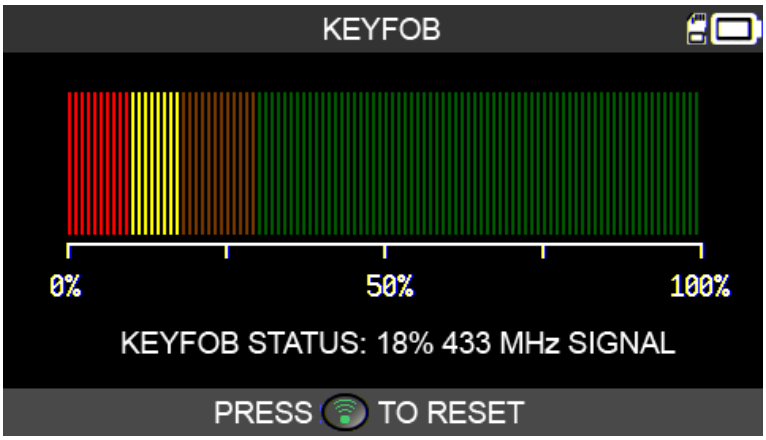
2.5.3. 1) Remote test result

PASS: the key sends a strong radio signal within the chosen frequency range.



Reset the measurement and start a new test.

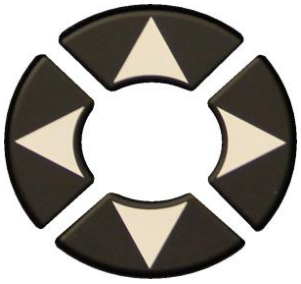
FAIL: a weak radio signal indicates a low battery. Please change the battery.



Reset the measurement and start a new test.

2.6. PARTS

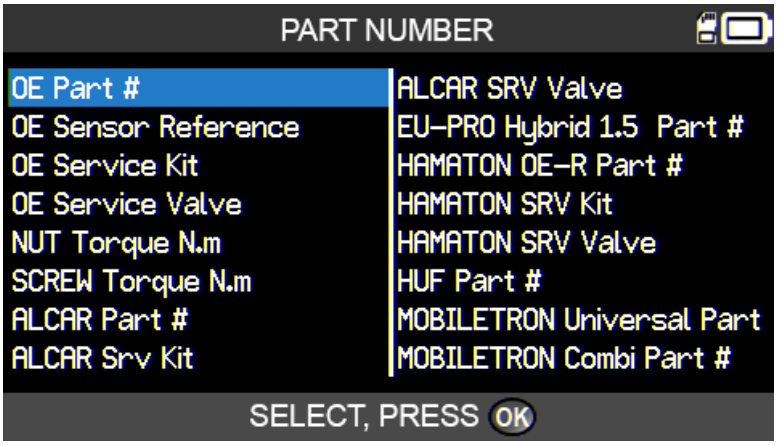
This functionality offers a parts database for all TPMS sensors available across all vehicles on the market.



= Next

= Back

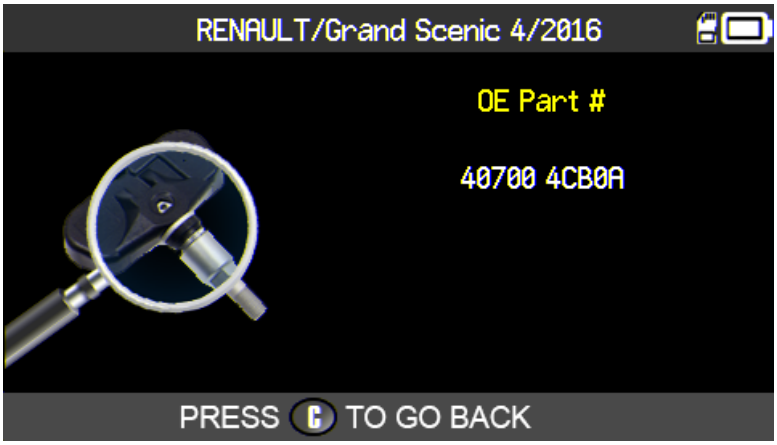
Select the type of part you are looking for in the database.



= Next

= Back

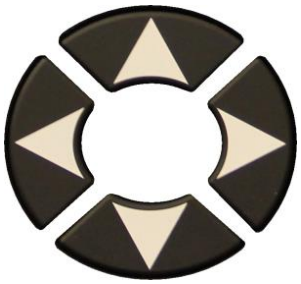
Scroll through the information if necessary.



= Back

2.7. HELP

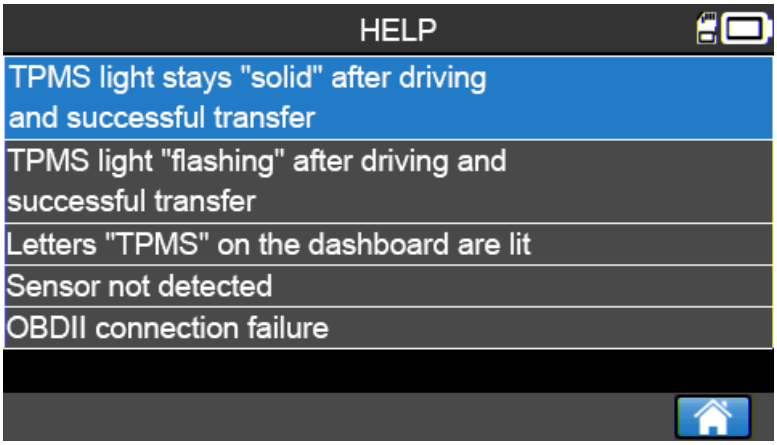
This function provides help for users for resolving TPMS faults.



= Next

= Back

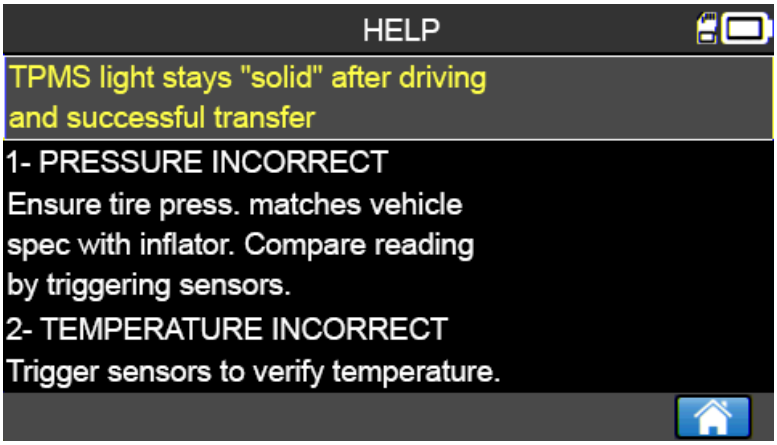
Select the type of fault.



= Next

= Back

Scroll through to view the different information.



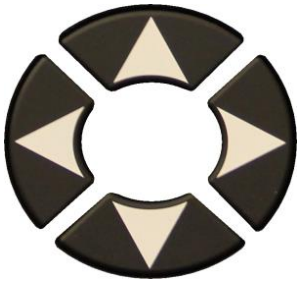
= Next

= Back

Follow the on screen instructions.

3. PROGRAM A BLANK SENSOR

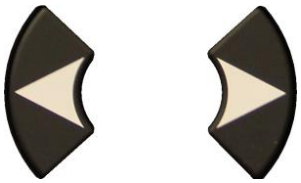
The **VDO TPMS PRO** tool is compatible with most programmable universal sensors.



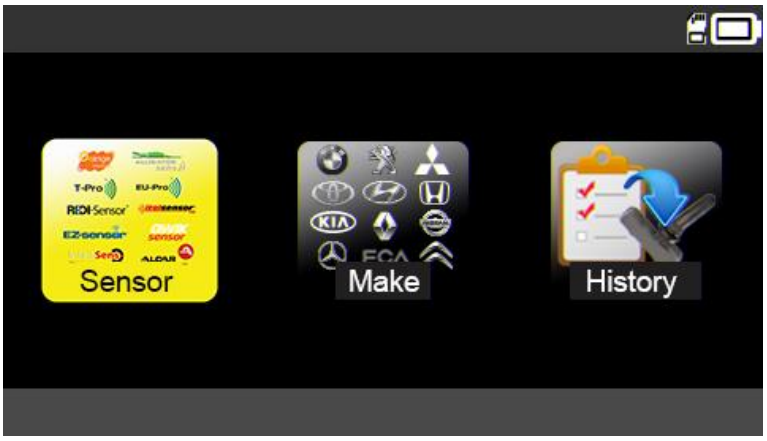
= Next

= Back

3.1. SELECT BY SENSOR MAKE



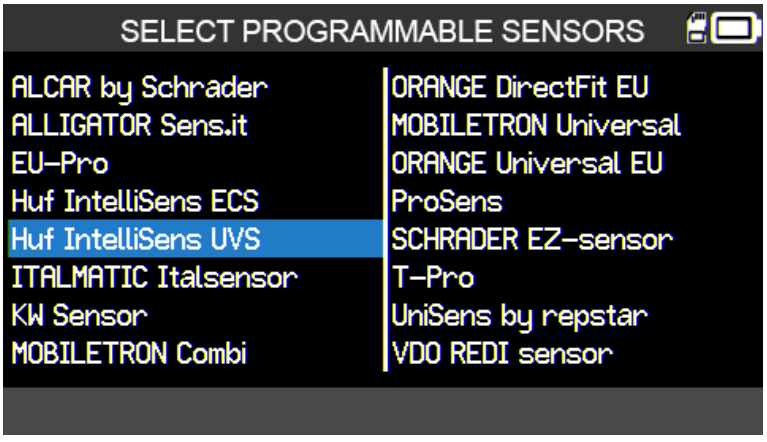
Choice of selection mode: **"Sensor".**



= Next

= Back

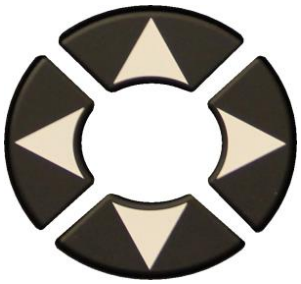
Scroll up and down to choose the make of programmable sensor.



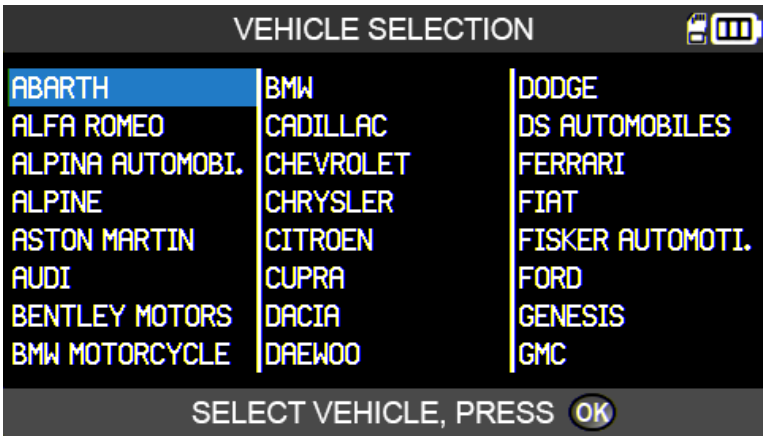
= Next

= Back

The makes shown may change, depending on your settings.

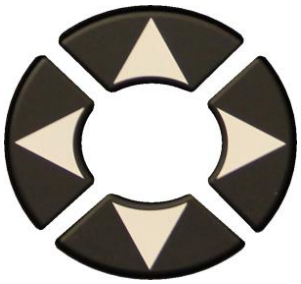


Scroll up and down to choose the make of vehicle.

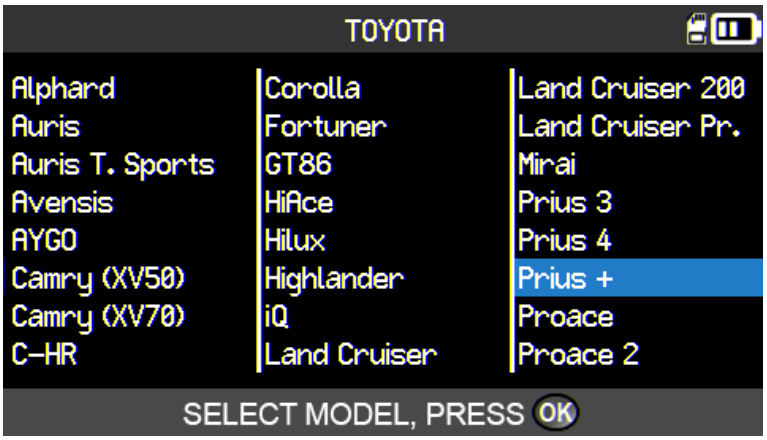


= Next

= Back

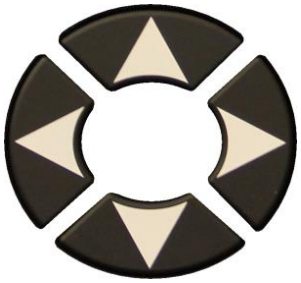


Scroll up and down to choose the vehicle model.

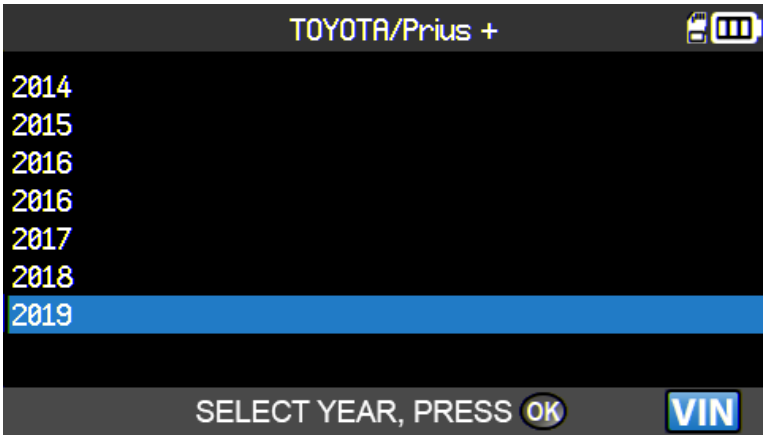


= Next

= Back



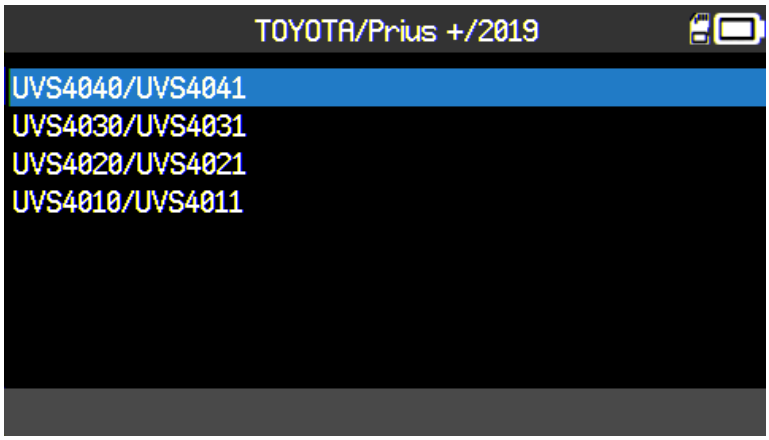
Scroll up and down to select the vehicle model year.



= Next

= Back

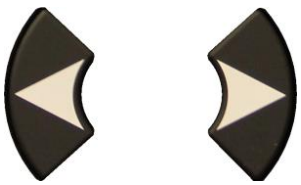
The compatible sensor models are displayed. Select your model.

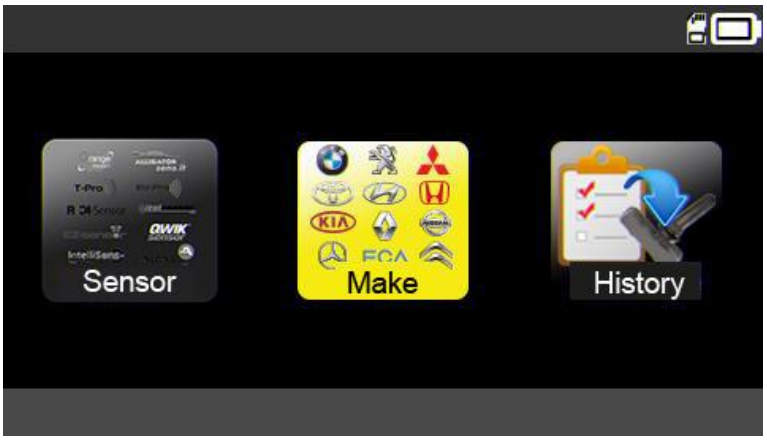


= Next

= Back

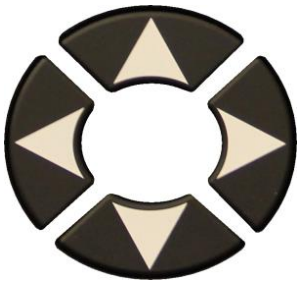
3.2. SELECT BY VEHICLE MAKE



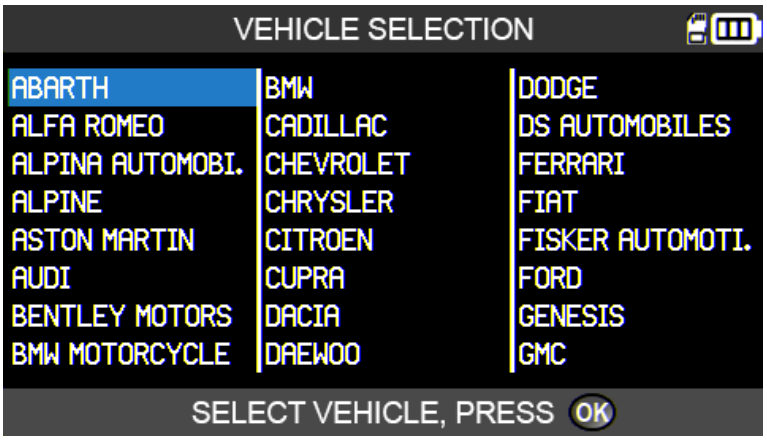


= Next

= Back

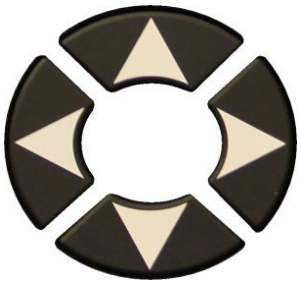


Scroll up and down to choose the make of vehicle.

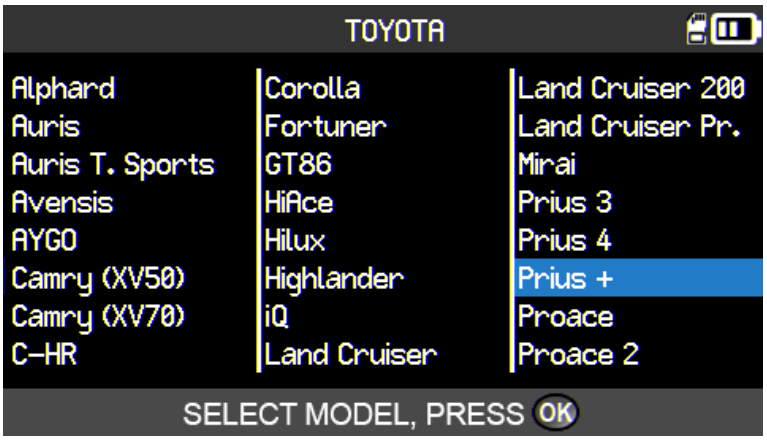


= Next

= Back

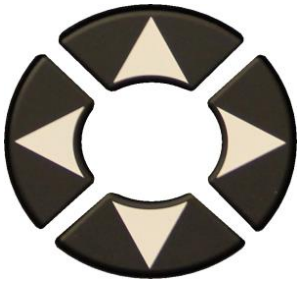


Scroll up and down to choose the vehicle model.

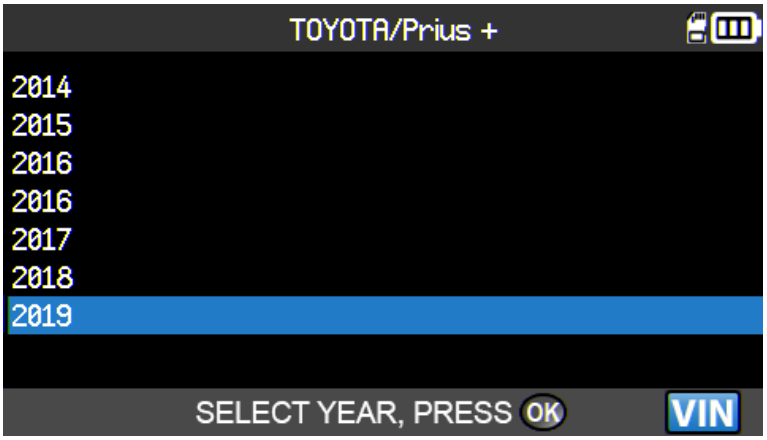


= Next

= Back



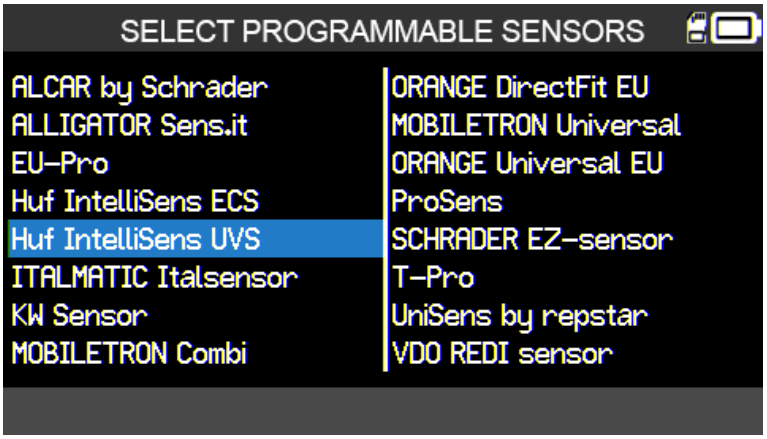
Scroll up and down to select the vehicle model year.



= Next

= Back

Scroll up and down to choose the make of sensor.

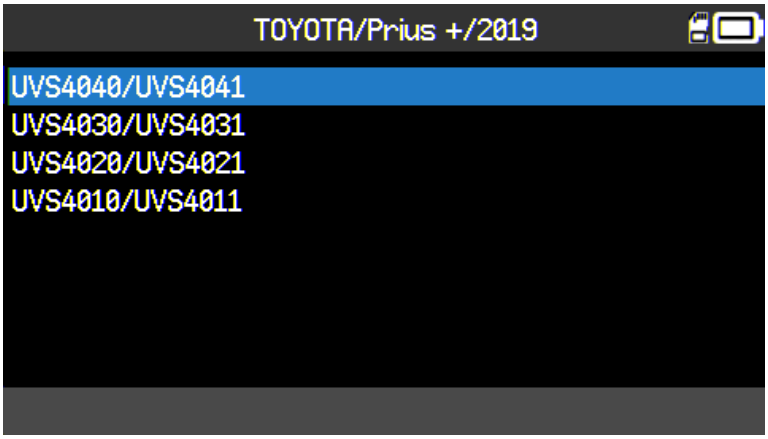


= Next

= Back

The makes shown may change depending on the compatibility with the selected vehicle and on the tool settings.

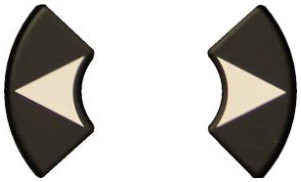
The compatible sensor models are displayed. Select your model.

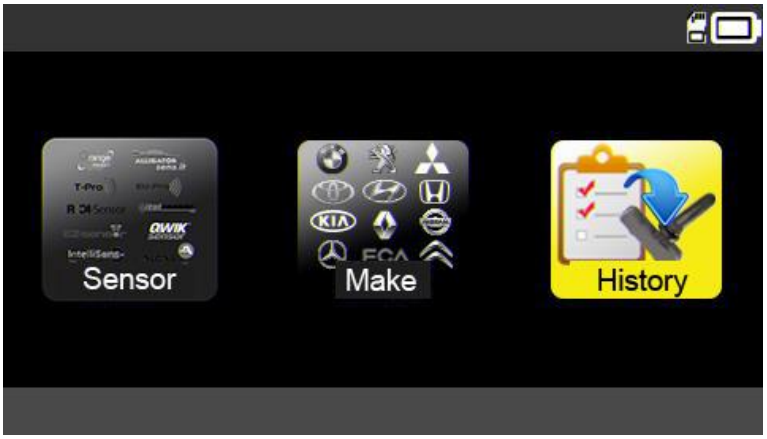


= Next

= Back

3.3. SELECT BY HISTORY

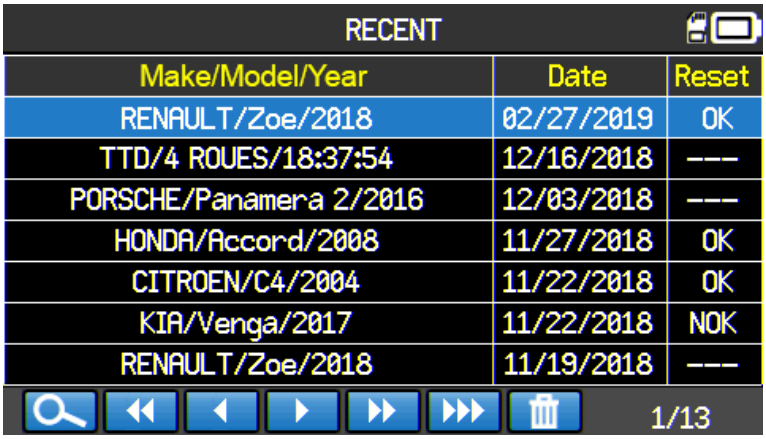




= Next

= Back

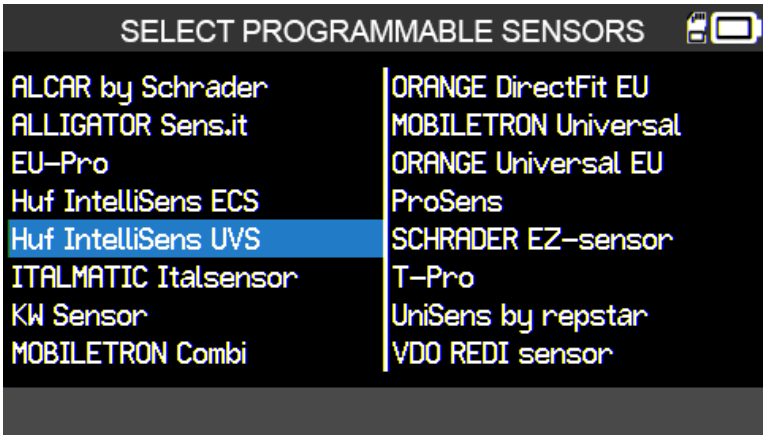
Scroll up and down to choose the vehicle.



= Next

= Back

Scroll up and down to choose the make of sensor.

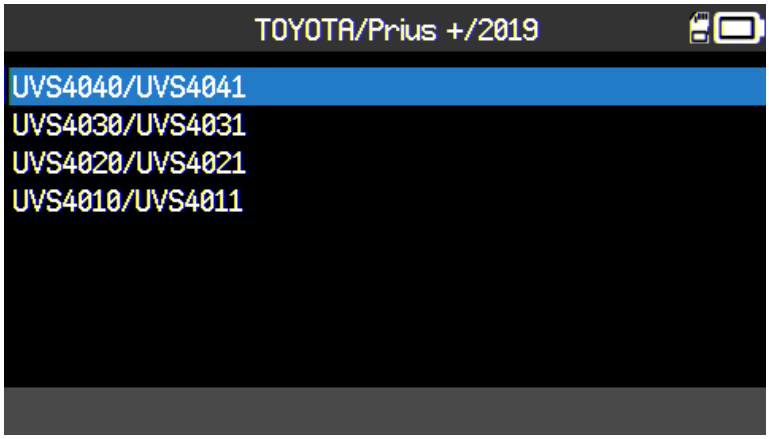


= Next

= Back

The makes shown may change depending on the compatibility with the selected vehicle and on the tool settings.

The compatible sensor models are displayed. Select your model.

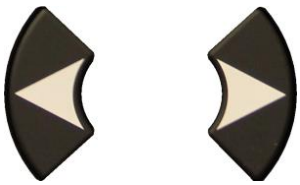


= Next

= Back

3.4. "COPY SENSOR ID" FUNCTION

This function enables the original sensor ID to be retrieved and then copy into a programmable sensor.



Scroll through to select the "**COPY**" option.

= Next

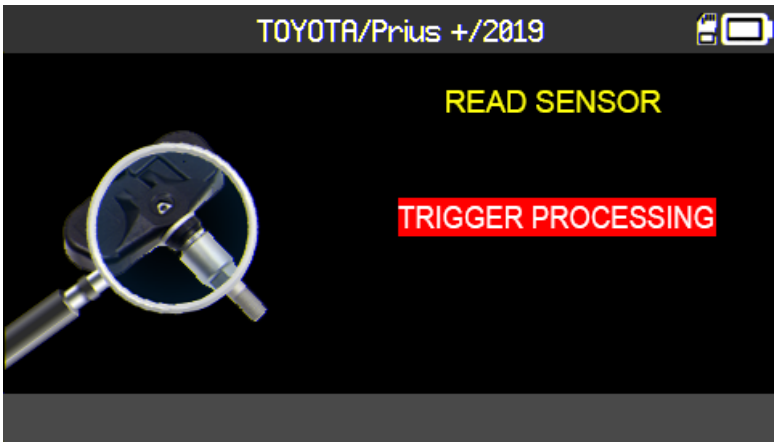
= Back

Position the old sensor in front of the tool antenna to read it.

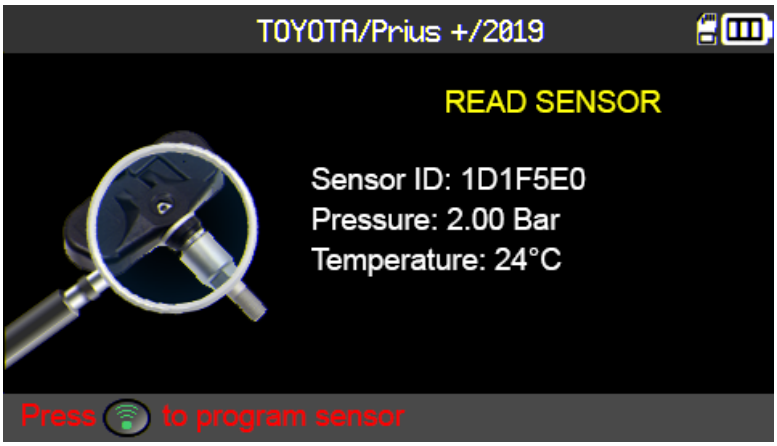
Press

to activate the sensor.

Wait a few seconds for the tool to read the sensor.



The sensor information is displayed.



= Next

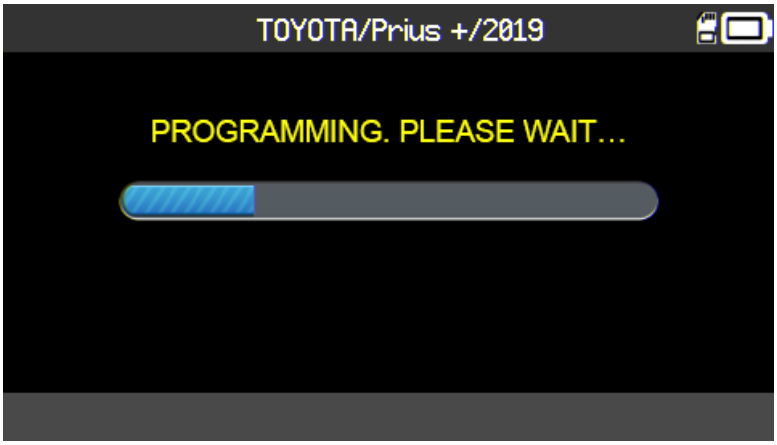
= Back

Position the new sensor in front of the TPMS tool antenna to carry out the programming.

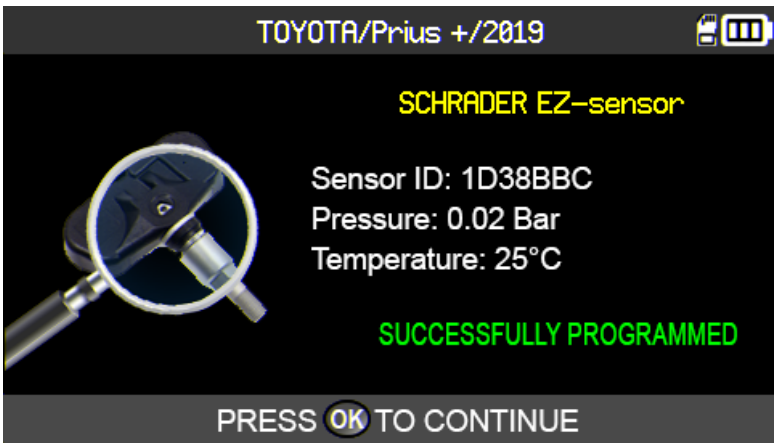
OK = Next

= main menu

Wait a few seconds.

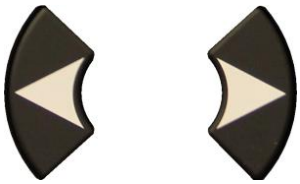


The sensor is cloned.



3.5. "CREATE SENSOR ID" FUNCTION

This function enables a sensor corresponding to the original model to be created if it can be cloned (total breakdown). A new sensor ID is generated randomly by the tool and will no longer be identical to the original. The TPMS ECU then needs to relearn this sensor ID. See section 2.5.1 ("OBD-II relearning").



Scroll right or left to choose the **CREATE** option.

= Next

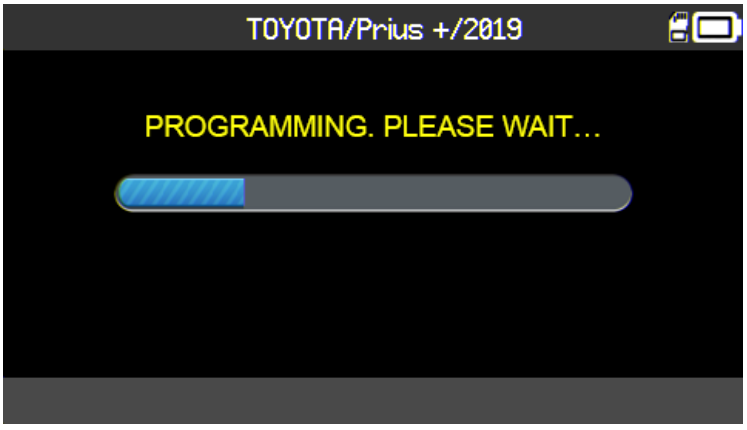
= Back

Position the programmable sensor in front of the device antenna to program it.

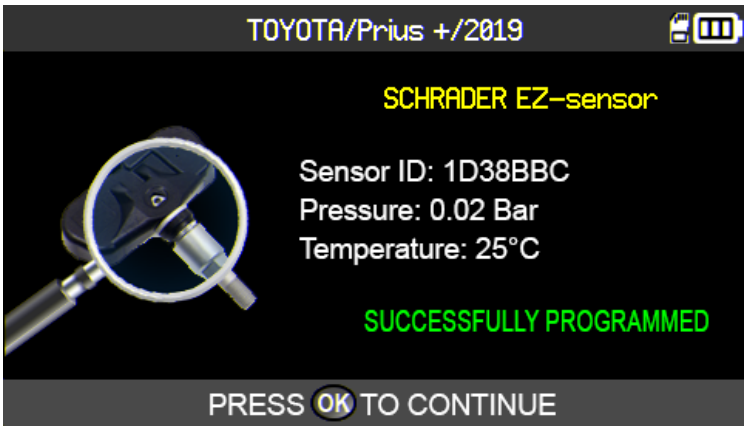
= Next

= Main menu

Wait a few seconds.



The sensor is created.

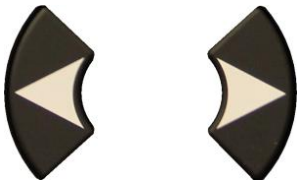


OK = Next

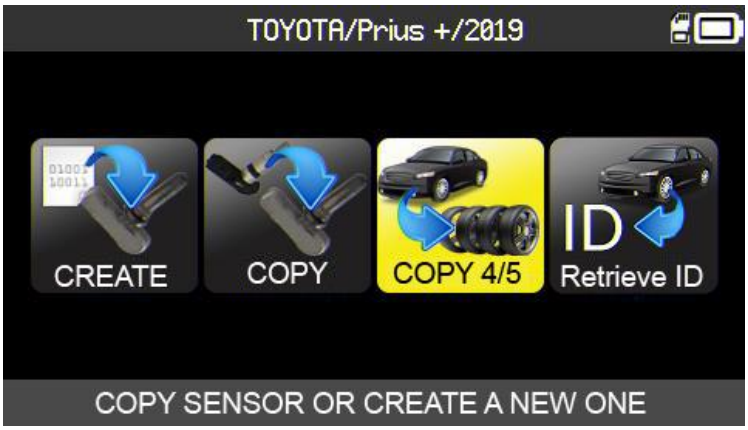
C = Back

3.6. "COPY ALL SENSORS" FUNCTION

This function enables the IDs from 4 or 5 old sensors to be retrieved to transfer them to the new programmable sensors. This option can be used to create a set of winter tires, for example.



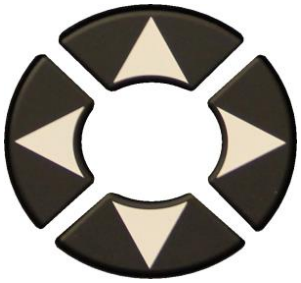
Scroll right or left to choose the **COPY** option.



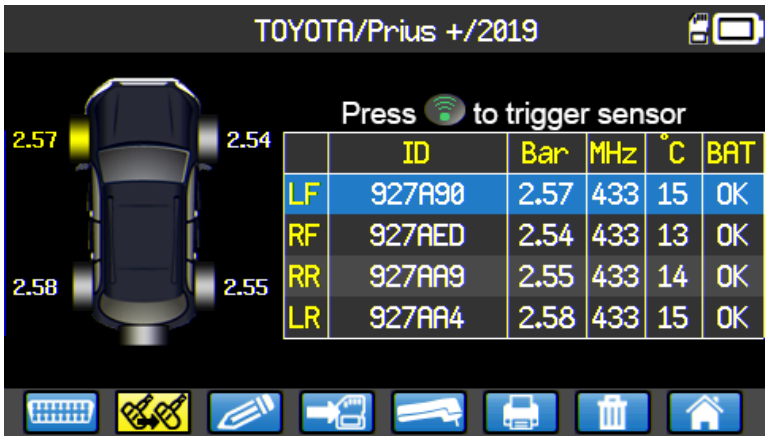
OK = Next

C = Back

Carry out the "**CHECK SENSOR**" operation and perform this operation on all four wheels.



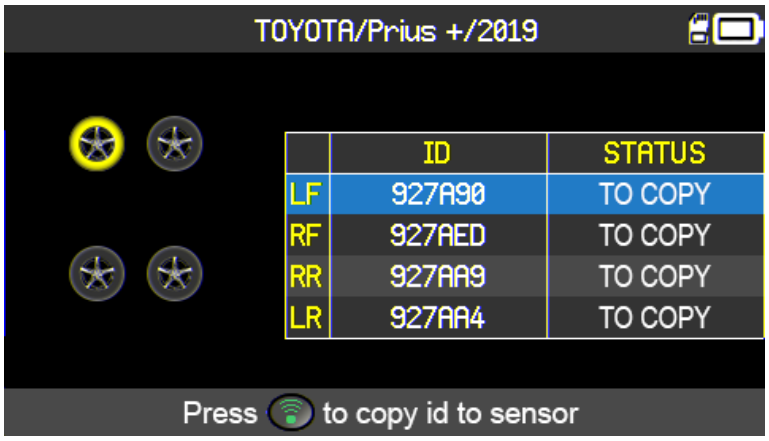
Once all the sensors have been read, select the icon "**Paste**"



OK = Next

C = Back

Select the wheel to copy.



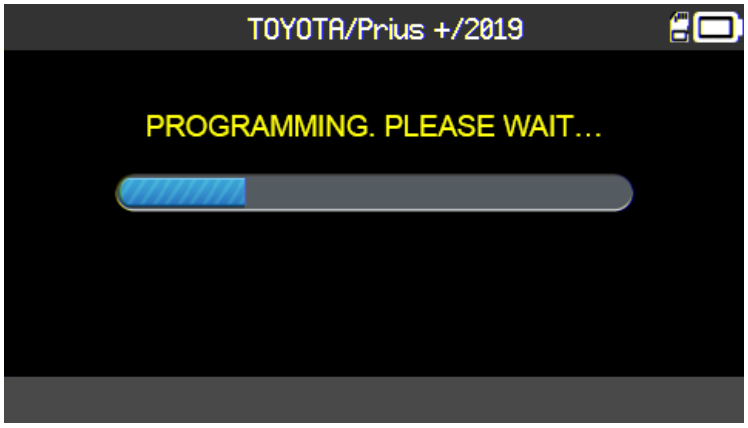
To paste the sensor.

Position the first sensor in front of the tool antenna to program the new sensor.

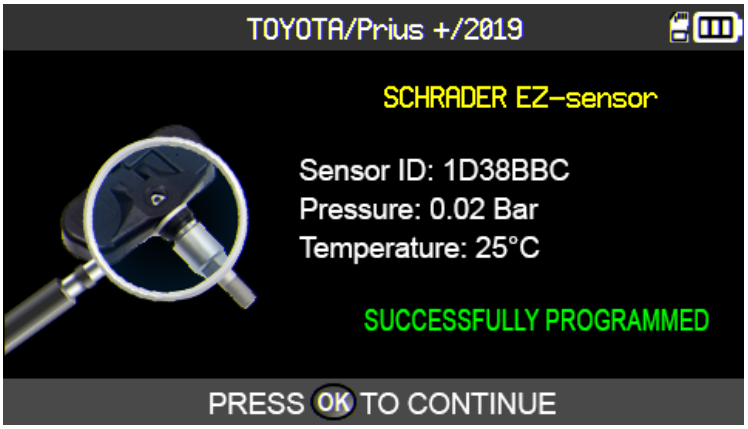
= Continue

= Back to main menu

Wait a few seconds.



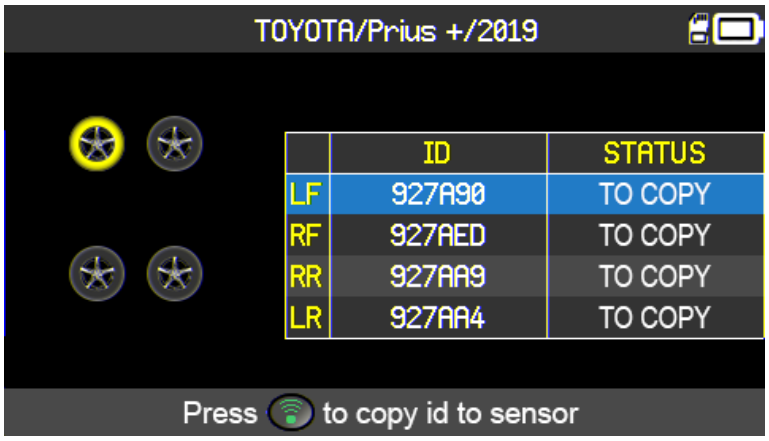
The sensor is cloned.



= Next

= Back

Select the second wheel to copy.

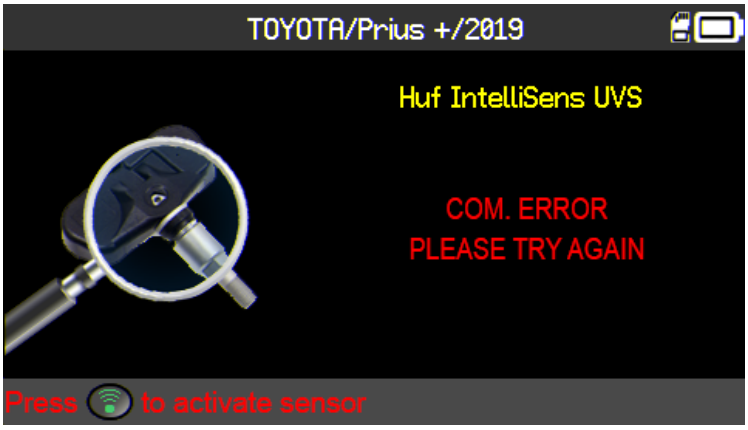


To paste the sensor.

Perform the same operation for all wheels on the vehicle.

3.7. PROGRAMMING FAULT

In the event of an transfer issue, the message opposite will appear. Restart the operation.

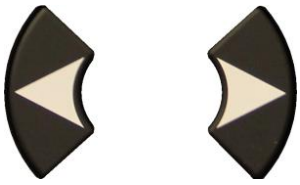


= Try again

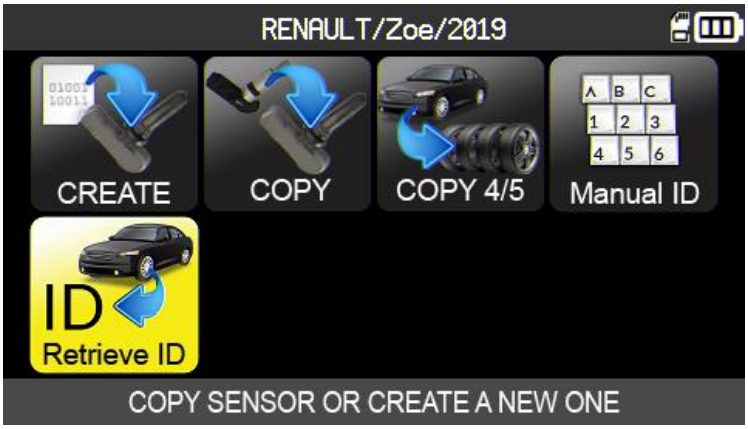
= Back

3.8. "RETRIEVE ID" FUNCTION

This function enables the sensor IDs saved in the TPMS ECU of the vehicle to be retrieved automatically via the OBDII interface.



Scroll right or left to choose the **ID RETRIEVAL** option.



= Next

= Back

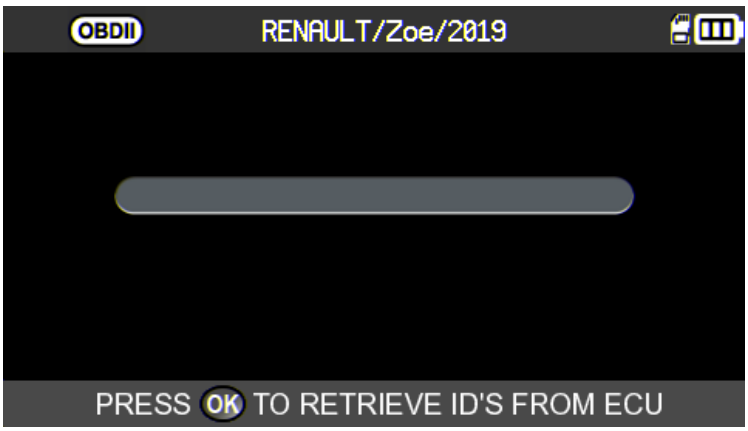
Connect the OBD-II module to the TPMS tool.

= Next

The tool shows the location of the OBD-II connector in the vehicle.

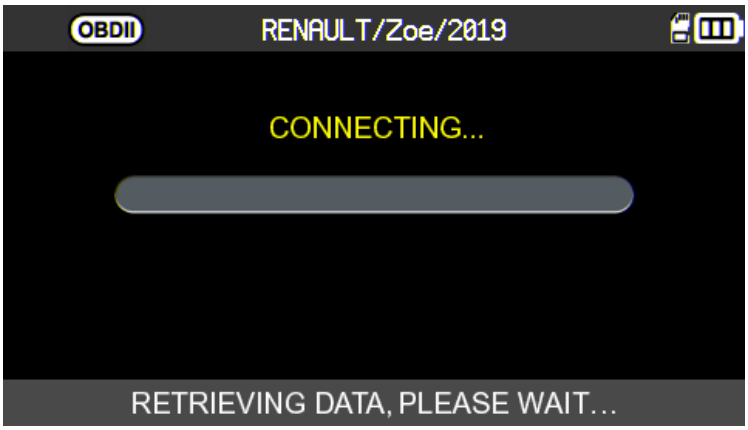
= Next

Switch on the ignition then finally confirm by pressing "OK" to run the TPMS system.

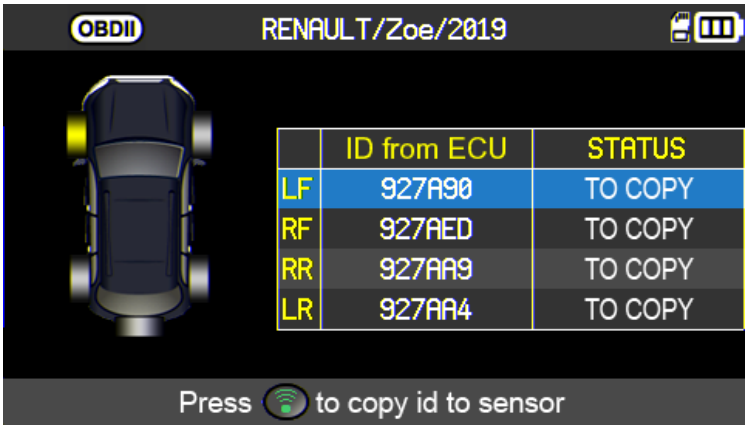


= Next

The TPMS tool connects to the ECU. Please wait while this is carried out.



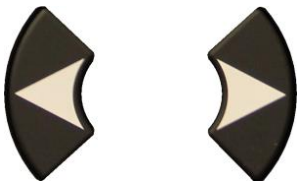
The tool shows the TPMS sensor identifiers saved in the vehicle ECU.



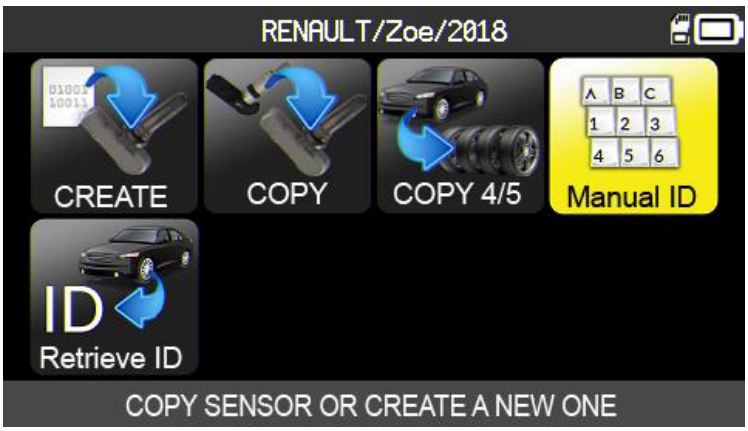
To paste the sensor.

3.9. "MANUAL ID ENTRY" FUNCTION

This function enables the ID's for damaged sensors to be entered manually.



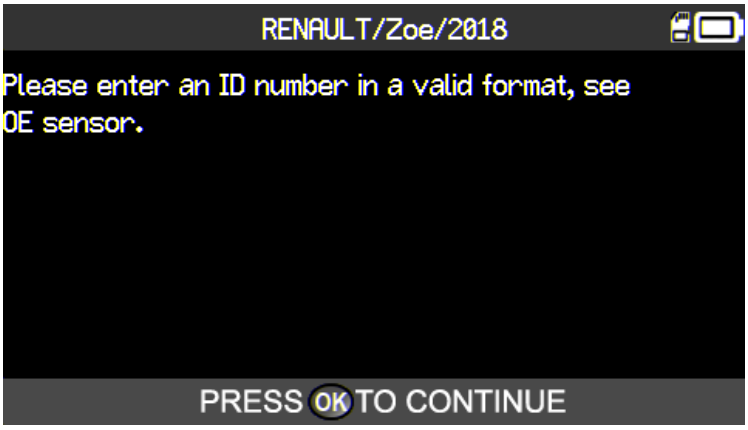
Scroll right or left to choose the **RETRIEVE ID** option.



= Next

= Back

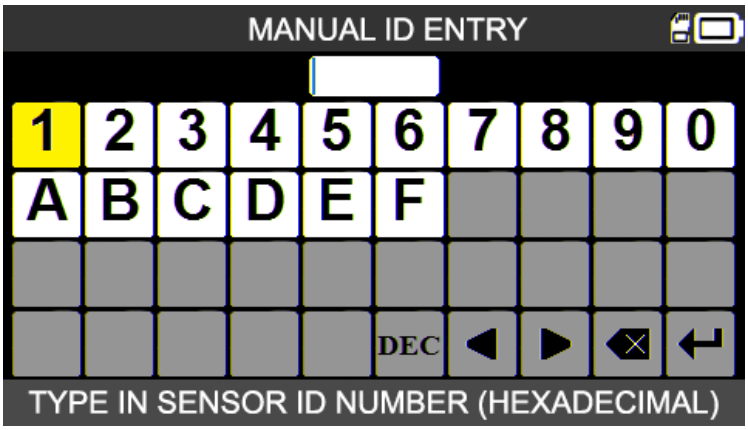
The tool alerts you to the importance of entering a valid sensor ID in the correct format. (decimal or hexadecimal)



= Next

= Back

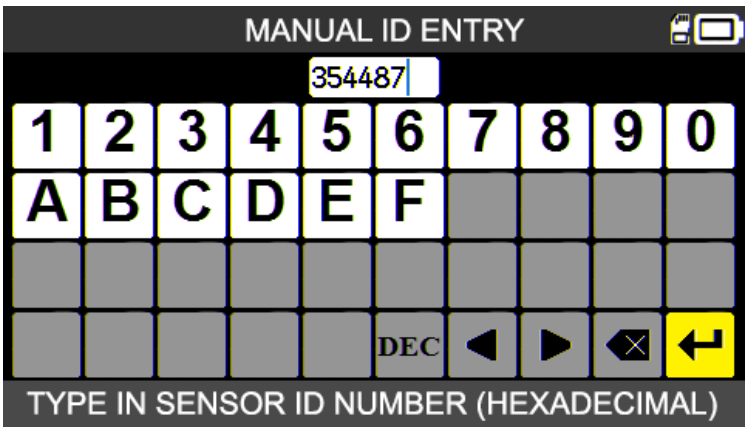
Use the virtual keyboard to enter the sensor ID.



= Next

Use the icon

to confirm once the entry has been made.

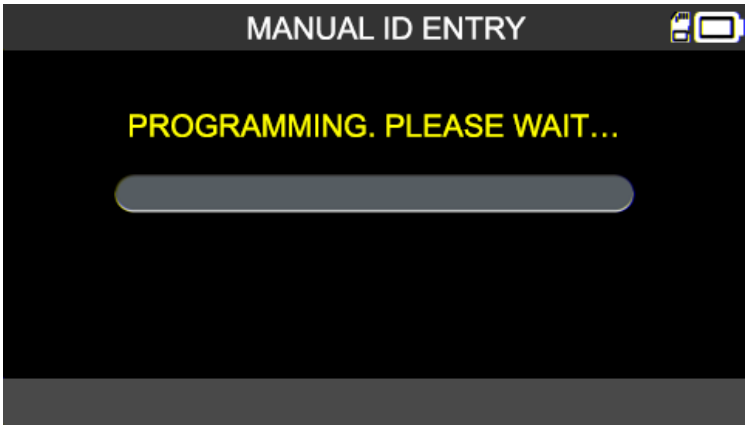


= Next

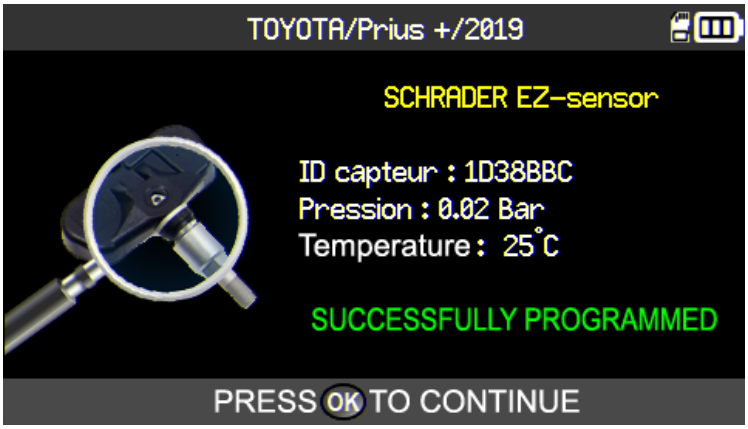
The tool is then ready to program the sensor.

To program.

Please wait while the TPMS tool programs the sensor.



The sensor is cloned.



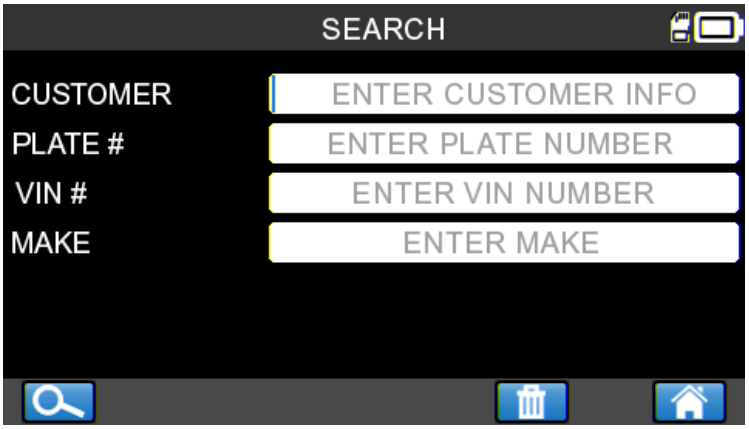
= Next

4. SEARCH FUNCTION

This function enables a task saved in the TPMS tool to be searched. The search is more accurate if you have previously completed the additional fields, such as: customer name, vehicle registration number, VIN identification, vehicle make.

= Next

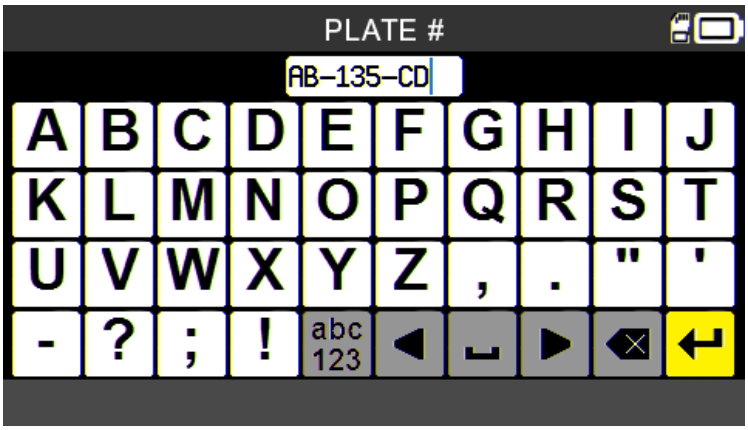
= Back



= Next

= Back

Use the arrows to select the search criteria: customer name, registration, VIN identification and/or vehicle make.

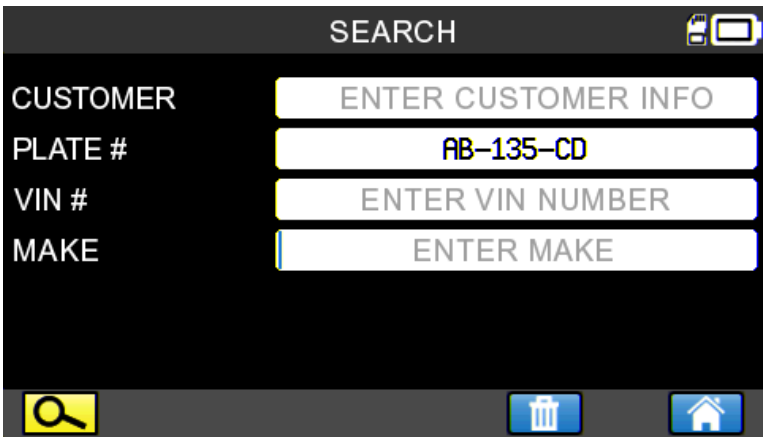


= Next

= Back

Use the arrows to create the entry and confirm using the icon

The tool confirms the entry.

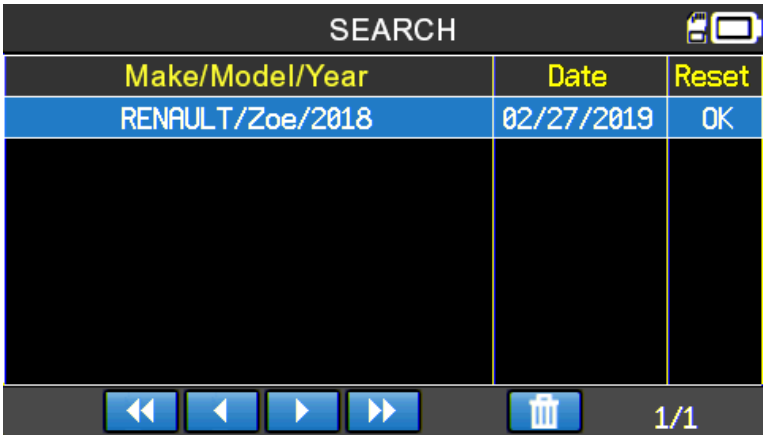


OK = Next

C = Back

The tool shows the search results.

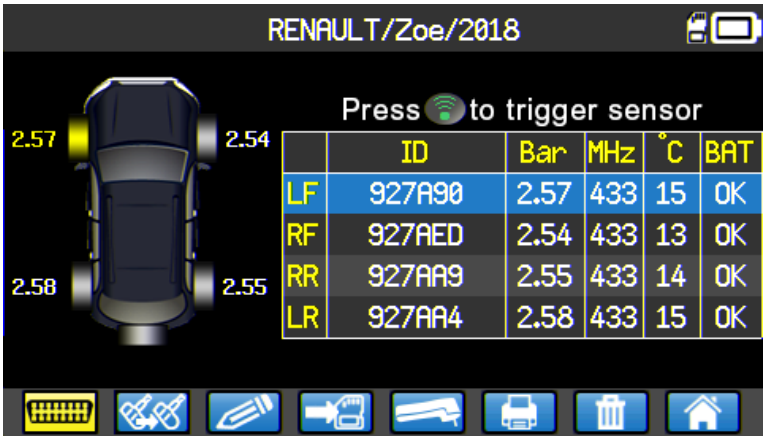
Select the vehicle of your choice.



OK = Next

C = Back

You are then ready to perform all the TPMS maintenance actions on the vehicle.

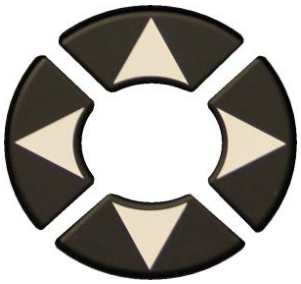


OK = Next

C = Back

4.1. SEARCH USING THE VIN

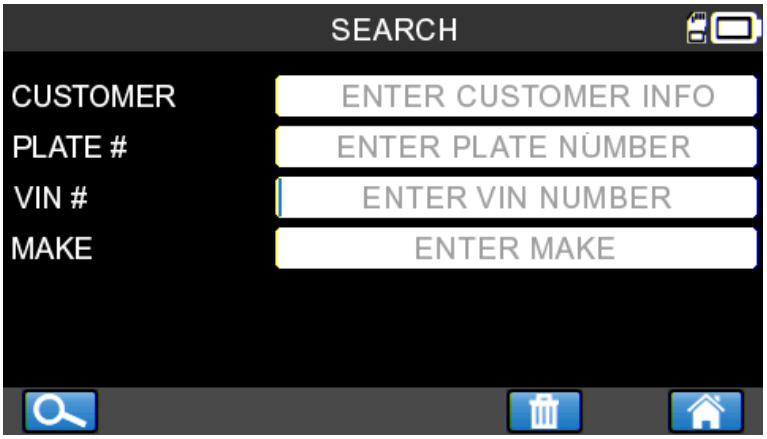
This function enables you to search for a vehicle that is already saved in the device, using its VIN identification number.



= Next

= Back

Select the **VIN no.** field.

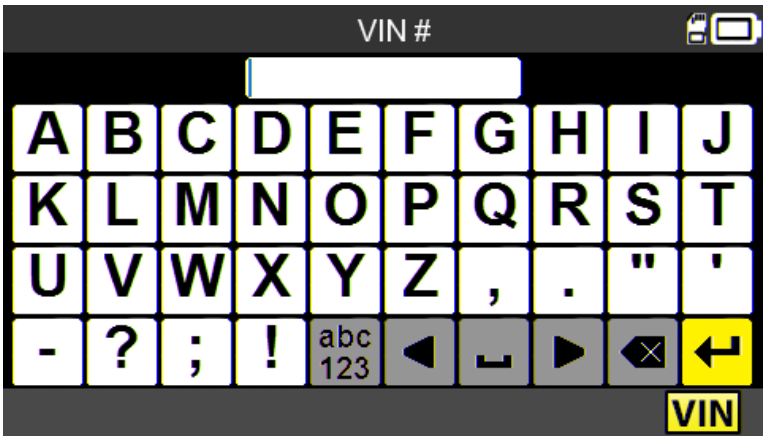


= Next

= Back

Enter the vehicle VIN manually or use the button

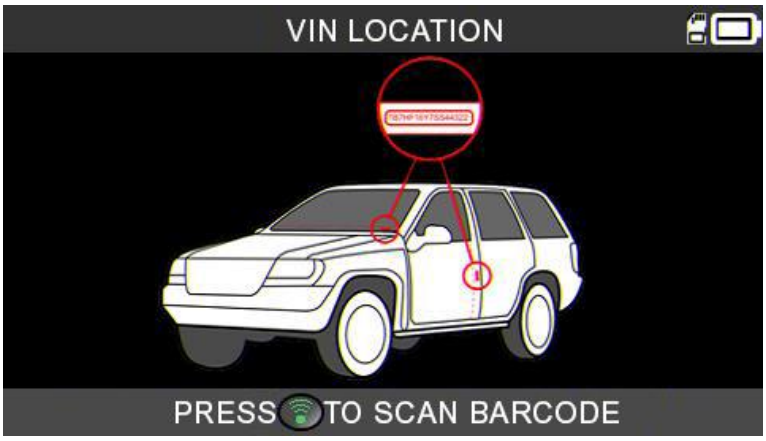
to use the bar code scanner. (US only)



= Next

= Back

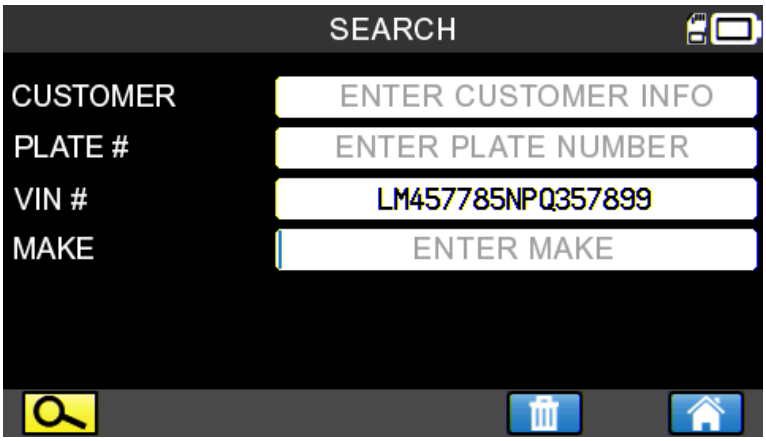
The device shows the most common locations for the VIN identification number.



To scan the VIN barcode.

The VIN number is displayed in the corresponding field.

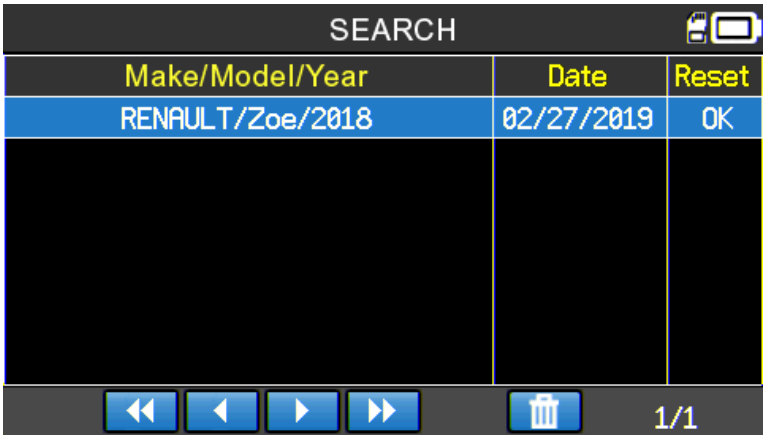
Select the button to show the data relating to the vehicle.



OK = Next

C = Back

The vehicle corresponding to the VIN is displayed.

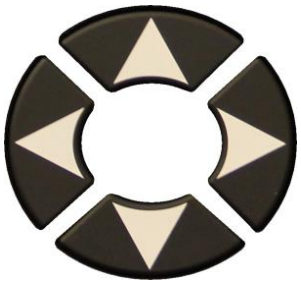


OK = Next

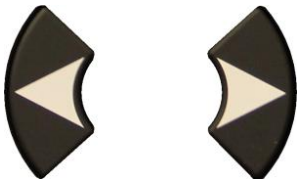
C = Back

5. HISTORY

This function shows all the tasks saved on the device.



= Next

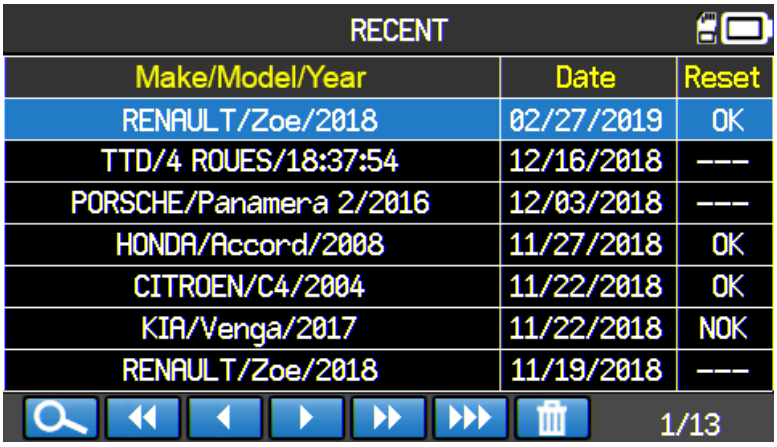


Scroll right or left to select the **RECENT** option.

= Next

= Back

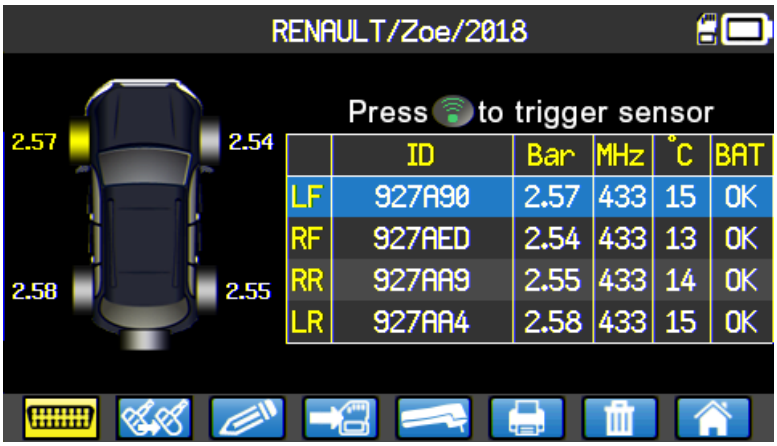
Select the vehicle.



= Next

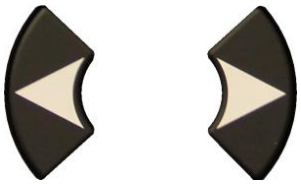
= Back

The screen, which corresponds to the selected vehicle, allows users to select an ongoing task and complete it, add information, print, etc.



To read the sensor.

= Back

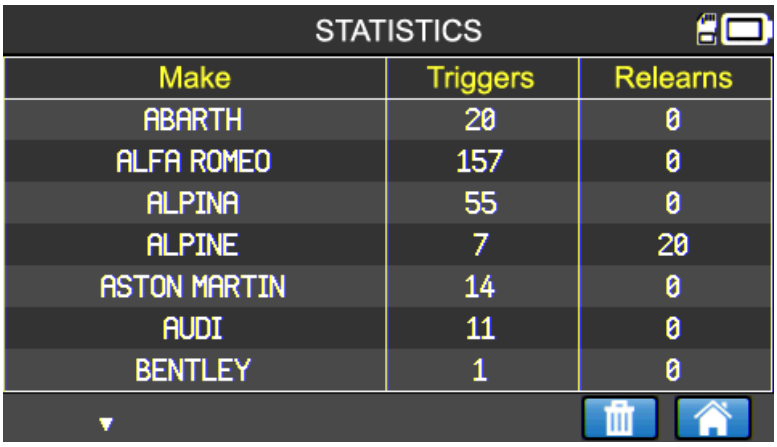


Scroll right or left to select the **STATISTICS** option.

= Next

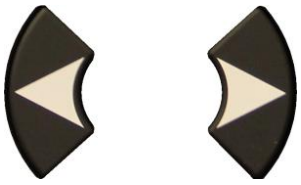
= Back

The device shows all the operations carried out since the TPMS was first used.



= Next

= Back

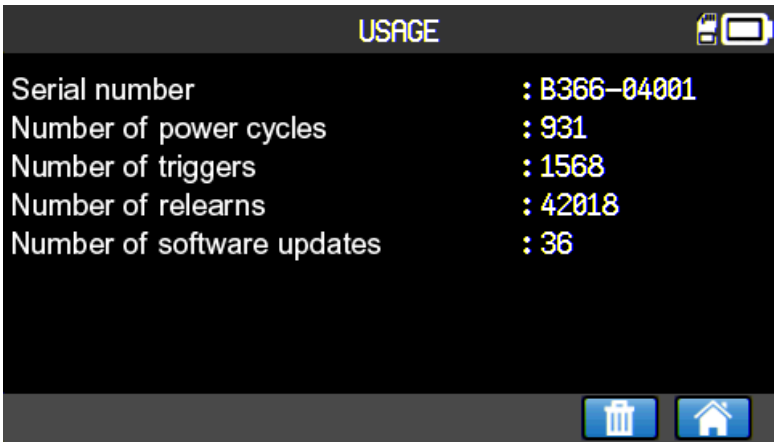


Scroll right or left to select the **USAGE** option.

= Next

= Back

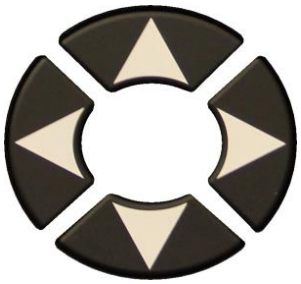
The tool shows the general usage statistics for the TPMS tool.



= Back

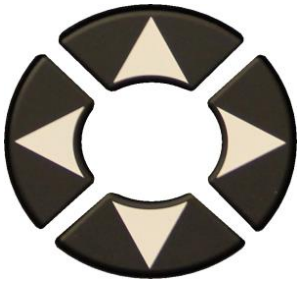
6. SETTINGS

6.1. SETTINGS MENU



= Next

= Back



Select a setting.

= Next

= Back

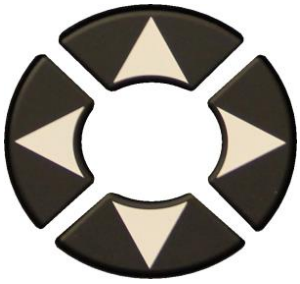
***Note**: the text under each icon shows the status of the corresponding setting.*

6.1.1. Description of the TPMS tool settings

	**LANGUAGE**	Select the language to be used in the menus.
	**UNITS**	Change the display units for pressure, temperature and depth measurement. (TTD)
	**FORMAT**	Change the display format for the sensor ID.
	**BUZZER**	Activate or deactivate the tool buzzer.
	**SWITCH OFF**	Sets the time before the device switches off automatically when not being used.
	**ZONE**	Select the work zone. Please note, in the event of a change of zone, a firmware update may be required to download the database for the selected zone. There must be an SD card in the device.
	**WIFI**	Activates or deactivates the tool WIFI connectivity.

6.1.2. Change the language setting

LANGUAGE: Enables the language displayed in the TPMS tool menus to be selected.

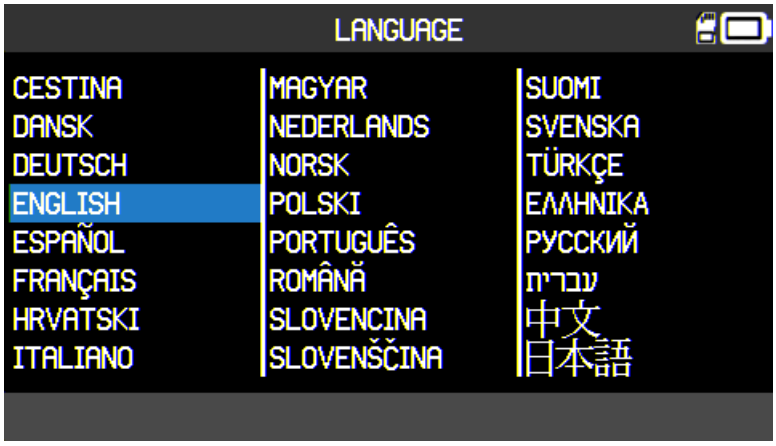


Select a setting.

= Next

= Back

Scroll through to choose the **language.**



= Next

= Back

6.1.3. Change the Units settings

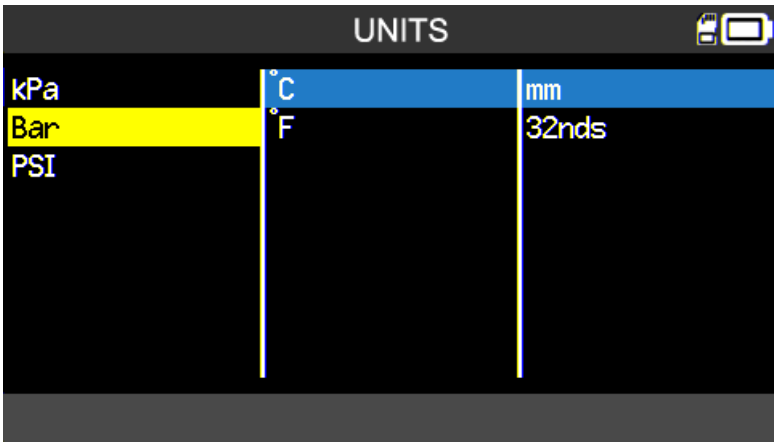
UNITS: change the units used for pressure, temperature (kPa, Bar or PSI with F° or C°) and the tire tread depth measurement (mm/32nds)

Select a setting.

= Next

= Back

Scroll through to choose the **units.**

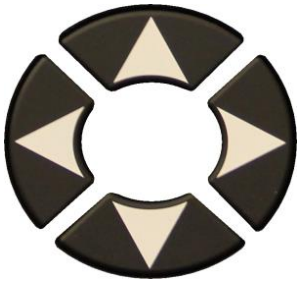


= Next

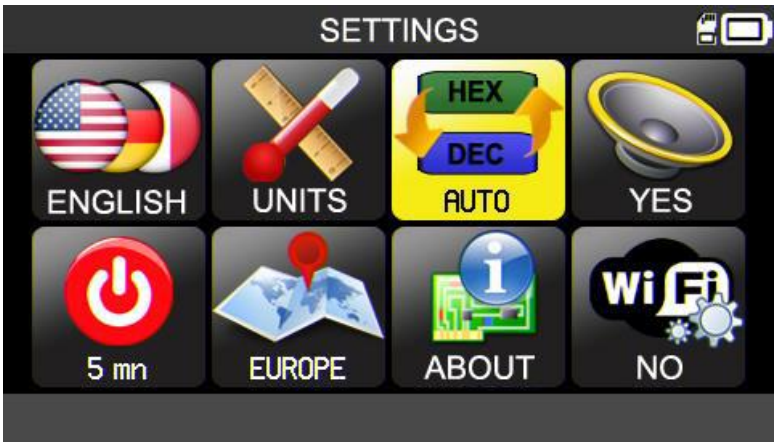
= Back

6.1.4. Change the Format settings

FORMAT: change the sensor identifier display format.



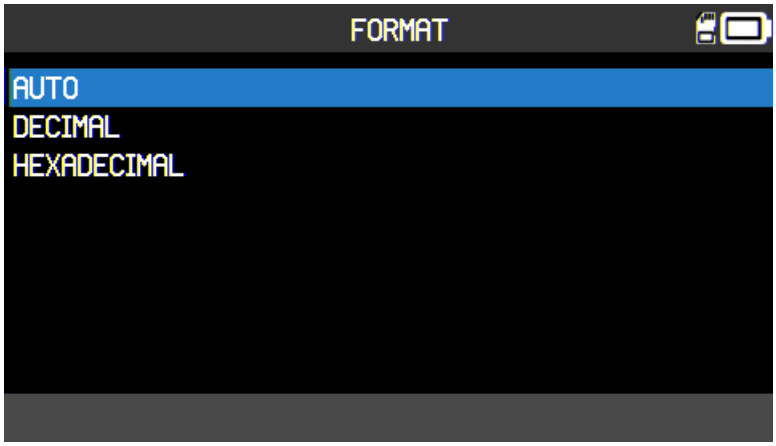
Select a setting.



= Next

= Back

Scroll through to choose the **Format**.



= Next

= Back

AUTO: display the ID following the format sent by the TPMS sensor.

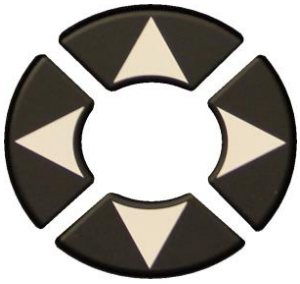
DECIMAL: always displays the ID's in decimal format (0 to 9).

HEXADECIMAL: always displays the ID's in hexadecimal format (0 to 9 and A to F).

6.1.5. Change the Buzzer setting

BUZZER: to activate / deactivate the buzzer. (YES or NO).

When the settings are on **YES**, a beep sounds when the sensor ID is received by the TPMS tool.

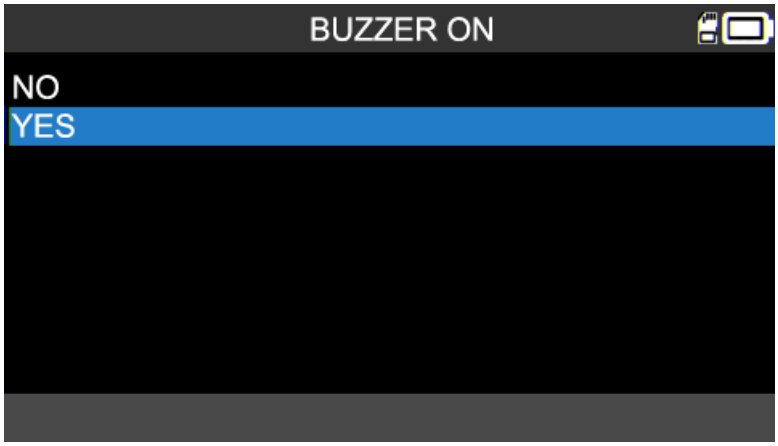


Select a setting.

= Next

= Back

Scroll through to choose **Yes** or **No**.

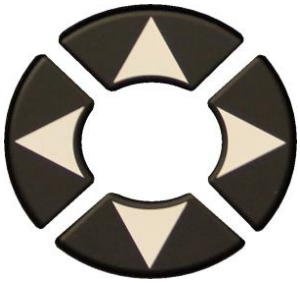


= Next

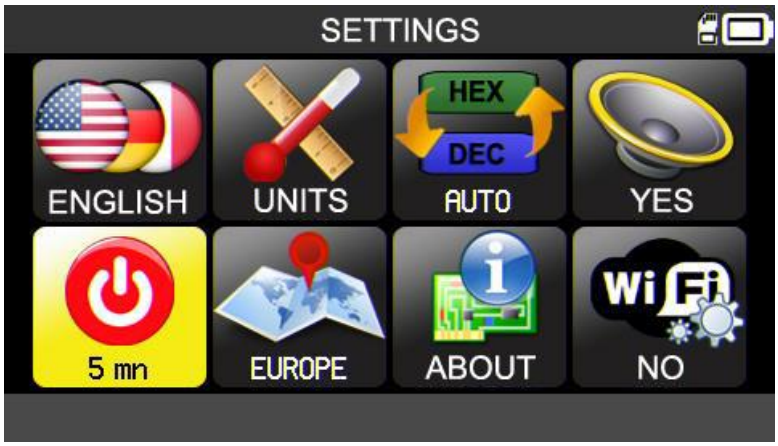
= Back

6.1.6. Change the automatic switch off setting

AUTO OFF: time the tool is not used before automatic switch off.



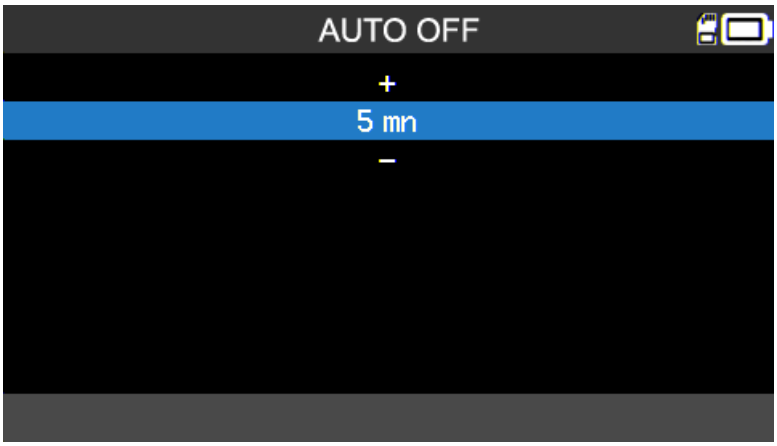
Select a setting.



= Next

= Back

Scroll **Up** (+) and **Down** (-) to set the time.



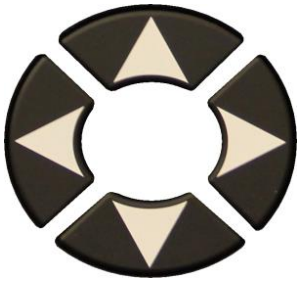
= Next

= Back

Change from **1 min** (minimum) to **DISABLED** (never).

6.1.7. Change the Zone setting

Enables the device working zone to be changed to switch from a European vehicle to an American vehicle, for example.

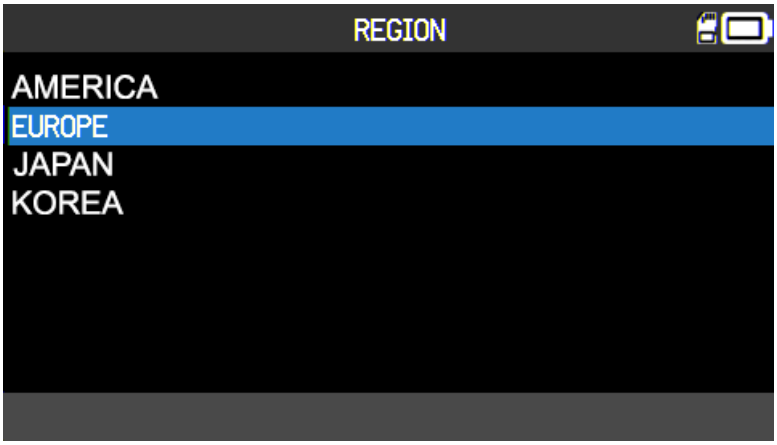


Select a setting.

= Next

= Back

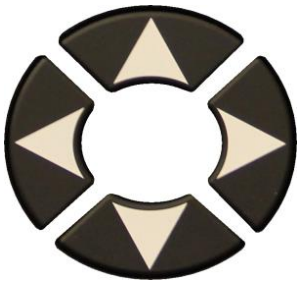
Scroll through to select another zone.

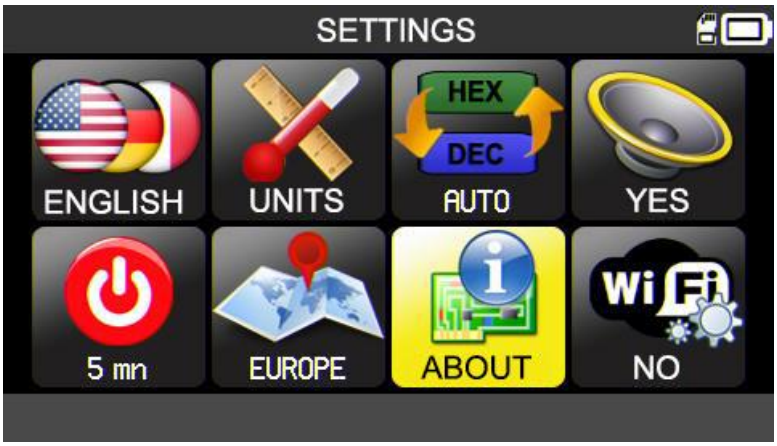


= Next

= Back

6.1.8. About

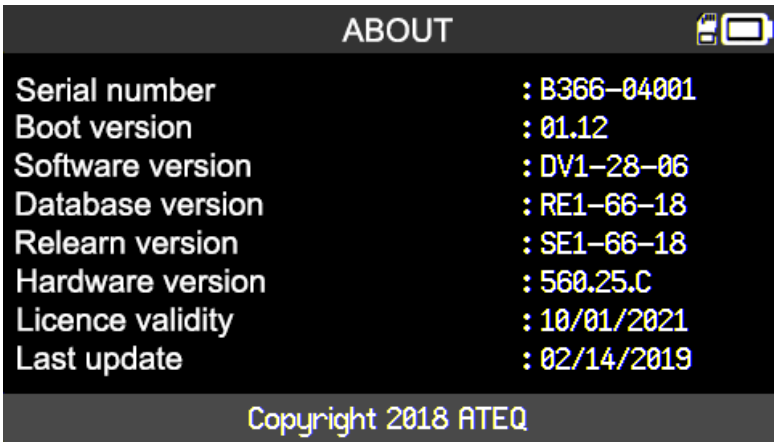




OK = Next

C = Back

Displays all the information about the firmware version, the database and the validity of the user license.



C = Back

6.1.9. WiFi: prerequisite and configuration

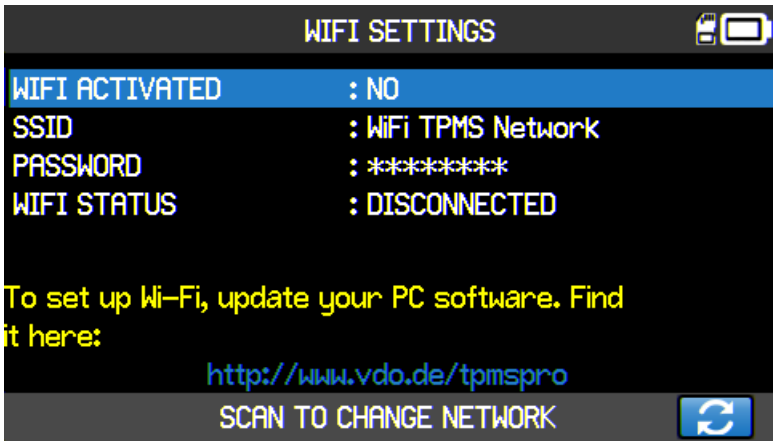
The WIFI functionality of the **TPMS PRO** enables tasks performed on the TPMS to be transferred wirelessly to the **WebTPM** software installed on a PC.

To do this, please make sure the following points have been respected:

- the latest version of the WebTPM software must be installed on the PC to receive the tasks from the TPMS tool via WiFi,
- the TPMS tool must be up to date with the latest version of its internal firmware. To do this, use WebTPM and consult the section relating to this guide.
- TPMS tool and PC must both be connected to the same WiFi network,
- the WiFi router must be capable of using 802.11b standard.
- the DHCP server must be set to "default gateway",
- filtering by MAC address must be deactivated,
- WiFi channels can be used as required: 1, 6 or 11.

After checking these various points, follow the next procedure on the TPMS tool:

When you go into the WiFi menu, the tool displays the WiFi connection status.

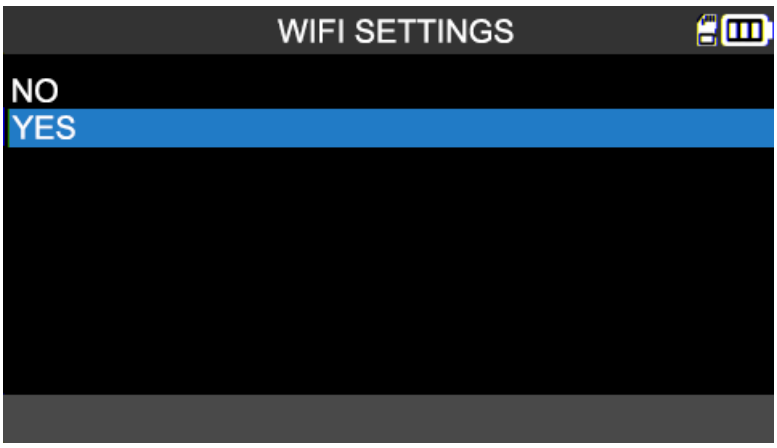


OK = Next

C = Back

To activate WiFi, choose setting "WiFi activated".

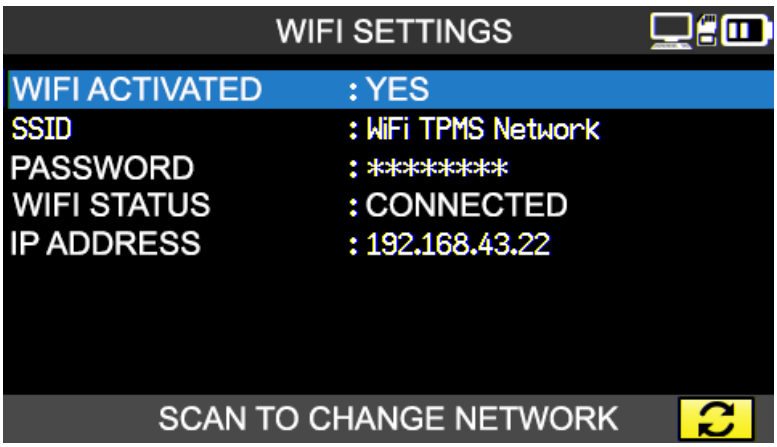
In the menu displayed confirm with "Yes".



OK = Next

C = Back

The device confirms it is connected and gives full details of the WiFi connection.

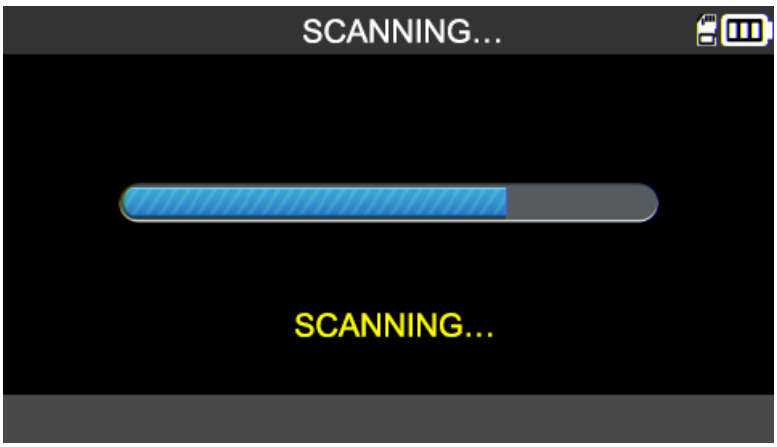


OK = Next

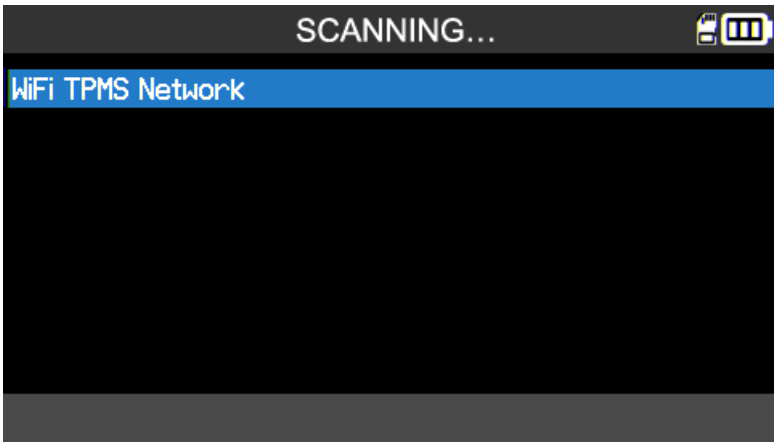
C = Back

Select icon

to scan for WiFi networks.

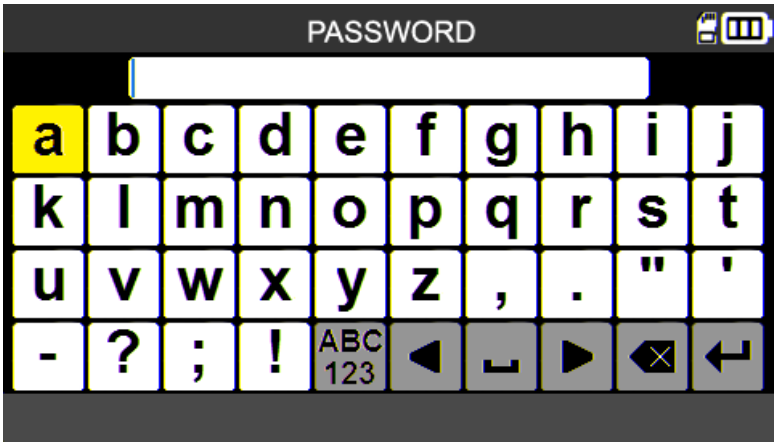


The tool displays the available WiFi networks.



OK
= Next

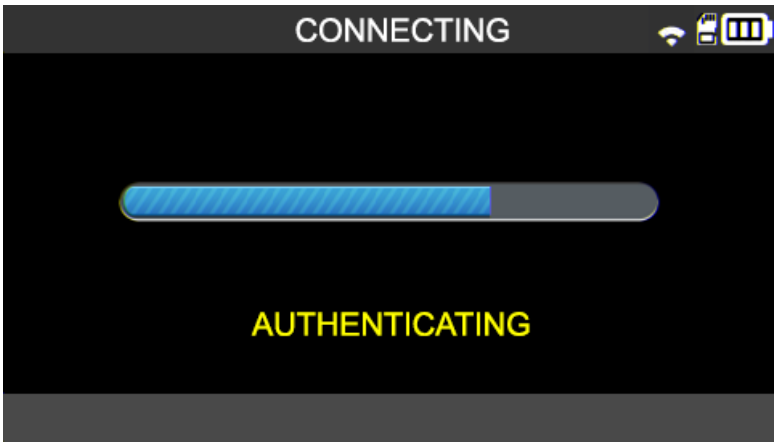
Enter the WiFi network password.



The ↵ button confirms the password.

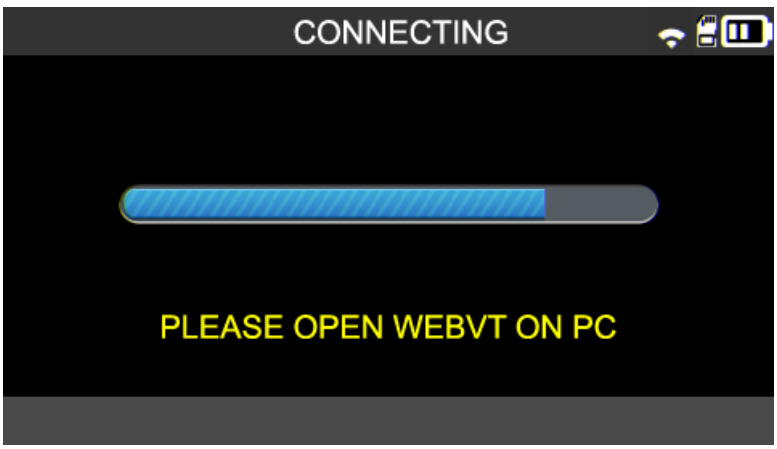
OK

The tool connects to the WiFi network.

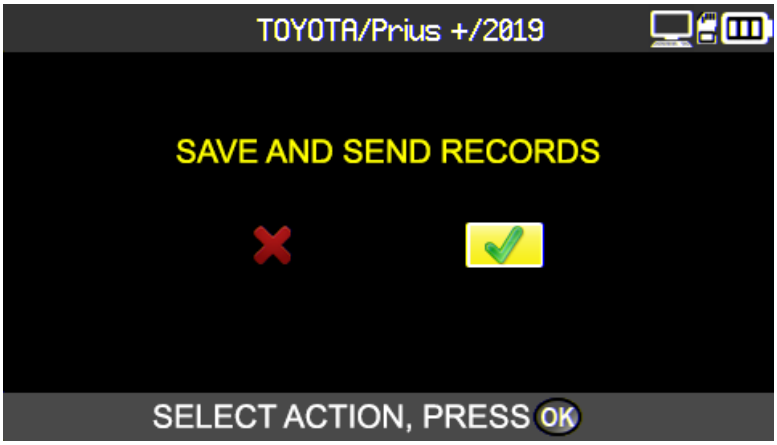


The tool is now connected to the WiFi network.

Now run the WebTPM software on the PC.

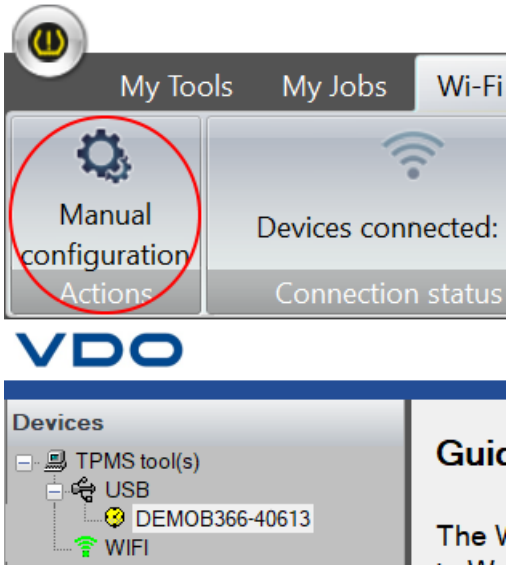


When saving a task, the tool offers to send data to WebTPM.

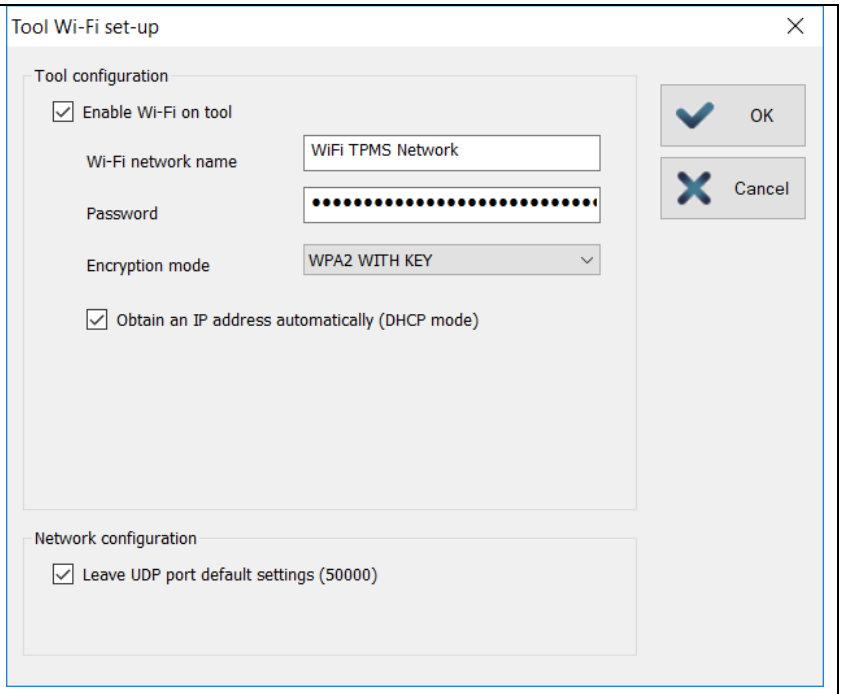


6.1.10. WiFi: advanced settings

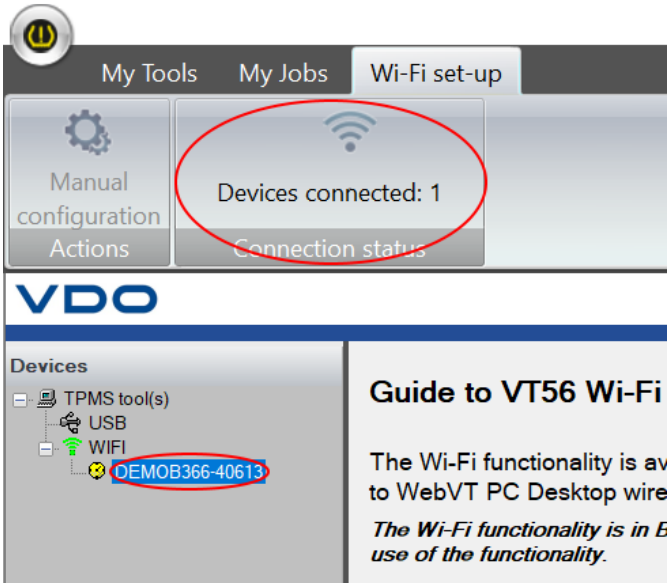
If your WiFi connection requires advanced configuration: special network key, manual IP, TCP port configuration, connect your TPMS tool to your PC using the USB cable and open WebTPM on the PC.

On WebTPM, go to the "WiFi configuration" menu bar. Then click on "Manual configuration".	

The manual WiFi configuration menu for the TPMS tool is displayed.

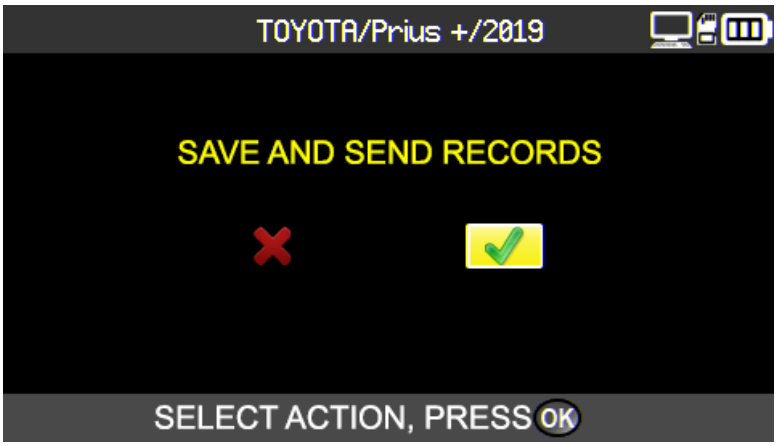
Manual configuration enables users to: - enter the name of the WiFi network (SSID), - manually enter the password, - choose the type of WiFi key, - manually configure the IP address of the TPMS tool, the subnet mask and the gateway, - change the TCP port. (UDP)	

You can check that the TPMS tool is properly connected to the WebTPM software via WiFi at any time. To do this, go to the "WiFi configuration" menu bar.

"Connection status" shows the number of TPMS devices connected. You can click on the "My Tools" tab and check that the serial number of your TPMS tool appears in the log. Configuration was carried out successfully and the TPMS tool is connected to WebTPM.	

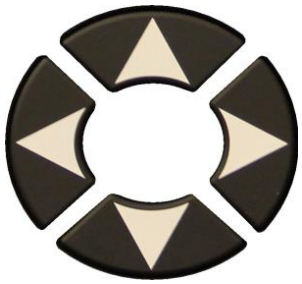
The tasks performed on the TPMS tool are now ready to be transferred automatically and wirelessly to the PC with WebTPM installed.

When saving a task, the TPMS tool always offers to send collected data to WebTPM.



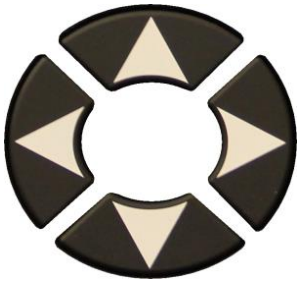
7. TRAINING

This menu shows a step-by-step guide to procedures such as OBD-II relearning, firmware updates, etc.



= Continue

Tutorial example:



= Next

= Back

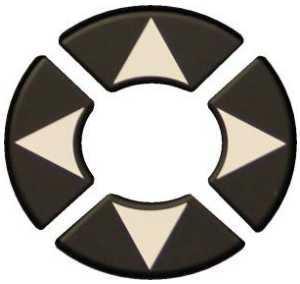
To change the page.

= Next

= Back

TIRE TREAD DEPTH GAUGE (TTD)

The Tire Tread Depth gauge (TTD) available on option provides an accurate measurement of the depth of tire treads. All measurements can be saved and/or printed.



OK = Continue

Connect the **Tire Tread Depth gauge**

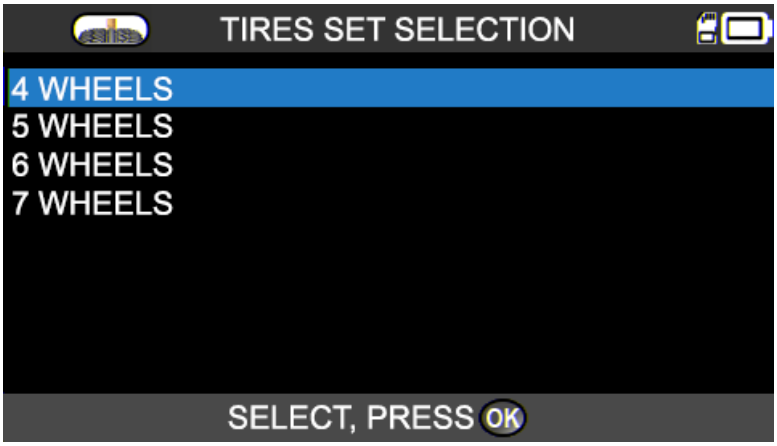
OK = Continue

C = Previous

Check for the green light on the back of the "**Tire Tread Depth gauge**" accessory.

When correctly connected the  icon appears in the header.

Scroll through to select the number of wheels.

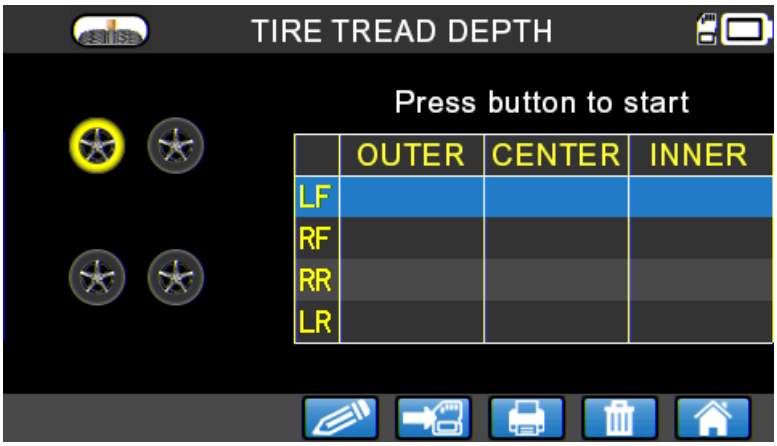


OK = Continue

C = Previous

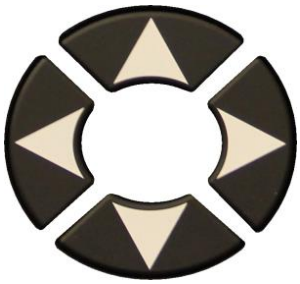
The tool is ready for depth measurements.

Scroll through to select the different wheels.

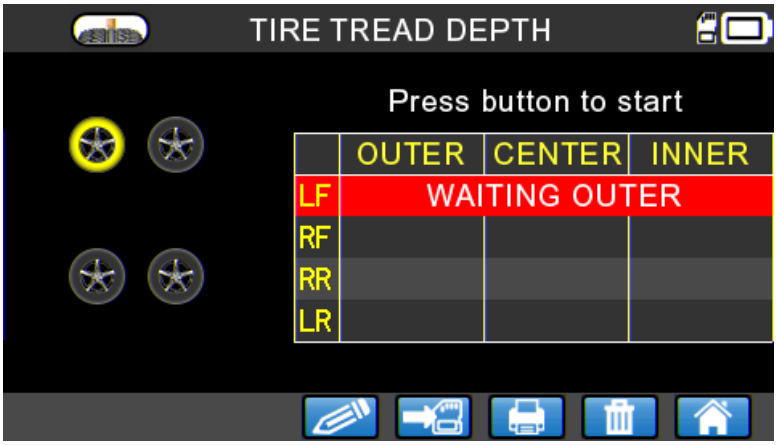


= Previous

Press the **depth gauge** button to begin measuring.



Follow the instructions displayed on the screen for all the wheels.



= Previous

WAITING OUTER / CENTER / INNER

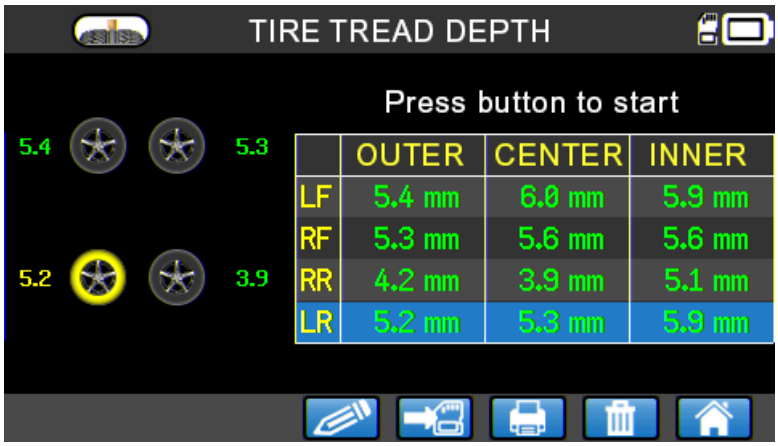
MEASURE PROCESSING

RELEASE

For each new wheel, press the button on the **Tire Tread Depth** gauge to start the wheel depth measurement.

Once all the wheels are measured, all the depth measures are displayed.

These results can then be transferred to a PC using **WebTPM**

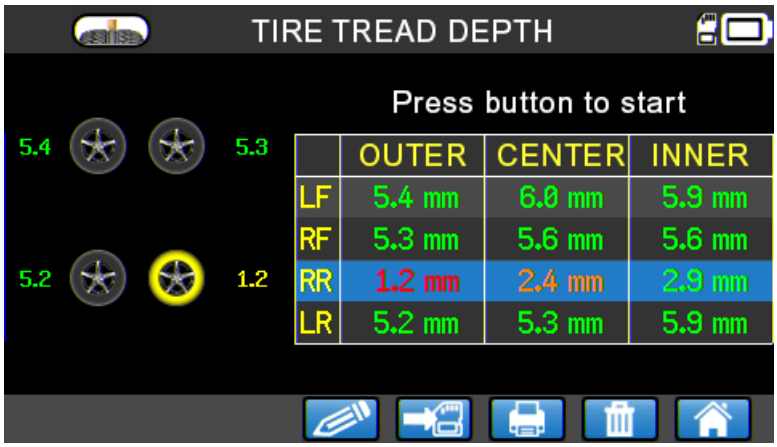


C = Previous

The results can also be recovered in the "**History/recent**" menu.

If the measurement is below the minimum legal standard, the result is displayed in red.

If displayed in orange, the result is close to minimum legal standard.



C = Previous

MISCELLANEOUS

1. CHARGE

Low Battery Indication

The **TPMS** tool incorporates a low battery detection circuit. A full charge enables an average of 800 sensors to be read (approximately 160 to 200 vehicles).

This data can vary based on the sensor models used.

Low battery level indicator:

0% 25% 50% 75% 100%

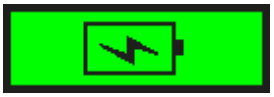
When 0% is reached, the light will flash and the device will switch off after 10 seconds.

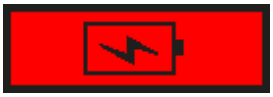
 Battery charging.

 The battery has a fault. Please contact the after-sales services.

DO NOT use a device with a low battery level, because data reception and emission may become unstable.

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





There are two options for charging the device:

- plug the end of the local charger onto the TPMS tool, then plug the charger into the wall socket.
- Plug the end of the local charger into the docking station, then install the TPMS tool in the docking station.

In all cases, the "**CHARGING**" light should light up red.

Battery replacement: It is recommended to return the tool to your dealer for battery replacement.

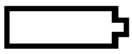
2. PRINT TPMS INFORMATION

***Note**: this function will only become activated after reading all the vehicle TPMS sensors.*

1) Place the TPMS in its docking station and check that all the TPMS sensors have been read.

2) Connect/check that the charger is properly connected to the docking station.

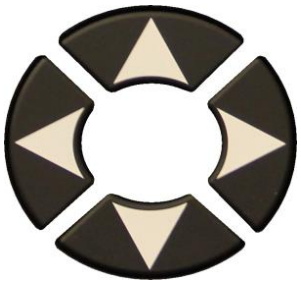
3) Switch on the printer, press the  button until the green light  of the printer flashes.

4) The printer is ready to operate when the  light is on.

The  button feeds the paper through.

***Note**: communication between the device and the printer provided by an infra-red connection.*

```
TOYOTA
RAV4
2012
---- LEFT  FRONT ----
Sensor ID : E89D500
Pressure : 0.03 Bar
Temperature :  23 C
Battery state: OK
---- RIGHT FRONT ----
Sensor ID : 2A6E100
Pressure : 0.08 Bar
Temperature :  23 C
Battery state: OK
---- RIGHT REAR ----
Sensor ID : 559E00F
Pressure : 0.03 Bar
Temperature :  26 C
Battery state: OK
---- LEFT  REAR ----
Sensor ID : 559FA29
Pressure : 0.03 Bar
Temperature :  25 C
Battery state: OK
```



5) Select the  icon.

6) Print the results by pressing OK  .

= Print

= Back

3. TROUBLESHOOTING

Issues reading a TPMS sensor

If your **TPMS** tool does not detect one or more valves, carefully follow this process in order to diagnose the problem:

1) The vehicle **has no TPMS sensors** even if a metal stem is present. For example, Schrader valves can look the same as TPMS valves.

➔ Check for the presence of TPMS sensors on the vehicle. You can also use your TPMS tool to check the **type of TPMS valve** (direct or indirect) mounted on your vehicle. Caution, **indirect TPMS** systems operate **without sensors mounted in the tires**.

➔ If the vehicle you are checking was **not originally fitted with TPMS sensors**, your tool will tell you clearly through the message "Indirect TPMS".

2) The **TPMS sensor or computer** may be **damaged** or **defective**.

➔ Check all these elements separately in order to eliminate the possible origin of the problem.

3) The **TPMS** sensor only responds to a certain **frequency**.

➔ Check the communication frequency of the vehicle's TPMS sensors. This is generally 433 MHz for Europe and 315 MHz for the United States and Japan. Make sure the vehicle is not a vehicle imported from another region since it may be set to a different frequency.

4) The **TPMS sensor** mounted in the tire is not the **correct reference**.

➔ Each vehicle model – each version even – can be fitted with a different make and model of TPMS sensor. Make sure that the vehicle is fitted with the correct TPMS sensor P/N.

5) Your **TPMS** tool may require a software update.

➔ If all the previous points were check out, you may have a vehicle that is not yet in the TPMS tool's database. In this case simply update your device using the WebTPM software. Refer to the dedicated section of this user guide for this.

6) Your **TPMS** tool is damaged or defective.

➔ If all the previous points check out, your TPMS tool may be damaged or defective. In this case contact your local dealer.

4. UPDATING THE DEVICE SOFTWARE

Upgrading Your TPMS TOOL

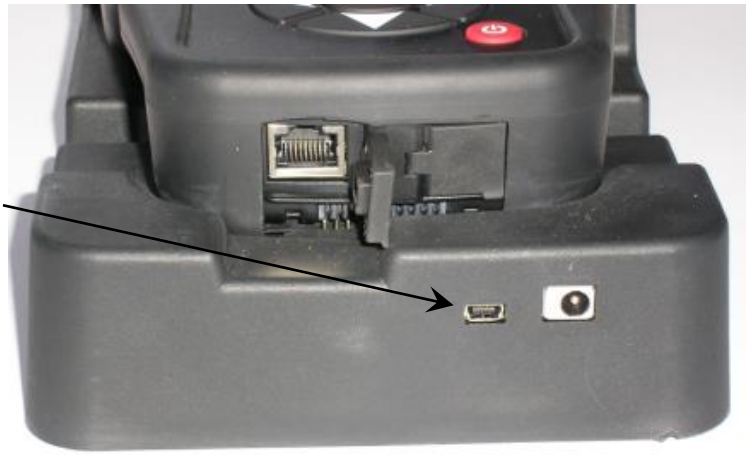
As soon as a new model or new generation of vehicle comes on the market, or when a new TPMS communication protocol becomes available, it will be necessary to update the TPMS tool.

The updating procedure is given below.

***IMPORTANT**: Temporarily deactivate all anti-virus and spam blocking software on your computer. This is necessary to ensure the program and drivers are successfully installed.*

USB connector for Internet update.

Slot for SD card for local update.



USB connector for Internet update via docking station

4.1. INSTALL THE WEBTPM PROGRAM (PC WITH WINDOWS OS)

1) Go to www.vdo.com/tpmspro to download the latest version of the **WebTPM** software.

2) **Unzip the archive** containing the software and then run the installation of the **program** and the **drivers**.

3) Follow **all the installation steps** carefully and confirm when necessary.

4) Once the software is installed, **run** WebTPM.

5) **Connect** your TPMS tool to the PC with the supplied **USB cable**.

6) **Register** your product online to receive information about the latest improvements and new features of your TPMS tool.

7) Follow the update instructions displayed on screen.

8) **Wait** for the update procedure to complete, this can take 10 minutes, **do not disconnect the device** or the PC during the procedure.

9) The WebTPM software will let you know when the update is finished. You will now be able to use your TPMS device again.

4.2. IMPORTANT POINTS TO RESPECT WHEN UPDATING THE SOFTWARE

1) Make sure that the **battery** is fully charged before updating.

2) Make sure the **WebTPM** software is **installed** correctly and **running** before connecting your TPMS tool to a PC.

3) Make sure that the PC is properly connected to the **Internet** so that WebTPM can automatically download the software and database updates for the TPMS tool.

4) Temporarily disable all **anti-virus** programs which could block Internet access for the WebTPM software.

5) The WebTPM software is only available for **Windows PC** platforms.

Warning!

Do not disconnect the TPMS tool from your PC or turn off your computer during the update process. This may result in serious damage to the tool.

5. WARRANTY

VDO Limited Hardware Warranty

VDO warrants to the original purchaser that your **VDO** hardware product shall be free from material and workmanship defects for the length of time identified on your product package and/or contained in your user documentation, from the date of purchase. Except where prohibited by applicable law, this warranty is nontransferable and is limited to the original purchaser. This warranty gives you specific legal rights, and you may also have other rights that vary under local laws.

Remedies

VDO's entire liability and your exclusive remedy for any breach of warranty shall be, at **VDO**'s discretion, to repair or replace the hardware. Shipping and handling charges may apply, unless prohibited by the applicable law. To repair or replace any hardware, **VDO** may, as it chooses, use parts that are new, restored or already used but in good working order. Any replacement hardware product will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer or for any additional period of time that may be applicable in your jurisdiction.

This warranty does not cover problems or damage resulting from (a) accidents, abuse, incorrect use, or any unauthorized repair, modification or disassembly; (b) improper operation or maintenance, usage not in accordance with the product instructions, or connection to an unsuitable voltage supply; or (c) the use of consumables such as replacement batteries not supplied by **VDO**, except where such a restriction is prohibited by applicable law.

How to Obtain Warranty Support

Before submitting a warranty claim, we recommend you visit the technical support section of our website at www.vdo.com/tpmspro for technical assistance. Valid warranty claims are generally processed through the point of sale during the first thirty (30) days after purchase. However, this period of time may vary depending on the place of purchase. Check with **VDO** or the retailer who sold you the product for further information. Warranty claims that cannot be processed through the point of sale and any other product-related questions should be addressed directly to **VDO**. The addresses and customer service contact information for **VDO** can be found in the documentation accompanying your product and on the website at www.vdo.com/tpmspro.

Limitation of Liability

VDO WILL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER, INCLUDING BUT NOT LIMITED TO LOSS OF PROFITS, REVENUE OR DATA (WHETHER DIRECT OR INDIRECT) OR COMMERCIAL LOSS FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON YOUR PRODUCT, EVEN IF YOU HAVE NOT BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Some jurisdictions do not allow the exclusion or limitation of special, accidental or consequential damage, and so the above-mentioned limitations or exclusions may not apply to your case.

Duration of Implied Warranties

EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OR CONDITION OF MERCHANTABILITY OR FITNESS IN RELATION TO THIS HARDWARE PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THE APPLICABLE LIMITED WARRANTY PERIOD FOR YOUR PRODUCT. Some jurisdictions do not allow limitations on how long an implied warranty lasts, and so the above-mentioned limitations may not apply to your case.

National Statutory Rights

Consumers have legal rights under applicable national legislation governing the sale of consumer goods. Such rights are not affected by the warranties in this Limited Warranty.

No Other Warranties

No **VDO** dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

Warranty period

The warranty period for **VDO** devices is one year.

6. SAFETY PRECAUTIONS

You must read and understand these safety precautions and warnings before using or charging your Li-Ion batteries.

Operating environment

Remember to always follow any specific regulations in force in your sector of work, and to switch off your device when its use is prohibited, or when it may cause interference or danger.

Only use the tool in its normal operating position.

About charging

Only use the power supply provided with your tool. The use of any other power supply may damage the tool and/or be dangerous.

When the red LED goes off, charging is finished.

About the charger

Do not use this charger in wet environments; never touch the charger if your hands or feet are wet.

Allow sufficient space around the charger for ventilation when you use it to power or recharge the tool's battery. Do not cover the charger with objects liable to affect cooling. Do not use this charger inside a bag.

Connect the charger to a suitable power outlet.

Do not use the charger if it is damaged or if its power lead is damaged. Do not disassemble the charger and do not modify any of its parts. Do not attempt to repair the charger. It does not contain any part that can be repaired. Replace the charger if it has been damaged or exposed to excess moisture.

Do not try to use it as a power source.

Unplug it before undertaking any cleaning or care.

About the battery

WARNING: *this device contains a Li-Ion battery. It can explode and release hazardous chemicals. To reduce any risk of fire or burns, do not disassemble, crush, pierce or dispose of the battery or the tool in fire or water, and do not short-circuit or short the contacts with a metal object.*

Always use the power supply approved by **VDO** and supplied with the device.

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

Opening the tool or tampering with or breaking the seal placed on the tool will invalidate the warranty.

Safety instructions for Li-Ion battery use

The device must imperatively be placed on a non-flammable surface during charging (ceramic tray or metal box).

Only charge the Li-Ion battery **WITH** the specific charger provided.

If the battery begins to overheat to more than **60°C (140°F)**, **STOP CHARGING IMMEDIATELY**. The battery must **NEVER** exceed **60°C** (140°F) during the charging process.

NEVER charge a battery pack immediately after use and while it is still hot. Let it cool down to room temperature.

If you see any smoke or liquid coming out of the battery, stop charging immediately. Disconnect the battery from the charger and place the battery in an isolated area for at least 15 minutes. **STOP USING THE BATTERY**, and return the device to your dealer.

Always keep a fire extinguisher for electrical fires within reach while charging the battery. In the unlikely event that the Li-Ion battery catches fire, **DO NOT** use water to extinguish the fire, use sand or the extinguisher described above.

The parts of a Li-Ion battery must be neutralized out of use. The neutralization procedure must be carried out within very strict safety parameters. You are recommended to contact a specialist in this battery type to carry out this process. They will have the out-of-use battery collected by a specialized recycling organization. Alternatively, contact your dealer.

Do not dispose of Li-Ion batteries with household waste.

To prevent leakage or other hazards, do not store batteries above **60°C** (140°F). Never leave the battery inside a car (for example) where the temperature could be very high or in a place where the temperature could exceed **60°C** (140°F). Store the battery in a dry place to avoid all contact with any kind of liquid. Store the battery only on a non-flammable surface that is heat resistant and non-conductive, and away from any flammable materials or sources.

A Li-Ion battery must be stored with a minimum charge of **30%**. If you store the battery completely discharged, it will quickly become unusable. If it has to be stored for a long period (over 6 months), remember to recharge it regularly (to more than 30%).

If you do not follow these safety instructions, you risk causing serious damage to people or property, and you even risk causing a fire!

The **VDO** company accepts no responsibility in the event of damage arising as a result of non-compliance with these safety instructions.

Since use of a Li-Ion battery entails significant fire risks capable of causing serious damage to people and property, the user agrees to accept the risks and the responsibility involved.

Since **VDO** cannot control correct use of the battery (charging, discharging, storage, etc.), it cannot be held responsible for damage caused to people or property.

7. EC COMPLIANCE DECLARATION CE

The manufacturer of the **VDO TPMS PRO** declares that this device complies with the requirements of the following standards:

- ETSI EN 300 330 V2.1.1 (2017-02)

- ETSI EN 301 489-1/-3 V2.1.1 (2017-03)

- EN 61010-1:2010 (2014/35/EU)

- EN 62479:2010

- EN 61326-1:2013 (2014/30/EU)

8. FCC COMPLIANCE DECLARATION FC

The manufacturer of the **VDO TPMS PRO** declares that this device complies with the requirements of the following standards:

- PART 15B 2005

- PART 15C 47 CFR FCC PART 15.209

9. RCM COMPLIANCE DECLARATION

The manufacturer of the **VDO TPMS PRO** declares that this device complies with the requirements of the following standards:

- CISPR 32:2015 / COR1:2016 Class B

- AS/NZS CISPR 32:2015 Class B

10. RECYCLING

Do not dispose of the rechargeable battery or the tool and/or its accessories in the dustbin.

Their components must be recovered and recycled.

The crossed-out wheelie bin symbol means that the product must be subject to separate collection at the end of its life within the EU. This measure applies not only to your device but also to any other accessory marked with this symbol. Do not dispose of these products with unsorted household waste. For more information, please contact **VDO**.

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