TECH500
Tyre Pressure Monitoring System Tool

User Guide

REGISTER YOUR TOOL NOW FOR ADDED BENEFITS

See page 18 for details

SD Card

Mini-USB

Rubber housing

Display

Back/Esc

Up/Down navigation

Enter

On/Off: hold down for a few seconds

Test: commence a TPM test, only works on Vehicle Audit Screen

Home: returns to Home menu

OBD cable connector

DOWNLOAD YOUR FREE TPMS DESKTOP

See page 22 for details

FOREWORD

Thank you for choosing the TECH500. This manual will help you get your tool up and running and explains how to get the most out of all its great features.

Please become fully familiar with the instructions in this user's manual. It should be kept ready to hand for consultation whenever required.

If you need further assistance, please visit the support pages on the Bartec Auto ID website at www.bartecautoid.com

LIST OF CONTENTS

IMPORTANT NOTICES

SAFETY DEFINITIONS

All **Danger**, **Warning**, **Important**, and **Note** messages must be followed for your safety. These safety messages are in the following form

⚠️   **DANGER: Means you may risk possible loss of life.**

⚠️   **WARNING: Means you may risk possible bodily harm.**

CAUTION: Means you risk damage to the vehicle or the tool.

These safety messages cover situations Bartec is aware of. Bartec cannot know, evaluate and advise you as to all the possible hazards. You must be certain that any conditions or service procedures encountered do not jeopardise your personal safety.

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DISCLAIMER

All information, illustrations, and specifications contained in this technical instruction manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without obligation to notify any person or organization of such revisions or changes. Further, Bartec shall not be liable for errors contained with the furnishing, performance or use of this material.

SAFETY PRECAUTIONS

Read carefully the installation, operating and maintenance instructions in the Operator's manual.
Do not allow unqualified persons to use this equipment. This will prevent injury to persons and damage to the equipment.
The work place must be dry, sufficiently lit and well ventilated.
Do not forget that breathing carbon monoxide (odourless) can be very dangerous and even fatal.

When working on the vehicle:
- Wear suitable clothing and act in such a way as to prevent industrial accidents.
- Before starting, check to be certain the gear shift is in neutral (or in PARK (P) if the transmission is automatic) and put the handbrake on and check to be sure the wheels are completely locked.
- Do not smoke or use naked flames when working on a vehicle.
- Wear safety glasses to protect your eyes from dirt, dust or metal chips.

Disposing of equipment

- Do not dispose of this equipment as miscellaneous solid waste but arrange to have collected separately.
- The re-use or correct recycling of electronic equipment (EEE) is important in order to protect the environment and human health.
- In accordance with European Directive WEEE 2012/16/EU, special disposal points are available for waste electrical and electronic equipment.
- Public administrators and producers of electrical and electronic equipment are involved in facilitating the re-use and recovery of waste electrical and electronic equipment through these collection activities and use of appropriate planning arrangements.
- Unauthorised disposal of waste electrical and electronic equipment is punishable by law with appropriate penalties.

Disposing of batteries

- The Tech 500 contains a Lithium Polymer rechargeable battery which is not accessible to the user.
- Batteries must be recycled or disposed of properly. Do not throw batteries away as part of normal refuse disposal.
- Do no throw batteries on to an open fire

Correct use of the tool

- Do not expose the tool to excessive moisture.
- Do not use the tool near sources of heat or polluting emissions (stoves, ovens, etc.).
- Do not drop the tool.
- Do not allow the tool to come into contact with water or other liquids.
- Do not open the tool or attempt to perform maintenance or repair operations on any internal parts.
- You are advised to keep the packaging and to re-use it if the tool is moved to another site.

When using the tool remember:

- Do not subject the tool to magnetic or electric interference.

Reception, maintenance and guarantee:

Inspect the tool when delivered. Damage sustained during shipment is not covered by the guarantee. Bartec will accept no responsibility for material or bodily harm resulting from inappropriate use of the product, failure to maintain it, or incorrect storage conditions.

Bartec provides training for clients desirous of acquiring the knowledge required for the correct use of its products.

Only personnel authorized by Bartec are permitted to make any repairs that may be necessary. This tool is guaranteed against any manufacturing fault for 12 months as of date of invoice (parts and labour) only if product has been correctly used. Serial number must stay readable and proof of purchase must be retained for presentation upon request.

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BEFORE GETTING STARTED

1. Charging

NOTICE: Only use the power supply or USB cable that is included in the TECH500 tool kit to charge this tool. The use of un-approved power supplies may damage it and will void the tool warranty.

2. Registration

The Bartec TECH500 can be registered at https://tools.bartecautoid.com/ . Follow the on-screen prompts filling in the information and tool serial number. A valid serial number and supplier is required to process the registration, which can take up to 24hrs once submitted.

3. Update

Once the tool is registered, verify the software level loaded to the level available online and update the tool if necessary.

KIT COMPONENTS

The **TECH500SDE** kit inside the tool box includes:

- TPMS activation tool
- OBD II cable
- USB cable
- Battery charger
- Bluetooth Stick
- User Manual

Identifying Kit Components and Features

The TECH500SDE tool is battery operated and generates a low-frequency magnetic field to activate tyre sensors. It receives UHF radio signals from the tyre sensors typically at 434MHz.

CHARGING TOOL

The TECH500 is shipped with a charged battery. It is recommended that the tool is charged **2+ hours** before first use. For optimum performance, always keep it sufficiently charged.

When there is an insufficient amount of power remaining in the battery, the TECH500 will flash its battery icon for two seconds, save all of the TPM Data and then power itself off.

POWER ON/OFF SEQUENCE

Auto power off is after 5 minutes of inactivity.
The unit automatically powers up when the charger or USB port is in use – auto power off is not operational. The tool cannot be operated when plugged in.
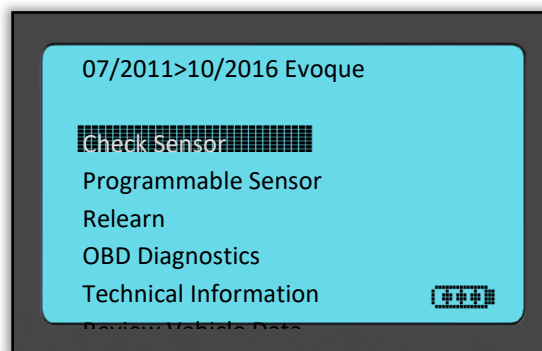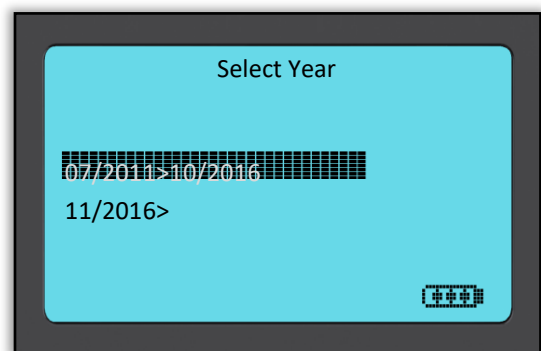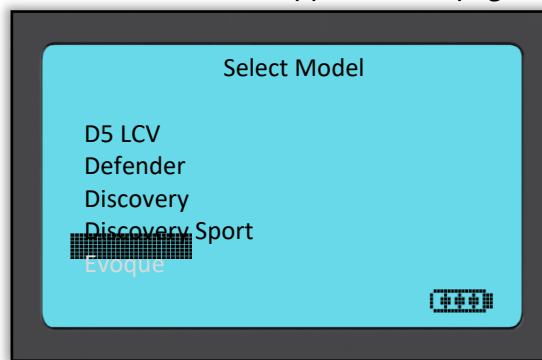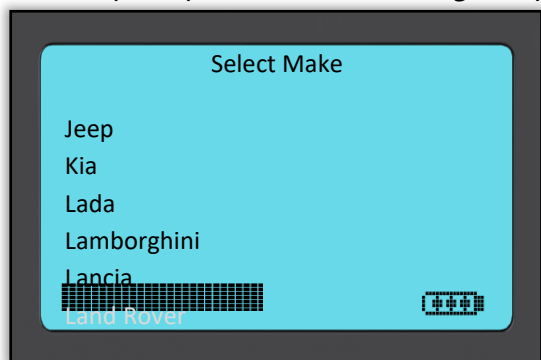
HOME MENU

Select Vehicle	Used to start a new Service
Recent Vehicles	Used to resume an incomplete service
Vehicle Data	Used when reviewing read data
Toolkit	Used to test the remote car key or to use the UHF Monitor
My Tool	Used for settings and tool information

SELECT VEHICLE

To start a new service and see all service functions available for the car that needs TPMS maintenance, press "Select Vehicle" in the Main Menu and continue with choosing the required make, model and year combination.

Enter Vehicle Registration: This can be enabled or disabled in My Tool > Workflow.
To verify the year of manufacturing, it is possible to use the VIN. See Appendix A – page 24

Select Make

Jeep
Kia
Lada
Lamborghini
Lancia
Land Rover

Select Model

D5 LCV
Defender
Discovery
Discovery Sport
Evoque

Select Year

07/2011>10/2016
11/2016>

07/2011>10/2016 Evoque

Check Sensor
Programmable Sensor
Relearn
OBD Diagnostics
Technical Information
Review Vehicle Data

The service menu consists of the following points and will only show functions that are applicable for the preselected make model year combination.
All captured data will be stored automatically.

1/6 CHECK SENSOR

Use this function to test the fitted sensors before continuing with further steps.

LF activated sensors
To test a sensor the tool should be placed alongside the valve stem and the 'Test' key pressed.

Tool Positioning
Do NOT touch the metal rim. The tool needs to point through the rubber at the sensor.
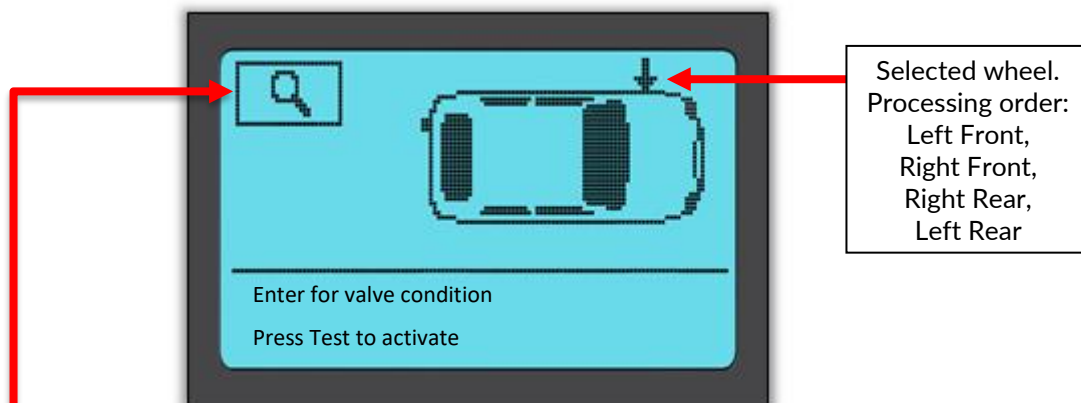

(Note: with Ford Banded sensors the tool should be held 180°/opposite from the stem's position)

Non-LF activated sensors (some Beru sensors up to 2009)
If the tool requires rapid tyre deflation (of the order of 10psi or 0.5bar), then deflate the tyre and place the tool alongside the stem while pressing the test key.
During testing, the screen confirms the sensor type being tested and displays a progress bar. Different makes of Sensors respond at different speeds/ time intervals.
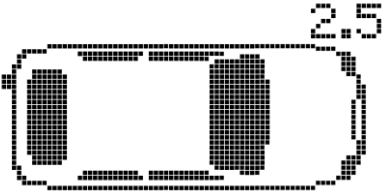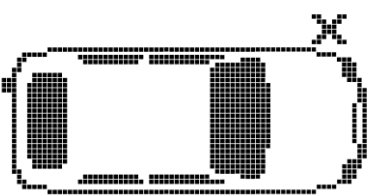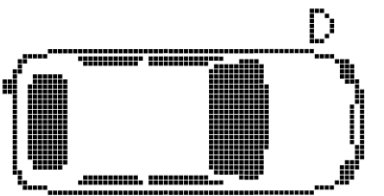

Enter for valve condition

Press Test to activate

Selected wheel.
Processing order:
Left Front,
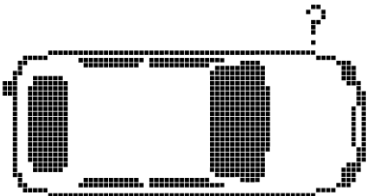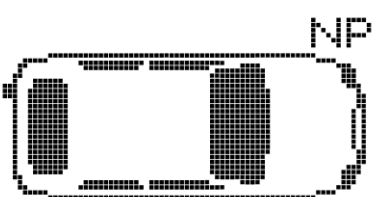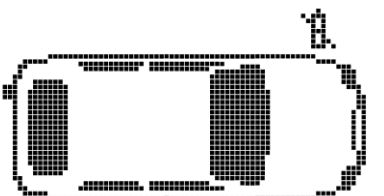Right Front,
Right Rear,
Left Rear

| Sensor Test Toolkit	The tool tries to read all possible sensor types that could be fitted to the selected Make. The search will identify that the sensor is working, although it may not be the correct sensor for a particular Make, Model and Year combination.

Possible Reading Scenarios

Note that if a faulty Sensor has been replaced, some method of relearn procedure will need to be followed, as explained later in this manual.

	Successful Sensor Read Sensor was successfully activated and decoded. Displays pressure (in Bar or PSI) at wheel location.
	Failed Sensor Read No Sensor Activation or Decode. May be wrong sensor fitment or non-functioning sensor. Tool will prompt to attempt reading the sensor 3 times.
	Duplicate ID A Sensor with a duplicate ID has been read. Tool will direct to re-read those sensors.
	Wrong Sensor Type A Sensor was activated and decoded, but does not match the protocol for the Make Model Year that the tool was set-up for.
	No Pressure
	Low Sensor Battery Sensor's internal battery has dropped below a certain voltage threshold.

Valve Condition

Press enter at the particular wheel position to select the Valve condition.
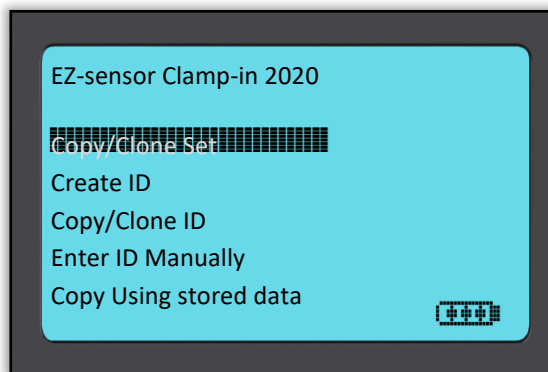

Valve Condition

Sensor OK
Corroded Stem
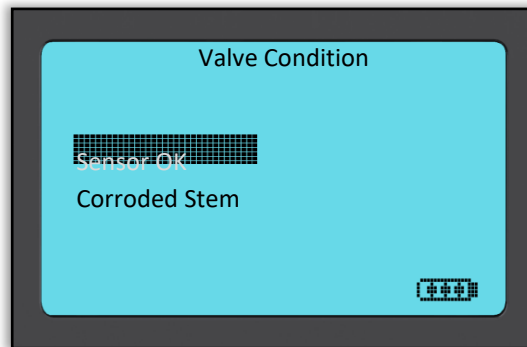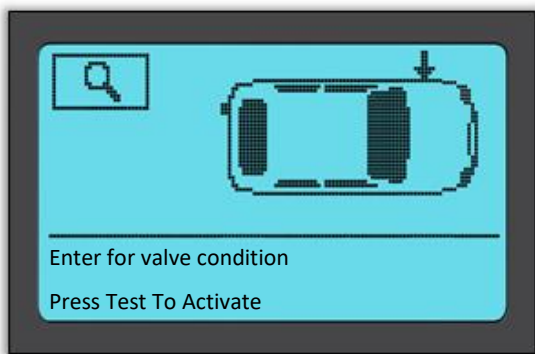
Successful Sensor Read

When all four wheels have been read, the tool will automatically save all Data and come up with the following three options.

Send	Sends the data to the Service Centre or TPMS Desktop
Print	Sends the data immediately to the Bluetooth printer that will print out the report.
Continue	Will let you exit the menu to continue with further steps

2/6 PROGRAMMABLE SENSOR

The "Programmable Sensor" Point on the service menu enables the function of programming aftermarket replacement sensors like the HUF IntelliSens or the Schrader EZ-sensor. Even when they are already mounted in a wheel or programmed to another vehicle.
The user can choose from a selection of sensors which match the preselected MMY.

03/2014>12/2018 C Class

Check Sensor
Programmable Sensor
Relearn
OBD Diagnostics
Technical Information
Review Vehicle Data

Universal Sensors

Schrader EZ-sensor
Huf intelliSens UVS
Huf IntrlliSens ECS
ProSens
UniSens by repstar
Alligator sens.it

Select Sensor Type

EZ-sensor Clamp-in 2020
EZ-sensor Snap-in 1000
EZ-sensor 2.0 Clamp-in 2210
EZ-sensor 2.0 Snap-in 1210
EZ-sensor 2.0 Clamp-in 2200

EZ-sensor Clamp-in 2020

Copy/Clone Set
Create ID
Copy/Clone ID
Enter ID Manually
Copy Using stored data

Copy/Clone Set	Used to Copy/Clone a winter tyre set with the same ID´s as the summer tyre set. Requires the reading of the old sensor to program the same ID on the replacement sensor to avoid the relearning process.
Create ID	Used to create a single sensor with a new ID. Can be repeated as many times as requested. The ID needs to be relearned to the vehicle's ECU. The following pages will describe this procedure.
Copy/Clone ID	Used to Copy/Clone a single ID. Can be repeated as many times as requested. Requires the reading of the old sensor to program the same ID on the replacement sensor to avoid the relearning process.
Enter ID Manually	Used to create a Sensor with a new ID that can be typed in manually. This option only appears for some sensors. If it is not possible to copy the ID, enter the same ID manually, which is written on the sensors body.
Copy Using stored data	Gives you the option of using stored IDs either read from the TPMS sensors or from the vehicle OBD

The current coverage list is available at www.bartecautoid.com

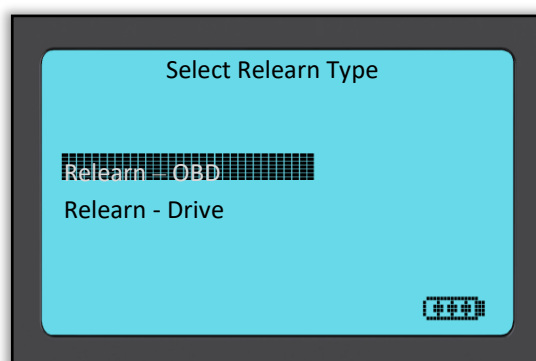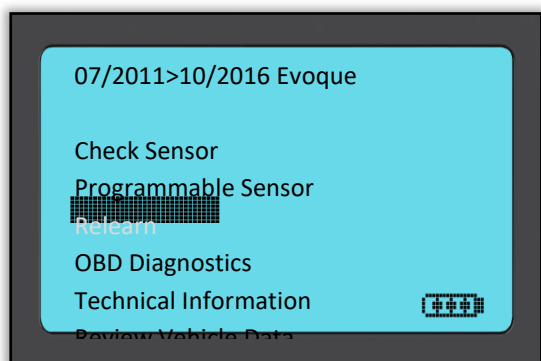The user has the option to either create or copy the ID.

Notice: Sensors need to be read before copying.

Sensors that can be programmed by the tool may have slightly different procedures and times.

Recommended sensor position for programming:

3/6 RELEARN

07/2011>10/2016 Evoque

Check Sensor
Programmable Sensor
Relearn
OBD Diagnostics
Technical Information
Review Vehicle Data

Select Relearn Type

Relearn - OBD
Relearn - Drive

To find out which relearn type is available for a vehicle, just turn on the tool and select Relearn. Or refer to the current coverage list at www.bartecautoid.com > Downloads.

Stationary Relearns:

Stationary Relearns use the vehicles on-board TPMS system to listen for transmissions from sensors while the vehicle is in a "Learn Mode".
Once the vehicle is in Learn Mode, use the tool to activate the sensors. The vehicle will listen for the sensor IDs and learn them to the vehicle.

Active (Drive) Relearns:

Some vehicles can be reset by driving. Refer to the on-screen relearn procedures for details on how far/long to drive. It can take up to 20 minutes to relearn the sensor IDs.

OBD Relearns:

OBD connection allows the TECH500 to directly program the vehicle electronics module with sensor IDs.
Note that not all vehicles support vehicle communications modes.
OBD can be connected when all sensors are successfully read and the message "All Sensors OK" is displayed.
Please use the "Technical Information" menu and select "View Vehicle Info" to find the OBD location.

Relearn Information:

This contains extra information about the relearn for the selected vehicle, which can assist you if you have any problems. An example would be for some Toyota and Lexus vehicles which use a summer and winter tyre set.

After selecting a Relearn method, follow the instructions given by the tool to relearn Sensors.

Relearn Toolkit
(Explanation below)

Selected tyre.
Processing order:
Left Front,
Right Front,
Right Rear,
Left Rear

Enter for valve condition

Press Test To Activate
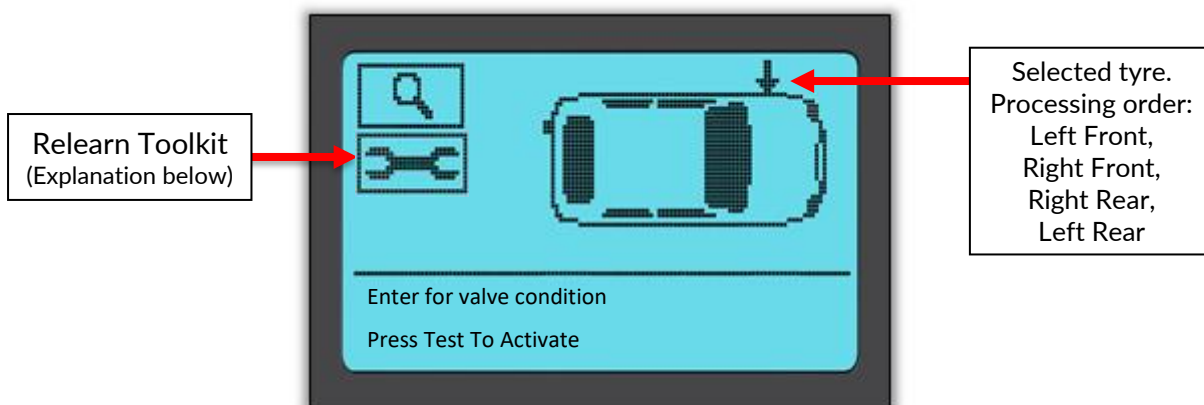
As well as the pressure and temperature, we also display the "mode" of the sensor. In some cases the mode cannot be changed and isn't important, but in some cases it will need to be changed in order for the relearn to work.

For example if sensors for a vehicle show "Park" or "Drive" they are already in the correct mode. Otherwise use the "Set to Park" command in the Relearn Toolkit. If the sensors are shown as Ship, Off or Test mode, put them in Park mode, using the "Set to Park" command in the Relearn Toolkit.
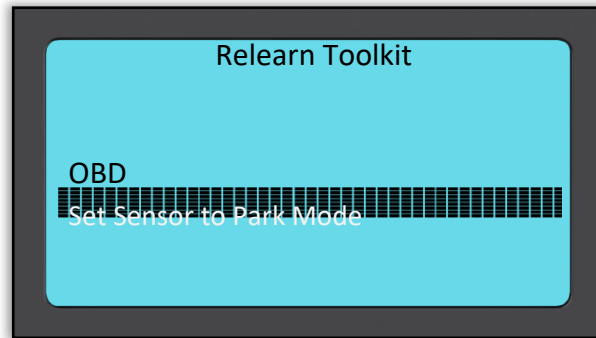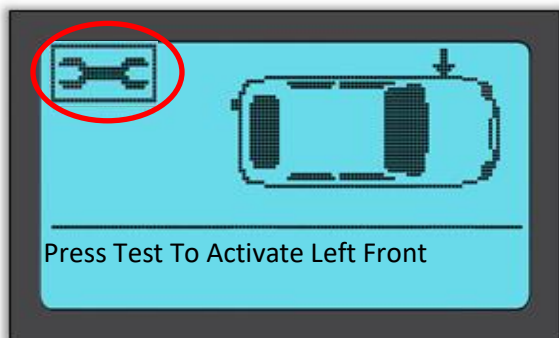
To access the Relearn Toolkit, use the up and down arrows to select the spanner symbol in the top left corner.

Press Test To Activate Left Front

Relearn Toolkit

OBD
Set Sensor to Park Mode

Special service advice for Toyota Models:

| Toyota ECU Reset | If at any time the vehicle TPMS Reset button is pressed with the new sensor IDs fitted, the ECU OBD relearn will not work until the Toyota ECU Reset is selected (with the tool connected to OBD). The TPMS Reset button should only be used to set new tyre pressures, and on some vehicles to change between winter and summer ID sets. |

Special service advice for Kia and Hyundai Models:

| • Reset YD Sensor | For some Kia and Hyundai vehicles with the newer low line TRW YD sensors, this allows you to put the sensors back into the correct mode (Sleep or Rest) to work with the vehicle. |

These specific Service advices will only appear if applicable for the preselected Make, Model and Year combination.

4/6 OBD DIAGNOSTICS

07/2011>10/2016 Evoque

Check Sensor
Programmable Sensor
Relearn
OBD Diagnostics
Technical Information
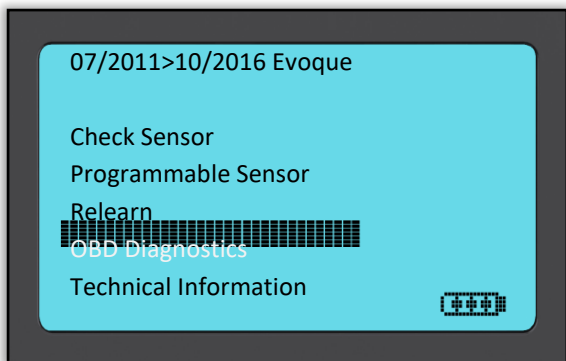
| OBD Diagnostics | This option will only be listed for vehicles that Bartec has OBD coverage for. It reads information from the vehicle such as the VIN, DTCs (Diagnostic Trouble Codes) and the IDs of the sensors. |

5/6 TECHNICAL INFORMATION

07/2011>10/2016 Evoque

Check Sensor
Programmable Sensor
Relearn
OBD Diagnostics
Technical Information

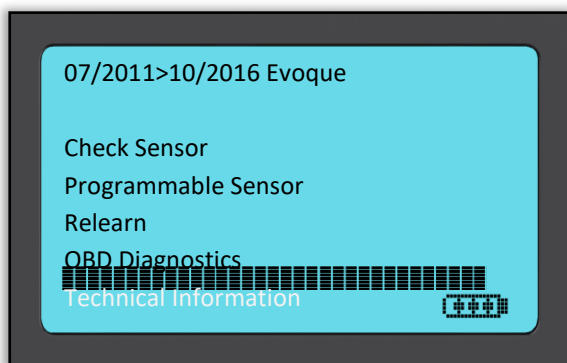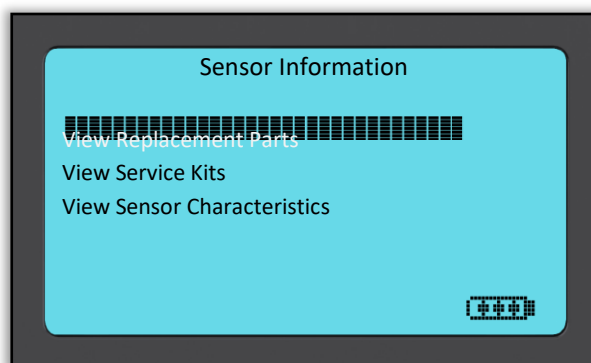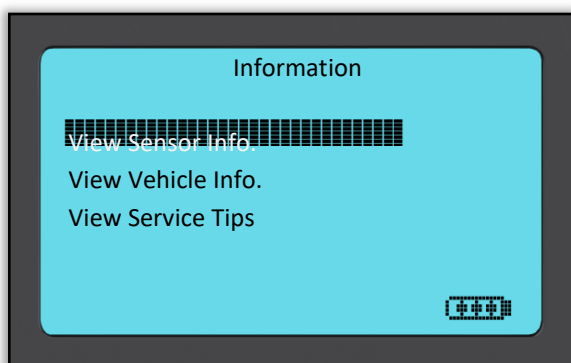| Technical Information	Gives detailed information about replacement parts, service kits, sensors, vehicles and service tips.

Information

View Sensor Info.
View Vehicle Info.
View Service Tips

Sensor Information

View Replacement Parts
View Service Kits
View Sensor Characteristics

Sensors do not have to be read to access the following information.

View Replacement Parts	Used to show all Replacement Sensor part numbers that can be fitted to the preselected MMY
View Service Kits	Used to show all Replacement Service Kit part numbers that can be fitted to the preselected MMY
View Sensor Characteristics	Used to show technical sensor information of the sensor that needs to be fitted. e.g. Nut torque settings

Information

View Sensor Info.
View Vehicle Info.
View Service Tips
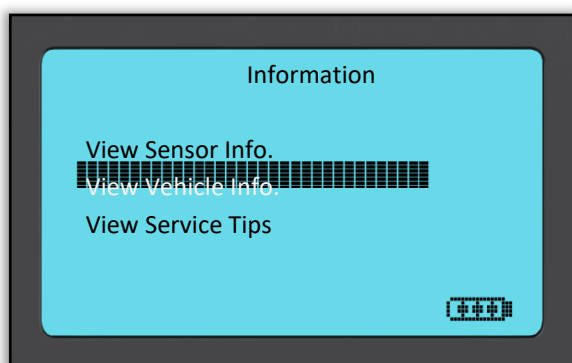
View Vehicle Information	This option provides information about the Relearn method, the OBD port location and if there are programmable Sensors for the preselected MMY available.

Information

View Sensor Info.
View Vehicle Info.
View Service Tips
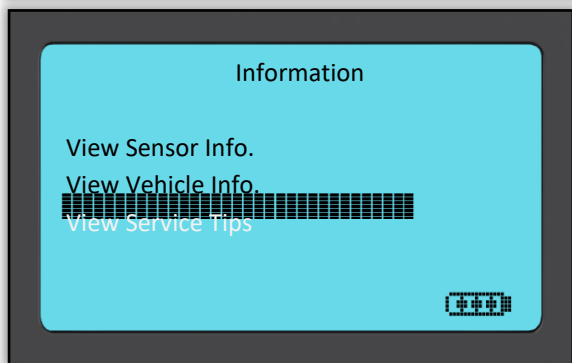
View Service Tips	This option provides information about the specific meaning of the TPMS light as well as common mechanical faults for the preselected MMY.

6/6 REVIEW VEHICLE DATA

Sensors and OBD need to have been read for data to be shown.
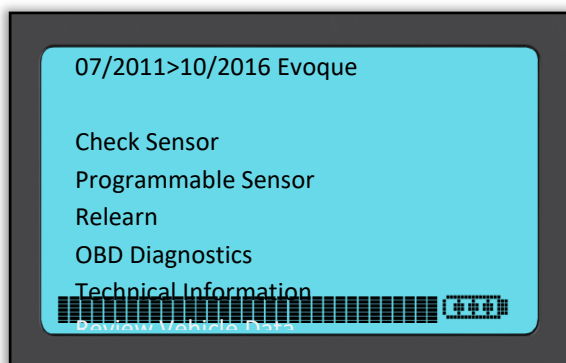
The menu gives direct access to specific screens that display the Vehicle data. This option is helpful if the user wants to have a second look at the Sensor Data, OBD Data or wants to print the data from the last processed vehicle via the Bluetooth printer.

RECENT VEHICLES
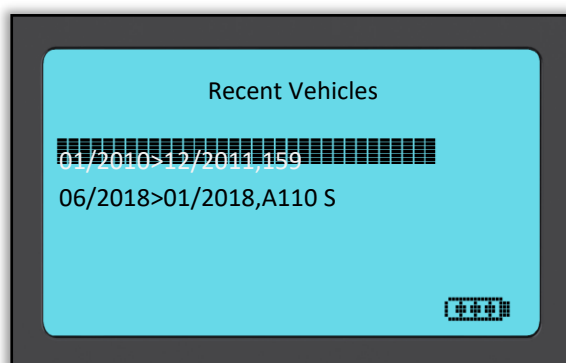
Recent Vehicles	To resume to an incomplete Service, select one of the previous serviced vehicles by Year and Model and continue with the service menu.

VEHICLE DATA

This menu gives access to specific screens that display the previous read Vehicle Data sorted by registration or model as detailed above.

List by Registration	This option is only useful if a registration is entered with each tested vehicle. It will sort the saved data by registration.
Search by Registration	Allows to search a vehicle with a specific registration. Use the Up Arrow to start with upper case, the Down Arrow for numbers and lower case, Test to enter the next character, and Enter to start searching.
List by Model	Stored data will be sorted by model.
Upload Service Data	To enable Bluetooth, select "My Tool" > "Networks" > "Bluetooth" and connect to TPMS Desktop to upload all stored data.
Clear Service Data	Clears all data on the tool; any data not already sent to TPMS Desktop will be transferred when next connected

If one data set is selected, it is possible to get further information about the sensor and the OBD, to directly access the Program Sensor section and to print the data via the Bluetooth printer.

TOOLKIT

RKE Test	Select RKE Test, hold the Key Fob and press the function buttons on the Fob. The TECH500 will check only for a signal present. When performing relearn processes that use the Key Fob it is important to verify that the Key Fob is transmitting.
UHF Monitor	Allows operator to search for sensor signals. This feature is used for advanced diagnostics to determine if signals may be causing issues during sensor activation and vehicle relearns.
Passive Key	A passive key system allows the driver to (un)lock the vehicle's doors without touching a key and to start/stop the engine simply by pushing the ignition button. This feature is used when the passive key system doesn't work. A working system will first show activity from the vehicle, and then show a response from the key.

My Tool

Sub-menu containing important information and settings about the tool itself.

Settings

TPM ID	Select whether the tool displays the TPM ID in DECIMAL or HEXIDECIMAL
Pressure	Change how pressure is displayed, choose between PSI or Bar.
Temperature	Select Celsius or Fahrenheit.
Display Contrast	Adjust tool display contrast.
Lang.	Select Language for tool.
Date/Time	Allows to set the date and time.
Restore Defaults	Reset all settings back to the factory default values.

Networks

Choose between Bluetooth and WiFi. To enable WiFi change the settings from Disabled to Enabled.

To connect to a network, highlight Join Network and press Enter. Select the correct available network displayed by highlighting it and pressing Enter. Use Up Arrow key to start with upper case, Down Arrow key for numbers and lower case to enter the passphrase. ESC to go back a position and Enter to enter the next character. TEST to connect. Special characters like β, ä, ö, etc cannot be selected.

When connected, it is possible to check for updates.
To go ahead, press enter. To check later, press ESC.

Current network displays information about the network the tool is connected to.

For Bluetooth, please see section 'TPMS Desktop' (page 22).

Software Updates

WiFi Updates	Used to set the interval with which the tool should check for updates via WiFi (Daily, Weekly, Monthly or Off).
Check Now	The tool connects, looks for an update and asks to press Enter to Update. Press ESC to not go ahead.
Enter Update Mode	Used to install an update on the tool. See page 20 onwards for update instructions.

Tool Info

Gives the operator the ability to view:

- Software Version currently installed
- Build Date of that Software
- Serial Number of the tool
- Language Region
- Coverage Region

Switch to US coverage

Note: can only be used if US coverage is downloaded on the tool.

Usage

View the number of Power Cycles, Sensor Activations and OBD Relearns.

Support
On screen reference for Bartec Auto ID Ltd support.

Workflow

Vehicle No.	Allows the user to select different formats of licence plates.

REGISTRATION

It is essential to register the tool as it enables the notification
of software updates and the ability to download update files to the
tool.
To register a tool, navigate to the Bartec TPMS website at
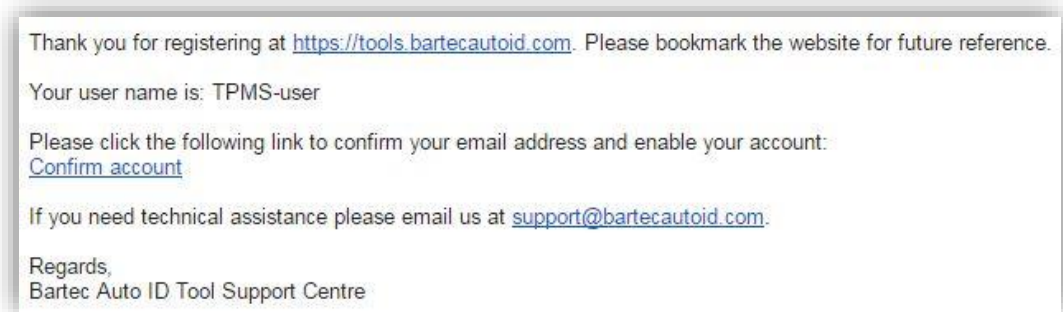tools.bartecautoid.com/register.aspx .

The first page is the TPMS Tool Support page, showing the product range.

First select your product, then select 'Register' to create a new account. It is important to fill in
all fields completely and accurately. This information will help Bartec remain in contact
regarding updates and other important TPMS information. Choose a username (without a
space) and password.

If the details are accepted, this message will show:

Registration Complete - Awaiting Email Confirmation
Your registration is complete. Please check your email and follow the link to confirm your email address to enable your account.

The following email should arrive within a few minutes:

Thank you for registering at https://tools.bartecautoid.com. Please bookmark the website for future reference.

Your user name is: TPMS-user

Please click the following link to confirm your email address and enable your account:
Confirm account

If you need technical assistance please email us at support@bartecautoid.com.

Regards,
Bartec Auto ID Tool Support Centre

When clicking 'Confirm account' it will bring the user back to the website and the following
page will show that the registration was successful. Click on 'this page' to log in.

Registration Email Confirmation
Your email address has been validated. You can now login to register tools.
You can log in on this page.

After Login, the personal settings will show, which can be changed as required.

Selecting Tools gives the user the option to register a new tool. The serial number is printed on the back of the tool or in 'My Tool' menu 'Tool Info'.

Note that this Serial Number is validated by the website and it must be entered correct.

If the number is accepted the user will see the tool listed, along with a Download button which will allow to get the latest software version:

Selecting 'Download' generates a version of the software locked to the serial number only and gives a standard download message (dependent on the browser) to save the software file. After saving the file, continue with the update process as described in the following.

UPDATING THE TOOL VIA USB CABLE

The tool is compatible with PCs running Windows operating systems.
Find a detailed written and video guide at www.bartecautoid.com > TPMS Dropdown menu > TPMS Support > SW Update Guide.

Step 1:

Power on the TECH500, select My Tool from the Main Menu, select Software Updates and select Enter Update Mode.

Tool will prompt user to "Insert USB Lead to Transfer Update Files" and connect to the PC.
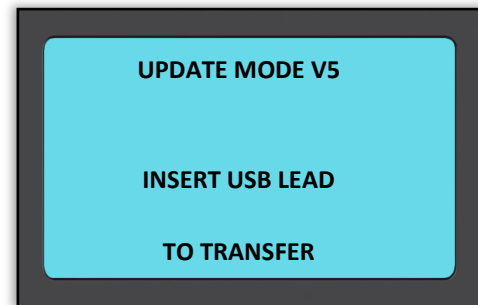
Step 2:

The tool should open a window on the computer screen which is seen as a Removable Disk. OR: To open window, navigate to My Computer and open the removable disk.

Step 3:

Copy and Paste or Drag and Drop the saved Update file (*.mfu) into the Removable Disk Window.

Note: Every tool needs its own unique update file. The file can only be used for the specific tool identified by the serial number.
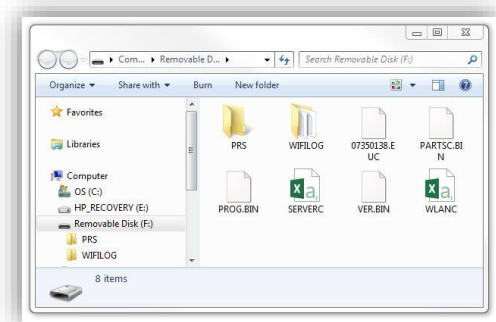
Step 4:

The tool will load the update file to the operating system.
Once the verification is complete the update finishes and the tool can be unplugged.

Step 5:

The tool is now updated and ready to go. The software version can also be checked in the Tool Info screen.

Trouble Shooting Tips:

- If Windows does not recognize the tool, please check that the USB cable is connected, that the tool is in update mode, and that there are no unnecessary update files on your PC available.
- Make sure the right update file is used.
- Do not delete any files that may already be in the removable disk window.

UPDATING YOUR TOOL VIA WIFI

Once the tool is set up to connect to WiFi network, it will be ready for updating via WiFi. Go to My Tool > Software Updates > WiFi Updates. There are two options:

Schedule check	The interval setting, with which the user want the tool to check for updates (Off / Daily / Weekly / Monthly). Once the interval is set, the tool will use its internal clock to switch on WiFi, connect to the Bartec system and alert the user when an update is available.
Check Now	When pressing Enter, the tool connects to the WiFi network. If there is an update: press Enter to download and install or ESC to cancel downloading. The user can always come back to this option to download and install.

CHANGING FROM EU TO US VEHICLE COVERAGE

To work with USA coverage the user needs to download and install the US coverage software update. Log on to 'My Account' at tools.bartecautoid.com , go to 'Tools' and click on the link for US Coverage ⓘ.

The file will be downloaded onto your computer.
Connect the TECH500 to the computer via USB cable, click and drag the file from the computer's download section onto the removable disk of the TECH500.

Once the update is completed the tool is ready to switch from EU coverage to USA coverage.

Go to My Tool > Switch To USA Coverage and press Enter. A message will be displayed that the tool is "Preparing update…" and will go into Update mode to install the USA coverage. The process can take a few minutes.

To switch back to the EU coverage: go to My Tool > Switch to EURO Coverage.

TPMS DESKTOP

The TPMS Desktop provides revolutionary technology to help manage Bartec TPMS tools on the computer. The TPMS Desktop is designed to work with the following Bartec tools; TECH400, TECH500, TECH300, TAP100/200 and the TPMS PAD.

Go to https://tools.bartecautoid.com/tpmsdesktop/ to download your FREE copy now!
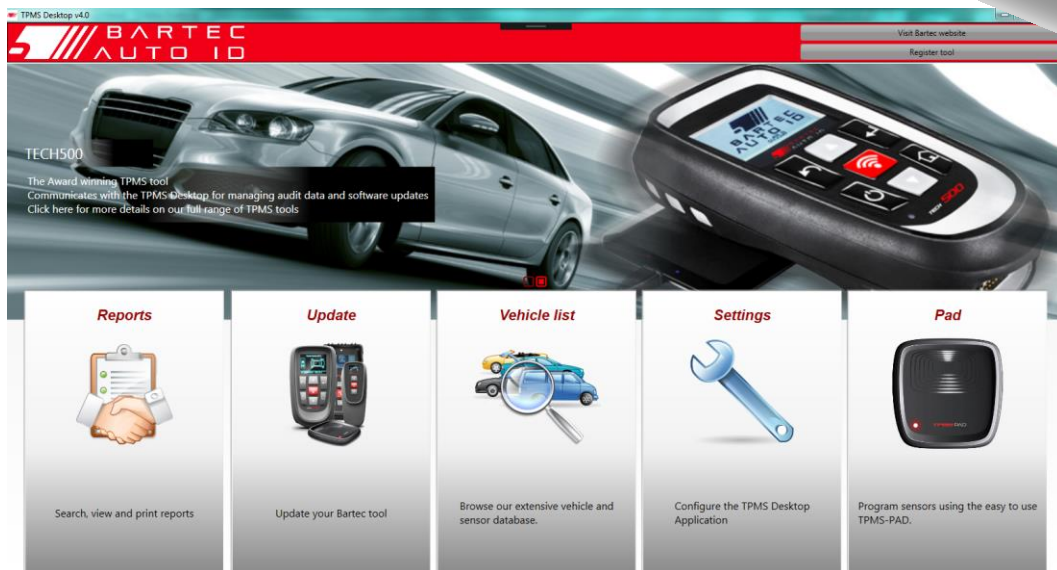
Reports	Complete job reports recorded and stored when needed
Update	Automatically retrieve update files from the current registered account
Vehicle List	Lookup TPMS information for a vehicle quickly and easily
Settings	Configure settings for Bluetooth and WiFi configuration
PAD	Launches the software to run the TPMS PAD
Display	Software available to display vehicle details, tyre pressure and tread depth readings on a TV or Monitor for Tyre shop garages or waiting rooms

Reports
Search, view and print job reports. This preformatted and detailed record contains the necessary job information needed for users and customers! To sort or filter reports by date, make, model and year. Or to print a report and attach it to the invoice as proof of work completed. Reports can be used to create customer receipts and limit liability.

Update
Register and update the Bartec Tool with the latest software. This feature helps to keep control of all tools in use and updates them with the most current software available. Simply connect the tool to a PC with TPMS Desktop installed and click *Update*.

Vehicle List
Browse the extensive vehicle and sensor database. Search by make, model and year to quickly find the data needed: OBD location, TPMS relearn, sensor information – it's all there with TPMS Desktop. Plus, the database is regularly updated.

System Settings
Configure the TPMS Desktop Application to meet the tyre shop's needs. Want to connect with Bluetooth. Connectivity is just a few clicks away with TPMS Desktop.

PAD
Program sensors using the dedicated, easy to use TPMS PAD. Simply connect the TPMS PAD to the PC using a USB cable to program and test sensors with ease! Copy and create a universal sensor with *Copy Sensor* and *Create Sensor* – features only available with TPMS Desktop.

Display
Garage/Tyre shop display screen functionality enables the technician to show the customer their vehicle readings on a TV or monitor in the garage or waiting room. Gives the customer more confidence and sells more tyres.

The TECH500 will connect wirelessly to the TPMS Desktop using Bluetooth technology. While this will work easily with most computers, some have software which can be difficult to setup. In these rare circumstances, or if the computer does not support Bluetooth, a Bluetooth adaptor be used. Additional information on how to install an adaptor can be found on the Bartec support website: **tools.bartecautoid.com**

Bluetooth® SETTINGS

To be able to use the TECH500 with Bluetooth, the tool first needs to be configured. Go to My Tool > Networks > Bluetooth and choose 'Enabled'.

If there are problems using the built-in Bluetooth, the user can use a USB dongle. Select Devices and Printers in Control Panel.
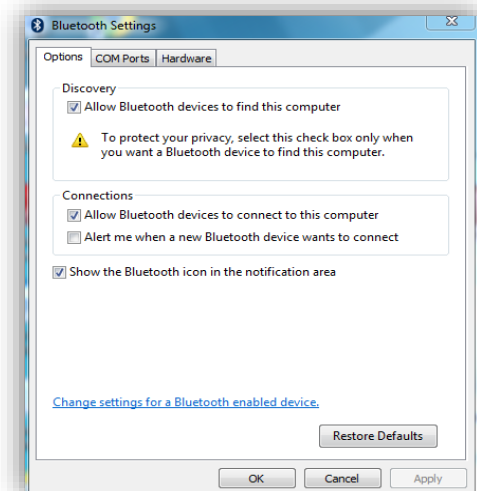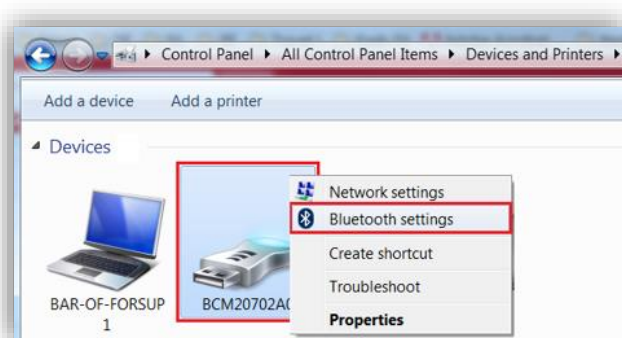
Right click on the Bluetooth dongle icon and click on Bluetooth settings. Tick the boxes as seen on the Options tab above. Press OK when finished.

Start the TPMS Desktop application and go to Settings. Open the Bluetooth section: the PC/Laptop should be **connectable** and **discoverable** for the TECH500.
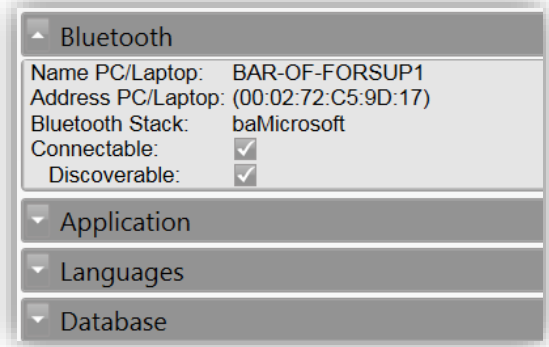
Bluetooth	
Name PC/Laptop:	BAR-OF-FORSUP1
Address PC/Laptop:	(00:02:72:C5:9D:17)
Bluetooth Stack:	baMicrosoft
Connectable:	☑
Discoverable:	☑

▼ Application
▼ Languages
▼ Database

APPENDIX

APPENDIX A: Vehicle Identification Number (VIN)

When using the TECH500 tool, it is important for the user to verify the Model Year to help insure looking for that proper sensor and using the proper vehicle COMs when necessary.

By using the vehicles VIN and locate the 10th digit from the left the user can in most cases accurately determine that vehicle's Model Year. Take that digit and reference the chart on this sheet. This will be the Model Year which needs to be selected on the tool.

3VWPE69MX3M169854
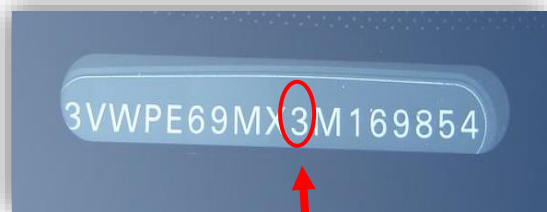
3 = 2003

10th Digit in VIN	Year
W	1998
X	1999
Y	2000
1	2001
2	2002
3	2003
4	2004
5	2005
6	2006
7	2007
8	2008
9	2009
A	2010
B	2011
C	2012
D	2013
E	2014
F	2015
G	2016
H	2017
J	2018
K	2019

APPENDIX B: TPMS SYSTEM REVIEW

When cycling the ignition for off to run, the TPMS tell-tale should come on,and go off. This would indicate a system with no fault present.

Solid Light: Pressure Problem	Check the tyre pressures, and adjust to placard. NOTE: Some vehicles are equipped with sensors in the spare. Also, with some vehicles, over pressure may turn on the light.
Flashing Light: System Problem	System problems can range from faulty sensor(s) to sensors on the vehicle that haven't been learned to that vehicle.

APPENDIX C: MODES and MODE CHANGING

Sensors can have many different "modes" when they have been read, such as Learn, Tool LF, YD Sleep, YD Rest, Hi Norm Dly. Some of those are called sleep mode to preserve battery life.

Mostly, these modes are not important because the sensor will be supplied already in the correct mode to use. But for some sensors made by Continental it is important that the mode is displayed as "Park", as otherwise it will not work on the vehicle.

The TECH500 tool has the ability to perform the necessary mode change. If a sensor is shown as "Ship", "Test" or "Off" and the relearn toolkit provides the option "Set Sensor to Park Mode", please use this option to change the sensor mode into the correct one:

- Go to "Relearn" and select vehicle (MMY).
- Press enter when relearn procedure shows.
- Select the spanner in the upper left corner with the Up/Down buttons. Press Enter.
- Select "Set Sensor to Park Mode", press Enter.
- Go to the wheel, hold the tool near the sensor and press "Test".
- Repeat for each wheel.
- Start the Relearn procedure.

Also, some sensors are supplied in a mode where they cannot be read by the tool unless they are pressurized in a wheel. Some examples would be replacement sensors bought from a Ford dealership, and some Mitsubishi Continental sensors.

APPENDIX D: COMMS ERROR TROUBLESHOOTING

If a problem or error occurs during the COMMS process, follow the steps below before calling customer support.

Check vehicle ignition
Vehicle ignition must be in the RUN position in order for vehicle COMMS process to complete.

Check cable to tool connection
Insure the cable is connected at the DB15 and thumb screws are finger tight.

Check cable connection at vehicle
Make sure OBDII connection is good.

Verify Make, Model, and Year
COMMS can change from Model to Model, and Year to Year. Verify the tool is set-up to the proper MMY.

Verify tool power level
If the tool has a low battery charge, this may affect the COMMS process. Charge tool and try again.

TECHNICAL SPECIFICATION

Power Supply	Lithium Polymer rechargeable battery, not user serviceable
Max power consumption	1.5W Schrader TPM, 0.5W all others
Display	LCD single colour, graphic, resolution 128x64
Keyboard	7 keys, dust, water and grease-resistant
Input/output	Mini-B style USB used to Connect to PC for firmware update and audit file download.
Vehicle connection	15 way D connector on tool connects cable with OBDII connector on the other end
Working environment	Temperature 0°C - 45°C, Humidity: 20-55%
Storage environment	Temperature –10°C - 50°C, Humidity: 20-60%
Dimensions	187mm x 107mm x 47mm
Weight(including batteries)	490g

CE COMPLIANCE

DECLARATION OF EM CONFORMITY

Date of issue 14 June 2016

Manufacturer's name:	Bartec Auto Id Ltd
Manufacturer's address:	Unit 9 Redbrook Business Park
	Wilthorpe Road
	Barnsley
	South Yorkshire
	S75 1JN
	UK

This document is a declaration that the product identified below conforms with the essential protection requirements that have been specified in the European Union Radio Equipment Directive (RED) 2014/53/EU.

Product name(s): TECH300 TECH500 TECH400Pro
Model number(s): TECH300 & TECH500
Product option(s): None

The assessment of conformity has been made using the Standards Route to Compliance. The standards that the products are compliant with are listed below

EN 300330-1:V2.1.0
EN 300330-2:V1.5.1
EN 301489-17:V2.2.1
EN 300328 :V1.8.1
EN 61000-6-1:2019
EN 61000-6-3:2007+A1:2011
EN 61010-1:2010+A1:2019

_____   Date: 14/06/2016

Name

Charles Beal, Technical Director

$C\epsilon$

BARTEC PRODUCT RANGE & ACCESSORIES

TPMS Tool TECH500	TPMS Tool TECH300	Diagnostics Tool TECH100	RITE-SENSOR

ACCESSORIES

TECH500 wireless charging PAD

Audit Report Mini Printer

Tread Depth and Pressure Tool TAP100 & TAP200

Wall mountable wireless charging stations for the workshop or mobile working

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