





TPMS Quick Start Guide - Frequent Scenarios

This quick start quide should help you choose which process to use for common scenarios you may encounter.

Mechanically broken (and unserviceable) but Electronically functioning TPMS sensor(s) need replacing

Create replacement i-sensor(s) using the Auto-Duplicate method (Pages 14-16)

Electronically malfunctioning (dead battery) TPMS sensor(s) need replacing

Create replacement i-sensor(s) using the Manual Duplicate method (Pages 17-19)

Missing TPMS sensor(s) / Electronically malfunctioning TPMS sensor(s) with illegible ID code need replacing

if i-sensor OBDII module / other diagnostic equipment available:

Attempt OBDII READ feature (Pages 29-30) or follow diagnostic equipment instructions to read data from vehicle ECU and create i-sensor(s) using the Manual Duplicate method in conjunction with this data.

Use the Program Blank Sensor method of i-sensor creation (Page 20) and then use the OBDII WRITE feature (Page 26-28) or follow diagnostic equipment instructions to write the new ID code(s) to the vehicle ECU.

if i-sensor OBDII module / other diagnostic equipment NOT available:

Use the Program Blank Sensor method of i-sensor creation (Page 20) and follow the relevant relearn procedure for the vehicle.

Tyre/wheel rotation required on vehicle with TPMS sensors

If TYRE rotation is being performed and wheels/sensors are staying in the same location there will be no issue with the TPMS system, but the sensors should all be serviced in accordance with sensor manufacturer recommendations.

If WHEEL rotation is being performed then there are a number of possible scenarios.

If the vehicle ECU can learn TPMS without the use of OBDII equipment then in most cases there will be no problems. However, if the vehicle is equipped with WAL technology, wheels are being rotated across axles and they are fitted with i-sensors the Manual R/L Modify process (Page 25) could be required.

If the ECU can only learn TPMS using OBDII equipment then the i-sensor OBDII module or other diagnostic equipment will be required to programme the new sensor locations to the ECU correctly.

Second wheel set (Winter/Track Day) requiring TPMS sensors

Use the Auto-Duplicate or Manual Duplicate methods of i-sensor creation (Pages 14-19) for all 4 sensors fitted to the standard set of wheels and fit these duplicated sensors to the second wheel set, ensuring that the wheels are correctly labelled so that they can easily be interchanged.

There are a number of more advanced scenarios that could be encountered. If, at any point, you are unsure of which process is the correct one to use, contact our TPMS experts on +44(0)208 838 0910, selecting option 4 and we will do all that we can to assist.



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Introducing i-sensor

Thank you for choosing i-sensor, the intelligent TPMS solution from Autogem. The i-sensor products have been created to be an intuitive, efficient and cost effective alternative to replacing OE tyre pressure sensors.

This owner's manual contains some key information on TPMS sensors that will help you understand how to use the i-sensor tool correctly and efficiently. We highly recommend you read the entire manual carefully together with the assembly instructions enclosed with each individual i-sensor.

We hope you enjoy using i-sensor, the intelligent TPMS solution.

Basic Principles Of TPMS

It is important to understand some basic principles of the tyre pressure monitoring technology in order to fully understand the benefits of i-sensor.

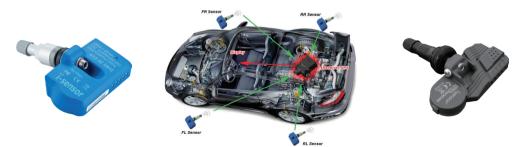
There are TWO types of Tyre Pressure Monitoring Systems fitted to vehicles in Europe:

Direct TPMS: Utilises sensors mounted in each wheel, usually attached to the base of the valve stem, that transmit data from within the tyre to the vehicle ECU. The ECU then uses this data to accurately and quickly inform the driver of tyre pressure issues.

Indirect TPMS: Utilises the vehicles existing ABS sensors, recording wheel rotation speed, to estimate when a tyre pressure loss may have occurred. These systems are sometimes known as deflation detection systems (DDS).

Direct TPMS works by:

Wirelessly transmitting data from inside each tyre (from the valve mounted sensor) to a receiver unit which in turn communicates with the vehicles ECU.



- Each TPMS sensor has it's own UNIOUE ID code
- ID codes are also programmed into the ECU
- ECU will only accept communications from the sensors it is paired with
- If a sensor that is paired to the ECU is removed from the vehicle or if the internal battery of the sensor fails (stopping the sensor from being able to transmit) the ECU will illuminate a warning light to the driver indicating a system malfunction



Basic Principles Of TPMS - continued

When a sensor is replaced on a vehicle:

- NEW unique ID code of the new sensor must be recorded to the ECU
- If the NEW ID code is not programmed to the ECU the TPMS warning light will continue to be illuminated as the ECU recognises that it is no longer receiving a transmission from the OLD sensor which it is still paired to

Vehicle ECUs are only able to communicate in a certain protocol or language

- Protocol specified by the vehicle manufacturer
- IMPORTANT: Sensor fitted to the vehicle must be compatible with the TPMS Receiver & ECU

Over 100 different OE TPMS sensors in the European market from a number of manufacturers

- All transmit own pre-programmed protocol
- Will only communicate with compatible vehicle ECUs
- · Multiple different designs, with multiple different handling requirements

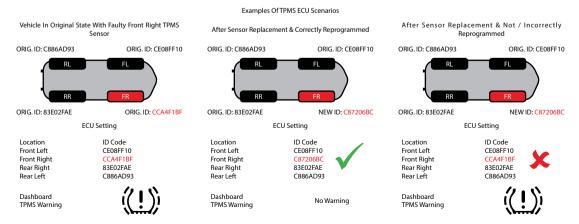


The way in which the NEW ID codes are programmed in to the ECU can vary: Some vehicles to do this automatically via either

- Stationary relearn or
- Drive around procedure

Other vehicles MUST be programmed using electronic tools connected to the ECU via the vehicle OBDII port - this is often referred to as an OBD Reset

Over 90% of sensor replacements are due to mechanical failure of the sensor stems from accidental breakage or corrosion caused by incompatible components or the environment. These sensors are still able to transmit data electronically but are unable to function correctly as a tyre valve.





What Does i-sensor Do?

The i-sensor tool has a number of features to assist you when dealing with vehicles fitted with TPMS sensors;

A. DIAGNOSE SENSOR - This process allows you to perform a contact less sensor scan on all TPMS sensors, so long as they are powered (ie the internal battery is working). A TPMS audit (both electronic and visual) should be the first process undertaken when a vehicle with TPMS sensors arrives at the workshop.

The electronic scan will allow you read the following from working sensors: Unique Sensor ID - in Decimal or Hexadecimal Format Pressure - in PSI, Bar or kPa Temperature - in °C or °F Battery Status (where available) - OK or LOW

B. NEW SENSOR - Having identified the need to replace a TPMS sensor, the tool along with a blank i-sensor, will allow you to create the replacement sensor that you require. This process can be done in three different ways depending upon the circumstances you are faced with.

i) AUTO DUPLICATE (FASTEST METHOD OF TPMS WARNING LIGHT RESET)

The OLD sensor is mechanically broken or malfunctioning but is transmitting a signal. The Auto Duplicate option allows you to quickly copy the existing ID code from the OLD sensor electronically and duplicate it into the NEW sensor to create a clone of the OLD sensor. There is no requirement for the ECU to learn a "NEW" ID in this case.

ii) MANUAL DUPLICATE (2ND FASTEST METHOD OF TPMS WARNING LIGHT RESET)

The OLD sensor is electronically broken or the internal battery is dead, so the sensor is unable to transmit a signal. The Manual Duplicate option allows you to locate the ID code from the OLD sensor body (if it is still legible) and manually type this into the tool, which in turn allows the tool to duplicate this ID code into the NEW sensor to create a clone of the OLD sensor. There is no requirement for the ECU to learn a "NEW" ID in this case.

IMPORTANT: IF THE VEHICLE BEING WORKED UPON CAN ONLY ELECTRONICALLY RESET THE TPMS SYSTEM VIA OBDII, WHEELS SHOULD ALWAYS BE RETURNED TO THEIR ORIGINAL LOCATION ON THE VEHICLE. IF WHEEL ROTATION IS REQUIRED YOU MUST EITHER: USE AN APPROPRIATE DIAGNOSTIC TOOL TO RESET THE TPMS SYSTEM OR MOVE THE SENSOR(S) OUT OF THE ORIGINAL WHEEL AND FIT TO THE WHEEL THAT IS FITTED IN ITS PLACE (FOR ALL AFFECTED SENSORS).



What Does i-sensor Do? - continued

iii) PROGRAM BLANK SENSOR (3RD FASTEST METHOD OF TPMS WARNING LIGHT RESET)

The sensor is electronically broken or the internal battery is dead **AND** the ID code can not be manually read from the sensor body or there is no sensor in the wheel. This means that you may be unable to create a clone of the OLD sensor. In this case you can create a NEW sensor with its own unique ID code.

IMPORTANT: WHEN CREATING A SENSOR USING "PROGRAM BLANK SENSOR", YOU MAY REQUIRE ADDITIONAL DIAGNOSTIC EQUIPMENT IN ORDER TO PERFORM THE ECU RESET WHERE THE VEHICLE CAN ONLY ELECTRONICALLY RESET THE TPMS SYSTEM VIA OBDII. VEHICLES WHICH HAVE THE ABILITY TO AUTOMATICALLY LEARN THE NEW SENSOR ID'S THE RELEARN PROCESS REMAINS THE SAME AS IT WOULD BE FOR THE OE SENSOR - PLEASE REFER TO VEHICLE HANDBOOK FOR DETAILS.

C. WIRELESS ID/RL MODIFY - MODIFY i-sensor - This process allows you to modify, where applicable, the ID CODE attributed to an i-sensor or switch the sensor from a LEFT to a RIGHT sided sensor for applications utilising WAL technology. In most cases these processes can be done wirelessly and do not require the i-sensor to be in the programming cradle. These options are most useful for:

User Error: Correct an i-sensor which has been created with an incorrect ID code Wheel Rotation: Sensors moved around vehicle but user unable to reprogramme ECU WAL Vehicles: Adjust the attributed "SIDE" for an i-sensor if moving the sensor from left wheel to right wheel or cross-axle wheel rotation.

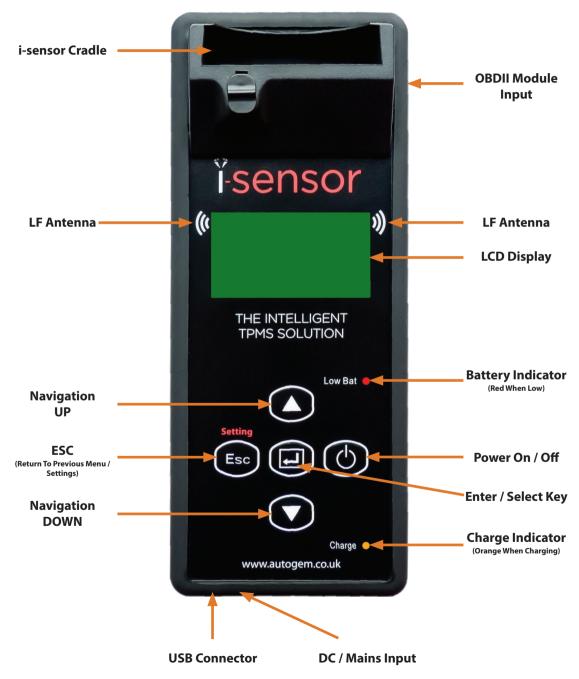
- **D. OBDII READ / WRITE VIA OBDII MODULE -** This feature is available on all tools that have the RJ11 Socket on side of cradle but does require the use of an optional OBDII attachment. With the additional module attached the tool can READ the sensor ID codes from the vehicle ECU or can WRITE new sensor ID codes or positions to the vehicle ECU.
- **E. 4 WHEEL MODE & ID TO PC** When the tool settings are changed to 4 WHEEL mode the tool allows the collection of a whole vehicle's worth of data with the option to view the data on a PC using our ID to PC software.

This process is useful to view all of the data obtained from diagnosing a single vehicle, giving both Hexadecimal and Decimal ID Codes for each sensor along with Pressure in PSI, kPa & Bar, Temperature in C and F and the Sensor Battery State.

The software also reports the Date & Time of data collection & the vehicle MMY used. This data can also be exported in CSV or TEXT format, which could then be printed for your own records or even attached to your customer invoice.



i-sensor Tool Overview





Initial Tool Set Up

It is recommended that the tool receives a full charge before first use. Simply utilise the mains plug along with the universal adaptor supplied (set for the region the tool is being used in) and connect this to the DC / Mains Input found in the base of the tool.

Upon full charge the ORANGE charge indicator found at the bottom right of the front panel will extinguish. If the tool battery becomes close to full depletion the Low Bat light, found to the right of the UP navigation key, will illuminate RED. Please charge the tool as soon as possible.

Power On The Device



Press and hold the power key to power on the device

The device will display the Autogem logo during the Power On procedure.

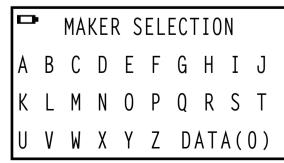


This then changes to the i-sensor logo along with the software version.



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Finally the device loads to the vehicle MAKER SELECTION menu.





Device Settings



The SETTING screen displays:

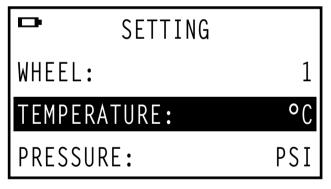
Software Version and Serial Number of the tool along with a number of adjustable settings outlined below.

You can access the Device Settings by pressing the Esc key whilst on the vehicle MAKER SELECTION screen Use the arrow keys to navigate the options on the screen

D	SETTING	
WHEEL:		1
TEMPERA	TURE:	۰F
PRESSUR	E:	PSI

You can change the displayed units and languages by highlighting the required field and pressing the Enter key

This will scroll through the various parameters available for that field.



ADJUSTAB	LE PARAMETERS IN SETTINGS	
WHEEL:	1 / 4	
TEMPERATURE:	°F / °C	
PRESSURE:	Bar / PSI / kPa	
ID FORMAT:	Auto / Dec / Hex	
AUTO OFF:	Disabled / 1min / 2min / 3min / 5min / 10min	
DISPLAY CONTRAST: (Press Enter & Use Arrow Keys To Select) 0 - 30		
BUZZER:	ON / OFF	
LANGUAGE:	English / Deutsch / Español / Slovenská / Français	



Diagnose Sensor

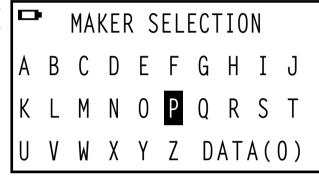




Use the arrow keys to navigate the options on each screen

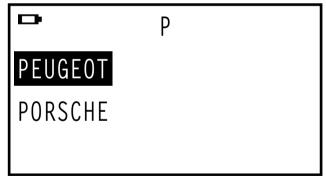
Use the arrow keys to highlight the FIRST LETTER of the manufacturer of the vehicle you require.

Press the Enter key



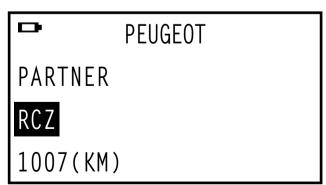
Use the arrow keys to select the manufacturer of the vehicle that you require.

Press the Enter key



Use the arrow keys to select the model that you require.

Press the Enter key





Diagnose Sensor

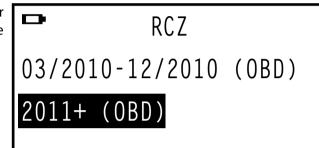




Use the arrow keys to navigate the options on each screen

Use the arrow keys to select the year option that corresponds to the vehicle that you are working on.

Press the Enter key



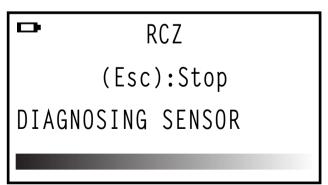
Use the arrow keys to select the DIAGNOSE SENSOR option and hold the tool, with one of the LF antennas against the side wall of the tyre, adjacent to the valve.

Press the Enter key

RCZ
WIRELESS ID MODIFY
DIAGNOSE SENSOR
NEW SENSOR

The i-sensor tool will now activate the sensor with a modulated signal. The sensor response time may vary and this is dependent on the sensor brand / type.

The tool will beep and display the appropriate information once the sensor data is captured.

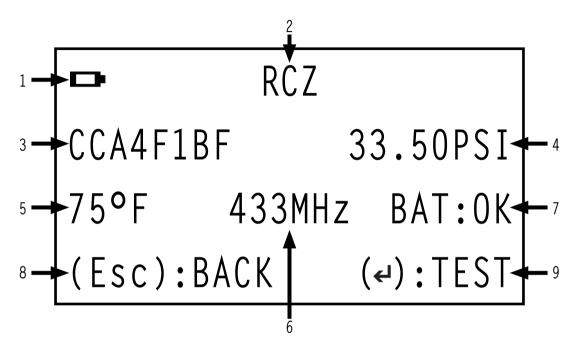


The information displayed on the Sensor Data Screen should be recorded to the Service Record Chart (Pre-Work Inspection Report) enclosed in each i-sensor box if a sensor replacement is required.



Diagnose Sensor

The Sensor Data Screen



- 1) Tool Battery Level Indicator
- 2) Vehicle Model Selected
- 3) Unique ID Code Of Sensor Diagnosed
- 4) Tyre Pressure
- 5) Tyre Temperature
- 6) Sensor Frequency
- 7) Sensor Battery Status
- 8) Go Back One Menu Level



9) Test Again / Test Another Sensor Of Same Type



WARNING:

If there is (OBD) after the Year/ Date Selection - The TPMS reset procedure for the vehicle is via OBD RESET ONLY.

If this occurs it is recommended that the existing sensors are DUPLICATED. If sensor duplication is not available, diagnostic equipment will be required to reset the vehicle ECU.

Please Note:

The i-sensor tool will only display the information transmitted by the sensor being diagnosed. Not all sensors will transmit all of the data fields shown in this example.



Duplicating / Cloning Existing Sensors

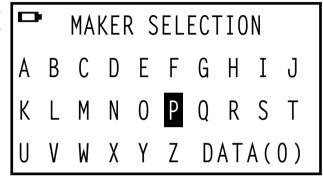




Use the arrow keys to navigate the options on each screen

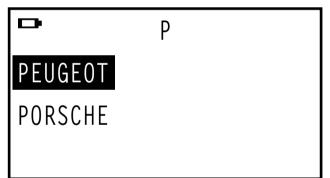
Use the arrow keys to highlight the FIRST LETTER of the manufacturer of the vehicle you require.

Press the Enter key



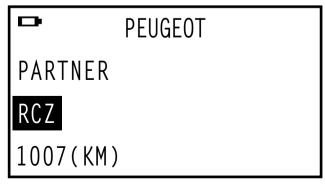
Use the arrow keys to select the manufacturer of the vehicle that you require.

Press the Enter key



Use the arrow keys to select the model that you require.

Press the Enter key



The NEW SENSOR feature will ONLY allow you to program i-sensors. Other OE or Programmable Sensors are not compatible and cannot be programmed using this feature.



Duplicating / Cloning Existing Sensors

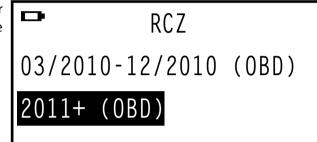




Use the arrow keys to navigate the options on each screen

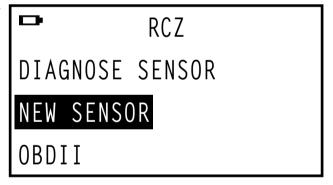
Use the arrow keys to select the year option that corresponds to the vehicle that you are working on.

Press the Enter key



Use the arrow keys to select the NEW SENSOR option.

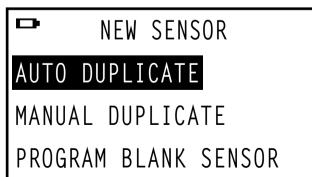
Press the Enter key



The THREE ways to create a new sensor are then displayed.

When duplicating an existing sensor you can choose either AUTO DUPLICATE or MANUAL DUPLICATE.

Both methods are covered in the following pages.



Ensure you select the correct i-sensor blank to program - 315MHz or 433MHz as per the data shown when diagnosing the original sensor fitted to the vehicle (field 6 on page 11)



Auto Duplicate





Use the arrow keys to navigate the options on each screen

Use the arrow keys to select AUTO DUPLICATE.

Hold the tool, with OLD sensor adjacent to one of the two LF ANTENNAS - side of tool display.

Press the Enter key

NEW SENSOR
(Esc):Stop
DIAGNOSING SENSOR

The i-sensor tool will now activate the sensor and display the ID code of the diagnosed sensor.

Once the ID code is displayed locate a new i-sensor and place it into the cradle on top of the tool and lock into place with the sliding mechanism. NEW SENSOR 11418856

Esc):BACK (←):PROGRAM

Press the Enter key
to initiate the programming process.

The screen will display;
Erasing Flash...
Program Sensor...
Verifying...
Finally displaying the confirmation screen after a double beep.

PROGRAM SUCCESSFUL
Sensor ID 11418856

(Esc):BACK (←):PROGRAM









Manual Duplicate





Use the arrow keys to navigate the options on each screen

Use the arrow keys to select MANUAL DUPLICATE

Press the Enter key



O.E. ID LOCATOR (helps to locate the ID on a sensor - etched / sticker)

INPUT ID (allows you to manually input the ID code you wish to duplicate)

Firstly, use the OE ID LOCATOR to determine where to find the ID code on the sensor you wish to duplicate.

Use the arrow keys to select O.E. ID LOCATOR.

Press the Enter key

Use the arrow keys to select the manufacturer of the sensor you wish to duplicate (manufacturer markings will be present on the sensor body).

Press the Enter key



SCHRADER

TRW

VDC

NEW SENSOR
AUTO DUPLICATE

MANUAL DUPLICATE

PROGRAM BLANK SENSOR



MANUFACTURER

OE ID LOCATOR

INPIIT ID

WE ALSO PROVIDE THE SENSOR ID LOCATOR IN A LARGER, CLEARER PRINTED FORMAT.
THIS PRINTED PRODUCT IS SUPPLIED WITH EVERY NEW TOOL.



Manual Duplicate





Use the arrow keys to navigate the options on each screen

The screen will then display the position of the ID code on the sensor body for all versions of sensors manufactured by the selected company. Use the arrow keys to scroll through the images to find the diagram that suits the sensor you are working with.

Press the Esc key to go back

MANUAL DUPLICATE menu.



Use the arrow keys to select the INPUT ID option.

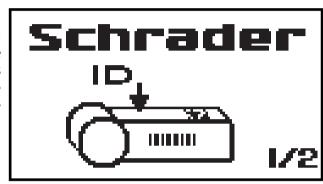
Press the Esc key again to return to the

Press the Enter key

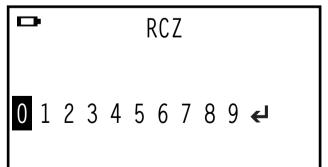


BY default the tool is set to AUTO mode which automatically determines if you require DEC (numbers only) or HEX (numbers & letters). This can be changed in the settings.

Use the arrow keys to select each digit, pressing the Enter key after each selection.



MANUAL DUPLICATE O.E. ID LOCATOR INPUT ID



The NEW SENSOR feature will ONLY allow you to program i-sensors. Other OE or Programmable Sensors are not compatible and cannot be programmed using this feature.



Manual Duplicate





Use the arrow keys to navigate the options on each screen

If the maximum number of digits are entered the "Enter" arrow will automatically be highlighted.

Double check the ID is the same as the one printed on the sensor you are duplicating.

If incorrect, use the Esc key to erase the code you have typed and re-enter the correct code.

RCZ
01234567
0 1 2 3 4 5 6 7 8 9

Locate a new i-sensor and place it into the cradle on top of the tool and lock into place with the sliding mechanism.

RCZ
01234567
0 1 2 3 4 5 6 7 8 9

Press the Enter key on the "Enter" arrow when ready to initiate the programming process.

The screen will display;
Erasing Flash...
Program Sensor...

Verifying...
Finally displaying the confirmation

PROGRAM SUCCESSFUL
Sensor ID 01234567
(Esc):BACK (←):PROGRAM



screen after a double beep.

NARNING: PLEASE DO NOT KEEP OLD TPMS SENSORS IN VEHICLE AS THEY MAY CAUSE THE TPMS SYSTEM TO MALFUNCTION. IF DRIVER WISHES TO KEEP OLD SENSORS PLEASE REMOVE THEM FROM VEHICLE AS SOON AS POSSIBLE.





Program Blank Sensor





Use the arrow keys to navigate the options on each screen

Use the arrow keys to select PROGRAM BLANK SENSOR.

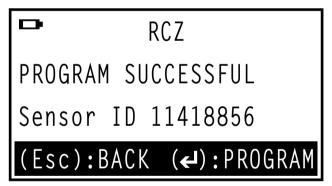
Locate a new i-sensor and place it into the cradle on top of the tool and lock into place with the sliding mechanism

Press the Enter key

The screen will display; Erasing Flash... Program Sensor... Verifying...

Finally displaying the confirmation screen after a double beep.

NEW SENSOR
AUTO DUPLICATE
MANUAL DUPLICATE
PROGRAM BLANK SENSOR



PLEASE NOTE, WHEN CREATING A SENSOR USING "PROGRAM BLANK SENSOR", YOU MAY REQUIRE OUR ADDITIONAL OBDII MODULE OR ADDITIONAL DIAGNOSTIC EQUIPMENT IN ORDER TO PERFORM THE ECU RESET WHERE THE VEHICLE CAN ONLY PERFORM AN ELECTRONIC RESET VIA OBDII.

ON VEHICLES WHICH HAVE THE ABILITY TO AUTOMATICALLY LEARN THE NEW SENSOR ID'S, THE RELEARN PROCESS REMAINS THE SAME AS IT WOULD BE FOR AN OE SENSOR.



Select Right Wheel / Select Left Wheel (WAL)



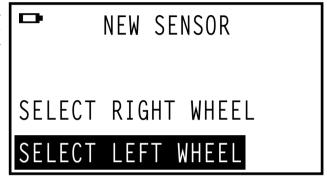


Use the arrow keys to navigate the options on each screen

For vehicles equipped with WAL technology you will be asked to choose which side of the vehicle the new sensor is being created for.

Choose the required option.

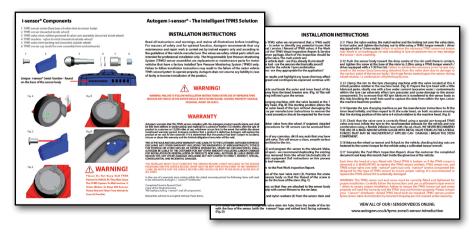
Press the Enter key



This request will appear for all vehicles that are equipped with WAL technology. It is important that any sensors that are created for a RIGHT WHEEL are fitted into a wheel on the right hand side of the vehicle or any sensors that are created for a LEFT WHEEL are fitted into a wheel on the left hand side of the vehicle. Failure to follow this process will result in the TPMS failing to function correctly.

IMPORTANT: FITTING THE SENSOR

WHEN BUILDING I-SENSORS AND FITTING THEM TO THE WHEEL, PLEASE REFER TO THE ASSEMBLY INSTRUCTIONS ENCLOSED WITH EACH I-SENSOR.





Wireless ID/RL Modify





Use the arrow keys to navigate the options on each screen

This function has been designed to allow i-sensor users to modify the ID code and the Right/Left setting (WAL) in a sensor that has already been created using one of the previous methods without the i-sensor being mounted into the cradle on the i-sensor tool.

This function will only allow the ID code / Left Wheel / Right Wheel setting to be adjusted.

If a sensor needs to be reprogrammed to a different MMY then it must be mounted into the programming cradle on the i-sensor tool and created using one of the previous methods.

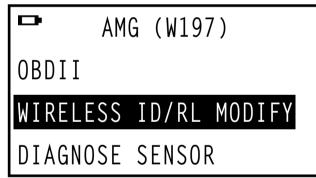
Dial in the required Manufacturer, Model and Year and select the option for WIRELESS ID MODIFY (WIRELESS ID/ RL MODIFY for vehicles equipped with WAL technology).

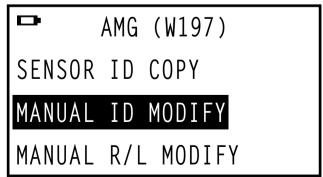
Press the Enter key

Sensor ID Copy: Copy the ID from a functioning sensor (Object) to a preprogrammed i-sensor (Target).

Manual ID Modify: Manually modify the ID of a pre-programmed i-sensor

Manual R/L Modify: Switch a preprogrammed i-sensor from being a RIGHT WHEEL sensor to a LEFT WHEEL sensor and vice versa.







Sensor ID Copy





Use the arrow keys to navigate the options on each screen

Place the sensor that needs to be copied next to the tool.

Press the Enter key 📵

This will diagnose the object sensor and collect it's ID code.

AMG (W197)
SCAN OBJECT ID

(Esc):BACK (←):TO SCAN

If possible, double check that the ID code collected matches that printed on the sensor copied.

Position the tool alongside the preprogrammed i-sensor as if it was to be diagnosed.

Press the Enter key

The tool will firstly identify the preprogrammed i-sensor, displaying its ID code.

This sensor will then be modified to the new ID code.

Finally, the message PROGRAM SUCCESSFUL will appear.

► AMG (W197)

OBJ. ID:0C556AF

SCAN TARGET SENSOR TO

(Esc):BACK (←):MODIFY

□ AMG (W197)

0B88E49

MODIFIED TO OC556AF

PROGRAM SUCCESSFUL



Manual ID Modify





Use the arrow keys to navigate the options on each screen

Place the tool next to the i-sensor that needs to be modified.

Press the Enter key

This will diagnose the target i-sensor and collect it's ID code.

AMG (W197) SCAN ORIGINAL ID

Esc):BACK (←):TO SCAN

Retrieve the sensor with the ID that is required or locate a record of the ID code that is required.

Press the Enter key

AMG (W197)

ORG. ID:0B88E49

Esc):BACK (←):KEY IN

Enter the required ID code using the letters / numbers on screen & double check the code that has been entered.

Press the Enter key



Program sensor will be displayed for a short period before displaying PROGRAM SUCCESSFUL

AMG (W197)

0B88F49

MODIFIED TO OC556AF

PROGRAM SUCCESSFUL



Manual R/L Modify





Use the arrow keys to navigate the options on each screen

Place the tool next to the i-sensor that needs to be modified.

Press the Enter key

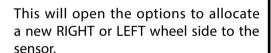
This will diagnose the target i-sensor and collect it's ID code.

➡ AMG (W197)

SCAN ORIGINAL ID

(Esc):BACK (←):TO SCAN

Press the Enter key



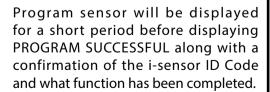
Select the **SET WHEEL:R** or **SET WHEEL:L** as required.

➡ AMG (W197)

ORG. ID: 0B88E49

(Esc):BACK (←):SET R/L

Press the Enter key



► AMG (W197)

0B88E49

SET WHEEL:R

PROGRAM SUCCESSFUL



OBDII - Write Data Via OBDII Module





Use the arrow keys to navigate the options on each screen

Dial in the required Manufacturer, Model and Year. Select the option for OBDII

Press the Enter key 📵

If there is already data stored in the tool it will ask you if you want to DELETE it or CANCEL the current process. Choose the option required.

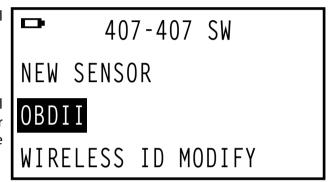
Cancelling will then show the stored data, automatically reverting to 4 WHEEL mode with the LEFT FRONT wheel position flashing.

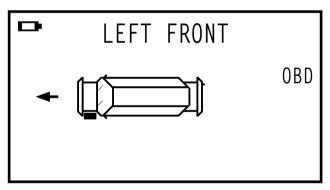
Deleting the data will revert the display to 4 WHEEL mode, with no data saved and with the LEFT FRONT wheel position flashing.

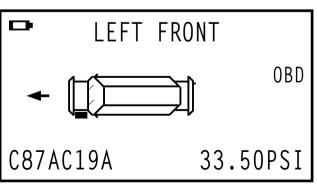
Place the tool next to the sensor mounted in the LEFT FRONT wheel.

Press the Enter key

The LEFT FRONT sensor will be diagnosed and the ID code and Pressure will be displayed. The LEFT FRONT wheel will now show solid.









OBDII - Write Data Via OBDII Module





Use the arrow keys to navigate the options on each screen

Press the UP navigation key to move to the RIGHT FRONT wheel.

Place the tool next to the sensor mounted in the RIGHT FRONT wheel.

Press the Enter key

The relevant data is collected & shown

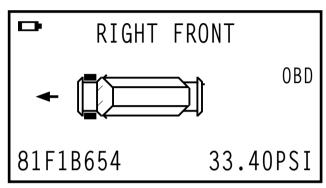
Repeat this process for the RIGHT REAR, RIGHT LEFT and the SPARE wheel if applicable.

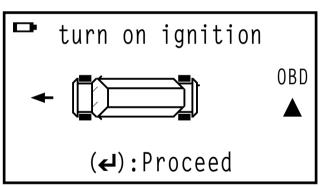
Press the UP navigation key again until there is a flashing arrow beneath the OBD text.

Press the Enter key

Follow the on screen instructions to correctly connect the OBDII module to the vehicle and the i-sensor tool.

The module itself plugs into the vehicle and the enclosed RJ11 cable attaches the OBDII module to the i-sensor tool.





- 🖿 turn on ignition
- -KEY ON/ENGINE OFF
- -CONNECT OBD TO TOOL
- -CONNECT OBD TO CAR



OBDII - Write Data Via OBDII Module





Use the arrow keys to navigate the options on each screen

The OBDII module will now connect and will display the module version for software and hardware.

The screen will then display the READ CAR ID and WRITE CAR ID options. Select WRITE CAR ID.

Press the Enter key

The WRITE process will then commence displaying: OBD INITIALISING... READ VEHICLE DATA OBD WRITE IDs... WRITE SUCCESSFUL OBDII Connected

READ CAR ID

WRITE CAR ID

OBDII Connected

WRITE SUCCESSFUL



OBDII - Read Data Via OBDII Module





Use the arrow keys to navigate the options on each screen

Dial in the required Manufacturer, Model and Year. Select the option for OBDII

Press the Enter key

If there is already data stored in the tool it will ask you if you want to DELETE it or CANCEL the current process. DELETE the data at this point by pressing Enter key.

Press the UP navigation key a number of times until there is a flashing arrow beneath the OBD text.

Press the Enter key

Follow the on screen instructions to correctly connect the OBDII module to

the vehicle and the i-sensor tool.

The module itself plugs into the vehicle and the enclosed RJ11 cable attaches the OBDII module to the i-sensor tool.

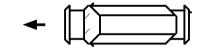
➡ 407-407 SW

NEW SENSOR

OBDII

WIRELESS ID MODIFY

turn on ignition



OBD



(←):Proceed

- 🖿 turn on ignition
- -KEY ON/ENGINE OFF
- -CONNECT OBD TO TOOL
- -CONNECT OBD TO CAR



OBDII - Read Data Via OBDII Module





Use the arrow keys to navigate the options on each screen

The OBDII module will now connect and will display the module version for software and hardware.

The screen will then display the READ CAR ID and WRITE CAR ID options. Select READ CAR ID.

Press the Enter key

The WRITE process will then commence displaying:
OBD INITIALISING...
OBD READ IDs...
READ SUCCESSFUL

OBDII Connected

READ CAR ID

WRITE CAR ID

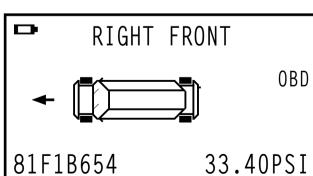
OBDII Connected

READ SUCCESSFUL

Upon returning to the data screen the read data is then available to view.

Navigate data from each wheel position using the UP and DOWN keys.

The selected wheel position will flash and the location name will be displayed.





ID To PC Function - Saving Data





Use the arrow keys to navigate the options on each screen

In order to use the ID to PC function extract the "TPMS ID# to PC APP Vx.x" from the enclosed installation CD.

Set the i-sensor tool to 4 WHEEL mode in the settings menu (Page 10)

SFTTING SERIAL#: 00000000001 WHEEL: TEMPERATURE:

Follow the MMY selection process as per the DIAGNOSE SENSOR instructions (Pages 11 & 12).

Use the arrow keys to select the DIAGNOSE SENSOR option.

Press the Enter key

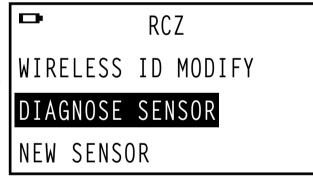


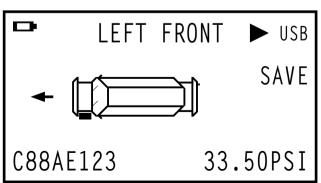
Place the tool next to the sensor mounted in the LEFT FRONT wheel.

Press the Enter key



The LEFT FRONT sensor will be diagnosed and the ID code and Pressure will be displayed. The LEFT FRONT wheel will now show solid.







ID To PC Function - Saving Data





Use the arrow keys to navigate the options on each screen

Press the UP navigation key to move to the RIGHT FRONT wheel.

Place the tool next to the sensor mounted in the RIGHT FRONT wheel.

Press the Enter key

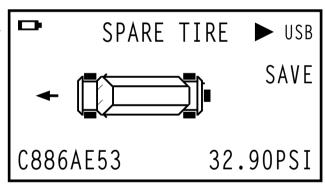
The relevant data is collected & shown

Repeat this process for the RIGHT REAR, RIGHT LEFT and the SPARE wheel if applicable.

With all available wheels diagnosed, connect the USB cable to a PC and to the base of the i-sensor tool.

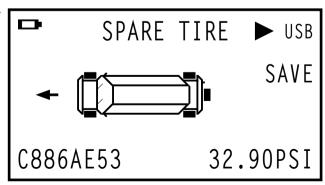
RIGHT FRONT SAVE

C88AB549 33.40PSI



Run the "TPMS ID# to PC APP Vx.x" application on the PC and the data will automatically populate into the program window.

This data can be saved to TXT format by clicking the DISK icon in the top left corner or saved to CSV format by clicking the GREEN X icon (see over).





ID To PC Function - Saving Data



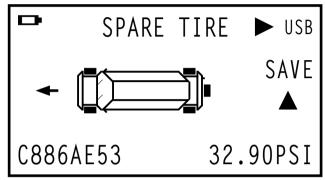
Use the arrow keys to navigate the options on each screen

The data can also be stored to the tool by moving the arrow so that it is directly underneath the SAVF icon.

Press the Enter key

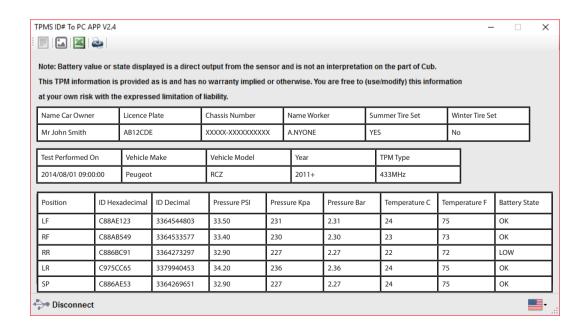


The tool will now allow you to apply a name to the save file for easy identification later.



The saved data can be accessed from the MAKER SELECTION screen and a total of 20 full records can be saved to the memory.

Connecting the tool to USB when in the DATA menu will allow transfer of all saved records.





Update Software (Software Download)

- 1. Go to www.autogem.co.uk website.
- 2. Click on the I-SENSOR TOOL UPDATE tab on the navigation bar.
- 3. On the I-SENSOR TOOL UPDATE page, please complete all of the requested details to register the tool for the first time & click on the Submit Query button.
- 4. An unregistered tool will load a second web page in which some further details will be requested in order to complete the registration process.
- 5. An email will be sent to the email address submitted to confirm completion of the registration process. Should Autogem have any problem with the registration a support call will be made to assist.
- 6. Go back to the I-SENSOR TOOL UPDATE page and complete all of the requested details.
- 7. Select the software update required from the drop down menu at the bottom of the page.
- 8. Click on Submit Query to begin the download.
- 9. Save the .HEX file somewhere safe on the PC to access later in the update process.









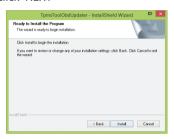


Update Software (PC Installation)

- 1. Insert CD supplied with the i-sensor tool into the CD/DVD drive of the PC **OR** run the latest executable setup files provided by Autogem.
- 2. If the software "Autorun" does not begin, navigate to the CD/DVD drive in your PC drive structure, double click the CD-DVD drvie icon, open the "i-sensor tool software" folder and double click the "setup.exe"
- 3. If the Install Shield Wizard requests any additional software, click "Install" to allow any compulsory windows software items to be installed.
- 4. When the "TpmsToolObdUpdater Installshield Wizard" window appears, click "NEXT"







- 5. Please read the license agreement carefully and check the "I ACCEPT THE TERMS OF THE LICENSE AGREEMENT"
- 6. Click "NEXT" to continue with the software installation.
- 7. In the "TpmsToolObdUpdater Installshield Wizard" window click "INSTALL"







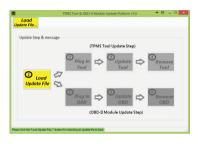
- 8. A window displaying a confirmation of a successful installation will then appear and will request installation of the "TPMS driver", click "OK" to install.
- 9. When the "PL2303 USB-to-Serial Driver Installer Program" window appears, click "NEXT"
- 10. A window displaying a confirmation of a successful installation will then appear, click "FINISH" to complete the installation process.



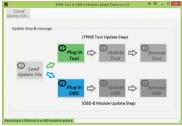
Software Update (Tool Update)

- 1. Click on the "UpdaterPlatform" icon or run the software saved to your PC.
- 2. The "TPMS Tool & OBD-II Module Update Platform" software will load.









- 3. Click on the "Load Update File" box highlighted yellow and a window will prompt for the location of the update file downloaded from the autogem.co.uk website.
- 4. The update file will include a firmware update for the i-sensor® tool and may also include an update for the optional OBD-II Module. The software will prompt which updates options are available by highlighting the available update options (Green = Tool Update, Blue = OBD-II Module Update).
- 5. Plug the enclosed USB cable into the the device you wish to update and then attach the USB cable to the PC.



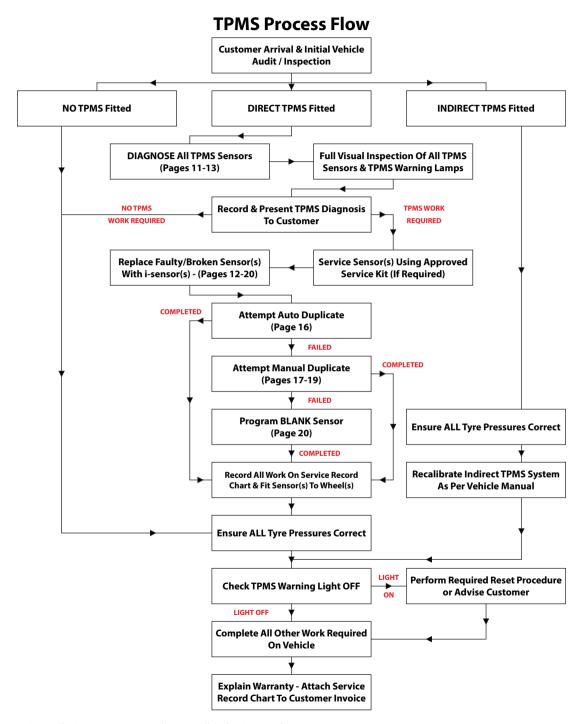
6. A second update window will then load.

NOTE: If updating the i-sensor® tool, ensure it is now turned on and wait for the USB Status indicator to change from "USB Disconnect" to "USB Connect"

- 7. Click on the "Program" button to initiate the device software update
- 8. The update status light will now flash yellow during the update procedure, turning to a solid green light once the update is completed.
- 9.Upon completion follow the instructions to remove the device from the PC to complete the update process and close the updater software windows.

NOTE: Every device is supplied with updates for the first year. To make the most of the tool install updates as soon as they become available.







LIMITED WARRANTY

(WARRANTY ONLY VALID IN COUNTRY OF PRODUCT PURCHASE)

Autogem i-sensor products are guaranteed from material defects for 365 days after the date of purchase. If the product fails under normal circumstances within the first year, Autogem will repair or replace the product. Product will not be replaced or repaired if damaged from misuse or incorrect application. To obtain repair or replacement of the product under warranty, contact your i-sensor supplier. Proof of purchase and date of purchase is required to validate the warranty claim.

Autogem is not liable for any direct or consequential loss or property damage arising from use of product.

Note: Warranty does not cover tyre valve stems or screws for tyre valves. The tyre valves stems and screws need to be replaced when repairing tyres, changing tyres or changing the TPMS sensors. If installing / reinstalling a TPMS sensor, new valve stems and screws should be always be used.

Warning: Only use i-sensor branded replacement parts. Alternative products are not guaranteed to work with i-sensor and have not been tested to the stringent requirements of Autogem. The use of NON i-sensor components will void any Autogem i-sensor warranty.

IMPORTANT WARRANTY INFORMATION - TO ACTIVATE WARRANTY:

Please complete the following sections, detach from the User Guide and post to: Autogem Invicta Ltd, Unit 6 Space Business Park, Abbey Road, Park Royal, London, NW10 7SU or visit our website www.autogem.co.uk and select the I-SENSOR TOOL UPDATE tab.

Company Name:	_ Email:
	Purchased From:
Company Address:	
	Purchase Date:
City:	Invoice No:
Postcode:	Tool Serial No:
Tel:	



CE Compliance Notice & Warning

All CE marked Autogem i-sensor products are in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the Declaration of Conformance will be provided upon request from:

Autogem Invicta Ltd Unit 6 Space Business Park Abbey Road Park Royal London NW10 7SU - UK

WARNING: 20cm safe distance from the antenna to the user must be maintained.

Disposal of Waste Electrical & Electronic Equipment

This mark on a product and/or accompanying documents indicates that this product complies with the EU Directive 2002/96/EC and that when it is to be disposed of, it must be treated as Waste Electrical & Electronic Equipment (WEEE). Any WEEE marked waste products must not be mixed with general domestic waste, but kept separate for the treatment, recovery and recycling of the materials used. For proper treatment, recovery and recycling; please take all WEEE marked waste to your local authority civic waste site, or return to the supplier of the product where it will be accepted free of charge. Disposing of WEEE marked waste correctly prevents any potential negative effects upon human health and the environment from any hazardous materials that the waste may contain.



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