Tire Pressure Sensor System Tool Kit

TPMS5

TPMS diagnostic tool to diagnose sensors and relearn TPM systems on Domestic, Asian and European vehicles. Simple icon-based navigation easily navigates from one function to the next. Includes OBD-II connectivity to write sensor IDs to ECU as required. Features vehicle-specific prompts that guide TPM system relearns and software to program aftermarket TPM sensors.

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Safety Signal Words

SAVE THESE INSTRUCTIONS

All safety messages contain a safety signal word that indicates the level of the hazard. An icon, when present, gives a graphical description of the hazard. Safety Signal words are:

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.

WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.

CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury to the operator or to bystanders.

Safety Message Conventions

Safety messages are provided to help prevent personal injury and equipment damage.

Safety messages communicate the hazard, hazard avoidance and possible consequences using three different type styles:

- Normal type states the hazard.

Bold type states how to avoid the hazard.

Italic type states the possible consequences of not avoiding the hazard.

An icon, when present, gives a graphical description of the potential hazard.

Safety Message Example

WARNING

- Risk of unexpected vehicle movement.

Block drive wheels before perofrming a test engine running.

Moving vehicles can cause injury.

Safety Precautions

WARNING

• Use of diagnostic equipment can cause electrical shock, fire and explosion.

Use caution and proper procedures when connecting and disconnecting leads. Diagnostic equipment must be located 18” or more above floor level. Avoid sparks and other sources of ignition.

Electrical shock, flames and explosion can cause serious injury.

• Improper use can cause hazardous conditions.

Unexpected electrical, thermal or mechanical occurrences can cause injury.

Read and follow all safety precautions accompanying the product. Wear safety goggles.

• Electromagnetic and electronically generated waves may interfere with pacemakers.

Individuals with pacemakers should never use this product.

Using this product with a pacemaker can result in serious injury or death.

• Internal battery presents a risk of fire, explosion and electric shock.

Charge battery pack only with charger provided.

Do not operate at temperatures above 120°F (50°C). Do not store at temperatures above 140°F (60°C).

Do not discard used batteries; return them to a Snap-on repair center for recycling. Follow all safety messages in user manual.

Warning: This product can expose you to chemicals such as Diisononyl Phthalate (DINP), which is known to the State of California to cause cancer and chemical such as Bisphenol A (BPA), which is known to the State of California to cause birth defect or other reproductive harm.

Fire or explosion or electric shock can cause injury.

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

IP54 FCCID: 2ANR7-TPMS5

TPMS5	QTY:1
For Emergencies only. Call CHEMTREC	
1-800-424-9300 US and Canada	
+1-703-741-5970 International	
3.8 V	4.8 A 18.24 Wh

Input Rating: DC5V, 1A
Operating temperature range: -10°C ~ 50°C
Storage Temperature range: -20°C ~ 60°C
Operating Humidity: 20 ~ 85 % RH. NON-CONDENSING
Storage Humidity: 5 ~ 95 % RH. NON-CONDENSING
IP54: Dust-Protected and protected against splashing water.

The device is restricted to indoor use only when operating in the 5150 to 5350 MHz frequency range.

Do not position the equipment so that it is difficult to operate the disconnecting device.

Cleaning

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

AT	BE	BG	HR	CY	CZ	DK
EE	FI	FR	DE	EL	HU	IE
IT	LV	LT	LU	MT	NL	PL
PT	RO	SK	SI	ES	SE	UK

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.
This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:
. Reorient or relocate the receiving antenna.
. Increase the separation between the equipment and receiver.
. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
. Consult the dealer or an experienced radio/TV technician for help.

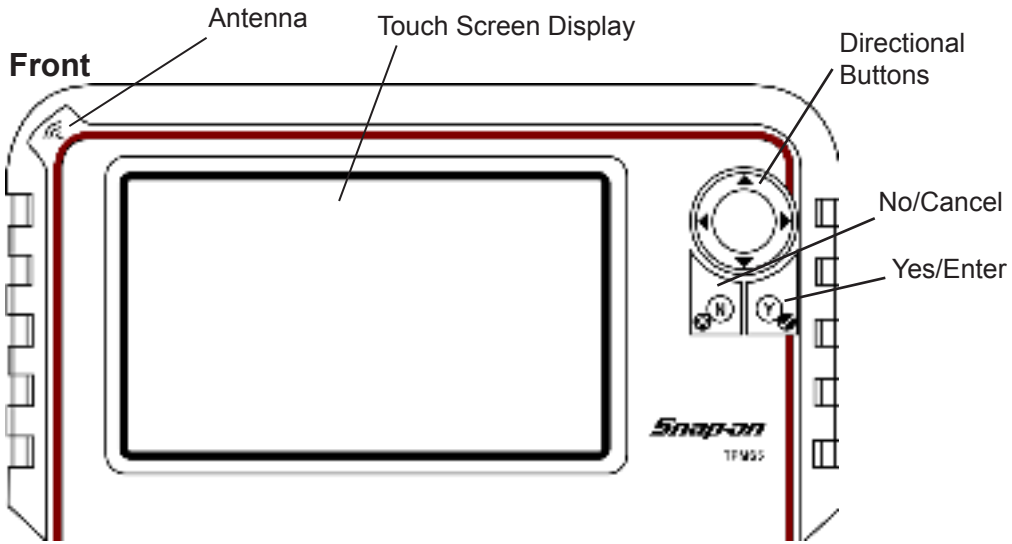
FCC Caution: *To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment. (Example - use only shielded interface cables when connecting to computer or peripheral devices).*

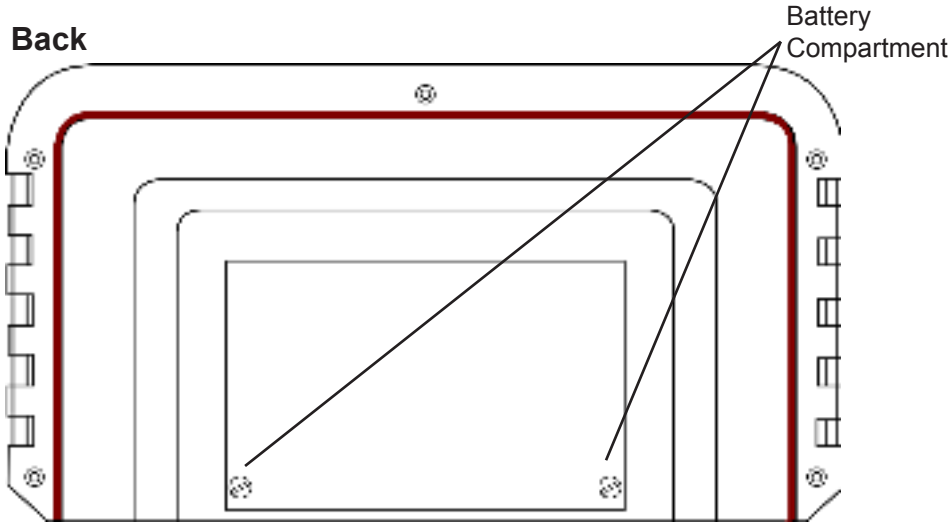
FCC Radiation Exposure Statement

This equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. The exposure standard for wireless devices employing a unit of measurement is known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6W/kg.
The FCC has granted an Equipment Authorization for this device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this device is on file with the FCC and can be found under the Display Grant section of www.fcc.gov/oet/ea/fccid after searching on FCC ID: 2ANR7-TPMS5
This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

Chapter 1: Introduction

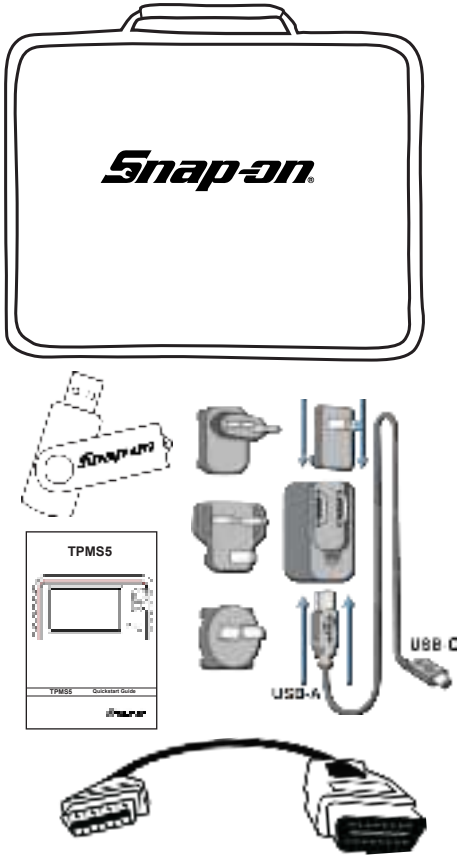
TPMS diagnostic tool that tests pressure monitoring sensors, captures sensor data, and relearns tire pressure monitoring systems. Also programs aftermarket sensors and various other TPMS functions.

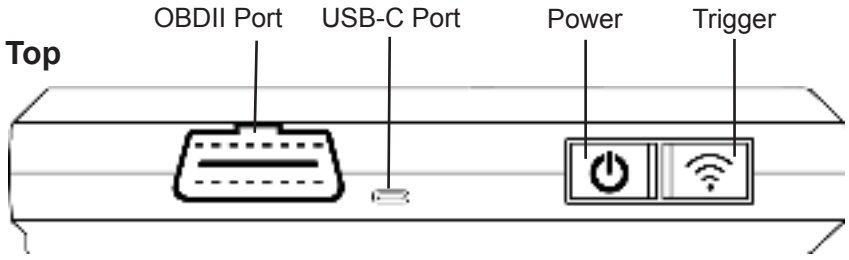




Kit Contents

TPMS5
TPMS5 Tool Kit
TPMS5-1
OBDII Cable
TPMS5-4
USB Type C Cable
TPMS5-7
AC/DC Power Adapter
TPMS5-8
Lithium Battery
TPMS5-9
Soft Carry Case
TPMS5-10
USB Drive with Manual
SS203545
Quick Start Guide





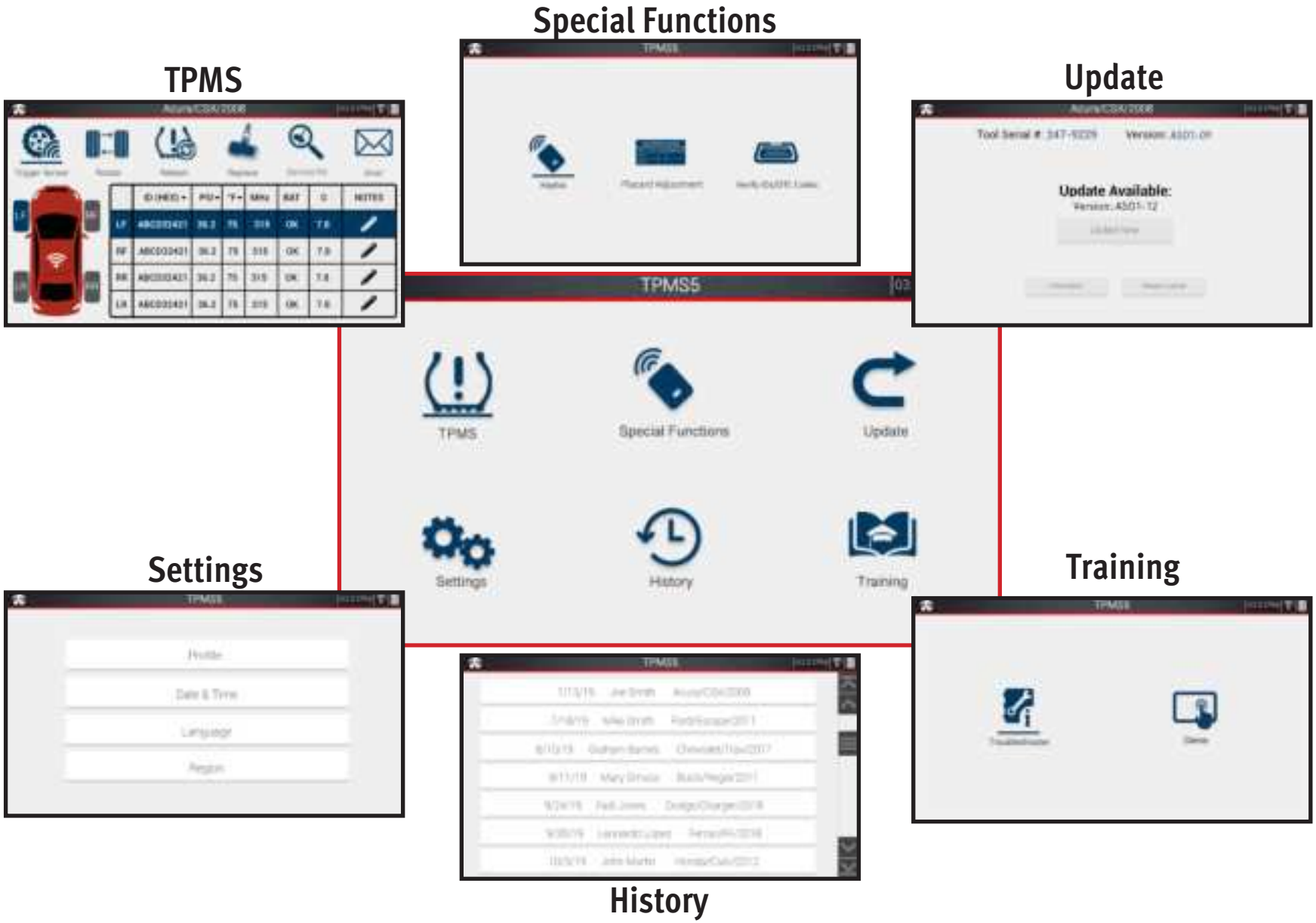
Chapter 2: Tool Operation and Navigation

When testing sensors, position the TPMS5 antenna on the sidewall of the tire near the valve. Press the Trigger button to trigger the sensor.

For certain applications, the OBDII Cable is needed to perform vehicle relearns, placard adjustments, and more. For these applications, Plug the OBDII cable into the tool, and the other end into the vehicle. The TPMS5 will display OBDII vehicle port locations for easy identification.

A - Main Menu

The Main Menu is a hub to the various features and functions available on the TPMS5. From this screen you will find the main TPMS Function, Special Functions, Update/Registration, Settings, History, and Training.

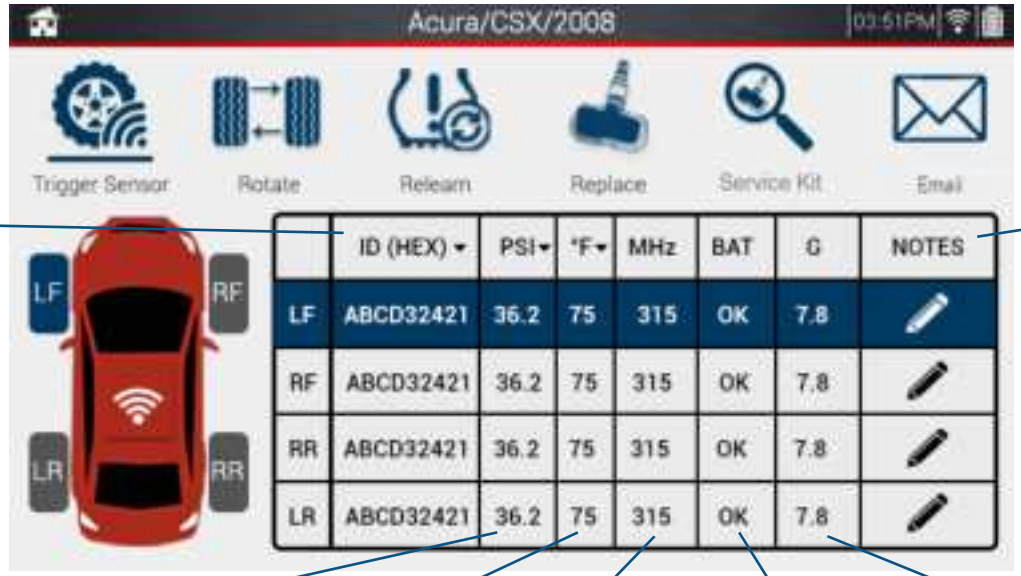


B - TPMS

The main function of the TPMS5 is to trigger sensors, perform TPMS relearns, replace sensors, and more. This section will cover all the functionalities of “TPMS”.

1. Trigger Sensor

Trigger Sensor is selected by default upon entering the TPMS function. From here, using the Trigger button on top of the tool or by tapping the trigger icon on the display (located on the vehicle icon), the tool will trigger TPMS sensors and display all TPMS info.



Sensor ID

Sensor ID is unique to each TPMS sensor and can be displayed in either Hexadecimal or decimal format by tapping the drop down arrow.

Notes

Custom notes can be entered by tapping the pencil icon

Pressure

Tire pressure is displayed in PSI, Bar, or kPa, by tapping the drop down arrow.

Temperature

Tire temperature is displayed in either Farenheit or Celcius by tapping the drop down arrow.

Frequency

Sensor frequency is displayed. Many Domestic vehicles use 315 MHz, and many Asian and European use 433 MHz.

Battery

Sensor battery status is displayed. If a sensor’s battery is sufficient “OK” will be displayed. If a sensor battery is low, “NOK” will be displayed

G

Some sensors contain an accelerometer. the G column will display this data if applicable

2. Rotate

The Rotate function is used whenever performing a tire rotation and a TPMS relearn is required. The tool will display specific instructions if a vehicle requires special pressure/tire adjustments before performing a relearn.

3. Relearn

When replacing a sensor, or altering sensor locations, a TPMS relearn is required. The Relearn function displays all necessary steps to put a vehicle into a “learn” mode, to relearn the sensors to the ECU. If applicable, an OBDII relearn can be performed with the OBDII Cable included with the tool. The TPMS5 will display OBDII port locations and instructions.

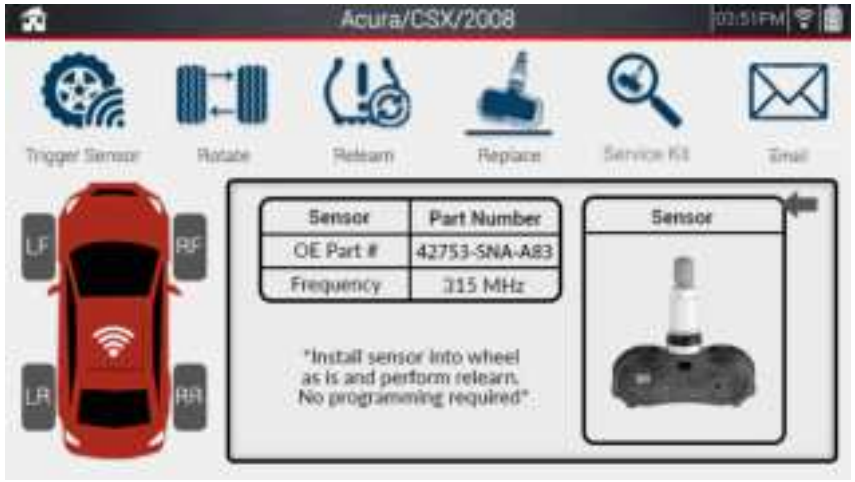
Manual Relearn Example

OBDII Relearn Example

4. Replace

If a sensor needs replacing, this function can be used to program aftermarket TPMS sensors, view OEM sensor part numbers, as well as images of all sensors. *Sensor Programming functions are explained in the next section.*

Aftermarket Example



OEM Example

4.1 Create

The Create function allows the user to program a brand new sensor ID to an aftermarket TPMS sensor.

1

Select the sensor brand you are working with, then select “Create”.

2

Place the sensor above the tool’s antenna, and tap program, or use the Trigger button on top of the tool.

3

The tool will begin programming the sensor. *This process may take a few moments.*

4

Once successfully programmed, the tool will display the sensor’s ID, pressure, and temperature.

4.2 Copy

The Copy function allows the user to copy the sensor ID from an existing sensor, and program them to an aftermarket sensor.

1

Select the sensor brand you are working with, then select “Copy”.

2

Place the tool’s antenna next to the sensor you wish to copy, and tap copy, or use the Trigger button on top of the tool.

3

The tool will begin copying the existing ID.

4

The existing sensor’s information will be displayed. Place the new sensor above the tool’s antenna, and tap program, or use the Trigger button on top of the tool.

5

The tool will begin programming the sensor. *This process may take a few moments.*

6

Once successfully programmed, the tool will display the sensor’s ID, pressure, and temperature.

4.3 Copy Set

The Copy Set function allows the user to copy the sensor ID from an existing sensor, and program them to an aftermarket sensor.

1

Select the sensor brand you are working with, then select “Set”.

2

Select “Copy”

3

The tool will display a table to copy multiple sensors. Place the tool’s antenna next to the sensor you wish to copy, and tap copy.

4

The existing sensor’s ID will be displayed. Place the new sensor above the tool’s antenna, and tap program.

5

The tool will begin programming the sensor. *This process may take a few moments.*

6

Once successfully programmed, the tool will display the sensor’s ID, pressure, and temperature.

Note: Sensors can be copied and programmed in any order. It is not necessary to Copy, then Program each sensor in succession.

4.4 Retrieve ID

The Retrieve ID function allows the user to pull the sensor IDs from the vehicle's ECU via the OBDII cable, and program them to an aftermarket sensor.

1

Select the sensor brand you are working with, then select "Retrieve ID".

2

Ensure the OBDII Cable is connected to the tool and vehicle with the ignition in the ON position, Then tap "Retrieve IDs"

3

The tool will begin retrieving the IDs from the vehicle.

4

Once retrieved, the tool will display a table with all of the existing IDs stored in the vehicle. Place the new sensor above the tool's antenna, and tap program.

5

The tool will begin programming the sensor. *This process may take a few moments.*

6

Once successfully programmed, the tool will display "Successfully Programmed".

Note: Sensors can be programmed in any order. It is not necessary to program each sensor in succession.

4.5 Manual ID

The Manual ID function allows the user to program a custom ID to an aftermarket sensor in either Decimal (0-9) or Hexadecimal (A-F 0-9) format.

1

Select the sensor brand you are working with, then select “Manual ID”.

2

Select whether to enter a Decimal (0-9) or Hexadecimal (A-F 0-9).

3

Select the text box to bring up a keyboard to manually enter the Sensor ID.

4

Once entered, place the new sensor above the tool’s antenna, and tap program.

5

The tool will begin programming the sensor. *This process may take a few moments.*

6

Once successfully programmed, the tool will display the ID enetered, pressure, and temperature.

4.6 History

The History function allows the user to program aftermarket sensors based on previous job information. (For example, if a job was performed and saved on a 2020 Ford Focus, that job can be returned to, and that sensor information can be used for programming.)

1

Select the sensor brand you are working with, then select “History”.

2

All previous jobs will appear, select the job you wish to retrieve information from.

3

The tool will display the sensor information from the selected job. From this screen, select Replace.

4

From the Replace screen, select the preferred programming method.

5. Service Kit

When replacing a sensor, it is often neccesary to replace the sensor's valve stem. The Service Kit function displays the applicable service kit used for replacing sensors for the selected vehicle. The part number, torque specs, and image are all displayed.