Trademarks

Autel®, MaxiSys®, MaxiDAS®, MaxiScan®, MaxiTPMS®, MaxiRecorder®, and MaxiCheck® are trademarks of Autel Intelligent Technology Corp., Ltd., registered in China, the United States and other countries. All other marks are trademarks or registered trademarks of their respective holders.

Copyright Information

No part of this manual may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of Autel.

Disclaimer of Warranties and Limitation of Liabilities

All information, specifications and illustrations in this manual are based on the latest information available at the time of printing. Autel reserves the right to make changes at any time without notice. While information of this manual has been carefully checked for accuracy, no guarantee is given for the completeness and correctness of the contents, including but not limited to the product specifications, functions, and illustrations.

Autel will not be liable for any direct damages or for any special, incidental, or indirect damages or for any economic consequential damages (including the loss of profits).

> **❶ IMPORTANT**
> Before operating or maintaining this unit, please read this manual carefully, paying extra attention to the safety warnings and precautions.

For Services and Support:

🌐 Web   pro.autel.com
      www.autel.com

☎   1-855-288-3587/1-855-AUTELUS (North America)
    0086-755-86147779 (China)

✉   support@autel.com

For technical assistance in all other markets, please contact your local distributor.

Safety Precautions and Warnings

To prevent personal injury or damage to vehicles and/or the scan tool, read this instruction manual first and observe the following safety precautions at a minimum whenever working on a vehicle:

- Always perform diagnosis or service in a safe environment.
- Wear safety eye protection that meets ANSI standards.
- Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
- Operate the vehicle in a well-ventilated work area: Exhaust gases are poisonous.
- Put blocks in front of the drive wheels and never leave the vehicle unattended while running tests.
- Use extreme caution when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltages when the engine is running.
- Keep a fire extinguisher suitable for gasoline/chemical/electrical fires nearby.
- Put the transmission in PARK (for automatic transmission) or NEUTRAL (for manual transmission) and make sure the parking brake is engaged.
- Always turn the ignition off before connecting/disconnecting the OBD II Cable to/from the TPMS tool; otherwise it may cause the Malfunction Indicator Light (MIL) to turn on.
- Refer to the user's manual for the vehicle being serviced and adhere to all diagnostic procedures and precautions. Otherwise personal injury or unneeded repairs may result.
- Keep the TPMS tool dry, clean, free from oil, water and grease. Use a mild detergent on a clean cloth to clean the outside of the TPMS tool when necessary.

CONTENTS

1 Using the Manual

This manual contains device usage instructions.

Some illustrations shown in this manual may contain modules and optional equipment that are not included on your system. Contact your sales representative for availability of other modules and optional tools or accessories.

Conventions

The following conventions are used.

Bold Text

Bold text is used to highlight selectable items such as buttons and menu options.

Example:

- Tap **OK**.

Terminology

The term "select" means highlighting a button or menu item and tapping it to confirm the selection.

Notes and Important Messages

The following messages are used.

Notes

A **NOTE** provides helpful information such as additional explanations, tips, and comments.

Important

IMPORTANT indicates a situation which, if not avoided, may result in damage to the test equipment or vehicle.

Hyperlinks

Hyperlinks or links that take you to other related articles, procedures, and illustrations are available in electronic documents. Blue italic text indicates a selectable hyperlink and blue underlined text indicates a website link or email address link.

Illustrations

Illustrations used in this manual are samples, the actual testing screen may vary for each vehicle being tested. Observe the menu titles and on-screen instructions to make correct option selection.

2 General Information

TPMS system review

A tire pressure monitoring system (TPMS) is an electronic system designed to monitor the air pressure inside the pneumatic tires on various types of vehicles. TPMS report real-time tire-pressure information to the driver of the vehicle, either via a gauge, a pictogram display, or a simple low-pressure warning light. TPMS can be divided into two different types – direct (dTPMS) and indirect (iTPMS). TPMS are provided both at an OEM (factory) level as well as an aftermarket solution.

TPMS Legislation

In the United States, the United States Department of Transportation (NHTSA) released the FMVSS No. 138, which requires an installation of a Tire Pressure Monitoring System to all new passenger cars, multipurpose passenger vehicles, trucks, and buses that have a gross vehicle weight rating (GVWR) of 4,536 kg (10,000 lbs.) or less, except those vehicles with dual wheels on an axle, as of 2007. In the European Union, starting November 1, 2012, all new models of passenger cars must be equipped with a TPMS, with even tighter specifications that will be defined by the UNECE Vehicle Regulations (Regulation No. 64). From November 1, 2014, all new passenger cars sold in the European Union must be equipped with TPMS. On July 13, 2010, the South Korean Ministry of Land, Transport and Maritime Affairs announced a pending partial-revision to the Korea Motor Vehicle Safety Standards (KMVSS), specifying that "TPMS shall be installed to passenger vehicles and vehicles of GVW 3.5 tons or less, ... [effective] on January 1, 2013 for new models and on June 30, 2014 for existing models". Japan is expected to adopt European Union legislation approximately one year after European Union implementation. Further countries to make TPMS mandatory include Russia, Indonesia, the Philippines, Israel, Malaysia and Turkey.

TPMS Tell-tale Light

When diagnosing TPMS systems, you should understand what the TPMS tell-tale light means.

When turning the ignition OFF to ON, the TPMS tell-tale should come on, and then go off, which indicates the system is working fine. If the light stays on, there would be a pressure problem. If the light flashes, there would be a system problem, which can range from faulty sensors to sensors on the vehicle that haven't been learned to that vehicle.

Benefits of TPMS

The significant advantages of TPMS are summarized as follows:

- Fuel saving.
- Extended tire life.
- Decreased downtime and maintenance.
- Improved safety.
- Environmental efficiency.

3 Tool Information

Tool Description

Figure 3-1

1) **SENSOR SLOT** – holds the MX-Sensor needs to be programmed.

2) **LCD DISPLAY** – displays the menus and test screens.

3) **FUNCTION BUTTONS** – corresponds with "buttons" on screen for executing commands.

4) **UP SCROLL BUTTON** – moves up through menu and submenu items in menu mode. When more than one set of data are retrieved, use this button to move up to previous screens for additional data. It is also used to view previous trouble code when viewing DTCs.

5) **N BUTTON** – cancels a selection (or action) from a menu or return to previous menu.

6) ◀**LEFT SCROLL BUTTON** – when scrolling through a screen of data or text, moves to previous character and views additional information on previous screens if recorded data content covers more than one screen.

7) ❓ **HELP BUTTON** – provides help information.

8) ⏻ **POWER BUTTON** – long press this button to turn on/off the tool; or, short press the button to return to Home screen.

9) ▼**DOWN SCROLL BUTTON** – moves down through menu and submenu items in menu mode. When more than one set of data are retrieved, use this button to move down to next screens for additional data. It is also used to view next trouble code when viewing DTCs.

10) ▶ **RIGHT SCROLL BUTTON** – when scrolling through a screen of data or text, moves to next character and view additional information on next screens if recorded data content covers more than one screen.

11) **Y** **Y BUTTON** – confirms a selection (or action) from a menu.

12) 🔆**FUNCTION BUTTON/TEST BUTTON** – corresponds with "buttons" onscreen for executing commands, or commences a TPMS Test in sensor activation mode.

13) **USB PORT** – connects the TPMS tool to PC for software update, data printing or battery charging.

14) **POWER PORT** – connects the TPMS tool to the mains with the charger supplied for battery charging.

15) **SD CARD SLOT** – holds SD card.

16) **OBD II CONNECTOR** – connects the TPMS tool to the vehicle's Data Link Connector (DLC).

⊘ **NOTE**

Figures and illustrations, product's characteristics and functions, and included accessories in this User Manual are provided for reference only and may differ from actual product. Product design and specifications may be changed without notice.

Specifications

1) Display: TFT color display (320 x 240 dpi)
2) Power: 3.7 V Li-polymer battery
3) Operating Temperature: 0°C to 50°C (32°F to 122°F)

4) Storage Temperature: -20°C to 70°C (-4°F to 158°F)
5) Dimensions:

Length	Width	Height
202.2 mm (7.96")	106.7 mm (4.20")	37.7 mm (1.48")

6) Weight: 0.4 kg (0.88 lb.)

Accessories Included

1) **User Manual** – instructions on tool operations.
2) **OBD II Cable** – provides power to tool and communicates between tool and vehicle.
3) **USB Cable** – allows easy online update, data printing, and power charging via PC connection.
4) **Carry Case** – used to store the tool.
5) **Magnet** – used to trigger magnetically activated sensors (early model TPMS sensors).
6) **Power Adapter** – charges the built-in battery.
7) **SD Card** – used to store data.

Icons

1) ▯▮ – indicates battery charging.
2) ✉ – indicates there is data stored in the tool.
3) ▭ – indicates battery volume.
4) ⇇ – indicates USB communication with the computer is established.
5) ▯▮ – indicates magnet is required to activate TPMS sensor.
6) P↓ – indicates deflation is required to activate TPMS sensor.
7) ⊕ – indicates **One Wheel** test mode is selected.
8) ◼ – indicates **ALL Wheels** test mode is selected.
9) ((• – indicates the TPMS tool is sending signals to the tire sensor for activation and test in activation screen or indicates the sensor information is read by activation.
10) OBD – indicates the tool communication with the vehicle's OBD II DLC is established or indicates the sensor information is read by OBD.

Keyboard

No solvents such as alcohol are allowed to clean the keypad or display. Use a mild nonabrasive detergent and a soft cotton cloth. Do not soak the keypad as the keypad is not waterproof.

Battery Charging

The TPMS tool has a 3.7 V built-in lithium-ion polymer rechargeable battery. There are two means of battery charging:

✓ To charge battery by power adapter

1) Locate the power port of the device.

2) Connect the device and the power source with the adapter.

✓ To charge battery by USB cable

1) Locate the USB port of the device.

2) Connect the device and the computer with the USB cable.

For optimum performance, always keep your tool sufficiently charged. It is recommended that you charge the tool for over 2 hours before the first use.

⊘ **NOTE**

Only use the power adaptor or USB cable that is included in our pack to charge this tool. The use of un-approved power supplies may damage your tool and void the tool warranty.

Power Up by DLC

The tool can also be powered via the vehicle Data Link Connector (DLC). Just follow the steps below to turn on the TPMS tool:

1) Connect the OBD II Cable to the TPMS tool.

2) Find DLC on vehicle.

● *A plastic DLC cover may be found for some vehicles and you need to remove it before plugging the OBD II cable.*

3) Plug OBD II cable to the vehicle's DLC.

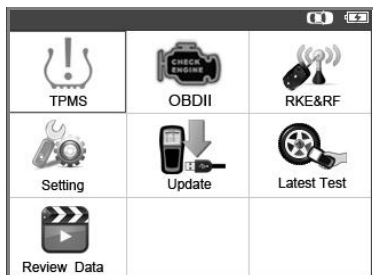4) Power up the TPMS tool by pressing the **Power** button, and wait for the Main Menu to appear.

Figure 3-2

System Setting

The tool allows you to make the following adjustments and settings.

1) **Market**: Selects the area of work, Europe or America.
2) **Language**: Selects the desired language.
3) **Pressure Unit**: Sets the pressure unit in kPa, Psi or Bar.
4) **Temperature Unit**: Sets the temperature unit in degree Celsius or Fahrenheit.
5) **Distance Unit**: Sets the distance unit in km or mile.
6) **ID Format**: Sets the ID displaying in Hexadecimal or Decimal.
7) **Beep Set**: Turns on/off key-press beep.
8) **Wheels**: Sets the test modes in One Wheel or All Wheels.
9) **Power-off**: Sets the time to power off automatically.
10) **Date**: Allows setting date information of the tool.
11) **About**: Allows viewing important information of the tool.
● *Setting will remain until change to the existing settings is made.*

To Enter the Setting Menu

From the **Main Menu**: Use the **UP/DOWN** and **LEFT/RIGHT** scroll button to select **Setting**, and press the **Y** button. The Setting menu displays as below.

9

Figure 3-3

Market

This function allows you to switch among the supported corresponding models for European and American areas.

1) From System **Setting** screen, use the **UP/DOWN** scroll button and the **LEFT/RIGHT** scroll button to select **Market**, and press the **Y** button.

2) From **Market** screen, use the **LEFT/RIGHT** scroll button to select the work area.

3) The tool will load the new database for the selected zone.

Figure 3-4

⊘ **NOTE**

The Market Setting is available for Global version only. The SD card is required to get the data when changing the market areas. Please select the correct Market before testing.

Language

● *English is the default language.*

1) From System **Setting** screen, use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **Language**, and press the **Y** button.

2) Use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select the desired language and press the **Y** button to save your selection and return to previous menu.

Figure 3- 5

Pressure Unit

1) From System **Setting** screen, use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **Pressure Unit**, and press the **Y** button.

2) From **Pressure Unit** screen, use the **LEFT/RIGHT** scroll button to select the desired unit: **kPa**, **Psi** or **Ba**r.

Figure 3- 6

3) Press the **Y** button to save your settings and return to previous menu, or press the **N** button to exit without change.

Temperature Unit

1) From System **Setting** screen, use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **Temperature Unit**, and press the **Y** button.

2) From **Temperature Unit** screen, use the **LEFT/RIGHT** scroll button to select the desired unit of temperature.

Figure 3-7

3) Press the **Y** button to save your settings and return to previous menu, or press the **N** button to exit without change.

Distance Unit

1) From System **Setting** screen, use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **Distance Unit**, and press the **Y** button.

2) From **Distance Unit** screen, use the **LEFT/RIGHT** scroll button to select the desired unit of distance: **km** or **mile**.

Figure 3-8

3) Press the **Y** button to save your settings and return to previous menu, or press the **N** button to exit without change.

12

ID Format

1) From System **Setting** screen, use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **ID Format**, and press the **Y** button.

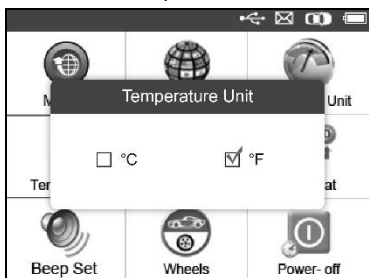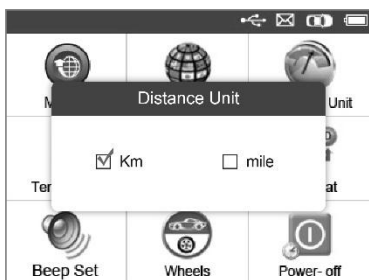2) From **ID Format** screen, use the **LEFT/RIGHT** scroll button to select the desired ID format.
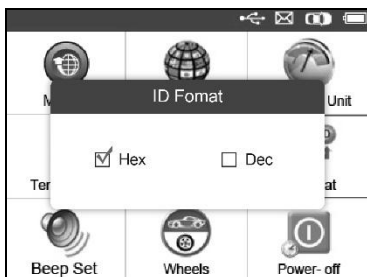
Figure 3-9

3) Press the **Y** button to save your settings and return to previous menu, or press the **N** button to exit without change.

Beep Set

This function allows you to turn on/off the built-in speaker for key pressing.

1) From System **Setting** screen, use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **Beep Set**, and press the **Y** button.

2) From **Beep Set** menu, use the **LEFT/RIGHT** scroll button to select **ON** or **OFF** to turn on/off the beep.

Figure 3-10

3) Press the **Y** button to save your selection or the **N** button to exit without change.

Wheels

This function allows you to set sensor testing mode in **All Wheels** or **One Wheel**.

1) From System **Setting** screen, use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **Wheels**, and press the **Y** button.

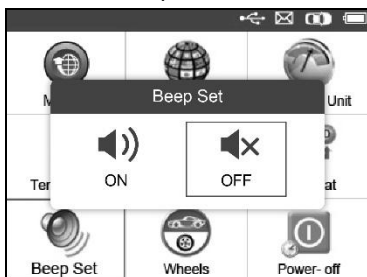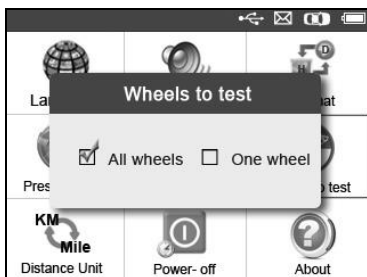2) From **Wheels** screen, use the **LEFT/RIGHT** scroll button to select **All Wheels** or **One Wheel** mode for TPMS sensor testing.

Figure 3- 11

3) Press the **Y** button to save your selection or the **N** button to exit without change.

NOTE
In **All Wheels** mode, the tool will determine if a duplicate sensor ID has been read. In this case, the tool will display a message "**Sensor ID Duplicated.**". In **One Wheel** mode, the tool will not check the duplication of sensor ID.

Power-off

1) From System **Setting** screen, use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **Power-off**, and press the **Y** button.

2) Press the **UP/DOWN** scroll button to increase or decrease the interval time for auto power-off, and then press the **Y** button to confirm your change or the **N** button to exit without change.
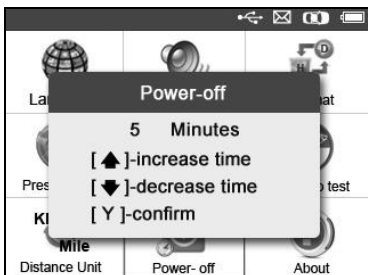
Figure 3-12

NOTE

1. Before the tool powers off automatically, it will save all the TPMS test data. Next time when the tool is powered on, you may retrieve the recorded data or return to the last operation.

2. When using external power, the scan tool stays on until you turn it off. When using internal battery power, the scan tool turns off automatically after a set time of inactivity.

Date

This function allows setting the date information of the tool.

1) From System **Setting** screen, use **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **Date**, and press the **Y** button; wait for the **Date** screen to appear.

2) Use **UP/DOWN** scroll button to increase or decrease the value and **LEFT/RIGHT** scroll button to select the item need to change.

Figure 3-13

About

This function allows viewing of some important information such as serial number and software version number of the tool.

1) From System **Setting** screen, use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **About**, and press the **Y** button; wait for the **About** screen to appear.

2) View tool information on screen. Press the **N** button to exit.

AUTEL

TS601 Global

Product Serial Number: MT6000000009
Register Password: 962413
Sys. Software Version: V1.00
Hardware Version: V1.00
Manufacture Date: 11/29/2012
Copyright(C)2012 Autel Co.,Ltd
All rights reserved

Figure 3-14

◯ **NOTE**

If the tool is Global version, please select the correct area under Market Setting before performing test.

Product Troubleshooting

This part describes problems that you may encounter while using the TPMS tool.

Vehicle Linking Error

A communication error occurs if the TPMS tool fails to communicate with the vehicle's ECU (Electronic Control Unit) when running the diagnostic function. You need to do the following to check up:

✓ Verify that the ignition is ON.

✓ Check if the TPMS tool's OBD II connector is securely connected to the vehicle's DLC.

✓ Verify that the vehicle is OBD II compliant.

✓ Verify that the vehicle is equipped with TPMS.

- ✓ Verify that the tool battery is sufficiently charged.
- ✓ Turn the ignition off and wait for about 10 seconds. Turn the ignition back to on and continue the testing.
- ✓ Verify that the control module is not defective.

Operating Error

If the scan tool freezes, then an exception occurs or the vehicle's ECU (Engine Control Unit) is too slow to respond to requests, do the following to reset the tool:

- ✓ Reset the scan tool.
- ✓ Turn the ignition off and wait for about 10 seconds. Turn the ignition back to on and continue the testing.

4 TPMS Check & Diagnostics

The MaxiTPMS® TS601 is a new generation TPMS diagnostic & service tool specially designed to activate all known OEM/Universal TPMS sensors, and provide users with direct access to the vehicle's ECU through OBD II connection, thus allowing users to reprogram sensor IDs, retrieve/clear TPMS DTCs, read live data and perform special functions, helping technicians to quickly find out faulty TPMS and turn off MILs.

✎ **NOTE**

All software screens shown in this manual are examples, actual test screens may vary for each vehicle being tested. Observe the menu titles and onscreen instructions to make correct option selections.

TPMS Sensor Check

The sensor check function allows user to activate TPMS sensor to view sensor data such as sensor ID, tire pressure, tire temperature, battery condition, sensor position and OE part number.

There are two means to check a TPMS sensor:

Select by Vehicle

Users can start activating sensors directly by selecting the specific vehicle make, model and year. The graphed vehicle with 4 or 5 wheels makes the sensor activation process more simple and convenient.

1) Use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **TPMS** from **Main Menu**, and press the **Y** button to confirm.

2) From the vehicle make screen, select a specific vehicle brand and press the **Y** button (Take Nissan as an example).

18

Figure 4- 1

3) Observe the menu title and use the **UP/DOWN** scroll button to select by model and year to identify the vehicle being tested.

● *The selected vehicle is remembered by the tool when a test is commenced.*
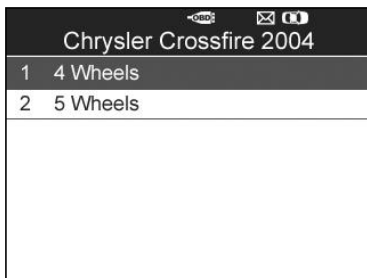
Select by Model:

Figure 4- 2

Select by Year:

Figure 4- 3

4) For some vehicles an option screen will show up to let users choose between **4 Wheels** and **5 Wheels** test mode.
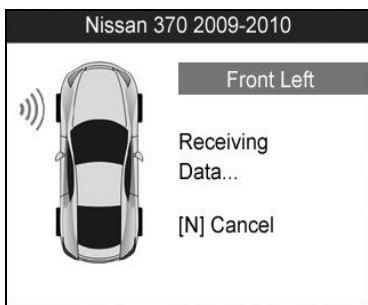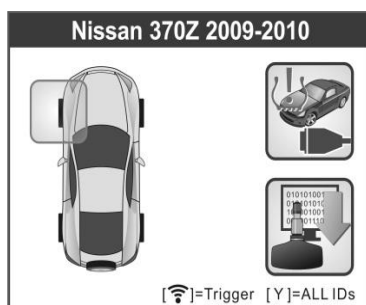

Figure 4- 4

● *Depending on the test mode (All Wheels or One Wheel), results are displayed in different manners.*

All Wheels Mode

In this mode, the screen will display as below (*Figure 4- 5*). Use the **UP/DOWN** and **LEFT/RIGHT** scroll button to select a desired wheel and press the **TEST** button to activate sensor (*Figure 4- 6*).

Figure 4- 5

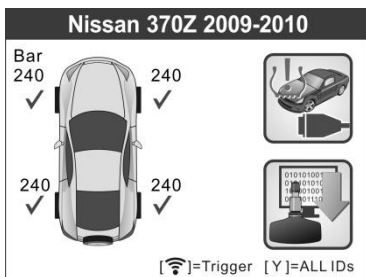
Figure 4- 6

The tool will do TPMS test in a sequence of FL (Front Left), FR (Front Right), RR (Rear Right), LR (Rear Left) and SPARE, if the vehicle has the option for the spare. Or, you can use the **UP/DOWN** or **LEFT/RIGHT** scroll button to move to the desired wheel for testing.

Place the tool alongside the valve stem, point toward the sensor location, and press the **TEST** button.

The tool will send LF signal to trigger the sensor. Once the sensor is successfully activated and decoded, the tool will display as below with a beep.
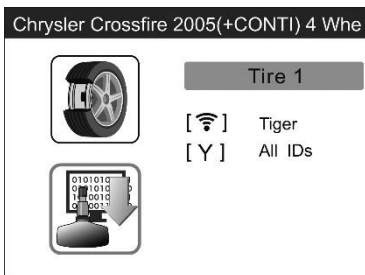

Figure 4- 7

✓ Wheel with a feedback icon, "√", "x", "D", indicates wheel test has been finished. Refer to *Table 4- 1 Possible Results for Testing* for detailed description to learn what testing result each icon stands for.

✓ Press the **Y** button to read all sensor data, including sensor ID, tire pressure, temperature, battery condition and modulation.

Under All Wheels mode, the tool can save up to 5 TPMS sensor data records at each time. Press the **UP/DOWN** or **LEFT/RIGHT** scroll button to turn over data screens while viewing. If more than five records are stored, the latest record will overwrite the oldest record.
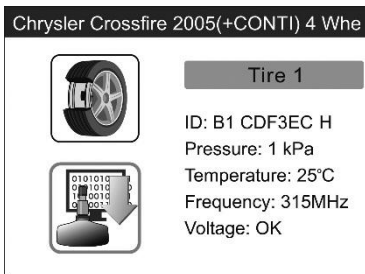
One Wheel Mode

In this mode the screen will show as below (*Figure 4- 8*). The tool will check TPMS sensor on the single wheel. Place the tool alongside the valve stem, point toward the sensor location, and press the **TEST** button. Wait for test result before moving the tool.

The tool will send LF signal to trigger the sensor. Depending on the sensor type, the tool will activate the sensor on the first or last step. Once the sensor is successfully activated and decoded, the tool will display as below with a beep (*Figure 4- 9*).

Figure 4-8

Figure 4-9

Once the first sensor test is completed, the screen will remain for 3 seconds for data viewing and then automatically switch to next sensor test. Follow the same procedure for the other sensor tests.

Under One Wheel mode, the tool can save up to 10 TPMS sensor data records at each time. Select the wheel icon and press **Y** button to view all sensors' information. Press the **UP/DOWN** and **LEFT/RIGHT** scroll button to turn over data screens while viewing. If more than ten records are stored, the latest record will overwrite the oldest record.

Table 4-1 *Possible Results for Testing*

Icon	Test Results	Description
√	Successful Sensor Read	TPMS sensor is successfully activated and decoded. The tool displays the sensor information.

| x	Failed Sensor Read	If the search period expires and no sensor is activated or decoded, it may be caused by wrong sensor fitting or non-functioning sensor. The tool then displays a message "No sensor detected".
		In this case, repeat testing to confirm the TPMS failure.
x	Wrong Sensor Type	A TPMS sensor is activated and decoded, but does not match the protocol for the Make, Model or Year that the tool was set-up for. The tool displays a message "Sensor triggered but cannot be known".
		In this case, verify the Make, Model or Year or other features you have selected as well as the sensor part number that was fitted.
D	Duplicate ID (only checked in **All Wheels** mode)	A sensor with a duplicate ID has been read. The tool displays a message "Sensor ID Duplicated.".
		In this case, clear data and re-read again.

⌀ NOTE
With Ford sensors, the tool should be held 180 degrees away from the stem. Please refer to vehicle user's manual.

● If the TPMS sensor requires a magnet, place the magnet over the stem and then place the tool alongside the stem, and press the **TEST** button.
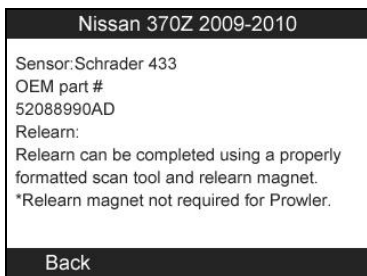

Figure 4-10

23
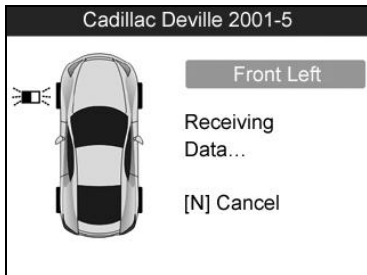
- If the TPMS sensor requires tire deflation (of the order of 10 psi), then deflate the tire and place the tool alongside the stem while pressing the **TEST** button.
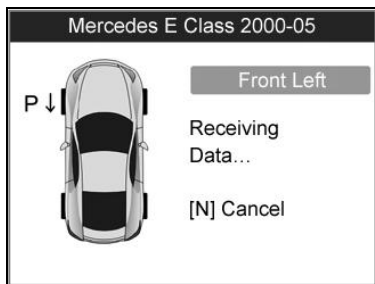
Figure 4- 11

- Anytime while doing the TPMS test, pressing ❓ button allows reading the sensor make, OEM part no., and relearn information for the vehicle being tested for reference. Use the **UP/DOWN** scroll button to view all details if the data information covers more than one page.

Figure 4- 12

- Sensor activation can be aborted at any time by pressing the **N** button. When the activation is aborted, the screen will return to the previous menu.

- By pressing the **Y** button, you may review information of all sensors tested. Press the **LEFT/RIGHT** scroll button to turn over data screens while viewing.

24

Pos	ID-H	Kpa	℃
FL	8000E0	240	38
FR	002020	240	38
RR	00E000	240	38
RL	1E00E0	240	38

[◀▶]=Change Page　[N]=Exit　1/2

Figure 4‑13

Pos	BAT	Mode	Modulation
FL	OK	TEST	433AM
FR	OK	TEST	433AM
RR	OK	TEST	433AM
RL	OK	TEST	433AM

[◀▶]=Change Page　[N]=Exit　2/2

Figure 4‑14

[Pos] – indicates the wheel sensor position.

[ID-H/D] – shows sensor ID data.

[kPa/Psi/Bar] – indicates tire pressure.

[°C/°F] – indicates tire temperature.

[BAT] – indicates battery condition.

[Mode] – defines tire sensor working mode or status.

[Modulation] – indicates sensor signal amplitude.

NOTE
Different ID format, pressure and temperature units will display at the title bar according to the device's system setting, please refer to *System Setting* on page 9 for detailed instruction.

Select by Latest Test

This function allows you to review the last tested sensor data and activate the sensor by using the wave signal of the latest trigger event, which is very

25

convenient and useful for technicians to wake up sensors of the same vehicle.

1) Use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **Latest Test** from **Main Menu**.

2) An activation screen with the previously activated sensor information will show up (*Figure 4- 15*). Use the **UP/DOWN** or **LEFT/RIGHT** scroll button to select the desired wheel, and press the **TEST** button to reactivate the sensor, or press the **Y** button to view all detailed sensor data (*Figure 4- 16*).
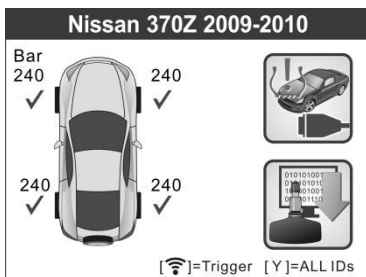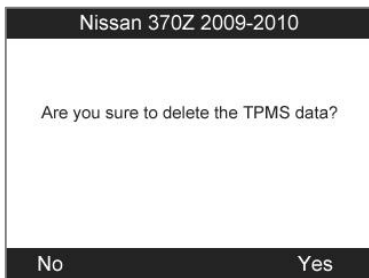

Figure 4- 15

Pos	ID-H	Kpa	℃
FL	8000E0	240	38
FR	002020	240	38
RR	00E000	240	38
RL	1E00E0	240	38

[◀▶]=Change Page   [N]=Exit   1/2

Figure 4- 16

3) If user is going to retest the sensor, a prompt will come up asking for your confirmation.
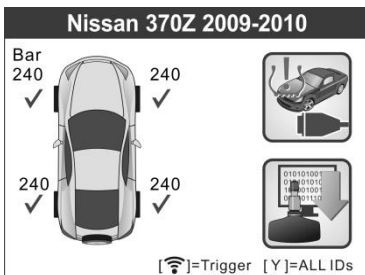
Figure 4‑17

4) Select **Yes** to delete all test records and enter test mode. Or select **No** to reserve the previous data and check the remaining untested sensors.

TPMS Relearn

This function, which provides users with quick access to the vehicle's ECU, enables users to do TPMS diagnostics, such as reading/writing sensor IDs on vehicle ECU, reading/ clearing codes of TPMS system, reading TPMS live data, retrieving TPMS ECU information, and performing actuation tests and special functions, and to save data for later reviews and printing.

1) Connect the TPMS tool to the vehicle's DLC with the OBD II cable. Press the **POWER** button to turn on the tool.
2) Turn the ignition on but do not start the engine.
3) Make sure the testing mode is set to **All Wheels** mode in System Setting.
4) Follow the same process in *TPMS Sensor Check* to enter the activation screen. Use the **UP/DOWN** scroll button or **LEFT/RIGHT** scroll button to select the **TPMS Relearn** function on the upper right corner of the screen.

Figure 4- 18

5) The tool will display a function screen as below. Use the **UP/DOWN** scroll button to select **TPMS Diagnosis** or **TPMS Sensor Information**, and press the **Y** button to continue.
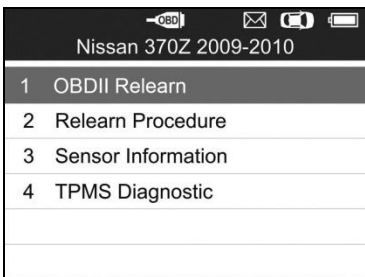
Figure 4- 19

6) The **OBD II Relearn** allows user to write the IDs to the system directly without performing other procedures.

7) The **Relearn Procedure** allows referring to the related procedures before performing Relearn.

NOTE
This menu is not available for all models.

8) The **Sensor Information** enables retrieval of the OEM sensor maker, OEM frequency and OEM part number

9) The **TPMS Diagnosis** option allows user to write IDs to vehicle, read IDs from vehicle, read/clear TPMS codes, read TPMS live data, perform active test and special functions.

- *The **TPMS Diagnosis** function varies by the vehicle being tested.*

In this manner, the scan tool will communicate with the vehicle being tested. If there is a linking error, a notice screen will show up. Please refer to *Product Troubleshooting* on page 16 for more details.

Write IDs to Vehicle

There are two ways to write IDs to vehicle:

1) Select **OBD II Relearn** to write IDs to vehicle directly without performing further procedures.

   Once the sensor IDs are successfully written, a confirm screen will show up. Press any key to continue.

| ID REGIST |
| ID Registration is completed. |
| Press any Key to continue |

Figure 4- 20
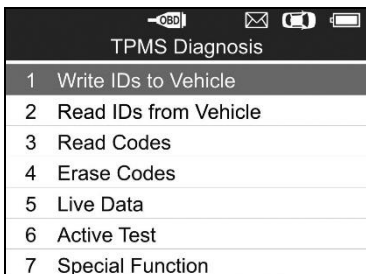
The OBD II Relearn function is not supported by all vehicles. If the OBD II Relearn item doesn't present, please write the ID by Write IDs to Vehicle under TPMS Diagnosis.
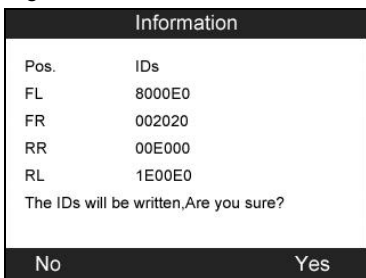
2) From the **TPMS Diagnosis Menu**, use the **UP/DOWN** scroll button to select the **Write IDs to Vehicle**, and press the **Y** button.

Figure 4- 21

The tool will display the sensor IDs and positions for your confirmation. Select **Yes** to register the ID in vehicle ECU, or **No** to exit.

Figure 4- 22

3) Once the sensor IDs are successfully written, a confirm screen will show up. Press any key to continue the TPMS diagnostic procedure.
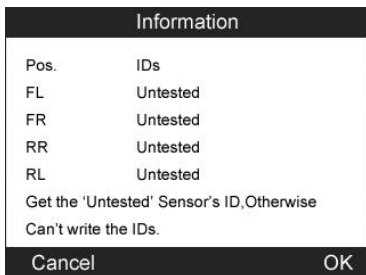

Figure 4- 23

NOTE

1. The sensor writing procedure may vary for different vehicles being serviced. Please follow the onscreen instruction and take appropriate measures and selections to complete the process.

2. If there are untested sensors in the vehicle, the writing ID process cannot proceed. The tool will display a warning message as below. In this case, follow the sensor check procedure to activate all sensors in vehicle and register sensor IDs again.

Information	
Pos.	IDs
FL	Untested
FR	Untested
RR	Untested
RL	Untested
Get the 'Untested' Sensor's ID, Otherwise	
Can't write the IDs.	
Cancel	OK

Figure 4- 24

⌀ NOTE
1. If duplicate IDs present, the writing ID process cannot proceed. In this case, follow the sensor check procedure to activate all sensors in vehicle and register sensor IDs again.

2. Make sure to turn the ignition off before connecting/disconnecting the OBD II Cable to/from the TPMS tool; otherwise it may cause the Malfunction Indicator Light (MIL) to turn on.

Read IDs from Vehicle

1) From **TPMS Diagnosis** Menu, use the **UP/DOWN** scroll button to select the **Read IDs from Vehicle**, and press the **Y** button.

2) The tool will display the sensor IDs and positions for viewing. Select **Save** to store data for future review, or **Esc** to exit without saving.

Read IDs from Vehicle	
ID TYPE1 FL	8000E0
ID TYPE1 FR	002020
ID TYPE1 RR	00E000
ID TYPE1 RL	1E00E0
Esc	Save

Figure 4- 25

Read Codes

1) From the TPMS Diagnosis Menu, use the **UP/DOWN** scroll button to select the **Read Codes**, and press the **Y** button.

2) The tool will display TPMS DTCs retrieved from the vehicle's ECU for your viewing. Select **Save** to store data for future review, or press **N** button to exit without saving.

Read Codes	
U1000	05
CAN COM CIRCUIT	
U1017	08
Please refer to vehicle service manual	
B2618	08
BCM	
	Save

Figure 4- 26

Erase Codes

1) From the TPMS Diagnosis Menu, use the **UP/DOWN** scroll button to select the **Erase Codes**, and press the **Y** button.

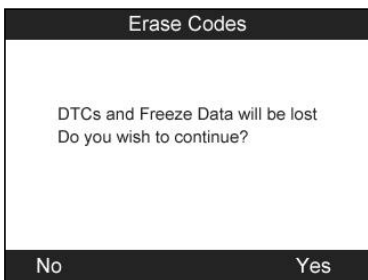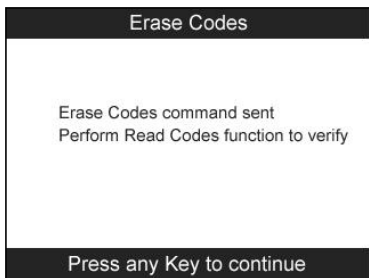2) The tool will display a warning message for your confirmation. Select **Yes** to continue, **No** to exit.

Erase Codes	
DTCs and Freeze Data will be lost Do you wish to continue?	
No	Yes

Figure 4- 27

3) If the erase command is sent successfully, the screen will show as below. Press any button to continue. To make sure codes are erased clearly, run **Read Codes** again.
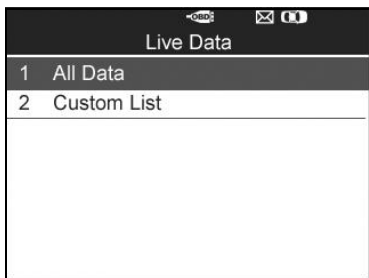
Figure 4- 28

Live Data

This function not only allows you to read the live data but also lets you record live data for later review.

From the **TPMS Diagnosis** Menu, use the **UP/DOWN** scroll button to select **Live Data**, and press the **Y** button.

All Data

1) From the Live Data menu, use the **UP/DOWN** scroll button to select **All Data** and press the **Y** button.

Figure 4- 29

2) The tool will display a list of all live sensor data.
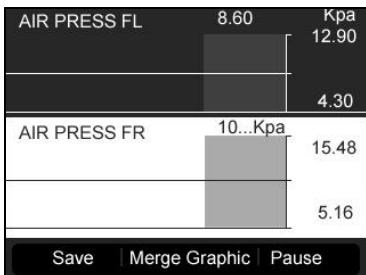
Figure 4- 30

- Press the corresponding **FUNCTION** button **Save** to store the retrieved live data for later playback or printing.

- Press the corresponding **FUNCTION** button **Stop Save** to stop saving data and resume live sensor data retrieving (*Figure 4- 31*).

- Press the corresponding **FUNCTION** button **Pause** to temporarily stop live sensor data retrieving (*Figure 4- 31*).

- Press the corresponding **FUNCTION** button **Continue** to resume live sensor data retrieving (*Figure 4- 34*).
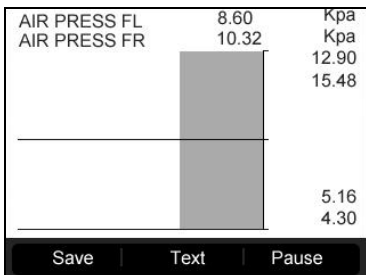

Figure 4- 31

- If the **One Graphic** option is highlighted when a specific item is selected, the graphic information is available (*Figure 4- 31*).

    When the sensor data is shown in graph, the tool offers two more options: **Two Graphics** and **Merge Graphic**. The first option can display two graphs on the same screen (*Figure 4- 32*), and the last option can merge the two graphs into one (*Figure 4- 33*).

34

Figure 4- 32

Figure 4- 33

- Press the corresponding **FUNCTION** button **Text** or the **N** button to return to previous screen.

Figure 4- 34

Custom List

1) To retrieve customized live sensor data, use the **UP/DOWN** scroll button to select **Custom List** from **Live Data** and press the **Y** button (*Figure 4- 29*).

2) Use the **UP/DOWN** scroll button to move to the desired item and press the corresponding **FUNCTION** button **Select**.

35

Figure 4-35

- The Selected items are marked with ticks on the left.
- The number on the right indicates sequence of the selected item.
- Press the corresponding **FUNCTION** button **Clear** to unselect the items, or press the corresponding **FUNCTION** button **Select All/Clear All** to select or unselect all items (*Figure 4-35*).

3) Press the **Y** button to confirm your selection and retrieve the selected live sensor data.

4) Press the **N** button to return to the previous menu.

Active Test

1) From the TPMS Diagnosis Menu, use the **UP/DOWN** scroll button to select **Active Test**, and press the **Y** button (*Figure 4-21*).

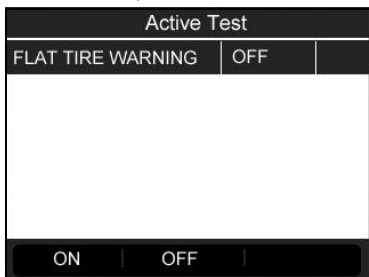2) The tool will display a list of available active tests for the vehicle being tested.

Figure 4-36

Take **Flat Tire Warning** for example:

3) From **Active Test** Menu, use the **UP/DOWN** scroll button to select **Flat Tire Warning** function (*Figure 4-36*).

36

4) Press the corresponding **FUNCTION** button **ON** or **OFF** to check whether the TPMS warning lamp on the vehicle is turning on or off.

Figure 4- 37

5) Press the **N** button to return to the previous menu.

Special Function

1) From the **TPMS Diagnosis** Menu, use the **UP/DOWN** scroll button to select **Special Function**, and press the **Y** button (*Figure 4- 21*).

2) The tool will display a list of available special functions for the vehicle being tested (*Figure 4- 38*).

✍ NOTE

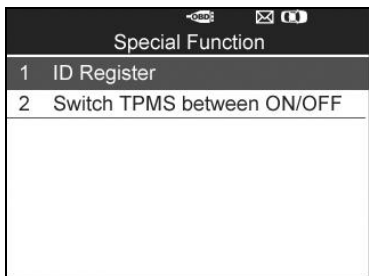The Special Function menu may vary for different vehicles being serviced. Please follow the onscreen instruction and take appropriate measures and selections to complete the process.
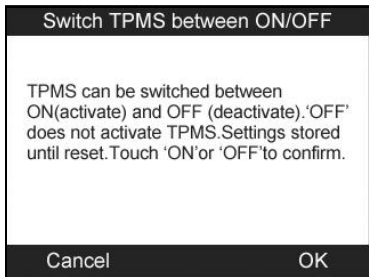
Take **Switch TPMS between ON/OFF** for example:

3) To manually switch on/off TPM system, use the **UP/DOWN** scroll button to select **Switch TPMS between On/Off** and press the **Y** button.
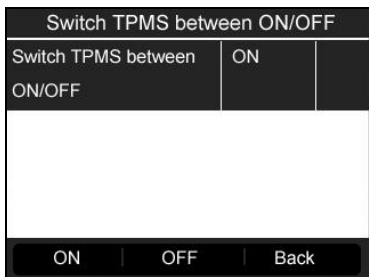

Figure 4- 38

4) The tool displays a message for your confirmation. Select **OK** to continue and **Cancel** to exit.

Figure 4- 39

5) Press the corresponding **FUNCTION** button "**ON**" or "**OFF**" to turn ON/OFF the TPMS on the vehicle.

Figure 4- 40

6) Press the corresponding **FUNCTION** button "**Back**" to return to the previous screen.

ECU Part Number

1) To retrieve ECU part number, use the **UP/DOWN** scroll button to select **ECU Part Number** function item from the TPMS Diagnosis Menu (*Figure 4- 21*).

2) The ECU part number will be displayed once it's successfully retrieved. Press the corresponding **FUNCTION** button **Save** to store for later playback and printing.

Ecu Information	
ECU Part number	284B2-EH10Q

Esc	Save

Figure 4-41

3) Press the corresponding **FUNCTION** button **Esc** to return to previous menu.

Audit Report

After the user finished the TPMS test, the tool is capable of presenting all of its stored TPMS data in a HTML file when connected to a PC via an USB cable.

The tool will automatically pop up an explorer window in PC screen when connected to an active USB port on the PC. Make sure the tool is powered on. Otherwise, there will be no communication between the tool and computer.

Once the explorer window is open, you may view a file by double-clicking on the file. If this explorer window does not automatically pop up, the user may browse for the newly connected device manually.

The data presented is in a HTML form format that displays not only information regarding the TPMS, but also automatically updates with the date. It also provides data entry areas for other tester and vehicle data.

MaxiTPMS TS601

Vehicle Make Tested: Honda Odyssey Touring 2005-2007

Test Performed by: [   ]

Owners Name: [   ]

License Plate No: [   ]

Model and Year: [   ]

Comments: [   ]

Wheel	BCM ID Hex	BCM ID Dec	ID Hex	ID Dec	Pressure	Temperature	Battery State	Modulation	OEM Part #:
FL	8D857ACF	2374335183	B8220764	30892378600	240Kpa	25	OK	315AM	06421-S3V-A04
FR	Untested	Untested	Untested	Untested	Untested	Untested	Untested	Untested	Untested
RR	Untested	Untested	Untested	Untested	Untested	Untested	Untested	Untested	Untested
RL	Untested	Untested	Untested	Untested	Untested	Untested	Untested	Untested	Untested
SP	Untested	Untested	Untested	Untested	Untested	Untested	Untested	Untested	Untested

Figure 4- 42

5 TPMS Sensor Programming

The Programming function allows users to program the sensor data to the MX-Sensor and replace faulty sensor with low battery life or one that is not functioning. The scan tool is easy-to-use with a proven efficiency and guaranteed accurate results.

⚪ **NOTE**

Programming function will only work with Autel's MX-Sensor. Currently, there are two models available: Clamp-in Sensor and Snap-in Sensor, both with two types, one in orange color with 433MHz frequency, and one in dark gray color with 315MHz frequency. The Clamp-in Sensor is taken as an example in this manual. Please choose the right MX-Sensor when programming.

Under All Wheels mode, there are four options available when programming MX-Sensor using this scan tool: **Auto Create**, **Manual Create**, **Copy by OBD**, and **Copy by Activation**.

Under One Wheel mode, you can rapidly program more than 5 MX-Sensors for the same vehicle model at a time with three options: **Copy by Activation**, **Auto Create** and **Manual Create**. That is really convenient for tire shops.

Auto Create

This function is designed to program the MX-Sensor by applying random IDs created according to the test vehicle when it is unable to obtain the original sensor ID.

1) Use the **UP/DOWN** scroll button and the **LEFT/RIGHT** scroll button to select **TPMS** from **Main Menu**, and press the **Y** button to confirm.

2) From the vehicle make screen, select a specific vehicle brand and press the **Y** button (Take Chrysler as an example).
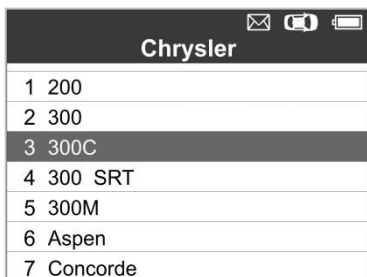
Figure 5- 1

3) Observe the menu option and use the **UP/DOWN** scroll button to select by model and year to identify the vehicle being tested.

NOTE

Please pay attention to the frequency used in the vehicle. Refer to the original sensor information for the exact frequency.
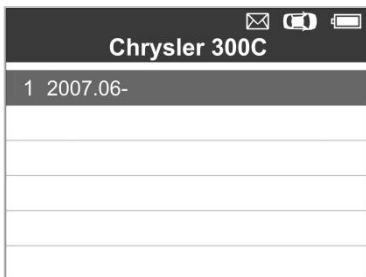

● The selected vehicle is remembered by the tool when a test is commenced.
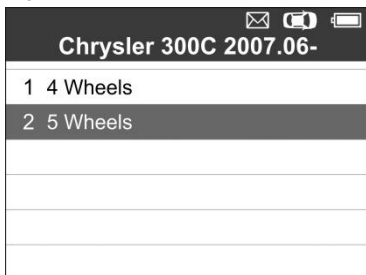
Select by Model:

Figure 5- 2

Select by Year:

Figure 5‑3

4) For some vehicles (like Chrysler), an option screen will show up allowing users to choose between **4 Wheels** and **5 Wheels** test mode before accessing the activation screen.

Figure 5‑4

● Depending on the test mode (**All Wheels** or **One Wheel**), results are displayed in different manners.

All Wheels Mode

1) In this mode, use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **MX‑Sensor** icon on the lower right corner.
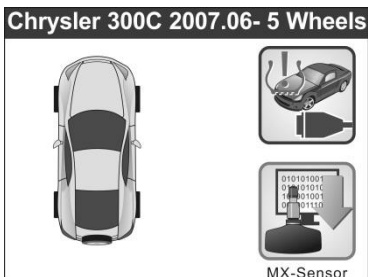
Figure 5- 5

⊘ **NOTE**

The MX-Sensor icon on the lower right corner will not appear if the TPMS Sensor Programming is not supported by the selected vehicle.

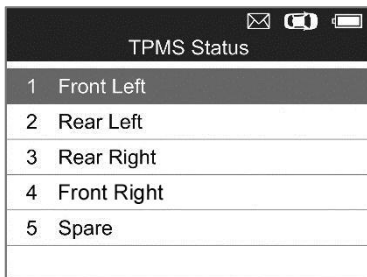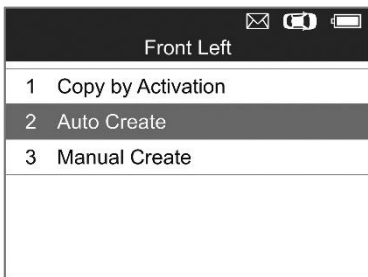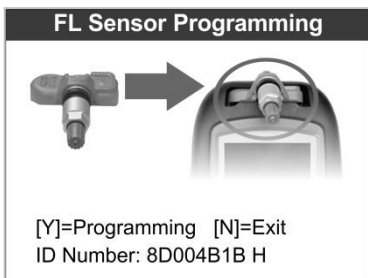2) Use the **UP/DOWN** scroll button to select the wheel which needs to be programmed.

Figure 5- 6

3) Use the **UP/DOWN** scroll button to select **Auto Create** to create a new random sensor ID.

Figure 5‑7

4) Insert the correct MX-Sensor into the sensor slot as displayed below:

FL Sensor Programming

[Y]=Programming   [N]=Exit
ID Number: 8D004B1B H

Figure 5‑8

✐ **NOTE**

Please pay attention to the MX-Sensor type displayed in the screen and insert the correct MX-Sensor. Inserting incorrect MX-Sensor will cause programming failure.

5) Press the **Y** button to write in the new created sensor ID to the MX-Sensor, and the screen will show as below (*Figure 5‑9*), or the **N** button to exit without change. If an error prompt displays as below (*Figure 5‑10*), please try another type of MX-Sensor, for the type of the inserted MX-sensor may be incorrect.
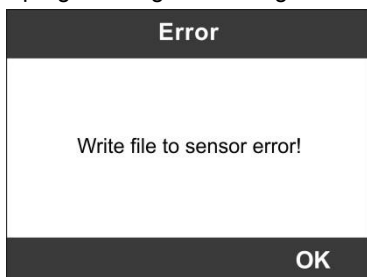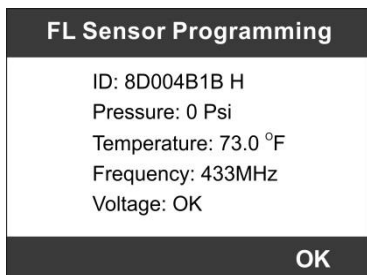
45

FL Sensor Programming	FL Sensor Programming
Programming...	Error ⚠ Without Sensor!
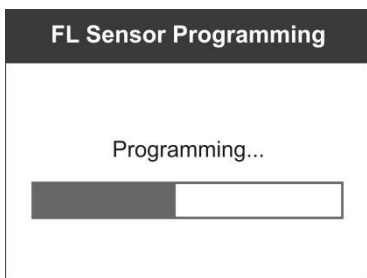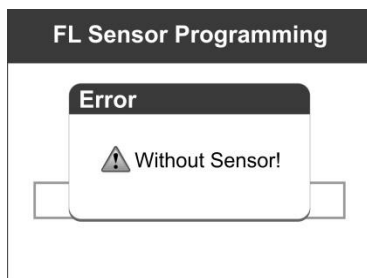
Figure 5- 9	**Figure 5- 10**

If programming failed, the screen will show as below, in this case, please perform programming function again.

Error

Write file to sensor error!

OK

Figure 5- 11

After programming is finished, a series of beep sound will be heard and the tool will display the data details such as the sensor ID, the temperature and the battery voltage after testing the new programmed MX-Sensor.

FL Sensor Programming

ID: 8D004B1B H
Pressure: 0 Psi
Temperature: 73.0 $^{\circ}$F
Frequency: 433MHz
Voltage: OK

OK

Figure 5- 12

Press **OK** to return to the previous screen, and a sensor mark will appear on the right side of the screen, indicating the wheel sensor has been programmed.
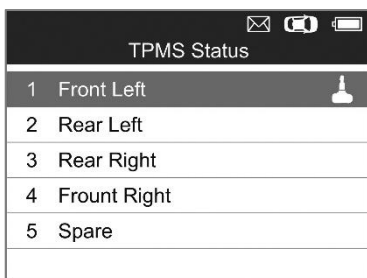
Figure 5- 13

The Programmed option is available when selecting the programmed wheel sensor. Select "**Programmed**" to reprogram the wheel sensor with the same ID if necessary.
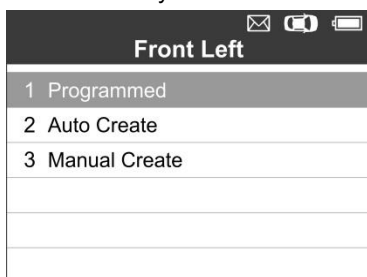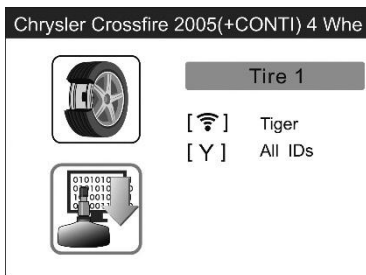

Figure 5- 14

After all required MX-Sensor is programmed, please select **Write IDs to Vehicle** in **Relearn** function, refer to *TPMS Relearn* on page 27 for details.

One Wheel Mode

1) In this mode, the screen will show as below. Use the **UP/DOWN** scroll button to select MX-Sensor icon on the lower left corner.

Figure 5- 15

2) Use the **UP/DOWN** scroll button to select **Auto Create** to create a new random sensor ID.
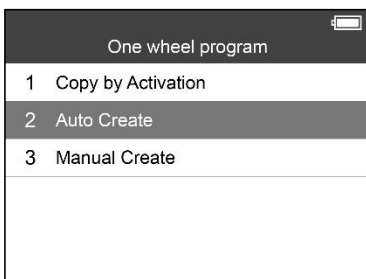
Figure 5- 16

3) Insert the correct MX-Sensor into the sensor slot as displayed below:
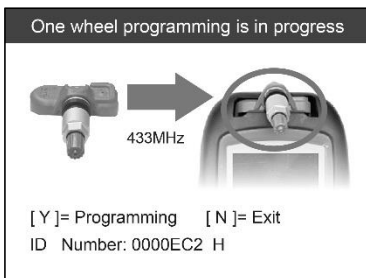
Figure 5- 17

NOTE

Please pay attention to the MX-Sensor type displayed in the screen and insert the correct MX-Sensor. Inserting incorrect MX-Sensor will cause programming failure.

4) Press the **Y** button to write in the new created sensor ID to the MX-Sensor and the screen will show as below (*Figure 5-18*). If an error prompts, please keep the MX-Sensor to be programmed away from other MX-Sensor (*Figure 5-19*).
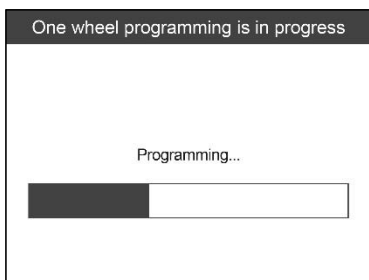
Figure 5-18

Figure 5-19

If programming failed, the screen will show as below. In this case, please perform programming function again.

Figure 5-20

After programming is finished, a series of beep sound will be heard and the tool will display the data details such as the sensor ID, the temperature and the battery voltage after testing the new programmed MX-Sensor.

One wheel programming is in progress

ID: 00000D03 H
Pressure: 0 Psi
Temperature: 76.0 °F
Frequency: 433MHz
Voltage: OK

OK

Figure 5‑21
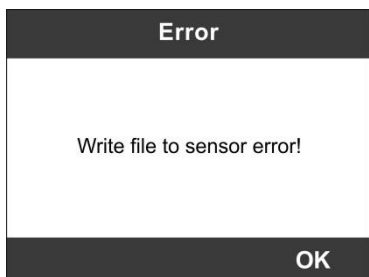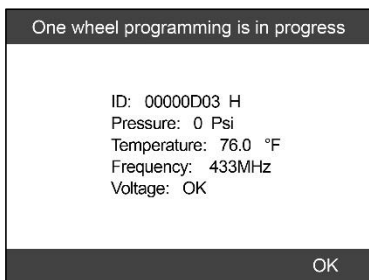
After all required MX-Sensor is programmed, please switch to All Wheels Setting and select **Write IDs to Vehicle** in Relearn function, refer to *TPMS Relearn* on page 27 for details.

Manual Create

This function allows user to manually enter sensor IDs. Users can enter the random ID or the original sensor ID, if it's available.

NOTE
Do not enter the same ID for each sensor.

1) Follow the steps in *Auto Create* to select **MX-Sensor** icon and then select the required wheel position and press the **Y** button for All Wheels mode.

   Under One Wheel mode, follow the steps in *Auto Create* to select MX-Sensor icon and press the Y button.

2) Use the **UP/DOWN** scroll button to select **Manual Create** and press the **Y** button (*Figure 5‑22* for All Wheel Mode, *Figure 5‑23* for One Wheel Mode).

⊠ 📧 ▭	⊠ ▭
Front Left	**One wheel program**
1 Copy by Activation	1 Copy by Activation
2 Auto Create	2 Auto Create
3 Manual Create	3 Manual Create
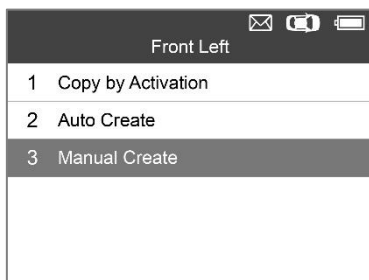
Figure 5‑22   **Figure 5‑23**

3) Use the **UP/DOWN** scroll button and the **LEFT/RIGHT** scroll button to select the character and press the **Y** button to confirm.

Input Sensor ID(HEX)

0	1	2	3
4	5	6	7
8	9	A	B
C	D	E	F

Backspace   **Pre.**   **Finish**
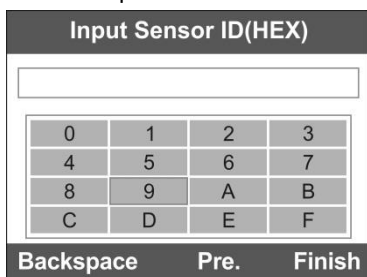
Figure 5‑24
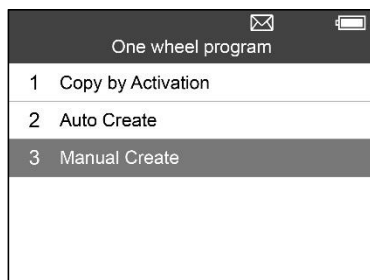
4) Use the left **FUNCTION** button to select **Backspace** to remove the entered character. Use the middle **FUNCTION** button to select **Pre.** to move the cursor to the previous character. Use the right **FUNCTION** button to finish the input and the screen will display a message requiring the user for confirmation. Select **Yes** to save the sensor ID and continue programming or **No** to return to the previous screen.
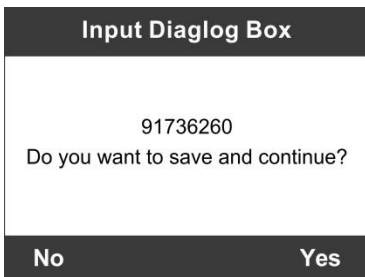
Figure 5- 25

⊘ **NOTE**

Different sensor from manufacturer may have different ID character length limit. The scan tool will automatically recognize the OEM sensor ID character length, and prompt a message when entered character length is out of limitation.

Figure 5- 26

5) Insert the correct MX-Sensor and press the **Y** button to start programming or the **N** button to exit.

⊘ **NOTE**

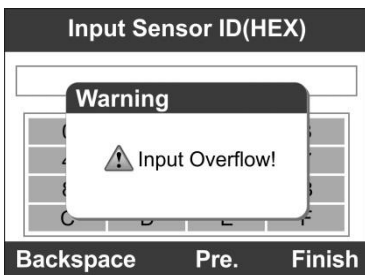If a random ID is entered, please perform the TPMS Relearn function after programming is finished. If the original ID is entered, then there is no need to perform Relearn function.

Copy by OBD

This function allows user to write in the saved sensor information to MX-Sensor after performing **Read IDs from Vehicle** in **Relearn** function.
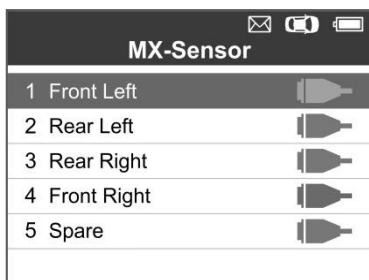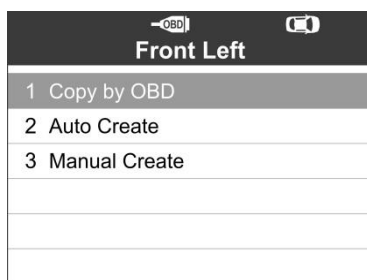
This function is not available under One Wheel mode.

1) Follow the steps in *Auto Create* to select **MX-Sensor** to enter the Programming function. The OBD mark will appear on the right side of the screen (*Figure 5-27*). After selecting the specific wheel and pressing the **Y** button, the "Copy by OBD" option is available on the function menu (*Figure 5-28*).

⊠ ▭◖ ▭
MX-Sensor
1 Front Left ▮▶
2 Rear Left ▮▶
3 Rear Right ▮▶
4 Front Right ▮▶
5 Spare ▮▶

Figure 5-27

▬OBD▮ ▭◖
Front Left
1 Copy by OBD
2 Auto Create
3 Manual Create

Figure 5-28

2) Select **Copy by OBD**, insert the correct MX-Sensor into the sensor slot, and then press the Y button to start programming the saved sensor information to the MX-Sensor.

Copy by Activation

This function allows user to bypass OBD II and automatically write in the retrieved original sensor data to the MX-Sensor. It is used after the original sensor is triggered.

All Wheels Mode

1) From the activation screen, select the specific wheel position and press the **TEST** button to trigger the original sensor. When the information is retrieved, a series of beep sound will be heard.

Figure 5- 29

2) Select MX-Sensor icon and a trigger mark ⟩⟩ will appear on the right side of the screen.
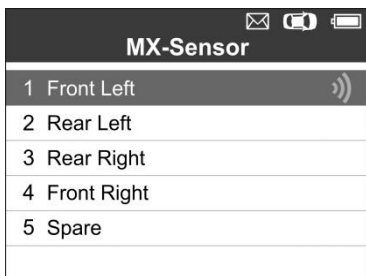
Figure 5- 30

3) Use the **UP/DOWN** scroll button to select the corresponding wheel, press the **Y** button.

4) Select **Copy by Activation**, insert the correct MX-Sensor into the sensor slot, and then press the **Y** button to start programming the retrieved sensor information to the MX-Sensor.
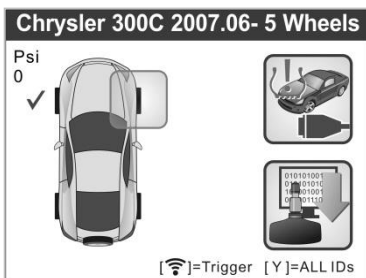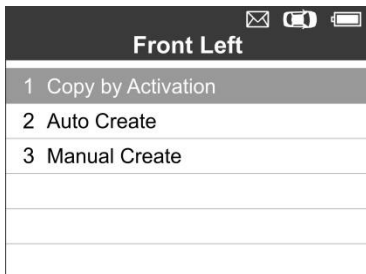

Figure 5- 31

One Wheel Mode

1) From the activation screen, press the **TEST** button to trigger the original sensor. You can use the **LEFT/RIGHT** button to select the specific tire to be triggered. When the information is retrieved, a series of beep sound will be heard and the sensor information will display.
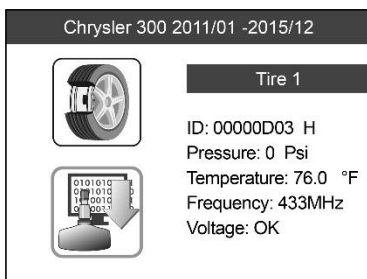
Figure 5- 32

2) Select **MX-Sensor** icon and press the **Y** button, and then select **Copy by Activation** in the next screen.
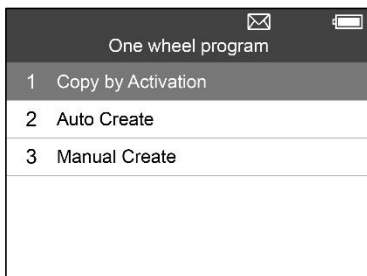
Figure 5- 33

3) Select the IDs you want to program with.

Figure 5-34

NOTE

In One Wheel mode, the tool can save at most 10 triggered sensors' information each time. Please do not use the MX-Sensors with the same ID in the same vehicle.

In All Wheels mode, if you had successfully performed both the Read IDs from Vehicle function and the activation function, the screen may show as below. You can choose either Copy by Activation or Copy by OBD even the IDs are not matched.

Figure 5-35

Once programmed with **Copy by Activation** and **Copy by OBD**, the MX-Sensor can be installed in the wheel directly to be mounted on the car and the TPMS warning light will turn off without needing to write IDs to the vehicle.

NOTE

For the vehicles not supported by Relearn function, please select the "Manual Create" option to enter the original sensor ID manually, or trigger

the original sensor at the activation screen to get the sensor information, before programming the MX-Sensor.

6 OBD II Diagnostics

The OBD II Diagnostics function is a fast-access option that allows you to carry out a quick test on the engine system of OBD II-compliant vehicles.

When more than one vehicle control module is detected by the scan tool, you will be prompted to select the module where the data may be retrieved. The most often to be selected are the Power-train Control Module [PCM] and Transmission Control Module [TCM].

CAUTION: Don't connect or disconnect any test equipment with ignition on or engine running.

1) Turn the ignition off.
2) Locate the vehicle's 16-pin Data Link Connector (DLC).
3) Plug the scan tool cable connector into the vehicle's DLC.
4) Turn the ignition on. Engine can be off or running.
5) Turn on the scan tool. Select **OBD II** from the **Main Screen** (Figure 3.1).
6) Press the **Y** button to wait for the Menu to appear. A sequence of messages displaying the OBD II protocols will be observed on the display until the vehicle protocol is detected.

⟢ **NOTE**
If the scan tool fails to communicate with the vehicle's ECU (Engine Control Unit) more than three times, a "LINKING ERROR!" message shows up on the display.

✓ Verify that the ignition is ON.
✓ Check if the scan tool's OBD II connector is securely connected to the vehicle's DLC.
✓ Verify that the vehicle is OBD II compliant.
✓ Turn the ignition off and wait for about 10 seconds. Turn the ignition back to on and repeat the procedure from step 5.
● *If the "LINKING ERROR" message does not go away, then there might be problems for the scan tool to communicate with the vehicle. Contact*

your local distributor or our technical supports.

7) View a summary of system status (MIL status, DTC counts, Monitor status) on screen.

System Status	
MIL Status	ON
Codes Found	127
Monitors N/A	0
Monitors OK	0
Monitors INC	10

OK   Save

Figure 6-1

● If more than one module is detected, you will be prompted to select a module before testing.

Control Module
1   Module $10
2   Module $18
3   Module $28
4   Module $98

Figure 6-2

● Use the **UP/DOWN** scroll button to select a module and press the **Y** button.

Read Codes

1) From **Diagnostic Menu**, use the **UP/DOWN** scroll button to select **Read Codes** and press the **Y** button.
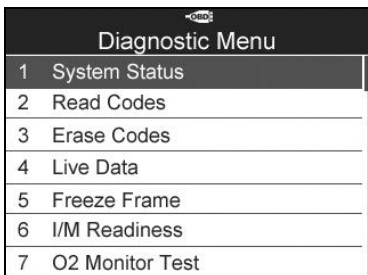
Figure 6-3

2) Use the **UP/DOWN** scroll button to select **Stored Codes**, **Pending Codes** or **Permanent Codes** from the **Read Codes** menu and press the **Y** button.
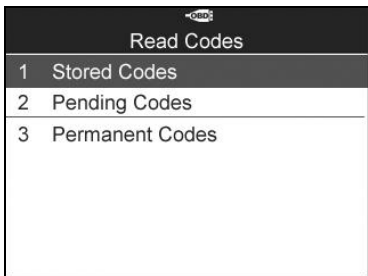
Figure 6-4

3) A screen of trouble codes will appear. If more than one DTC is found, use the **UP/DOWN** scroll button to check all the codes.
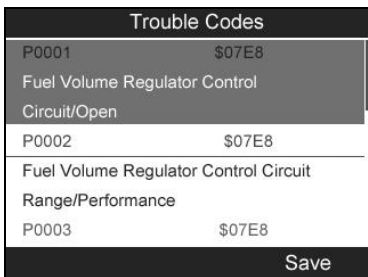
Figure 6-5

Erase Codes

- *This function is performed with key on engine off (KOEO). Do not start*

the engine.

1) Use the **UP/DOWN** scroll buttons to select **Erase Codes** from **Diagnostics Menu** and press the **Y** button (*Figure 6-3*).

2) A confirm screen will show up. Press the corresponding **FUNCTION** button **Yes** to continue; otherwise press the corresponding **FUNCTION** button **NO** to exit.

Erase Codes
Erase trouble codes! Are you sure?
No   Yes
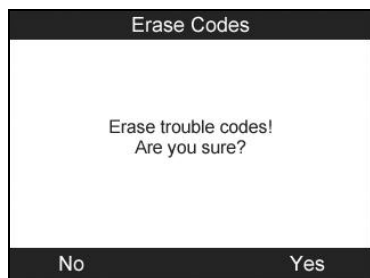
Figure 6-6

3) If the codes are cleared successfully, an "**Erase Done!**" message shows on the screen. Press any key to continue.

Erase Codes
Erase Done!
Press any key to continue

Figure 6-7

Live Data

In this function, you can not only read the live data but also retrieve data for later review.

1) To view live data, use the **UP/DOWN** scroll button to select **Live Data** from **Diagnostic Menu** and press the **Y** button (*Figure 6-3*).

2) Wait a few seconds while the scan tool validates the PID MAP.
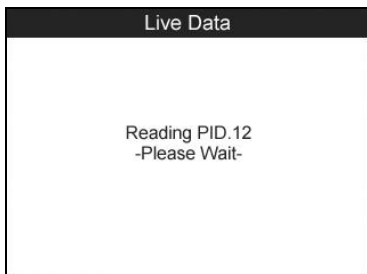
Figure 6-8

Complete List

1) To view complete set of data, use the **UP/DOWN** scroll button to select **Complete List** from **Live Data** menu and press the **Y** button.

Figure 6-9

2) Use the **UP/DOWN** scroll button to select a specific item or use the **LEFT/RIGHT** scroll button to turn to next page.

Figure 6-10

Custom List

1) To view customized PID data, use the **UP/DOWN** scroll button to select **Custom List** from **Live Data** menu and press the **Y** button (*Figure 6-9*).

2) Use the **UP/DOWN** scroll button to move to the desired item and press the corresponding **FUNCTION** button **Select** to choose.

	Custom List
☐	Numbers of DTCs
☐	DTC that caused required freeze frame data storage
☐	Fuel system 1 status
☐	Fuel system 2 status
☐	Calculated Load Value
☐	Absolute Throttle Position

Clear All   Select   Select All
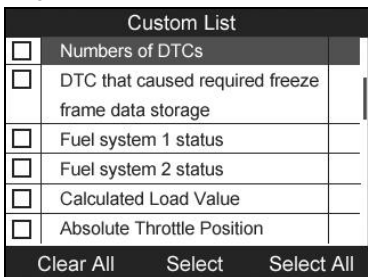
Figure 6- 11

3) Press the corresponding **FUNCTION** button **Clear** to unselect items, or press the corresponding **FUNCTION** button **Select All/Clear All** to select or unselect all items.

4) Press the **Y** button to view selected PIDs on screen.

Custom List		
Commanded Secondary Air Status	UPS	
Absolute Throttle Position	100.0	%
Numbers of DTCs	127	

Save   One Graphic   Pause
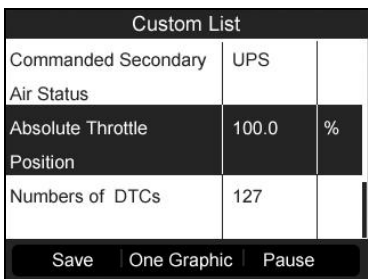
Figure 6- 12

5) Press the **N** button to return to previous menu.

Freeze Frame

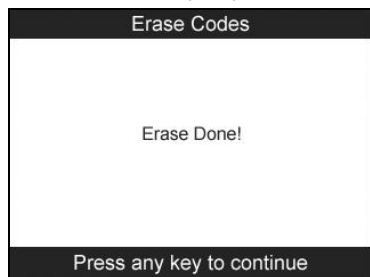1) To view freeze frame data, use the **UP/DOWN** scroll button to select **Freeze Frame** from **Diagnostic Menu** and press the **Y** button (*Figure 6- 3*).
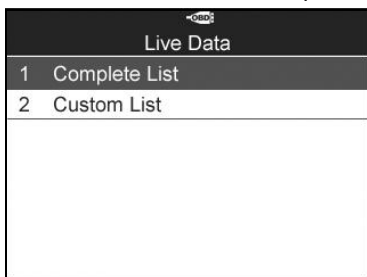
2) Wait a few seconds while the scan tool validates the PID MAP.

3) Use the **UP/DOWN** scroll button to select a specific item or use the **LEFT/RIGHT** scroll button to turn to next page.

Freeze Frame		
Engine Coolant Temperature	419	°F
Short Term Fuel Trim -Bank 1	99.2	%
Short Term Fuel Trim -Bank 3	99.2	%
Long Term Fuel Trim -	99.2	%
		Save

Figure 6-13

4) If there is no available freeze frame data, an advisory message "No freeze frame data stored!" shows on the display.

5) Press the corresponding **FUNCTION** button **Save** to record freeze frame to Review Data for later playback or printing. A confirming message "Save success!" shows on the screen and press any key to continue.

Retrieve I/M Readiness Status

Some latest vehicle models may support two types of **I/M Readiness** tests:

A. *Since DTCs Cleared* – indicates status of the monitors since the DTCs are erased.

B. *This Drive Cycle* – indicates status of monitors since the beginning of the current drive cycle.

An I/M Readiness Status result of "NO" does not necessarily indicate that the vehicle being tested will fail the state I/M inspection. For some states, one or more such monitors may be allowed to be "Not Ready" to pass the emissions inspection.

● **OK** – indicates that a particular monitor being checked has completed its diagnostic testing.

● **INC** – indicates that a particular monitor being checked has not completed its diagnostic testing.

● **N/A** – the monitor is not supported on that vehicle.

1) Use the **UP/DOWN** scroll button to select **I/M Readiness** from **Diagnostic Menu** and press the **Y** button (*Figure 6- 3*).
2) Wait a few seconds while the scan tool validates the PID MAP.
3) If the vehicle supports both types of tests, then both types will be shown on the screen for selection.

	I/M Readiness
1	Since DTCs cleared
2	This driving cycle
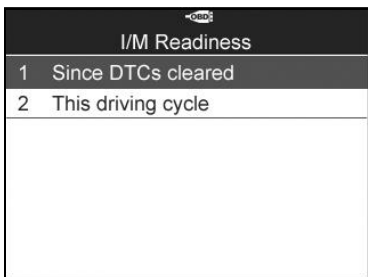
Figure 6- 14

4) Use the **UP/DOWN** scroll button, as necessary, to view the status of the MIL light (**ON** or **OFF**) and the monitors.

Since DTCs cleared		
Malfunction Indicator Lamp(ML) Status	ON	
Misfire Monitoring	INC	
Fuel system Monitoring	INC	
Comprehensive component	INC	
		N

Figure 6- 15

5) If the vehicle supports readiness test of "This Drive Cycle", a screen of the following displays:

This driving cycle		
Misfire Monitoring	INC	
Fuel system Monitoring	INC	
Comprehensive component Monitoring	INC	
Catalyst Monitoring	INC	
		N

Figure 6-16

6) Use the **UP/DOWN** scroll button for more PIDs if additional information is available for more than one page. Or use the **LEFT/RIGHT** scroll button to view PIDs in the previous/next page.

7) Press the **N** button to return to previous menu.

O2 Monitor Test

1) Use the **UP/DOWN** scroll button to select **O2 Monitor Test** from **Diagnostic Menu** and press the **Y** button (*Figure 6-3*).

2) Wait a few seconds while the scan tool validates the PID MAP.

3) Use the **UP/DOWN** scroll button to select O2 sensor from **O2 Monitor Test** menu and press the **Y** button.

	O2 Monitor Test
1	O2 Bank1 Sensor1
2	O2 Bank1 Sensor2
3	O2 Bank1 Sensor3
4	O2 Bank1 Sensor4

Figure 6-17

● If the vehicle does not support the mode, an advisory message will be displayed on the screen.
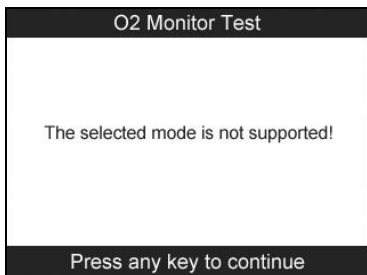
Figure 6- 18

4) Select a specific item and press the **Y** button to view test value, maximum value, minimum value, and determine if it is OK.

Figure 6- 19

5) Press the corresponding FUNCTION button **Save** to store to **Review Data** for later playback and print or press the **N** button to return to previous menu.
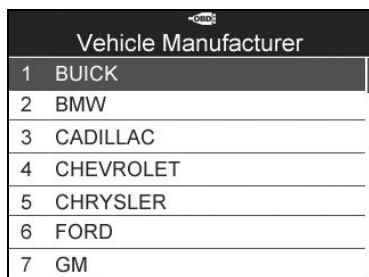
Figure 6- 20

On-Board Monitor Test

1) Use the **UP/DOWN** scroll button to select **On-Board Monitor Test**

from **Diagnostic Menu** and press the **Y** button (*Figure 6- 3*).

2) Wait a few seconds while the scan tool validates the PID MAP.

3) Select the vehicle make and press the **Y** button (If you have selected the vehicle before, the **Vehicle Manufacturer** screen would not appear again).

Figure 6- 21
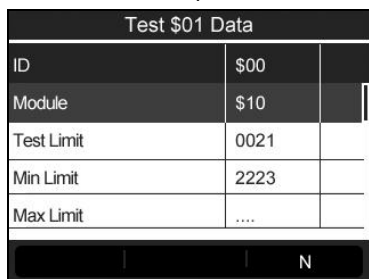
4) A list of specific monitoring systems appears. Select one of the items and press the **Y** button.

Figure 6- 22

5) A screen of test results shows up.

Figure 6- 23

6) Press the **N** button to return to previous menu.

Component Test

1) Use the **UP/DOWN** scroll button to select **Component Test** from **Diagnostic Menu** and press the **Y** button (*Figure 6-3*).

2) Wait for the scan tool to display the **Component Test** menu.

Figure 6-24

Component Test
1 EVAP Sys. leak test
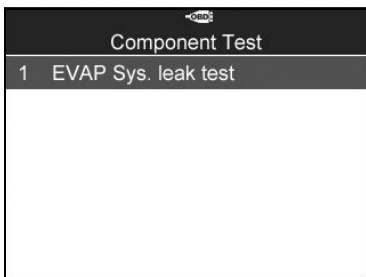
3) If the test has been initiated by the vehicle, a confirmation message will be displayed on the screen.

Figure 6-25

Component Test

COMMAND SENT!

Press any key to continue
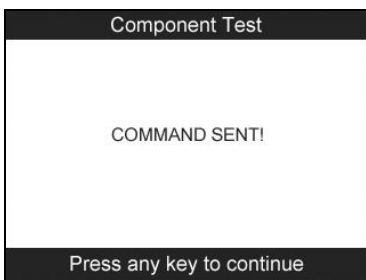
- If the test has not been successfully initiated by the vehicle, a message "**LINKING ERROR**" shows up. Make sure the tool and DLC are connected securely.

- Some vehicles do not allow scan tools to control vehicle systems or components. If the vehicle under test does not support the EVAP Leak Test, an advisory message is displayed on the screen.

Component Test

The selected mode is not supported!

Press any key to continue
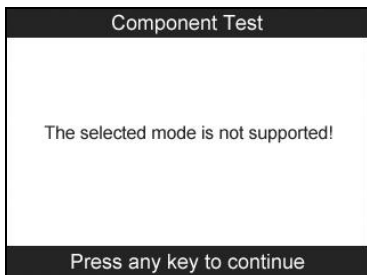
Figure 6- 26

4) Wait a few seconds or press any key to return to previous screen.

View Vehicle Information

This function enables retrieval of Vehicle ID No. (VIN), Calibration ID Nos. (CALIDs), Calibration Verification Nos. (CVNs), In-use Performance Tracking, and ECU Name.

1) From the **Diagnostic Menu**, use the **UP/DOWN** scroll button to select **Vehicle Info.** and press the **Y** button (*Figure 6- 3*).

2) Wait for the scan tool to display the **Vehicle Info.** menu.

	Vehicle Info.
1	Vehicle ID Number
2	Calibration ID
3	Cal.Verf.Number
4	In-use Perform Track
5	ECU Name
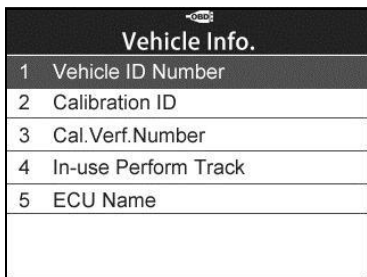
Figure 6- 27

● If the vehicle does not support this mode, a message shows on the display warning that the mode is not supported.

3) From **Vehicle Info.** menu, use the **UP/DOWN** scroll button to select **Vehicle ID Number** and press the **Y** button.

Vehicle ID Number	
VIN	LVSFCFAE16F01 5498
N	Save

Figure 6- 28

4) Follow the same procedures to retrieve **Calibration ID**, **Calibration Verification No.**, **In-use Performance Tracking** and **ECU Name**.

Modules Present

1) Use the **UP/DOWN** scroll button to select **Modules Present** from **Diagnostic Menu** and press the **Y** button (*Figure 6- 3*).
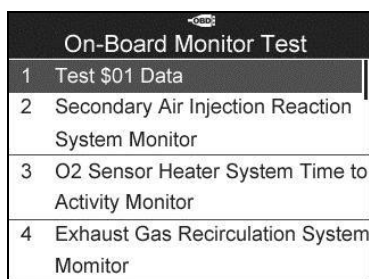
2) View modules present with their IDs and communication protocols.

Modules Present		
Protocol	ID	
CAN STD SLOW	$07E8	
		Save

Figure 6- 29

3) Press the corresponding **FUNCTION** button **Save** to store the modules data to **Review Data**, or press the **N** button to exit.

7 RKE & RF Monitor

Today's keyless remotes – also known as key fobs – make life easier. But when your key fob stops working or starts to perform sporadically, it will be particularly frustrating. Check your key fob to make sure it is in top condition so it will work when you really need it.

Since a key fob is attuned to a special frequency that is only detected by the car for which it was issued, you will need to use your vehicle to test the fob. Otherwise you will have to take it to a dealership or an automotive locksmith to have it tested for the right frequency. But with our TPMS tool, the key fob testing becomes easy and convenient.

1) Use the **UP/DOWN** scroll button and **LEFT/RIGHT** scroll button to select **RKE & RF** from **Main Menu** (*Figure 3- 1*), and press the **Y** button to confirm.

2) Hold the key fob very close to the tool and press the function buttons on key fob to test. If the button works and the key fob is sending a signal, the tool will beep and the screen shows as below. If the button does not work, the tool will do nothing. To make sure each button is working properly, please test each button in turn.

```
┌──────────────────────────────┐
│       RKE & RF Monitor       │
│                              │
│  ▓▓▓▓▓▓▓▓ 100% ▓▓▓▓▓▓▓▓▓▓    │
│                              │
│        433MHZ Signal         │
│                              │
└──────────────────────────────┘
```
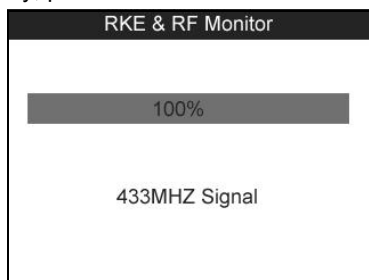
Figure 7- 1

- The progress bar indicates the approximate power level of the key fob.
- The stronger the signal, the higher the beep tone.
- The tool only tests 315MHz and 433MHz key fobs.

3) Press the **N** button to return to previous menu.

8 Review Data

The **Review Data** function allows user to view and print out saved data of the latest TPMS diagnostic recordings and all diagnostic data retrieved from the ECUs of the OBD II-compliant vehicles by the service tool.

Use the **UP/DOWN** and **LEFT/RIGHT** scroll button to select **Review Data** from Main Screen (*Figure 3-1*), and wait for the review data menu to appear.

1) Use the **UP/DOWN** scroll button to select **TPMS** or **OBD II** from **Review Data** and press the **Y** button.
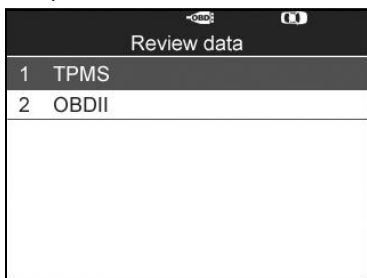
Figure 8-1

2) Use the **UP/DOWN** scroll button to select the desired stored data (Take **Read IDs from Vehicle** as an example) from **TPMS** menu and press the **Y** button.
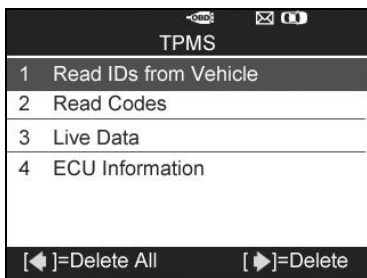
Figure 8-2

3) A list of retrieved sensor IDs will show on the screen.

Read IDs from Vehicle	
ID TYPE1 FL	8000E0
ID TYPE1 FR	002020
ID TYPE1 RR	00E000
ID TYPE1 RL	1E00E0
	Print

Figure 8- 3

- Print – select this function to print out the data on screen. For detailed instructions, refer to *Print Data* on page 75.
- Delete – use the **RIGHT** scroll button to delete the selected data.
- Delete All – use the **LEFT** scroll button to delete all data on the screen.

NOTE

Don't use Delete All unless you are definitely sure what you are going to proceed.

9 **Print and Update**

To print out retrieved data or update software, you will need the followings:

- ✓ TS601 tool with SD card inserted
- ✓ Mac-based or Windows-based PC or laptop with USB ports
- ✓ USB cable

Print Data

The **Print Data** function allows printing out data retrieved by the service tool by connecting the scan tool to a PC or laptop with the USB cable supplied.

✎ **NOTE**
The print function is not available on Mac-based computers for the present.

---

1) Install the **Maxi PC Suite** program to the PC.
2) Connect the scanner to computer with the USB cable supplied.
3) Run **Printer** software on computer.
4) Select **Review Data** function in **Main Screen** of the TPMS tool. In data menu screen, use the **UP**/**DOWN** scroll button to select the data you want to print. Wait for the reviewing window to display (*Figure 8- 3*), and then press the corresponding **FUNCTION** button **Print** and the selected file will be uploaded to your computer.
5) The **Printer** will show as below.

Figure 9- 1

6) The selected data will display on the textbox of Printer. By selecting the function keys on the right, you could execute the following operations:

   Print – print all data in the textbox (A printer should be connected to the computer).

   Edit – display an editable NOTEPAD window with recorded data.

   Copy – copy data in the textbox to the clipboard.

   Clear – delete data in the textbox.

   Exit – quit the operation.

7) You are also allowed to edit, copy, and delete the data in the Printer window.

Software Update

This function allows you to update the scan tool software through a computer. You can use a **Mac** or a **Windows-based** computer to download the suitable version from the www.maxitpms.com website and proceed.

Register the Tool

User could update the scan tool **ONLY** after you had registered the tool on our website: www.autel.com. Then you could download software, update online, retrieve information and get warranty service.

NOTE
Prior to registration, please confirm your network is working properly.

1. Visit our website http://pro.autel.com.
2. If you already have an Autel account, Sign In with your account ID and

76

password.

3. If you are a new member to Autel, click on the **Create Autel ID** button on the left side of the screen to create an ID.

4. Enter the required information in the input fields, and click the **Get Verification Code** button to get a verification code for email validation.

5. The online system will automatically send a verification code to the registered email address. Input the code in the Verification Code field and complete other required fields. Read through Autel's Terms and Conditions and click on Agree, and then click **Create Autel ID** at the bottom. A product registration screen will display

6. The device's Serial Number and Register Password is located in the *About* section of the Settings menu on the tool.

7. Select your product model, enter the product serial number and password on the Product Registration screen, and click **Submit** to complete the registration procedure.

Update Procedure

Autel frequently releases software updates.

Please update the TMPS tool via SD card. Remove the SD card from the tool and connect it with computer, and follow the update procedure to finish updating.
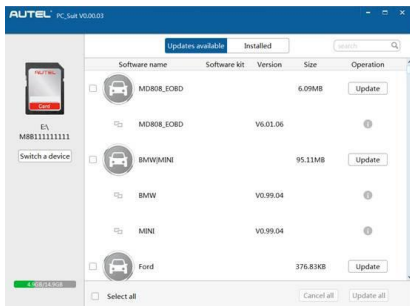
1) Run the **Maxi PC Suite**. Wait for the Log In window to pop up.
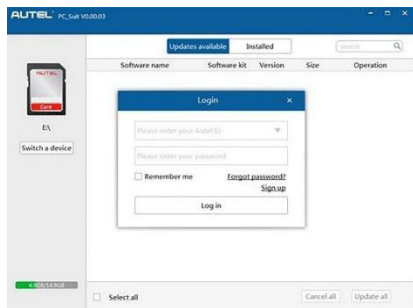
Figure 9- 2

2) Enter your Autel ID and password and wait for the Update window to display. If you forget your password, click the [**Forget Password?**] to link to our website and retrieve your password.

3) In the **Update** window, select the items you want to install. Usually, you should install all available updates.

Figure 9- 3

Generally there are two ways to update programs:

Batch Update

1) Select the programs that you would update by clicking on the check boxes next to those items. Then click the **Update Selected Items** button on the right side of screen. Or

2) Click on the **Select All** checkbox on the right side of screen and all updatable items will be selected automatically. Then click the **Update Selected Items** button on the right side of screen.

3) Check the updating process by observing the upper left progress bar [Downloads] and upper right progress bar [Installs]. You may also find progress information in the Status column of updated items.

4) When the downloading is completed, the downloaded programs will be installed automatically. The new version will replace the old version.

5) Anytime you could click the **Pause** button on the right side of screen to suspend all progresses.

6) To resume updating process, you may need to select those suspended items again, and then click the **Update Selected Items** button. The progress will resume from the break point.

Single Update

1) Find out the desired updating item and click the **Install** button in the same line, and the **Install** button changes to **Pause** at the same time.

2) Check the updating process by observing the upper left progress bar

[Downloads] and upper right progress bar [Installs]. You may also find progress information in the Status column of updated items.

3) Anytime you could click the **Pause** button in the line to suspend this progress.

4) To resume updating process, click the **Install** button in the line again. The progress will resume from the break point.

5) When the downloading is completed, the downloaded program will be installed automatically. The new version will replace the old one.

6) Once the update is complete, disconnect the tool from the computer. It is now updated and ready to go.

7) For users who choose to update by SD card, please insert the SD card into the scan tool, and switch on the TPMS tool. It's now updated and ready to go.

View or Delete Programs

To view the list of installed programs or to delete an installed program, please follow these steps:

1) Click on the **Installed Programs** tag entry and the page will show the list of programs installed.

2) Select the program(s) that you would delete.

  ◇ **Batch delete**: Select the programs that you would delete by clicking on the check boxes to the left of those items. Then click the **Delete** button on the right side of screen.

  ◇ **Single delete**: Click the **Uninstall** button in the line of your would-be-deleted program.

3) A window asking "**Are you sure to delete the software**?" will pop up for your confirmation.
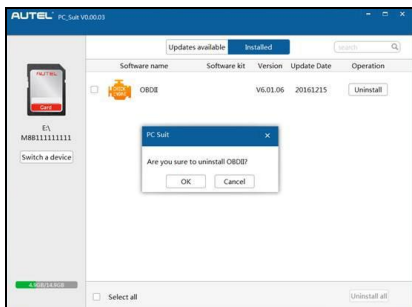
Figure 9-4

- Click on **OK** to delete the program(s) selected, or on **Cancel** to cancel the action.

- The deleted program will automatically add to the end of program list in the **Update** page in case you would like to install again.

10 Compliance Information

FCC COMPLIANCE   **FCC ID: WQ83017501601**

This device complies with Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme aux CNR exempts de licence d'Industrie Canada. Son fonctionnement est soumis aux deux conditions suivantes:

1. Ce dispositif ne peut causer des interferences; et
2. Ce dispositif doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

⚠ WARNING

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

✎ NOTE

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 or more 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.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

RF WARNING STATEMENT

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.

The term "IC" before the radio certification number only signifies that IC technical specifications were met.

RoHS COMPLIANCE

This device is declared to be in compliance with the European RoHS Directive 2011/65/EU.

CE COMPLIANCE

This product is declared to conform to the essential requirements of the following Directives and carries the CE mark accordingly:

EMC Directive 2004/108/EC

R&TTE Directive 1999/5/EC

Low Voltage Directive 2006/95/EC

11 Warranty and Service

Limited One Year Warranty

Autel Intelligent Technology Corp., Ltd. (the Company) warrants to the original retail purchaser of this MaxiTPMS Diagnostic Device that should this product or any part thereof during normal usage and under normal conditions be proven defective in material or workmanship that results in product failure within 1 year period from the date of purchase, such defect(s) will be repaired, or replaced (with new or rebuilt parts) with Proof of Purchase, at the Company's option, without charge for parts or labor directly related to the defect(s).

The Company shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the device. Some states do not allow limitation on how long an implied warranty lasts, so the above limitations may not apply to you.

This warranty does not apply to:

1) Products subjected to abnormal use or conditions, accident, mishandling, neglect, unauthorized alteration, misuse, improper installation or repair or improper storage;

2) Products whose mechanical serial number or electronic serial number has been removed, altered or defaced;

3) Damage from exposure to excessive temperatures or extreme environmental conditions;

4) Damage resulting from connection to, or use of any accessory or other product not approved or authorized by the Company;

5) Defects in appearance, cosmetic, decorative or structural items such as framing and non-operative parts.

6) Products damaged from external causes such as fire, dirt, sand, battery leakage, blown fuse, theft or improper usage of any electrical source.

ⓘ IMPORTANT

All contents of the product may be deleted during the process of repair. You should create a back-up copy of any contents of your product before delivering the product for warranty service.

Service and Support

If you have any questions regarding the product, please contact one of our offices in your region.

AUTEL NORTH AMERICA

- **Phone:** 855-AUTEL-US (855-288-3587) Monday-Friday 9am-6pm EST
- **Website:** www.autel.com, www.maxitpms.com
- **Email:** ussupport@autel.com
- **Address:** 175 Central Avenue, Suite 200, Farmingdale, New York, USA. 11735

AUTEL EUROPE

- **Phone:** 0049 (0) 61032000522
- **Website:** www.autel.eu, www.maxitpms.com
- **Email:** sales.eu@autel.com, support.eu@autel.com
- **Address:** Robert-Bosch-Strasse 25, 63225, Langen, Germany

AUTEL CHINA HQ

- **Phone:** 0086-755-22672493/86532091
- **Website:** www.autel.com, www.maxitpms.com
- **Email:** supporttpms@auteltech.com
- **Address:** 6th-10th floor, Building B1, Zhiyuan, Xueyuan Road, Xili, Nanshan, Shenzhen, 518055, China.

AUTEL SOUTH AMERICA

- **Phone:** (+507) 308-7566
- **Website:** www.autel.com/es, www.maxitpms.com
- **Email:** sales.latin@autel.com, latsupport@autel.com

- **Address:** Office 103, Building 3845, International Business Park, Veracruz, Panamá Pacífico, Panamá

AUTEL AUSTRALIA

- **Phone:** 03 9480 2978 / +61 476293327
- **Website:** www.autel.com.au, www.maxitpms.com
- **Email:** sales@autel.com.au
- **Address:** 155 Islington Street, Melbourne, Collingwood, VIC

For technical assistance in other markets, please contact your local selling agent.