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Safety Precautions and Warnings

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

- There are no user serviceable parts. Have the device serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the device is maintained. Disassembling the device will void the warranty right.
- Caution: This tool contains an internal Lithium Polymer battery. The battery can burst or explode, releasing hazardous chemicals. To reduce the risk of

fire or burns, do not disassemble, crush, pierce or dispose of the battery in fire or water.

- This product is not a toy. Do not allow children to play with or near this item.
- Do not expose the device to rain or wet conditions.
- Do not place the device on any unstable surface.
- Never leave the device unattended during charging process. The device must be placed on a non-flammable surface during charging.
- Handle the device with care. If the device is dropped, check for breakage and any other conditions that my affect its operation.
- Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, gases, or heavy dust.
- Keep the tool dry, clean, free from oil, water or grease. Use a mild detergent on a clean cloth to clean the outside of the device when necessary.
- People with pacemakers should consult their physician(s) before use. Electromagnetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
- Always perform automotive testing in a safe environment.
- Do not attempt to operate or observe the tool while driving a vehicle. Operating or observing the tool will cause driver distraction and could cause a fatal accident.
- 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.
- Put the transmission in P (for A/T) or N (for M/T) and make sure the parking brake is engaged.
- Keep a fire extinguisher suitable for gasoline/chemical/ electrical fires nearby.
- Don’t connect or disconnect any test equipment while the ignition is on or the engine is running.

Compliance Information

FCC ID: XUJOCP349P702
IC: 29886-OCP349P702

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

This device complies with Industry Canada's licence-exempt RSSs and part 15 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause interference; and

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

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

(1) Ce dispositif ne peut causer d'interférences ; et

(2) Ce dispositif doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

The device for operation in the band 5150–5250MHz is only for indoor use.

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.

Specific Absorption Rate (SAR) information:

This product meets the government's requirements for exposure to radio waves. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons regardless of age or health.

RF Exposure Information and Statement

The SAR limit is 1.6 W/kg averaged over one gram of tissue. This device has also been tested against this SAR limit. This device was tested for typical body-worn operations 0mm from the body. To maintain compliance with RF exposure requirements, use accessories that maintain a 0mm separation distance between the user's body.

This device is in compliance with the essential requirements and other relevant provisions of Radio Equipment Directive 2014/53/EU. The RF frequencies can be used in Europe without restriction.

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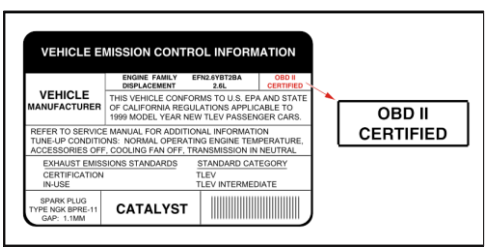
1 Overview

1.1 Vehicle Coverage

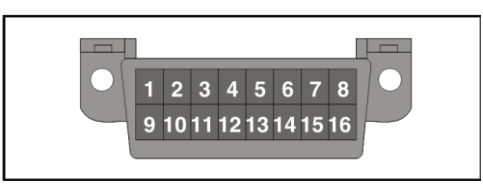
This diagnostic tool is specially designed to work with all OBD II compliant vehicles, including Controller Area Network (CAN). It is required by EPA that all 1996 and newer vehicles (cars and light trucks) sold in the United States must be OBD II compliant and this includes all American, Asian and European vehicles.

A small number of 1994 and 1995 model year gasoline vehicles are OBD II compliant. To verify if a 1994 or 1995 vehicle is OBD II compliant, check the following:

1. **Vehicle Emissions Control Information (VECI) Label**. It is located under the hood or by the radiator of most vehicles. If the vehicle is OBD II compliant, the label will designate **OBD II Certified**.



2. Government regulations mandate that all OBD II compliant vehicles **must** have a “common” 16-pin **Data Link Connector (DLC)**.



Note: Some 1994 and 1995 vehicles have 16-pin connectors but are not OBD II compliant. Only those vehicles with a Vehicle Emissions Control Label stating **OBD II Certified** are OBD II compliant.

1.2 On-Board Diagnostics (OBD) II

Note: With the exception of some 1994 and 1995 vehicles, most vehicles from 1982 to 1995 are equipped with some type of first generation On-Board Diagnostics.

OBD II is an early warning system designed to monitor engine, transmission, and emissions control components by performing specific diagnostic test.

When a fault condition is detected, the system captures important data and activates the “Check Engine” light.

If the light comes on, the vehicle might have a condition that wastes fuel, shortens engine lift, or causes excessive air pollution. If the problem that caused the light to come on is addressed, for instance a loose gap is tightened, the light will go out.

If the light comes on and stays on, a minor engine fault condition is occurring and should be addressed as soon as possible.

If the light is blinking, a severe engine fault condition is occurring and should be addressed immediately.

The diagnostic tool connects to the vehicle’s computer system and captures information that can help identify the fault condition.

1.3 OBD II Definitions

The following terms and their definitions are related to OBD II systems. Read and reference this list as needed to aid in the understanding of OBD II systems.

EOBD - European On-Board Diagnostics. Essentially the same as OBD II, with the same Data Link Connector and Communication Protocols.

Communication Protocols - Allows different systems and sensors in a vehicle to communicate. There are currently five protocols:

CAN Bus

J1850 VPW

ISO 9141-2

J1850 PWM

ISO 14230 KWP

Powertrain Control Module (PCM) -- The PCM is the OBD II accepted term for the vehicle’s “on-board computer.” In addition to controlling the engine

management and emissions systems, the PCM also participates in controlling the powertrain (transmission) operation. Most PCMs also have the ability to communicate with other computers on the vehicle (ABS, ride control, body, etc.).

DLC -- Data Link Connector. The 16-cavity connector on the vehicle that allows communication between the computer system and the diagnostic tool.

MIL -- Malfunction Indicator Lamp. The vehicle's "Check Engine" warning light that activates when a DTC is stored.

DTC -- Diagnostic Trouble Code. A code stored in the computer system's memory, which helps to identify the fault condition that is causing the MIL to activate.

Freeze Frame Data -- Operating conditions that are stored when a DTC is stored.

PID -- Parameter Identification Data. Data returned by the vehicle's control modules to the diagnostic tool.

Monitors -- Monitors are "diagnostic routines" programmed into the PCM. The PCM utilizes these programs to run diagnostic tests, and to monitor operation of the vehicle's emissions-related components or systems to ensure they are operating correctly and within the vehicle's manufacturer specifications. Currently, up to fifteen Monitors are used in OBD II systems. Additional Monitors will be added as the OBD II system is further developed.

Note: Not all vehicles support all fifteen Monitors.

Enabling Criteria -- Also termed Enabling Conditions. They are the vehicle-specific events or conditions that must occur within the engine before the various monitors will set, or run. Some monitors require the vehicle to follow a prescribed "drive cycle" routine as part of the enabling criteria. Drive cycles vary among vehicles and for each monitor in any particular vehicle. Please refer to the vehicle's factory service manual for specific enabling procedures.

Trip -- A Trip for a particular Monitor requires that the vehicle is being driven in such a way that all the required "Enabling Criteria" for the Monitor to run and complete its diagnostic testing are met. The "Trip Drive Cycle" for a particular Monitor begins when the ignition key is turned "On." It is successfully completed when all the "Enabling Criteria" for the Monitor to run and complete its diagnostic testing are met by the time the ignition key is turned "Off." Since each of the fifteen monitors is designed to run diagnostics and testing on a

different part of the engine or emissions system, the “Trip Drive Cycle” needed for each individual Monitor to run and complete varies.

Drive Cycle -- A specific mode of vehicle operation that provides conditions required to set all the readiness monitors applicable to the vehicle to the “ready” condition. The purpose of completing an OBD II drive cycle is to force the vehicle to run its onboard diagnostics. Some form of a drive cycle needs to be performed after DTCs have been erased from the PCM’s memory or after the battery has been disconnected. Running through a vehicle’s complete drive cycle will “set” the readiness monitors so that future faults can be detected. Drive cycles vary depending on the vehicle and the monitor that needs to be reset. For vehicle specific drive cycle, consult the service manual.

Note: Do not confuse a “Trip” Drive Cycle with an OBD II Drive Cycle. A “Trip” Drive Cycle provides the “Enabling Criteria” for one specific Monitor to run and complete its diagnostic testing. An OBD II Drive Cycle must meet the “Enabling Criteria” for all Monitors on a particular vehicle to run and complete their diagnostic testing.

Warm-up Cycle -- Vehicle operation after an engine off period where engine temperature rises at least 40°F (22°C) from its temperature before starting, and reaches at least 160°F (70°C). The PCM uses warm-up cycles as a counter to automatically erase a specific code and related data from its memory. When no faults related to the original problem are detected within a specified number of warm-up cycles, the code is erased automatically.

Fuel Trim (FT) -- Feedback adjustments to the base fuel schedule. Short-term fuel trim refers to dynamic or instantaneous adjustments. Long-term fuel trim refers to much more gradual adjustments to the fuel calibration schedule than short-term trim adjustments. These long-term adjustments compensate for vehicle differences and gradual changes that occur over time.

1.4 Diagnostic Trouble Codes (DTCs)

OBD II Diagnostic Trouble Codes are codes that are stored by the on-board computer diagnostic system in response to a problem found in the vehicle. These codes identify a particular problem area and are intended to provide you with a guide as to where a fault might be occurring within a vehicle. **DO NOT** replace parts based only on DTCs without first consulting the vehicle’s service manual for proper testing procedures for that particular system, circuit or component.

OBD II Diagnostic Trouble Codes consist of a five-digit alphanumeric code.

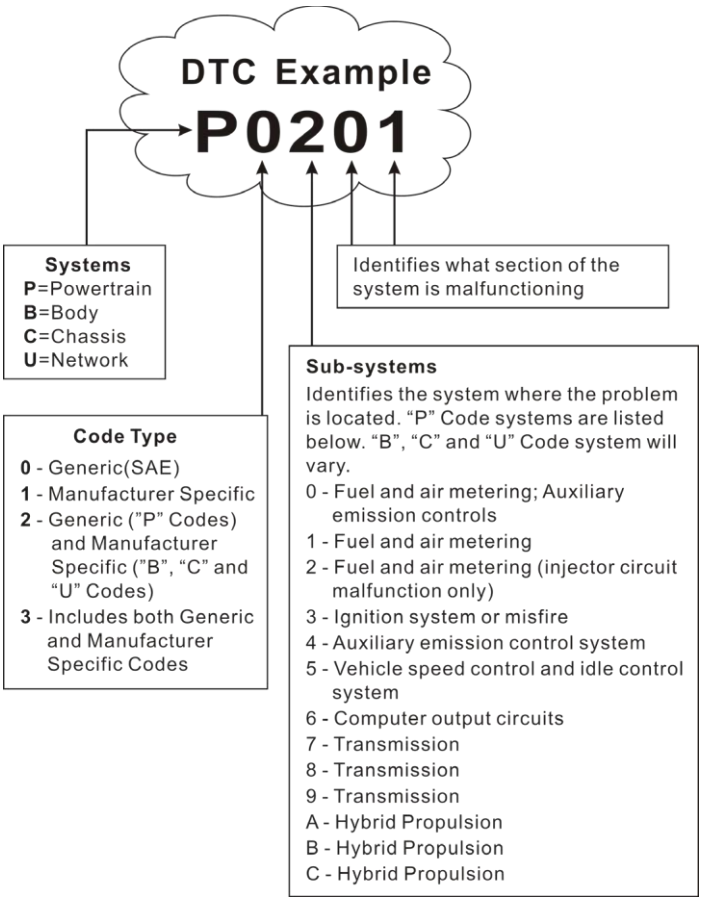
- The 1st character is a **letter** (B, C, P or U). It identifies the **main system** where the fault occurred (Body, Chassis, Powertrain, or Network).
- The 2nd character is a **numeric digit** (0 thru 3). It identifies the **type** of code (Generic or Manufacturer-Specific).

Note: Generic DTCs are codes that are used by all vehicle manufacturers.

The standards for generic DTCs, as well as their definitions, are set by the Society of Automotive Engineers (SAE).

Manufacturer-Specific DTCs are codes that are controlled by the vehicle manufacturers. The Federal Government does not require vehicle manufacturers to go beyond the standardized generic DTCs in order to comply with the new OBD II emissions standards. However, manufacturers are free to expand beyond the standardized codes to make their systems easier to diagnose.

- The 3rd character is a letter or a **numeric digit** (0 thru 9, A thru F). It identifies the specific system or sub-system where the problem is located.
- The 4th and 5th characters are **letters** or **numeric digits** (0 thru 9, A thru F). They identify the section of the system that is malfunctioning.



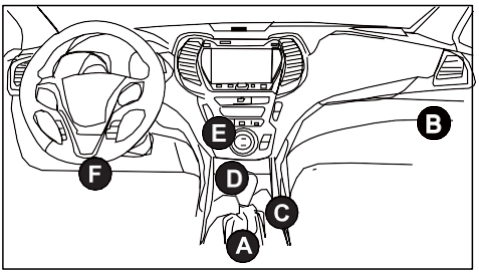
P0201 - Injector circuit malfunction, Cylinder 1

1.5 Location of the Data Link Connector (DLC)

The DLC (Data Link Connector or Diagnostic Link Connector) is typically a 16-pin connector where diagnostic code readers interface with the vehicle's on-board computer. It is usually located 12 inches from the center of the

instrument panel, under or around the driver's side for most vehicles. For some vehicles with special designs, the DLC location may vary.

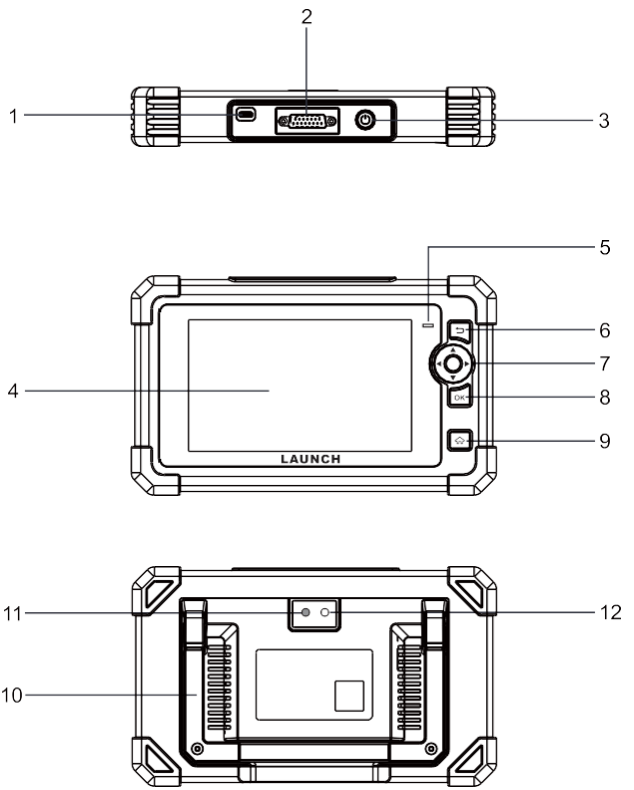
Refer to the following figure for possible DLC location.



If the DLC cannot be found, refer to the vehicle's service manual for the location.

2 Product Descriptions

2.1 Components & Controls



1. Charging Port

Connects the tool to PC to charge it.

2. DB15 Diagnostic Connector

Connects the tool to the vehicle's Data Link Connector (DLC).

3. Power Button

Turns on/off the tool.

4. Display Screen

Indicates test results.

5. Charging LED

Red means Charging; Green means Fully Charged.

6. ⮌ Button

Returns to previous menu.

7. Select Buttons

▲ Button

- When in MENU mode, scroll UP through the menu and submenu line by line.
- When in DATA VIEW mode, scroll through the screen data to the PREVIOUS page.

▶ Button

When in MENU/DATA VIEW mode, scroll through the screen to the NEXT page.

▼ Button

- When in MENU mode, scroll DOWN through the menu and submenu line by line.
- When in DATA VIEW mode, scroll through the screen data to the NEXT page.

◀ Button

When in MENU/DATA VIEW mode, scroll through the screen to the PREVIOUS page.

8. OK Button

Confirms a selection (or action) from a MENU list.

9. HOME Button

Navigate to the Job Menu screen.

10. Adjustable Stand

Flip it out to any angle and work comfortable at your desk, or hang it on steering wheel.

11. Camera Flash

12. Rear Camera

2.2 Technical Specifications

- Screen: 7” touch screen
- RAM: 4GB
- ROM: 64GB
- OBDII input voltage range: 9~18V
- Charging via:
  - DC 5V charging cable & power adaptor or
  - Diagnostic cable through connection to vehicle’s DLC
- Dimension: 251.4mm x 150.6mm x 40.4mm
- Net weight: <950g
- Working temperature: 0 to 40°C (32 to 104 °F)
- Storage temperature: -20 to 70°C (-4 to 158 °F)

2.3 Accessories Checklist

The following accessory items are for reference purpose only. For detailed accessory items, please consult from the seller.

1. Diagnostic tool x 1
2. OBD II diagnostic cable x 1
3. DC 5V charging cable x 1
4. Power adaptor x 1
5. Multilingual quick start guide x 1
6. User manual x 1

3 Initial Use

3.1 Charging & Turning On/Off

3.1.1 Charging

There are two charging methods available:

Via Charging Cable & Power Adaptor: Plug one end of the included charging cable into the DC-IN port of the tool, and the other end to the external DC power.

Via Diagnostic Cable: Insert one end of the diagnostic cable into the DB-15 connector of the tool, and the other end to the vehicle's DLC.

Once the charging LED illuminates solid green, it indicates that the battery is fully charged.

Note: Attempting to charge the tool via OBD diagnostic port will consume vehicle's battery power. You are not recommended to charge the tool in this way except for OBD diagnosis operations.

3.1.2 Turning On/Off

Press for about 3 seconds to turn it on.

Press for about 8 seconds to turn it off.

3.2 Getting Started

If it is the first time you have used this tool, you need to make some system settings.

1. Power on the tool. The screen displays a welcome page. Tap **Welcome to use** to go to next step.
2. Choose the desired system language, and tap **Next step**.
3. Choose the desired time zone, and tap **Next step** to enter the WLAN setup screen.
4. Slide the switch to ON, the system starts searching for all available wireless LANs. Choose the desired WLAN access point / network,



- If the network you chose is open, you can connect directly.
- If the selected network is encrypted, you have to enter the right security key (network password).

Note: If you choose **Ignore** in WLAN setup, it will go into the date setting page. If the tool has been properly connected to the Internet, the system will automatically obtain the correct network date and time and navigate to step 5.

5. After the network connection is done, tap **Next Step** to configure workshop information. Input the required information, and tap **Next Step** to go to next step.

Note: After you configured it, the system will append it on the report every time a report is successfully generated.

6. Carefully read all terms and conditions of the user agreement, check the box before the **Agree to all the above terms**, and tap **OK** to finish the sign-up process and navigate to Job Menu.

3.3 Job Menu

The main menu screen includes the following function modules:

Local Diagnose	Configure it as a professional diagnostic tool.
Service Function	Offer coding, reset, relearn and more service functions, to help vehicles get back to functional status after repair or replacement.

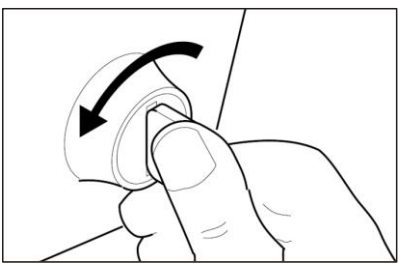
Other Modules	Include TPMS, Camera, Remote Assistance and BST battery tester.
Upgrade	Update vehicle diagnostic software and APK. Note: This function requires a stable network connection.
Mall	To subscribe extra vehicle diagnostic software or reset software that is not included within the tool.
Know Your Customer	Assist repair shops in business analysis, customer management, diagnosis statistics and service ranking.
Mine	Check saved reports, order information and make some system settings.
Toolbox	Some pratical add-on modules are available, including battery voltage, diagnostic software clear, firmware fix, DTC library, diagnostic record, DLC lookup and feedback etc.
More	Include Online support and LAUNCH Academy.

4 Diagnose

This function is specially designed to diagnose electronic control systems of single vehicle model.

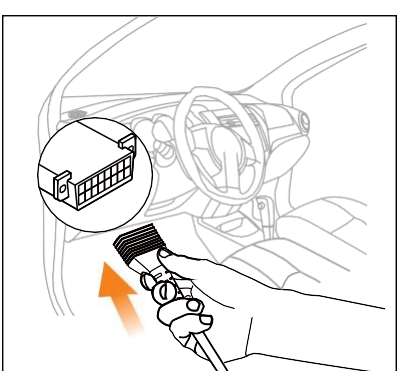
4.1 Connection

1). Turn the ignition off.



2). Locate the vehicle's 16-pin Data Link Connector (DLC). Refer to Chapter 1.5.

3). Plug one end of the diagnostic cable into the vehicle's DLC(Data Link Connector) port, and the other end to the DB-15 diagnostic connector of the tool, and then tighten the captive screws.



Notes:

- A plastic DLC cover may be found for some vehicles and you need to remove it before plugging the diagnostic cable.
- The cable connector is keyed and will only fit one way. If you have problems connecting the cable connector to the DLC, rotate the connector 180° and try again.

4). Turn the ignition on. Engine can be off or running.

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

5). Press the [POWER] button to turn it on and enter the Job Menu.

4.2 Perform System Diagnostics

This function is specially designed to diagnose electronic control systems of single vehicle model.

4.2.1 Smart Diagnosis (Auto-Detect)

This function allows you to quickly access the electronic control systems of the vehicle via decoding the VIN, without manual step-by-step menu selection.

Power on the tool. Tap **Mine** -> **Settings** -> **Automatic detection on connect** is on.

Alternatively, the user can also tap **Local Diagnose** -> **AutoDetect** to start the smart diagnosis manually if the "Automatic detection on connect" is Off.

After connection, turn the ignition key on and the system enters auto-detect mode.

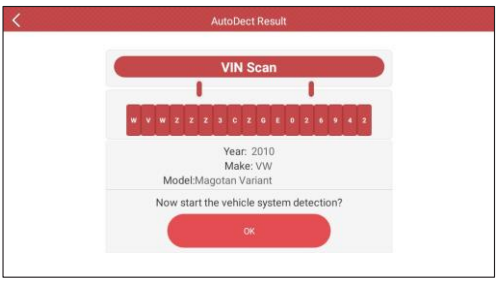
Note:

1). A highly stable and solid network connection is recommended for successful VIN access.

2). If the automatic detection can not identify the vehicle, please try to connect to the network. Not all cars support the Auto-Detect function due to auto manufacturers' settings.

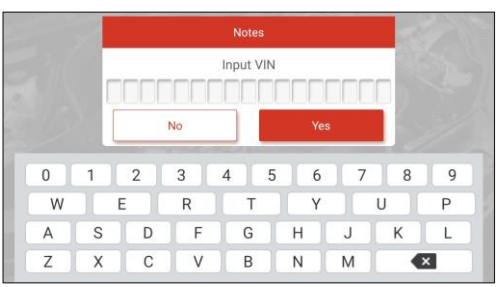
Caution: Don't connect or disconnect any test equipment with ignition on or engine running.

A. Once the system successfully obtains the VIN (Vehicle Identification Number) information of the currently identified vehicle, the following screen will appear.



Tap **OK** to start diagnosing all available systems. After the diagnosis is completed, a diagnostic report will be automatically generated.

B. If the tool failed to access the VIN information, the following screen will appear:



Notes:

- The most recognizable location for this number is in the top left corner on the vehicle's dashboard. Other locations include the driver's door or post, and the firewall under the hood.
- In general, vehicle identification numbers are standardized - all contain 17 characters. VIN characters may be capital letters A through Z and numbers 1 through 0; however, the letters I, O and Q are never used in order to avoid mistakes of misreading. No signs or spaces are allowed in the VIN.

Input the VIN, and tap **Yes**, the system will identify the vehicle model.

After the vehicle VIN is successfully decoded, a diagnostic report will be automatically generated.

If the system can not decode the VIN of the test vehicle, it will enter manual diagnosis mode. For details on manual diagnosis, see Chapter 4.2.2.

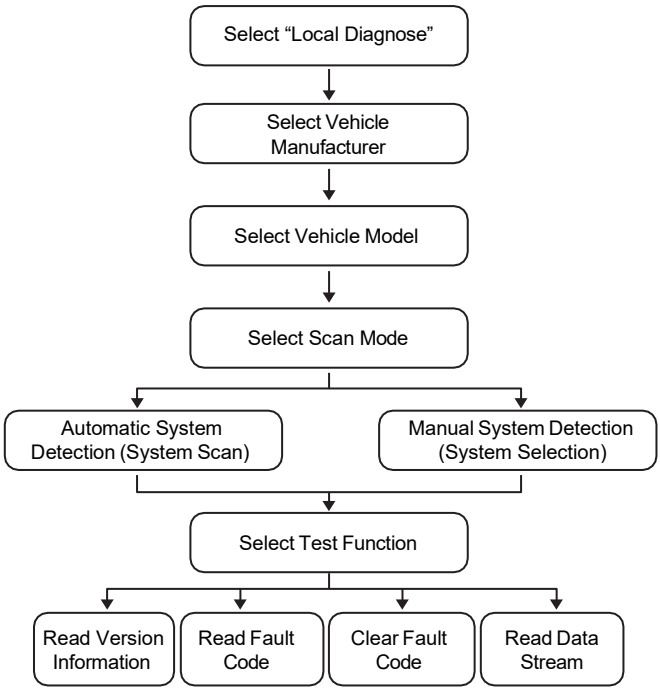
4.2.2 Manual Diagnosis

If the tool can not obtain the VIN information, you can also perform vehicle diagnosis manually. In this mode, you need to execute the menu-driven command and then follow the on-screen instruction to proceed.

Notes:

- Before diagnosing, please make sure the diagnostic program corresponding to certain vehicle model has been installed on your tool.
- For vehicles manufactured by different vendors, it is possible that it has different diagnostic menus. For details, please follow the instructions on the screen to proceed.

Refer to the flowchart illustrated as below to diagnose a vehicle manually:

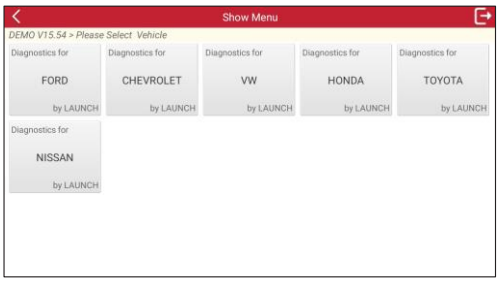


Take Demo V15.54 as an example to demonstrate how to diagnose a vehicle.

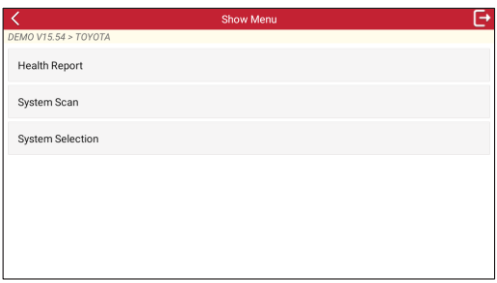
1). Select diagnostic software version: Tap **OK** to enter the test item selection screen.



2). Select test vehicle (varies with different versions): Tap the target vehicle model (Take “TOYOTA” for example) to continue.



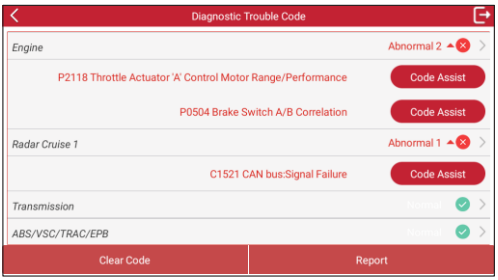
3). Select test item: Select the desired test item to proceed.



4.2.2.1 Health Report (Quick Test)

This function varies from vehicle to vehicle. It enables you to quickly access all the electronic control units of the vehicle and generate a detailed report about vehicle health.

Tap **Health Report** on the test item selection screen, the system starts scanning the ECUs. Once the scanning is complete, the following screen will appear:



In above figure, the tested system with fault code appears in red and the system with OK displays in black (normally).

On-screen Buttons:

>: Tap to select other test functions. For detailed operations, refer to Chapter 4.2.2.3 **System Selection**.

Report: Tap to save the diagnostic result as a diagnostic report. All diagnostic reports can be accessed from **Mine -> My Report**.

Clear Code: Tap to clear the existing diagnostic trouble codes.

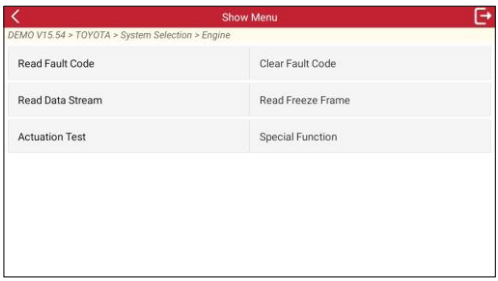
4.2.2.2 System Scan

This option allows you to quickly scan which systems are installed on the vehicle.

4.2.2.3 System Selection

This option allows you manually select the test system and function step by step.

Tap **System Selection** on the test item selection screen, and tap the desired system (take **Engine System** for example) to enter the test function screen.



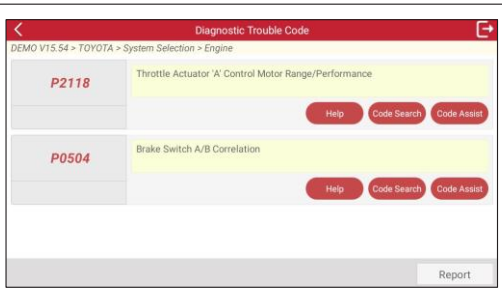
Note: Different vehicle has different diagnostic menus.

A. Read Fault Code

This function displays the detailed information of DTC records retrieved from the vehicle's control system.

Tap **Read Fault Code** on the test function selection screen, the screen will display the diagnostic result.

Note: Retrieving and using DTCs for troubleshooting vehicle operation is only one part of an overall diagnostic strategy. Never replace a part based only on the DTC definition. Each DTC has a set of testing procedures, instructions and flow charts that must be followed to confirm the location of the problem. This information can be found in the vehicle's service manual.



On-screen Buttons:

Help: Tap to view the help information.

Code Search: Tap it to search for more information about the current DTC online.

Code Assist: Tap it to check more details on the current DTC from the professional Code Assist database.

Report: To save the current data in text format. All diagnostic reports can be accessed from **Mine -> My Report**.

B. Clear Fault Code

After reading the retrieved codes from the vehicle and certain repairs have been carried out, you can use this function to erase the codes from the vehicle. Before performing this function, please be sure the vehicle's ignition key is in the ON position with the engine off.

Notes:

1. If you plan to take the vehicle to a Service Center for repair, DO NOT erase the codes from the vehicle's computer. If data is erased, valuable information that might help the technician troubleshoot the problem will also be erased.
2. Clearing DTCs does not fix the problem(s) that caused the code(s) to be set. If proper repairs to correct the problem that caused the code(s) to be set are not made, the code(s) will appear again and the check engine light will illuminate as soon as the problem that cause the DTC to set manifests itself.

C. Read Data Stream

This option retrieves and displays live data and parameters from the vehicle's ECU.

Tap **Read Data Stream** on the test function selection screen, the system will display data stream items.



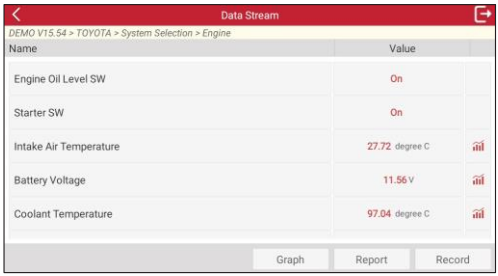
On-screen Buttons:

Select All: Tap it to select all items of the current page. To select certain data stream item, just check the box before the item name.

Unselect: Tap it to deselect all data stream items.

OK: Tap it to confirm and jump to the next step.

After selecting the desired items, tap **OK** to enter the data stream reading screen.



Notes:

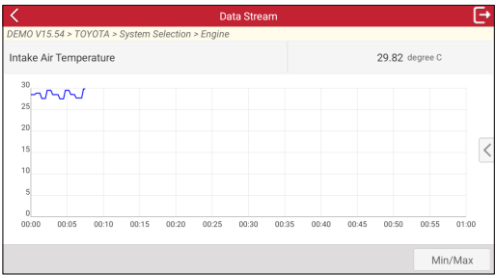
1. If the value of the data stream item is out of the range of the standard (reference) value, the whole line will display in red. If it complies with the reference value, it displays in blue (normal mode).
2. The indicator 1/X shown on the bottom of the screen stands for the current page/ total page number. Swipe the screen from the right/left to advance/return to the next/previous page.

There are 3 types of display modes available for data viewing, allowing you to view various types of parameters in the most suitable way.

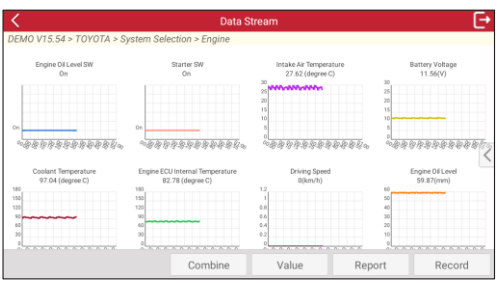
- Value (default) – Displays parameters with numbers and lists.
- Graph – Displays parameters with wave patterns.
- Combine – The graphs can be merged for easier comparisons.

On-screen Buttons:

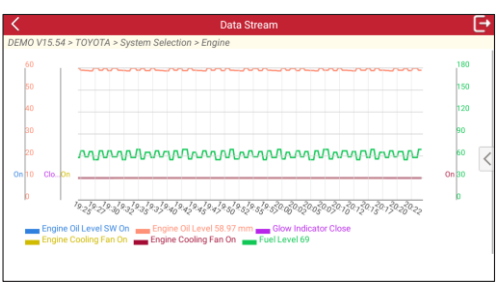
(single graph): Tap it to view the waveform graph of the current data stream item.



Graph: Tap it to view the waveform of the selected data streams. Tap < on the edge of the screen to customize the target data streams for displaying.



Combine: Tap it to merge values in waveforms for easier comparisons. Maximus 8 values can be selected at the same time.



Report: Tap to save the current data as a diagnostic report. All diagnostic reports can be accessed from **Mine -> My Report**. The tool logs the Date of Report (the date and time at which the report was created) and assigns a unique Report #.

Record: Tap to record and save the Live Data as valuable information to help troubleshoot and diagnose. All diagnostic records can be accessed from **Toolbox -> Diagnostic Record**.

D. Actuation Test

This option is used to access vehicle-specific subsystem and component tests. Available test vary by vehicle manufacturer, year, and model.

During the actuation test, the tablet outputs commands to the ECU in order to drive the actuators, and then determines the integrity of the system or parts by reading the ECU data, or by monitoring the operation of the actuators, such as switching a injector between two operating states.

Simply follow the on-screen instructions and make appropriate selections to complete the test.

E. Special Functions

This option offers coding, reset, relearn and more service functions, to help vehicles get back to functional status after repair or replacement. Available tests vary by vehicle manufacturer, year, and model.

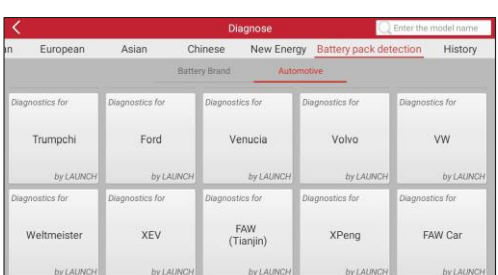
Some special functions can also be accessed by tapping the **Service Function** on the Job Menu.

4.3 Battery Pack Detection

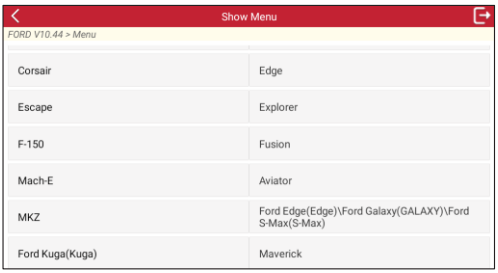
This function can detect the battery pack of new energy vehicles. Two methods are provided for selecting the battery pack: via battery brand and via vehicle model.

Take FORD as an example to demonstrate how to detect battery pack.

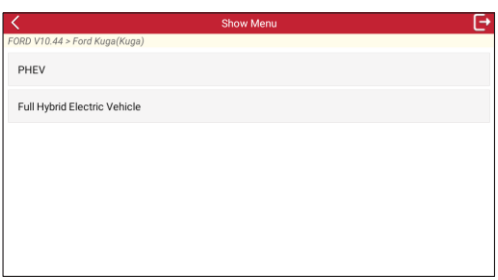
1. Tap Battey Pack Detection.



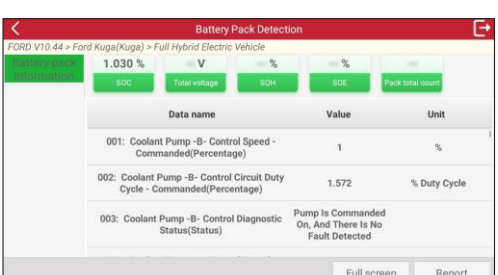
2. Tap FORD.



3. Choose the desired model to enter the following screen.



4. Connect the tool to the vehicle's DLC port. Choose the desired EV type to start the detection until the system outputs the test result.



Explanation of abbreviation terms:

SOC: State of Charge. It reflects the remaining battery power, referring to the ratio of the current remaining charge to the rated charge of the battery.

SOH: State of Health. It reflects the current battery's ability to store electrical energy relative to a new battery, referring to the ratio of the current battery's full charge energy to the new battery's full charge energy.

SOE: State of Energy. It reflects the remaining energy of a battery, referring to the ratio of the current remaing energy (releasable energy) to the rated energy of the battery.

4.4 Perform OBD II Diagnosis

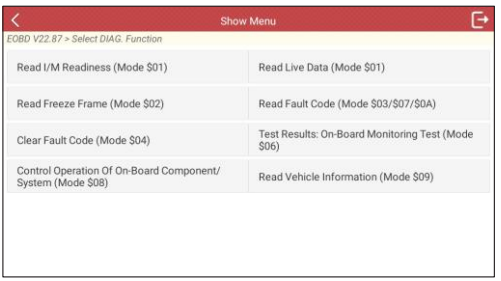
This option presents a quick way to check for DTCs, isolate the cause of the illuminated Malfunction Indicator Lamp (MIL), check monitor status prior to emissions certification testing, verify repairs, and perform a number of other services that are emission-related.

After the tool is properly connected to the vehicle's DLC, tap **OBD II** in the Diagnose main menu. The tool will start an automatic check of the vehicle's computer to determine which type of communication protocol it is using, then display the Monitor Status as follows.



Note: A PROTOCOL is a set of rules and procedures for regulating data transmission between computers, and between testing equipment and computers. Now five different types of protocols (ISO 9141, Keyword 2000, J1850 PWM, J1850 VPW and CAN) are in use by vehicle manufacturers.

Tap **OK** to enter the diagnostic test modes selection screen.



Note: Diagnostic Test Modes as described in the latest OBD II standard SAE J1979. Not all Modes are supported by all vehicles.

$01 - Request Current Powertrain Diagnostic Data

$02 - Request Powertrain Freeze Frame Data

$03 - Request Emission-Related Stored DTCs

$04 - Clear/Reset Emission-Related Diagnostic Information

$05 - Request Oxygen Sensor Monitoring Test Results (2007 and older vehicles only)

$06 - Request On-Board Monitoring Test Results for Specific Monitored Systems

$07 - Request Emission-Related Stored DTCs Detected During Current or Last Completed Driving Cycle

$08 - Request Control of On-Board System, Test or Component

$09 - Request Vehicle Information

$0A - Request Emission-Related Permanent DTCs

It mainly includes the following functions:

1. Read I/M Readiness

This function checks whether or not the various emissions-related systems on the vehicle are operating properly, and are ready for Inspection and Maintenance testing.

It can also be used to check the Monitor Run Status, and to confirm if the repair of a car fault has been performed correctly.

2. Read Live Data

This function retrieves and displays live data and parameters from the vehicle's ECU.

3. Read Freeze Frame

This function takes the snapshot of the operating conditions when an emission-related fault occurs.

4. Read Fault Code

This function can identify which section of the emission control system has malfunctioned.

5. Clear Fault Code

This function erases the codes from the vehicle, after retrieving codes from the vehicle and certain repairs have been carried out.

Make sure the vehicle's ignition key is in the ON position with the engine off before the operation.

6. Test Results: On-Board Monitoring Test

This function retrieves test results for emission-related powertrain components and systems that are not continuously monitored. The test's availability is determined by the vehicle manufacturer.

7. Control Operation of On-Board Component/System

This function is used to access vehicle-specific subsystem and component tests. Available test varies by vehicle manufacturer, year, and model.

8. Read Vehicle Information

This function retrieves a list of information (provided by the vehicle manufacturer) from the vehicle's on-board computer.

This information may include:

- VIN (Vehicle identification Number).
- CID (Calibration ID).
- CVN (Calibration Verification Number).

4.5 I/M

This function provides a quick access to the I/M Readiness diagnostics.

4.6 History

Generally once a vehicle diagnosis is performed, the tool will record every detail of diagnostic session.

The History function provides direct access to the previously tested vehicles.

Users can resume from the last operation without starting from scratch.

Tap **History** on the Diagnose main menu screen, all diagnostic records will be listed on the screen in date sequence.

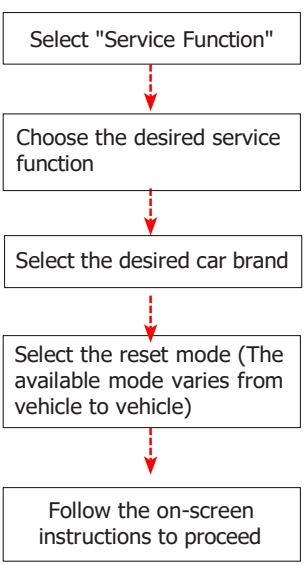
5 Service Function

It offers coding, reset, relearn and more service functions, to help vehicles get back to functional status after repair or replacement. Available tests vary by vehicle manufacturer, year, and model.

Due to continuing improvements, available service functions are subject to change without prior written notice. To enjoy more service functions, you are suggested to check for updates on a regular basis.

There are two methods to perform resetting operations: Manual Reset or Auto Reset. Auto Reset follows the principle of sending command from the tool to vehicle's ECU to do resetting. While using Manual Reset, users just follow the on-screen instructions to select appropriate execution options, enter correct data or values, and perform necessary actions, the system will guide you through the complete performance for various service operations.

Follow the flowchart shown as below to perform resetting.



6 Toolbox

6.1 Battery Voltage

This option can measure the current voltage of the vehicle's battery.

6.2 Diagnostic Software Clear

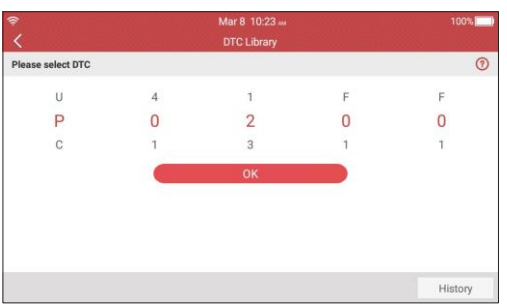
This item allows you to delete the diagnostic software that is not frequently used.

6.3 Firmware Fix

Use this module to upgrade and fix diagnostic firmware. During fixing, please do not cut power or switch to other interfaces.

6.4 DTC Library

This option allows you to retrieve the detailed descriptions of certain DTC from the DTC database.



Swipe the screen upwards/downwards to alter the value, then press [OK] button, the screen will display definition of the DTC.

6.5 Diagnostic Record

This module stores the running parameters or waveform graphs the user records.

Tap **Diagnostic Record** to enter and select the desired data stream items and tap **OK** to jump to the playback page.

On-screen Buttons:

Graph – Displays the parameters in waveform graphs.

Combine – Merge graphs for data comparison. Items are marked in different colors.

Value (default) – Displays the parameters as texts in a list format.

Auto Playback – Automatic playback of the selected data stream items. When in Auto Playback mode, this bar will change to “Auto Playback”.

6.6 DLC(Data Link Connector) Location

This option helps you to find the location of the vehicle’s DLC.

6.7 Feedback

This module allows you to send the feedback of your diagnostic problems to us for further analysis and troubleshooting.

6.8 FAQ

This module lists some frequently asked questions and answers related to this tool.

6.9 Image

This module allows you to manage or share the screenshots.

6.10 Product Manual

A detailed operation manual is integrated in the tool for quick reference.

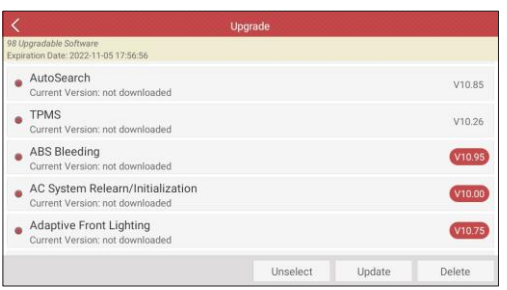
7 Upgrade

If some new software or APK can be updated, a numeric indicator will display on the **Upgrade** module on the Job menu. In this case, you may use this option to keep it synchronized with the latest version.

Notes:

- To enjoy more functions and better service, you are strongly suggested to update it on regular basis.
- This function requires a stable network connection.

Tap **Upgrade** on the Job menu to enter the update center.



By default, all diagnostic software is selected.

To deselect certain software, tap **Unselect**, and then check the box next to vehicle model.

Tap **Update** to start downloading. It may take several minutes to finish it, please be patient to wait. To pause downloading, tap **Stop**. To resume it, tap **Continue**. If network connection failure occurs, tap **Retry** to try again.

Once download is finished, the software packages will be installed automatically.

The free subscription of the default software can be viewed on the device by checking the expiration date, and needs to be renewed after expiration. When the renewal prompt pops up, you can tap “Renew” and renew the configured software pack in the Mall. Without the Subscription, the new diagnostic software and new software version, excepting from the downloaded software, are restricted to download.

8 Mall

This function allows you to subscribe other vehicle diagnostic software and reset software that are not pre-installed on the tool.

All diagnostic software in the mall covers full systems and full functions (excluding online programming and coding etc). Different vehicle software is tagged with different price.

Tap **Mall** to open the online software store. Select the target software and follow the on-screen instructions to finish the transaction.

Note: The software service belongs to the virtual goods. It becomes immediately effective from the date of the successful transaction and it does not accept the refund. When making payment, please double check the order information.

The subscribed software can be free to use for one year. After it expires, it will become disabled and user needs to renew the subscription to activate it.

9 Mine

9.1 My Report

This option allows you to check and manage your saved reports.

All the diagnostic reports are sorted by Date and Make. If there are too many reports stored, tap (Search) to filter and quickly locate it.

9.2 My Order

This option allows you to check order information.

9.3 Settings

This module allows you to make some system settings to your preference.

9.3.1 Units of measurement

It is designed to set the measurement unit. Metric System and English System are available.

9.3.2 Screen Capture

This option can set the Screen Capture icon to be shown or not on the screen. When set as ON, a screenshot icon will float on upper right corner of the screen. Tap it to capture the screen.

9.3.3 Automatic detection on connect

This option enables you to determine whether to start an automatic VIN detection once the tool is properly connected to the vehicle's DLC.

9.3.4 Display/Brightness

This item allows you to set the standby time and screen brightness.

Note: Reducing the brightness of the screen is helpful to conserve the power of the tool.

9.3.5 Sound

This option lets you adjust the volume and other sound settings.

9.3.6 Network

Note: Once WLAN is set as ON, the tool will consume more power. While it keeps unused, please set it off to save power. While WLAN keeps unused, please turn it off to conserve battery power.

The tool has built-in WLAN module that can be used to get online. Once you're online, you can register your tool and update diagnostic software & APK.

Slide the switch to ON, the system starts searching for all available wireless LANs. Choose the desired WLAN access point / network to connect.

9.3.7 Time Zone

This option allows you to set the time zone.

9.3.8 Language

The tool supports multiple languages. You can use this option to change the system language to the target language.

9.3.9 Workshop information

This option allows you to configure the workshop information.

Note: After you configured it, the system will append it on the report every time a report is successfully generated.

9.3.10 Exipration Date

This option allows you to check the expiration date of the diagnostic software and renew the software subscription.

9.3.11 Recovery

Use this item to reset this tool to the default factory setting.

Warning: Resetting may cause data loss. Before doing so, please be careful to perform this operation.

9.3.12 Clean Up

This option allows user to clear some cache files and free up some storage space. After clearn up, the tool will reboot automatically.

9.4 About

This option displays the hardware configuration information of the tool and license agreement.

10 Other Modules

10.1 TPMS (Tire Pressure Monitoring System)

This module allows you to configure the tablet as a professional TPMS activation & diagnostic tool, which provides the ability to trigger TPMS sensor, program TPMS sensor, perform the relearning procedure. It needs to work with the compatible TPMS activation & programming tool (sold separately).

For more details, please refer to the User Manual included with the module.

10.2 Camera

This application allows you to take pictures with the device camera.

10.3 Remote Assistance

This function enables you to receive remote support from technician fellows, colleagues or friends by allowing them to control your tool on their computer via TeamViewer software.

Note: In order to provide support and take control of your tablet remotely, you partner needs to install and run the TeamViewer full version program in his computer, and have your TeamViewer ID. Visit http://www.teamviewer.com for details.

10.4 BST (Battery Tester)

This module allows you to fix battery detection faster and easier. It needs to work with the specific Bluetooth battery tester (sold separately).

For more details, please refer to the User Manual included with the module.

Warranty

THIS WARRANTY IS EXPRESSLY LIMITED TO PERSONS WHO PURCHASE LAUNCH PRODUCTS FOR PURPOSES OF RESALE OR USE IN THE ORDINARY COURSE OF THE BUYER'S BUSINESS.

LAUNCH electronic product is warranted against defects in materials and workmanship for one year (12 months) from date of delivery to the user.

This warranty does not cover any part that has been abused, altered, used for a purpose other than for which it was intended, or used in a manner inconsistent with instructions regarding use. The exclusive remedy for any automotive meter found to be defective is repair or replacement, and LAUNCH shall not be liable for any consequential or incidental damages.

Final determination of defects shall be made by LAUNCH in accordance with procedures established by LAUNCH. No agent, employee, or representative of LAUNCH has any authority to bind LAUNCH to any affirmation, representation, or warranty concerning LAUNCH automotive meters, except as stated herein.

Order Information

Replaceable and optional parts can be ordered directly from your LAUNCH authorized tool supplier. Your order should include the following information:

1. Quantity
2. Part number
3. Item description

Customer Service

If you have any questions during the operation of the unit, please contact the Seller, or contact LAUNCH TECH Service Center.

Website: https://en.cnlaunch.com

Phone: +86 755 8455 7891

Email: overseas.service@cnlaunch.com

Statement: LAUNCH reserves the rights to make any change to this manual without notice. We have tried our best to make the descriptions and illustrations in the manual as accurate as possible, and defects are inevitable, if you have any question, please contact local dealer or LAUNCH TECH CO., LTD., LAUNCH does not bear any responsibility arising from misunderstandings.