Version: V1.00.000

Revised date: 08-31-2023

WARNING SYMBOLS AND DEFINITIONS	
⚠	This safety alert symbol is used to alert you to potential injury hazards. Obey all safety messages that follow this symbol to avoid possible injury.
⚠ DANGER	Indicates an imminently hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.
▲	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.
⚠ CAUTION	Indicates a hazardous situation which, if not avoided, could result in minor or moderate injury to the operator or to bystanders.
NOTE	Addresses practices not related to personal injury.

IMPORTANT SAFETY INFORMATION

⚠ **DANGER**

When an engine is operating, keep the service area well-ventilated or attach a building exhaust removal system to the engine exhaust system. Engines produce various poisonous compounds (hydrocarbon, carbon monoxide, nitrogen oxides, etc.) that cause slower reaction time and result in death or serious personal injury.

⚠ **WARNING**

Read all safety warnings and instructions.

> *Note: Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

1. Always perform automotive testing in a safe environment.
2. Do not connect or disconnect any test equipment while the ignition is on or the engine is running.
3. DO NOT attempt to operate the tool while driving the vehicle. Have second personal operate the tool. Any distraction may cause an accident.
4. Before starting the engine, put the gear lever in the Neutral position (for manual transmission) or in the Park (for automatic transmission) position to avoid injury.
5. NEVER smoke or allow a spark or flame in vicinity of battery or engine. Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, gases, or heavy dust.
6. Keep a fire extinguisher suitable for gasoline/chemical/electrical fires nearby.
7. Wear an ANSI-approved eye shield when testing or repairing vehicles.
8. Put blocks in front of the drive wheels and never leave the vehicle unattended while testing.
9. Use extreme caution when working around the ignition coil, distributor cap, ignition wires and spark plugs. These components create hazardous voltage when the engine is running.
10. To avoid damaging the tool or generating false data, please make sure the vehicle battery is fully charged and the connection to the vehicle DLC (Data Link Connector) is clear and secure.

11. Automotive batteries contain sulfuric acid that is harmful to skin. In operation, direct contact with the automotive batteries should be avoided. Keep the ignition sources away from the battery at all times.

12. Keep the tool dry, clean, free from oil, water or grease. Use a mild detergent on a clean cloth to clear the outside of the equipment when necessary.

13. Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.

14. Store the tool and accessories in a locked area out of the reach of children.

15. Do not use the tool while standing in water.

16. Do not expose the tool or power adapter to rain or wet conditions. Water entering the tool or power adapter increases the risk of electric shock.

Content

1 Introduction

1.1 Product Profile

MAXIMUSPROHD (MDMAXPROHD) is an evolutionary smart solution for specialized vehicle (including automotive and motorcycles) diagnosis and maintenance. It inherits from advanced diagnosing technology and is characterized by covering a wide range of vehicles, featuring powerful functions, and providing precise test result.

Through the wireless communication between VCI dongle and MAXIMUSPROHD tablet, it achieves full car model and full system vehicle trouble diagnosis, which include Reading DTCs, Clearing DTCs, Reading Data Stream, Actuation Test and Special Functions.

Moreover, taking advantage of the mobile Internet, it also integrates One-click Update, Tech 2 Tech (Remote Diagnosis) and Repair Data, which helps to diagnose vehicle issues more efficiently, and greatly increase customer's retention and boost shop revenue.

MAXIMUSPROHD adopts a high performance-price ratio display tablet, which comes loaded with the powerful 4-core 2.0GHz processor, 4G RAM, and a 10.1" IPS capacitive touch screen with a resolution of 1280 x 800 dots.

1.2 Features

- Smart Diagnosis (MAXVIN): This module allows you to use the VIN information of the currently identified vehicle to access its data (including vehicle information, historical diagnostic records) from the cloud server to perform quick test.

- Local Diagnosis: To perform diagnosis by executing on-screen commands step by step. Diagnosis functions include: Read DTCs, Clear DTCs, Read Data Stream, Special Functions etc.

- Tech 2 Tech (Remote Diagnosis): This option aims to help repair shops or technicians launch instant messaging and remote diagnosis, making the repair job getting fixed faster.

- Maintenance & Reset: All kinds of common maintenance and reset items, such as Oil lamp reset, DPF regeneration, ABS bleeding etc can be done.

- I/M Readiness: I/M refers to Inspection and Maintenance that is legislated by the Government to meet federal clean-air standards. I/M Readiness indicates whether or not the various emissions-related systems on the vehicle are operating properly and are ready for Inspection and Maintenance testing. Moreover, this module also has a direct access to generic OBD, saving time to enter into the system.

- One-click Update: Lets you update your diagnostic software online.

- Diagnostic History (Previous Session): Provides a quick access to the tested vehicles and users can choose to view the test report or resume from previous diagnostic session, without the necessity of starting from scratch.

- Pre- and Post- Repair Result Comparison: By comparing the pre-repair and post-repair report, you can clearly determine which vehicle issues have been fixed and which remained unsolved.

- Diagnostic Feedback: Enables you to submit the vehicle issue to us for analysis and troubleshooting.

- Vehicle Coverage: Quick dial to view the vehicle models that MAXIMUSPROHD covers.

- Backup/Restore: This feature lets you back up the recorded files to external storage device/restore the recorded data from the external storage device.

1.3 Technical Specifications

1.3.1 MAXIMUSPROHD Tablet

Item	Description
Operating system	Android 10.0
CPU	4-core processor, 2.0GHz
Display	10.1 inch capacitive touch screen with 1280 x 800 resolution
Memory	4GB
Hard disk	128GB
Connectivity	• WLAN (802.11 b/g/n/ac) • Universal serial BUS Ports (1 x Type-C + 1 x Type-A) • BT2.1, BT3.0, BT4.0, BT4.1, BT5.0, BT5.1
Cameras	2MP front-facing camera + 8MP rear-facing camera
Sensor	Gravity Accelerometer 3-Axis Acceleration Sensor
Operating Temperature	0℃ ~ 45℃(32 ~113℉)
Storage Temperature	-20℃ ~ 70℃(-4 ~158℉)

1.3.2 VCI Dongle

Item	Description
Working voltage	DC 9~36V
Power consumption	≤ 6W
Communication via	Wireless and wired
Size	200mm x 110mm x 47mm
Working temperature	-10℃ ~ 50℃(14 ~122℉)

2 Components & Controls

There are two main components to the MAXIMUSPROHD system:

- MAXIMUSPROHD Tablet -- the central processor and monitor for the system (For details, please refer to Chapter 2.1.)

- VCI Device -- the device for accessing vehicle data (For details, please refer to Chapter 2.2.)

2.1 MAXIMUSPROHD Tablet

No.	Name & Descriptions
1	Memory Card Slot -- To store the memory card for storage expansion.
2	Type C Charging Port-- Reserved for charging the tablet.
3	Power/Screen Lock Button -- To turn the tablet on/off with long press, or lock the screen with short press.
4	Volume Buttons – To adjust the volume.
5	Data Transmission Port -- Reserved for add-on modules (such as Videoscope etc), and other devices with similar port.
6	Microphone
7	Charging indicator -- It illuminates red while the tablet is charging. Once it is fully charged, it will illuminate solid green.
8	10.1" Capacitive Touch Screen
9	Ambient Light Sensor
10	Front Camera
11	Rear Camera
12	Camera Flash
13	Audio Speaker
14	Adjustable Kickstand - Flip out it to any angle and work comfortable at your desk, or hang it on the steering wheel.

2.2 VCI Dongle

The MAXDIAG VCI dongle works as a heavy duty / medium duty / light duty vehicle communication interface device, which is used to connect to the vehicle's DLC (Data Link Connector) port via the diagnostic cable to read the test data and then send it to the tablet.

No.	Name & Descriptions
1	DB-15 Diagnostic Connector-- To connect the diagnostic cable.
2	Touch Screen
3	DC-IN Port *Warning: The VCI dongle obtains power through the vehicle's DLC (Data Link Connector) via the diagnostic cable. Do NOT connect the DC-IN port to an external DC power supply if the VCI dongle can be powered up normally. If the pin of the DLC is damaged or the DLC has insufficient power, connect the DC-IN port to an external DC power supply. No responsibility can be assumed for any damage or loss caused as a result of not strictly following the above method.
4	Data I/O Port-- To connect it to the tablet to perform diagnosis via the data cable.
5	LAN/WAN Port-- Reserved for other purposes.

No.	Name	Qt.	Picture
1	MAXIMUSPROHD Tablet	1	(A tablet for showing test results.)
2	VCI Dongle	1	(A device for accessing vehicle data.)
3	Power Adapter	1	(To supply power to the tablet through connection to AC outlet.)

2.4 Accessory Checklist

Common accessories are same, but for different destinations, the accessories may vary. The following accessory items are only for reference. Please consult from the Matco Distributor or check the package list supplied with this tool together.

4	Diagnostic Cable	1	 (Connect the VCI dongle to the vehicle's OBD II DLC port. It can be separated into two parts: DB15F to HD15F data cable and HD15M to OBD II adapter.)
5	Password Envelope	1	 (A piece of paper bearing Product S/N and Activation Code, which is required for your registration.)
6	Data Cable	1	 (Connect the VCI and diagnostic tool to perform vehicle diagnosis.)

7	Cigarette Lighter Cable	1	 (Supply power to the VCI through connection to cigarette lighter receptacle.)
8	Battery Clamps Cable	1	 (Supply power to the VCI through connection to vehicle battery.)
9	Adapter Cables	1	 (Connect the diagnostic cable and vehicle's non-OBD II diagnostic socket.)

3 Preparations

3.1 Charging MAXIMUSPROHD

*Notes:
- Only use the included power adapter to recharge the tablet. Use of any other adapter will damage the tool. We assume no responsibility for damage or loss resulting from using other similar adapters other than the specified one.
- Always charge on a non-flammable surface in a well-ventilated area.

1. To check the battery power level, press and hold the Power button about 3 seconds to turn on the tablet.

2. Power level is indicated as a percentage in the upper right corner of the screen. If the power level drops below 10% while the tablet is on, a "Connect Charger" notification will appear on the screen.

**Charging with the Included 5V Power Adapter**

1. Connect one end of the power adapter to Type C charging port of the tablet, and the other end to the AC outlet.

2. The charging LED illuminates solid red and the charging symbol 🔋 will apeear on the screen.

3. Once it illuminates solid green, it indicates that the battery is fully charged and the charging complete symbol 🔋 replaces the charging symbol. Disconnect the power adapter from the AC outlet.

3.2 Power ON/OFF

*Note: If it is the first time you use the tablet or the tablet keeps idle for a long time, it could fail to be turned on. It results from low battery. In this case, please recharge it for a while and try to turn it on.

1. Press and hold the POWER button for about 3 seconds to turn on the tablet. The system starts initializing and then enters the Home screen.

2. To turn the tablet off, press and hold the POWER button until an option menu appears. Tap "Power Off".

3.3 Locator & Navigation Buttons
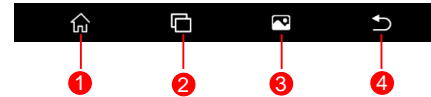
On-screen keys and status bar are as follows:

1	Tap 🏠 to navigate to the Android System's home screen.
2	Tap 🗔 to call out all running function modules which are integrated in the diagnostic App.
3	Tap 🖼 to capture the current screen and all captured screenshots are stored in the Screenshots folder.
4	Tap ↩ to return to the previous screen or exit the application.

3.4 Desktop

Adjusting Screen Brightness

The tablet is equipped with a built-in light intensity sensor. It can adjust the screen brightness according to the ambient light intensity automatically. Alternatively, you can also adjust it manually.

1. On the Home screen, tap Settings->Display->Brightness.
2. Drag the slider to adjust it.

💡Tips: Reducing the brightness of the screen is helpful to save the power of the tablet.

Setting Standby Time

If no activities are made within the defined standby period, the screen will be locked automatically and the system enters sleep mode to save power. To set the standby time interval:

1. On the Home screen, tap Settings-> Display-> Sleep.
2. Choose the desired sleep time.

3.5 Changing Language

MAXIMUSPROHD supports multiple languages. To change the language of the tablet, please do the following:

1. On the home screen, tap on Settings-> Language & Input-> Languages.
2. Tap on "Add a language" and choose the desired language from the list.
3. Tap and hold the desired language, drag it to the top of the screen and release. The system will change to the chosen language.

3.6 Wi-Fi Setup

MAXIMUSPROHD has built-in Wi-Fi that can be used to get online. Once you're online, you can register your tool, update diagnostic software & APK, browse the Internet, get apps and send email on your network.

*Note: Once WLAN is set as ON, the tablet will consume more power. While it keeps unused, please set it off to save power. While WLAN is not in use, please turn it off to conserve battery power.

Connect to a Wi-Fi Network

1. On the Home screen, tap Settings > WLAN.
2. Move the Wi-Fi switch to ON, the tablet starts searching for available wireless LANs.
3. Select the desired Wi-Fi network from the list. If the chosen network is open, you can connect directly. A password may be required for secured networks.

Disconnect from a Wi-Fi Network

1. On the Home screen, tap Settings > WLAN.

2. Tap the network with a "Connected" status, then tap "Forget".

4 Initial Use

4.1 User Registration

Users need to go through an sign-up process before using MAXFLEXPRO.

*Notes:
- Before registering, please make sure that your tablet has a strong and stable Wi-Fi signal.
- While activating device, the Serial number and Verification code can be found in the included password envelope. To obtain Activation code, please contact with your dealer.

Follow the steps below to proceed:

1. Tap the MAXFLEX icon ![icon] on the home screen to enter the following screen.

A. Tap "REGISTER BASIC MODE" to subscribe the diagnostic software with basic diagnostic functions.

B. Tap "TRANSFER FROM MAXME" to sign in the App with your MaxMe account.

C. Tap "REGISTER FULL SOFTWARE" to subscribe the diagnostic software with all systems and full functions.

2. Choose "REGISTER BASIC MODE" or "REGISTER FULL SOFTWARE", fill in your account information and device information and then tap on "ACTIVATE" to enter the following screen.

*Notes:

Serial number is a 12-digit number starting with 98 -- you can find it on the back of your tool.

Verification code is a 8-digit number stored in the Private & Confidential sheet.

Activation code is printed on the receipt, or consult your dealer for it.
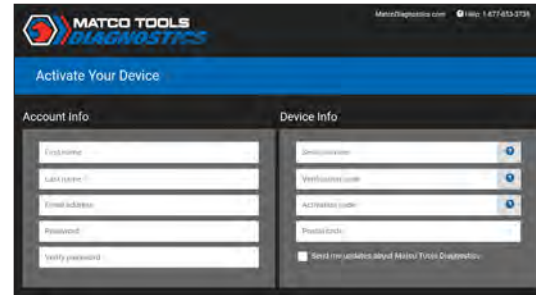
On-screen Buttons:

Recover Current Device Activation: If you have already activated your MAXFLEXPRO, tap it to navigate to the following screen.

Input Serial number, Email address and Password, and then tap "SUBMIT" to sign in and go to sign in.

Click Here to Reset Password: If you forgot the password, tap it to go to the following screen.
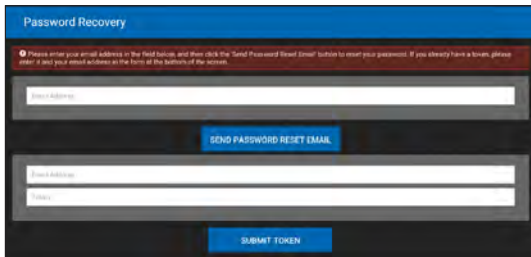
Follow the on-screen instructions to reset a new password.

3. Tap "RUN DIAGNOSTICS" to launch diagnostics.

On-screen Buttons:

Sign Out: Tap it to log out the system.

Update Profile: Tap it to modify personal information.

Update App: If a newer App version is detected, this option will appear on the screen. Tap it to keep synchronized with the latest version. Once updated, this option will disappear (*Note: To perform this function, a stable network signal is required).

4. Tap "   " on the top left-hand corner of the screen to switch to the Toolbox module.

*Note: If a red dot appears on upper right corner of the Update logo, it indicates newer software is available.

5. Tap "Update" to enter the update center.

Make sure all brands are selected, tap "Update" to start updating.

Tap the "OK" button on the pop-up message box when update is complete.

*Note: Download and installation will take approximately 10 minutes depending on the internet connection.

4.2 Basic Operations on Diagnostic App

4.2.1 Switch between different function modules

There are 2 function modules available on the MAXFLEXPRO: Diagnostics and Toolbox.

Swipe in from the left/right edge of the screen to switch between function modules.

Alternatively, you can also tap on the upper left corner of the screen to toggle between Diagnostics and Toolbox.

4.2.2 How to arrange diagnostic vehicle software icons?

All software icons, by default are organized by the system. Many display rules are available to meet your preference.

To re-organize it, press and hold certain software icon, an option menu pops up on the screen. Choose the display rule and the system will arrange the icon as desired.

If you choose "Pin to the top", the icon will be displayed on the top of the screen and marked with an orange solid dot.

4.2.3 How to distinguish if the software is locked or not?

If the software is locked, tap it to display the latest software summary. In this case, you need to purchase the software to unlock its content. Once it is unlocked, the software icon will turn into orange.

4.3 Function Modules

There are 2 function modules available on the MAXIMUSPROHD: Diagnostics and Toolbox.

4.3.1 Diagnostics

It mainly includes the following items:

Automotive	Configures MAXIMUSPROHD to operate as a diagnostic tool exclusively for passenger cars. Max VIN (VIN Scan) and Manual Diagnosis are supported.
Heavy Duty	Configures MAXIMUSPROHD to operate as a diagnostic tool exclusively for motorcycles.
Maintenance Reset	To perform all kinds of common repair & maintenance items, including electronic throttle position reset, ABS bleeding, oil lamp reset and DPF regeneration etc.
Previous Session	When a vehicle diagnosis is performed, MAXIMUSPROHD records the detailed diagnostic information. This function provides a quick access to the previously tested vehicles. Testing can be resumed from the previous operation without starting from scratch.

4.3.2 Toolbox

It mainly includes the following items:

Maximus Fix	This modules allows you to access full instructions, flow charts, wiring diagrams and more to walk through how to fix and finish the job. (*Note: Contact your Matco distributor for information on how to get the Maximus Fix.)
Tech 2 Tech	This option aims to help repair shops or technicians launch instant messaging and remote diagnosis, making the repair job getting fixed faster.
Saved Report	Includes Health report, Recorded Data, Remote Report and Data Samples.
Feedback	This item allows you to feedback your diagnostic problems to us for analysis and troubleshooting.
Update	To update vehicle diagnostic software and APK.

Applications	**Videoscope** (Optional)	To check unseen or unreachable parts or components.
	Oscilloscope (Optional)	To determine vehicle electrical equipment and circuit trouble.
	Sensor (Optional)	To diagnose/simulate vehicle ECU sensor trouble.
	Multimeter (Optional)	To measure physical parameters such as voltage, resistance, frequency etc.
	Battery (Optional)	To test whether vehicle's battery is good or not.
Settings		To make some system settings, including VCI Management, MD Printer Connection, Shop Information, Icon Size, Vehicle Voltage, Hide/Remove Software and Backup/Restore etc.
About		Includes FAQ, Vehicle Coverage, Quick Start Guide and User Manual etc.

4.4 Diagnostics toolbar

The diagnostics toolbar contains a number of buttons that enables various procedures. It is hidden under [icon] at the top of the vehicle diagnostic screens throughout the diagnostic session. Refer to the table below for a brief description of the functions of the diagnostics toolbar buttons.

🖨 **Print**	Tap to print the current screen. To perform printing, you need to purchase an extra Wi-Fi printer separately.
➡ **Exit Session**	Tap to exit the current diagnostic session.

5 Start Diagnostics

5.1 Connections

5.1.1 Preparation

Normal testing conditions

• Turn on the vehicle power supply.
• Vehicle battery voltage range should be 9-36V and working voltage of MAXIMUSPROHD is 5V.
• Throttle is in its closed position.

5.1.2 DLC Location

For Commercial Vehicles, the DLC is generally located in driver's cab.

5.1.3 Vehicle Connection

The method used to connect the VCI device to a vehicle's DLC depends on the vehicle's configuration as follows:

For OBD II vehicles, use the included diagnostic cable (DB15F to HD15F data cable and HD15M to OBD16 adapter) to connect the VCI to the vehicle's DLC port.
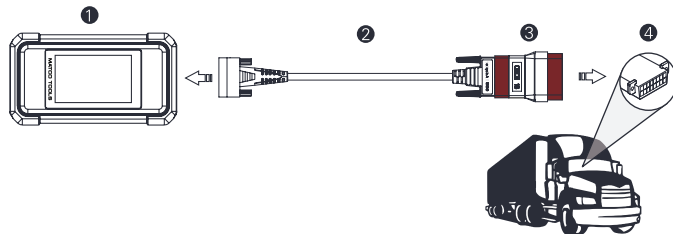
1. VCI
2. DB15F to HD15F data cable
3. HD15M to OBD16 adapter
4. Vehicle's DLC port

For non-OBDII vehicles, refer to the above figure to make connection.

1. Select the appropriate adapter according to the vehicle's DLC port type (4).
2. Loosen the captive screws of the DB15F to HD15F data cable (2) and disconnect the HD15M to OBD16 adapter (3) from the data cable.
3. Connect the data cable (2) with the target adapter on the above figure and tighten the screws. Other steps shall also apply.

If you choose to perform vehicle diagnosis via data cable, connect one end of the data cable into the VCI, and the other end into the data transmission port of the tablet.

5.2 Communication Setting

There are 2 ways available for MAXIMUSPROHD to communicate with the VCI device: BT(wireless) communication and USB cable connection. User can choose either of the following ways to establish communication.

5.2.1 Pairing up via Wireless (BT) communication

Refer to Chapter 5.1.3 Vehicle Connection to connect the MAXIMUSPROHD and VCI device.

1. Enter Bluetooth setting screen ("Settings" -> "BLUETOOTH"), slide the switch to ON and MAXIMUSPROHD will start searching for all available devices.
2. Tap the desired one from the result list to pair and match.

By default, the Bluetooth ID of the VCI dongle starts with 98********00 (where ******** stands for 8 digits).

3. If the pair request pops up on the screen, enter the request pin code (default code: 0000 or 1234).

4. Once pairing is successfully done, the VCI dongle will be shown on the top of the "Paired devices" list and the VCI icon on the lower right corner of the screen will light up.

*Notes:

• If you logged in the account on another diagnostic tool and the VCI dongle has ever been paired up with that tool, you need to cancel pairing first before using a different tool to proceed new diagnostic session. Tap "Setting" -> "Bluetooth" -> the ⚙ icon next to the device name, and then tap "FORGET" on the pop-up dialog box to unpair it.

• In case no Bluetooth setting is done before diagnostic software is launched, you can also configure it while using the App. For details, please refer to "**Chapter 5.3** Start diagnostics".

5.2.2 USB cable connection

1. Connect one end of the USB cable (optional) to the Data I/O port of the VCI device.

2. Connect the other end to the USB port of the tablet. The power indicator of the VCI device lights up.

*Note: The USB connection provides the most stable and fastest communication. When all the communication methods are applied at the same time, the MAXIMUSPROHD system will use the USB communication as the default priority.

5.3 Start Diagnostics

On the Diagnostics page, tap "Automotive/Motorcycles" to enter the vehicle selection page.

2 approaches are provided for you to access the vehicle diagnostic software.

5.3.1 Max VIN (VIN SCAN)

Through simple wireless (BT) communication between the MAXIMUSPROHD tablet and VCI, you can easily get the VIN (Vehicle Identification Number) information of the currently identified vehicle. Once the VIN is successfully identified, the system will retrieve it from the remote server and then guide you to vehicle information page without the necessity of step-by-step manual menu selection.

The vehicle information page lists all historical diagnostic records of the vehicle, which lets the technician have a total command of the vehicle faults. In addition, a quick dial to manual diagnosis and diagnostic function are also available on this page for reducing the roundabout time and increasing productivity.

*Notes:

• Before using this function, please make sure the VCI is properly connected to the vehicle's DLC. For detailed connection, see Chapter 5.1.3 "Vehicle Connection".

• A stable network connection is required for this function.

Follow the steps below to proceed.

1. Tap "MaxVIN". If the VCI dongle does not pair with the tablet before, the following screen will appear.

*Note: If the VCI was once used with other devices, you need to cancel the pairing of the VCI first via either one of the following ways:

• On the Android's home screen, tap "Settings" -> "Bluetooth" -> Choose the desired VCI from the Paired list. Tap "⚙", and then tap "FORGET" to unpair it.

• Go to "Toolbox", tap "Settings" -> "VCI Management" -> "Deactivate matching".

2. Tap "Pair", the system starts connecting the VCI and decoding the VIN.

A. If the tablet successfully decodes the vehicle VIN, the following screen will appear:

• Tap "Diagnostic" to start a new diagnostic session.
• Tap "Scan History" to view its historical repair record. If there are records available, it will be listed on the screen in sequence of date. If no records exist, the screen will show "No Record".
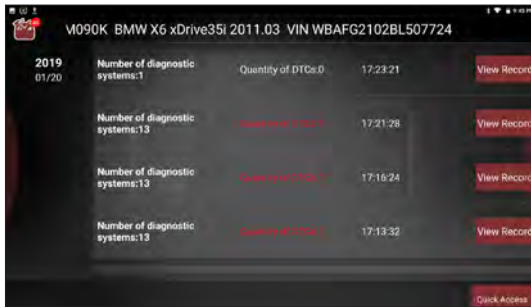
- Tap "View record" to view the details of the current diagnostic report.
- To perform other functions, tap "Quick access" to directly go to the function selection screen. Choose the desired one to start a new diagnostic session.

B. If the tablet failed to obtain the vehicle VIN, the following screen will appear:

There are two options availabe to enter VIN: Camera Scan and Manual Input.

a). Camera Scan:

- Tap "⬚", the following screen will appear:
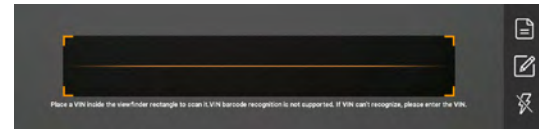
Place the VIN inside the viewfinder rectangle to scan it. The most recognizable location for this number is in the top left corner on the vehicle's dashboard. Other locations include the driver's door or post, and the firewall under the hood.

- If the ambient light is too weak, please turn the camera flash 🔦 on.
- If you have scanned the VIN of the vehicle, tap VIN record icon 📄 to select it from the record list.
- In case the tablet failed to identify it, tap ✏ to enter it manually.

After scanning, the screen automatically displays the result.

- If the VIN scanned is incorrect, tap the result field to modify it and then tap "OK". If the VIN exists on the remote server, the system will enter the vehicle information screen.
- To scan it again, tap "REPEAT".

b). Manual Input:

In this mode, you need to input the VIN manually.

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.

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*Note: 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 "OK" to start decoding the vehicle VIN.

1). If the scanned or entered VIN can be found from the server database, the following screen will appear:

- Tap "Diagnostic" to start a new diagnostic session.
- Tap "Scan History" to view its historical repair record. If there are records available, it will be listed on the screen in sequence of date. If no records exist, the screen will show "No Record".

- Tap "View record" to view the details of the current diagnostic report.
- To perform other functions, tap "Quick access" to directly go to the function selection screen. Choose the desired one to start a new diagnostic session.
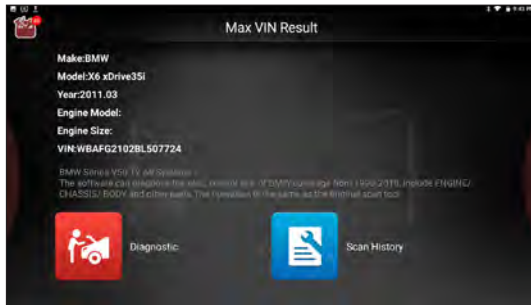
2). If the scanned or entered VIN can not be retrieved from the server database, the following pop-up message displays:
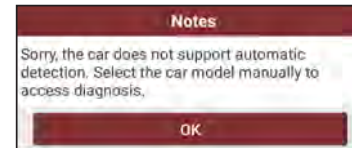
In this case, select the vehicle model manually to perform vehicle diagnosis.

5.3.2 Manual Diagnosis

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

1). Select diagnostic software version: Tap the "DEMO" to go to Step 2.

On-screen Buttons:

Vehicle Coverage: Tap to view the vehicle models that the current diagnostic software covers.

What's new: Tap to view the optimized items and enhancements.

Introduction: Tap to check the software function list.

Note: Tap to read some precautions on using the current diagnostic software.

Search Bluetooth (BT): Tap to search for the available VCI dongle.

*Notes:
• Bluetooth connection is not required to run the DEMO program.
• If a vehicle is tested and no Bluetooth connection is made before diagnosis, tap "Search Bluetooth", a dialog box similar to the following appears:

Tap "Scan" to start searching for the VCI. Once it is found, tap it to start pairing.

If the tablet has paired with the VCI, it will enter Step 2 directly.

OK: Tap it to go to next step.

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

5.3.2.1 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 to scan the vehicle control modules. When scanning is complete, the following screen appears.

The systems with fault code are displayed in red and systems functioning normally are displayed in white.

On-screen Buttons:

: Tap to view detailed Diagnostic Trouble Codes (DTCs) information. Tap to hide it.

*Note: Diagnostic Trouble Codes or Fault Codes can be used to identify which engine systems or components that are malfunctioning. Never replace a part based only on the DTC definition. Retrieving and using DTCs for troubleshooting vehicle operation is only one part of an overall diagnostic strategy. Follow testing procedures (in vehicle's service manual), instructions and flowcharts to confirm the locations of the problem.
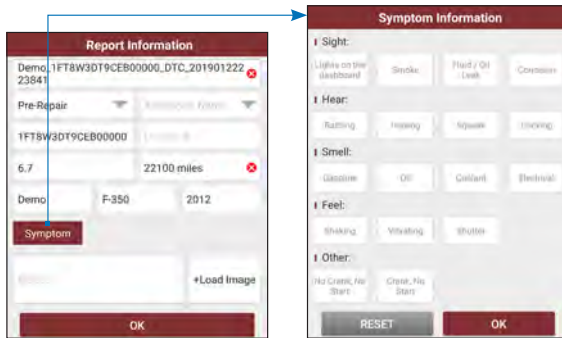

: Tap to retrieve it and find possible cause & verified solution from the Maximus Fix (sold separately).

Google Search: Highlight the desired DTC, and tap it to search in the Google engine for more detailed information about the selected DTC.

Enter: Tap to select other test functions.

Report: Tap to save it as a report of the current data in text format.

While filling the report information,

• Tap ▼ to choose the right report type from the pull-down list.

*Note: Diagnostic report is classified into two categories: Pre-Repair report and Post-Repair report.

To facilitate the comparison of the pre-repair and post-repair reports and get accurate test result, please make sure you saved the right type of the diagnostic report.

• In Technician Name field, input the technician name (*If you have entered the technician name before, tap ▼ directly to select it from the pull-down list).

• Tap "Symptom", select the fault symptom information from the list and tap "OK" to confirm.

• In Notes text box, write down more description about the diagnostic trouble codes.

• To make the fault symptom more intuitive, you may also tap "Load Image" to take a photo or upload a local photo.

After filling it, tap "OK" to save it as a diagnostic report and navigate to the report details page.
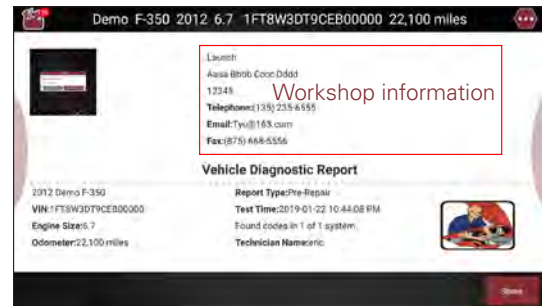
*Note: By default, the workshop information is blank. You can configure and revise it from the "Shop Information" in "Toolbox" -> "Settings".

Once you configured the information, it will be automatically generated every time the diagnostic report is saved. All vehicle and workshop information will be appended as a tag on the diagnostic report, which allows you to easily retrieve the desired report while performing "Filter" function of Diagnostic Report.

On the report details page, tap "Share" to share it to others. All diagnostic reports can be accessed from "Toolbox" -> "Saved Reports"-> "Health Report".

Compare Results: After you have made some repairs based on the pre-repair diagnostic report and re-diagnose the vehicle, tap "Compare Result" to select the pre-repair report to compare. By comparison of the pre- and post- repair reports, you can easily identify which DTCs are cleared and which remain unfixed.

The DTC status of post-repair   The DTC status of pre-repair

*Note: Before performing this function, please make sure that:

You have saved a pre-repair report of the currently tested vehicle, and

You have already made some repairs and service and cleared the DTCs after the pre-repair reported is generated. Otherwise, no differences exist between the pre- and post- repair reports.

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

*Note: 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.

5.3.2.2 System Scan

Use this option to quickly scan and identify which systems are installed on the vehicle.

Tap "System Scan" on the test item selection screen to scan the vehicle control modules. When scanning is complete, the following screen appears.
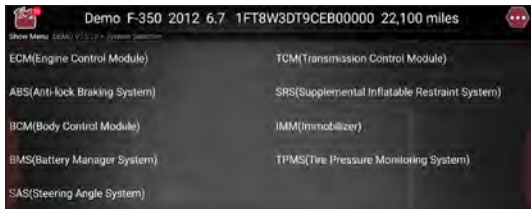
Tap the desired system to navigate to the test function selection screen. For detailed operations on test function, please refer to Chapter 5.3.2.3.

5.3.2.3 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 to enter the following screen:

Swipe the screen from the bottom to view the vehicle system on the next page.

Tap the desired system (take "ECM" for example) to jump to the test function selection screen.

*Note: Different vehicle has different diagnostic menus.

A. Version Information

This function is used to read the version information of system mode, vehicle VIN, software and ECU.

On the test function selection screen, tap "Version Information", the screen displays the detailed information about the ECU.

Tap "OK" to confirm and exit.

B. Read Fault Code

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

On the test function selection screen, tap "Read Fault Code", the screen will display the diagnostic result.

On-screen Buttons:

Freeze Frame: When an emission-related fault occurs, certain vehicle conditions are recorded by the on-board computer. This information is referred to as freeze frame data. Freeze frame data includes a snapshot of critical parameter values at the time the DTC is set. If it is

illuminated, tap it to view the freeze frame data.

Maximus Fix: Tap to retrieve it and find possible cause & verified solution from the Maximus Fix (sold separately).

Google Search: Highlight the desired DTC, and tap it to search in the Google engine for more detailed information about the selected DTC.

Report: To save the current data in text format. All diagnostic reports can be accessed from "Toolbox" -> "Saved Reports" -> "Health Report".

*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.

C. 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.

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.

On the test function selection screen, tap "Clear Fault Code", a confirmation dialog box pops up on the screen. Tap "Yes" and the system will automatically delete the currently existing trouble code.

*Note: After clearing, you should retrieve trouble codes once more or turn ignition on and retrieve codes again. If there are still some trouble codes in the system, please troubleshoot the code using a factory diagnosis guide, then clear the code and recheck.

D. Read Data Stream

This option lets you view and capture (record) real-time Live Data. This data including current operating status for parameters and/or sensor information can provide insight on overall vehicle performance. It can also be used to guide vehicle repair.

*Note: If you must drive the vehicle in order to perform a troubleshooting procedure, ALWAYS have a second person help you. Trying to drive and operate the diagnostic tool at the same time is dangerous, and could cause a serious traffic accident.

On the test function selection screen, tap "Read Data Stream", 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 page.

*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 – this is the default mode which displays the parameters in texts and shows in list format.

• Graph – displays the parameters in waveform graphs.

• Combine – this option is mostly used in graph merge status for data comparison. In this case, different items are marked in different colors.

On-screen Buttons:

: Tap it to view the waveform graph of the current data stream item.
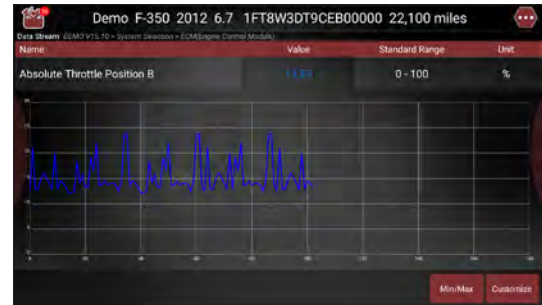
• Min/Max: Tap "Min/Max" to define the maximum/minimum value. Once the value goes beyond the specified value, the system will alarm.

• Customize: If desired, you can customize to show only those PIDs you are interested in viewing. Tap "Customize" to add/change other data stream items.

*Note: The real time (Live Data) vehicle operating information (values/status) that the on-board computer supplies to the tool for each sensor, actuator, switch, etc. is called Parameter Identification Data (IPD).

Graph: Tap it to view the waveform.
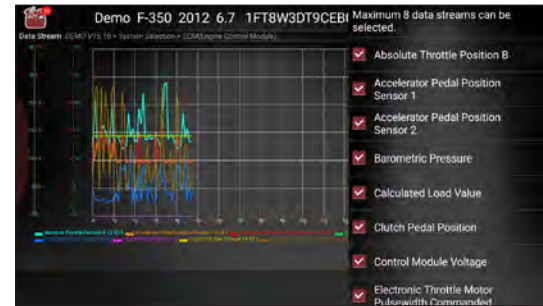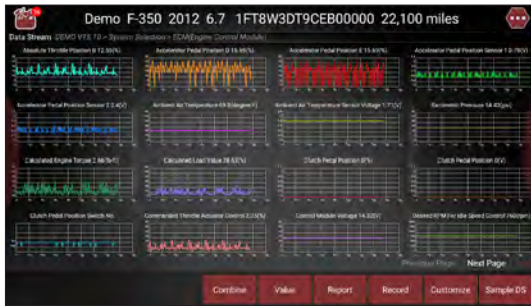
- Combine: This option is mostly used in graph merge status for data comparison.

- Value: Tap to display the parameters in texts.
- Customize: This option allows you to select only the PIDs that you wish to display. Tap it, a pull-down list of the data stream items appears on the screen. Select (Up to 8 data stream items can be selected)/deselect the desired items and then screen will display/remove the corresponding waveforms immediately.

Select Sample DS: Tap it to select the sample DS file, the values you customized and saved in process of DS sampling will be imported into the "Standard Range"(See below) column for your comparison.

*Note: Before executing this function, you have to sample the values of data stream items and save it as an sample DS file.

Report: To save the current data as a diagnostic report. All diagnostic reports can be accessed from "Toolbox" -> "Saved Reports" -> "Health Report".

Record: Tap to start recording diagnostic data. Recorded live data can

serve as valuable information to help you in troubleshooting of vehicle problems. All diagnostic records can be replayed from "Toolbox" -> "Saved reports" -> "Recorded Data".

---

*Note: The saved file follows the naming rule: It begins with vehicle type, and then the record starting time and ends with .x431 (To differentiate between files, please configure the accurate system time).

Help: Tap to view the help information.

Sample DS: This item enables you to customize the standard range of live data stream items and save it as DS sample file. Each time you run the data stream items, you can call out the corresponding sample data to overwrite the current standard range.

Tap it to start recording the sample data (*Only data stream items with units will be recorded), and the screen displays as below:
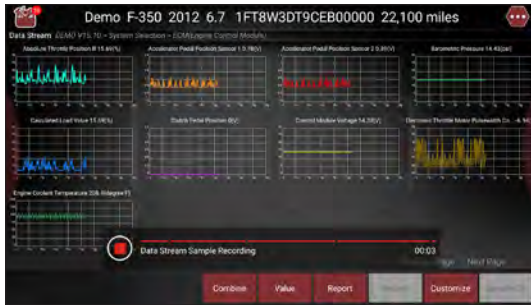
Once recording is complete, tap ⏹ to stop it and navigate to the data revision screen.

Tap the Min./Max. value to change it. After modifying all desired items, tap "Save" to save it as an sample DS file. All DS files are stored under the "Data Samples" file of "Save Report" in "Toolbox".

E. 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 MAXIMUSPROHD 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.

On the test function selection screen, tap "Actuation Test", the system will display as follows:

Simply follow the on-screen instructions and make appropriate selections to complete the test. Each time when an operation is successfully executed, "Completed" displays.

5.4 Maintenance Reset

In addition to amazing & powerful diagnostic function, MAXIMUSPROHD also features various service functions. The most commonly performed service functions contain:

• Oil Reset Service

• Electronic Parking Brake Reset

• Steering Angle Calibration

• ABS Bleeding

• TPMS (Tire Pressure Monitor System) Reset

• Gear Learning

• IMMO Service

• Injector Coding

• Battery Maintenance System

• Diesel Particulate Filter (DPF) Regeneration

• Electronic Throttle Position Reset

There are two methods to reset service lamp: 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.
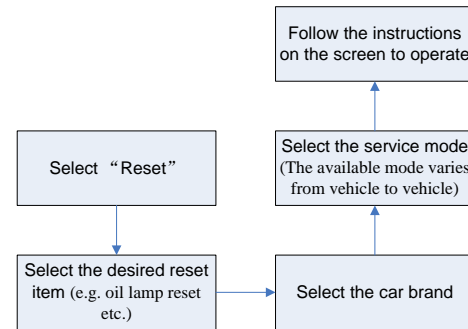
Figure 5-38

5.4.1 Oil Reset Service

This function allows you to perform reset for the engine oil life system, which calculates an optimal oil life change interval depending on the vehicle driving conditions and climate.

This function can be performed in the following cases:

1. If the service lamp is on, you must provide service for the car. After service, you need to reset the driving mileage or driving time so that the service lamp turns off and the system enables the new service cycle.

2. After changing engine oil or electric appliances that monitor oil life, you need to reset the service lamp.

5.4.2 Electronic Parking Brake Reset

1. If the brake pad wears the brake pad sense line, the brake pad sense line sends a signal sense line to the on-board computer to replace the brake pad. After replacing the brake pad, you must reset the brake pad. Otherwise, the car alarms.

2. Reset must be performed in the following cases:

   a) The brake pad and brake pad wear sensor are replaced.

   b) The brake pad indicator lamp is on.

   c) The brake pad sensor circuit is short, which is recovered.

   d) The servo motor is replaced.

5.4.3 Steering Angle Calibration

To reset the steering angle, first find the relative zero point position for the car to drive in straight line. Taking this position as reference, the ECU can calculate the accurate angle for left and right steering.

After replacing the steering angle position sensor, replacing steering mechanical parts (such as steering gearbox, steering column, end tie rod, steering knuckle), performing four-wheel alignment, or recovering car body, you must reset the steering angle.

5.4.4 ABS Bleeding

This function allows you to perform various bi-directional tests to check the operating conditions of Anti-lock Braking System (ABS).

1. When the ABS contains air, the ABS bleeding function must be performed to bleed the brake system to restore ABS brake sensitivity.

2. If the ABS computer, ABS pump, brake master cylinder, brake cylinder, brake line, or brake fluid is replaced, the ABS bleeding function must be performed to bleed the ABS.

5.4.5 Tire Pressure Monitor System Reset

This function allows you to quickly look up the tire sensor IDs from the vehicle's ECU, as well as to perform TPMS replacement and sensor test.

1. After the tire pressure MIL turns on and maintenance is performed, the tire pressure resetting function must be performed to reset tire pressure and turn off the tire pressure MIL.

2. Tire pressure resetting must be performed after maintenance is performed in the following cases: tire pressure is too low, tire leaks, tire pressure monitoring device is replaced or installed, tire is replaced, tire pressure sensor is damaged, and tire is replaced for the car with tire pressure monitoring function.

5.4.6 Gear Learning

The crankshaft position sensor learns crankshaft tooth machining tolerance and saves to the computer to more accurately diagnose engine misfires. If tooth learning is not performed for a car equipped with Delphi engine, the MIL turns on after the engine is started. The diagnostic device detects the DTC P1336 'tooth not learned'. In this case, you must use the diagnostic device to perform tooth learning for the car. After tooth learning is successful, the MIL turns off.

After the engine ECU, crankshaft position sensor, or crankshaft flywheel is replaced, or the DTC 'tooth not learned' is present, tooth learning must be performed.

5.4.7 IMMO Service

An immobilizer is an anti-theft mechanism that prevents a vehicle's engine from starting unless the correct ignition key or other device

is present. Most new vehicles have an immobilizer as standard equipment. An important advantage of this system is that it doesn't require the car owner to activate it since it operates automatically. An immobilizer is considered as providing much more effective anti-theft protection than an audible alarm alone.

As an anti-theft device, an immobilizer disables one of the systems needed to start a car's engine, usually the ignition or the fuel supply. This is accomplished by radio frequency identification between a transponder in the ignition key and a device called a radio frequency reader in the steering column. When the key is placed in the ignition, the transponder sends a signal with a unique identification code to the reader, which relays it to a receiver in the vehicle's computer control module. If the code is correct, the computer allows the fuel supply and ignition systems to operate and start the car. If the code is incorrect or absent, the computer disables the system, and the car will be unable to start until the correct key is placed in the ignition.

To prevent the car being used by unauthorized keys, the anti-theft key matching function must be performed so that the immobilizer control system on the car identifies and authorizes remote control keys to normally use the car.

When the ignition switch key, ignition switch, combined instrument panel, ECU, BCM, or remote control battery is replaced, anti-theft key matching must be performed.

5.4.8 Injector Coding

Write injector actual code or rewrite code in the ECU to the injector code of the corresponding cylinder so as to more accurately control or correct cylinder injection quantity.

After the ECU or injector is replaced, injector code of each cylinder must be confirmed or re-coded so that the cylinder can better identify injectors to accurately control fuel injection.

5.4.9 Battery Maintenance System Reset

This function enables you to perform a resetting operation on the monitoring unit of vehicle battery, in which the original low battery fault information will be cleared and battery matching will be done.

Battery matching must be performed in the following cases:

a) Main battery is replaced. Battery matching must be performed to clear original low battery information and prevent the related control module from detecting false information. If the related control module detects false information, it will invalidate some electric auxiliary functions, such as automatic start & stop function, sunroof without one-key trigger function, power window without automatic function.

b) Battery monitoring sensor. Battery matching is performed to re-match the control module and motoring sensor to detect battery power usage more accurately, which can avoid an error message displaying on the instrument panel.

5.4.10 Diesel Particulate Filter (DPF) Regeneration

DPF regeneration is used to clear PM (Particulate Matter) from the DPF filter through continuous combustion oxidation mode (such as high temperature heating combustion, fuel additive or catalyst reduce PM ignition combustion) to stabilize the filter performance.

DPF regeneration may be performed in the following cases:

a) The exhaust back pressure sensor is replaced.

b) The PM trap is removed or replaced.

c) The fuel additive nozzle is removed or replaced.

d) The catalytic oxidizer is removed or replaced.

e) The DPF regeneration MIL is on and maintenance is performed.

f) The DPF regeneration control module is replaced.

5.4.11 Electronic Throttle Position Reset

This function enables you to make initial settings to throttle actuators and returns the "learned" values stored on ECU to the default state. Doing so can accurately control the actions of regulating throttle (or idle engine) to adjust the amount of air intake.

5.4.12 Gearbox Matching

1. This function can complete the gearbox self-learning to improve gear shifting quality.
2. When the gearbox is disassembled or repaired (after some of the car battery is powered off), it will lead to shift delay or impact problem. In this case, this function needs to be done so that the gearbox can automatically compensate according to the driving conditions so as to achieve more comfortable and better shift quality.

5.4.13 AFS (Adaptive Front-lighting System) Reset

This feature is used to initialize the adaptive headlamp system. According to the ambient light intensity, the adaptive headlamp system may decide whether to automatically turn on the headlamps, and timely adjust the headlamp lighting angle while monitoring the vehicle speed and body posture.

5.4.14 Sunroof Initialization

This function can set the sunroof lock off, closed when it rains, sliding / tilting sunroof memory function, temperature threshold outside the car etc.

5.4.15 Suspension Calibration

1. This function can adjust the height of the body.
2. When replacing the body height sensor in the air suspension

system, or control module or when the vehicle level is incorrect, you need to perform this function to adjust the body height sensor for level calibration.

5.5 Diagnostic History (Previous Session)

Generally once a vehicle diagnosis is performed, MAXIMUSPROHD will record the every details of diagnostic process. The History function provides a quick access to the tested vehicles and users can resume from the last operation, without the necessity of starting from scratch.

Tap "Previous Session", all diagnostic records will be listed on the screen in date sequence.

Fig. 5-39

- Tap certain vehicle model to view the details of the last diagnostic report.
- To delete certain diagnostic history, select it and then tap "Delete". To delete all historical records, tap "Select All" and then tap "Delete".
- Tap "Restore" to directly navigate to the function selection page of last diagnostic operation. Choose the desired option to proceed.

6 Toolbox

6.1 Saved Reports

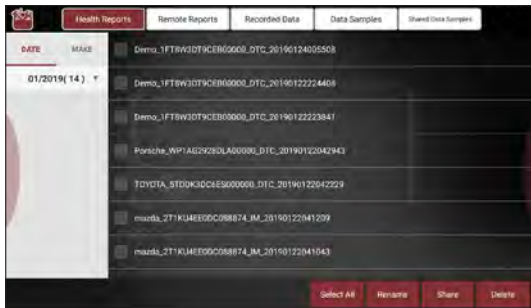Tap "Saved Reports", a screen similar to the following appears.

Fig. 6-1

6.1.1 Health Report

This module stores all diagnostic reports generated in process of vehicle diagnosis.

All the diagnostic reports are sorted by Date and Make. Tap the desired type to re-arrange and filter it.

- To select certain report, check the box before the report. To select all reports, tap "Select All". To deselect all, tap "Unselect".
- To revise the filename of the report, select the desired one and tap "Rename".
- To share the report with others, select the desired one and then tap "Share".

- Select the desired report and then tap "Delete" to delete it.

6.1.2 Remote Report

This option lists all diagnostic reports generated in process of remote diagnostics.

6.1.3 Recorded Data

If user records the running parameters or waveform graphs while reading data stream, it will be saved as diagnostic records and appear under this tab. You can use this option to view recorded live data. Frame playback and auto playback are supported.

Tap "Recorded Data", and select certain diagnostic record to enter:

Fig. 6-2

Select the desired data stream items and tap "OK" to jump to the playback page:

*Note: While viewing recorded live data, carefully look for any irregularities in any of the PID values/signal information (TEMP, RPM, etc). If any PIDs go beyond the standard range value, or irregularities are detected, follow the procedures in the vehicle's service manual to perform additional troubleshooting and repair.

Fig. 6-3

On-screen Buttons:

Graph – Displays the parameters in waveform graphs.

Combine – This option is mostly used in graph merge status for data comparison. In this case, different items are marked in different colors.

Value – This is the default mode which displays the parameters in texts and shows in list format.

Frame Playback – Plays back the recorded data stream items frame by frame. Tap ⏵ to start playing. Tap ⏹ to stop it. Tap ⏩ to fast forward to next frame. Tap ⏪ to reverse to previous frame. Once it is in frame playback mode, this button changes into "Auto Playback".

6.1.4 Data Samples

This feature allows you to manage the recorded data stream sample files.

6.1.5 Shared Data Samples

This feature lets you view the data stream sample files shared with others.

6.2 Tech 2 Tech

This option aims to help repair shops or technicians launch instant messaging and remote diagnosis, making the vehicle (even thousands of miles away) repair job getting fixed faster.
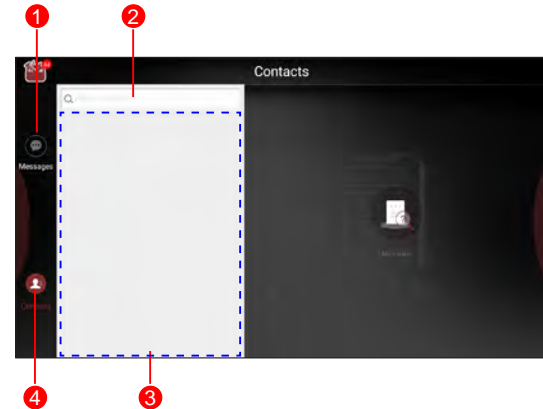
6.2.1 Interface Layout

Fig. 6-4

1	Message tab	Once an incoming message reaches, a red dot will appear on the upper right corner of the tab.
2	Search bar	Directly input the partner's S/N of the MAXIMUSPROHD to start searching, and tap the desired one to add it into your friend list.
3	Friends List	**By default, the screen appears blank.**
4	Contact tab	Tap to enter the friend list.

6.2.2 Add Friends

Tap "Contact" to enter the contact page. By default it appears blank.

In the search bar, input the partner's username and tap "Search" button next to the search bar to starts searching from Matco's technician database.

*Note: The partner must be the users who have registered their Matco's diagnostic tools. They may be the following:

Workshop

Technician

Once the result matches the keyword, a screen similar to the following will appear:
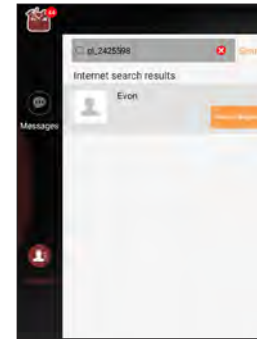

Fig. 6-5

• To launch the remote diagnostics directly, tap "Remote Diagnose" to invite a remote control or request control remote device.

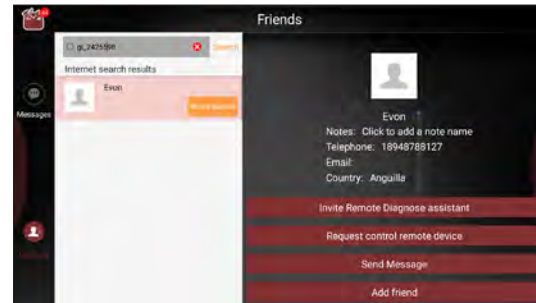• To view the partner's detailed information, tap 👤, the following screen appears:

Fig. 6-6

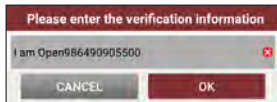Tap "Add friend" to send your request.

Fig. 6-7

Once the partner receives the request, a beep will sound. Tap the "Message" tab:

• Once the partner agreed your request, you will receive a piece of verification information and he/she will automatically be listed in the Contact tab.
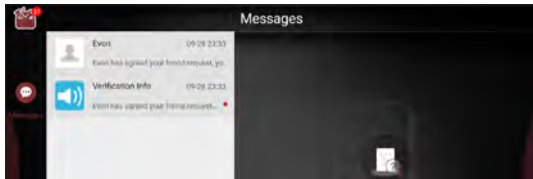

Fig. 6-8

• If a counterpart sent you a friend request, you can tap "Agree" to confirm and his/her name will appear in the friend list (Contact). Or tap "Ignore" to ignore this request.

6.2.3 Start Instant Messaging

*Note: The I/M (Instant Messaging) function is open to all users who had Matco & Launch's diagnostic tool equipped with this module.

There are two methods available for users to make a conversation on this module.

A. If you do not add the partner as your friend, tap "Send Message" in Fig. 6-6 to enter a screen similar to the following:
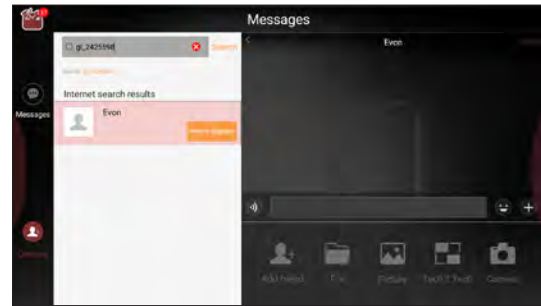

Fig. 6-9

B. If you have added the partner into the Contact, directly tap the desired fellow technician's photo (avatar) to start a conversation.

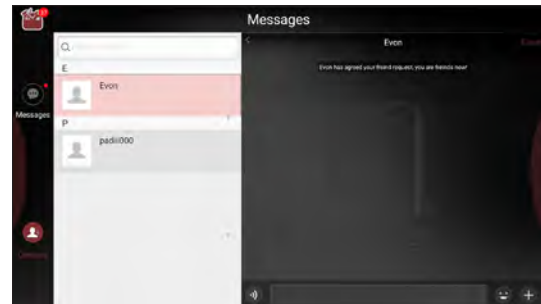Tap the input field and use the on-screen keyboard to enter the text message, and tap "Send".

Fig. 6-10

• Tap 🔊 to send the voice message.

• Tap 😊 to send the emoj.

- Tap ➕ to call out more function options.
  - Add friend: It is disabled if you have added the partner as your friend.
  - File: Choose diagnostic reports or local files to send.
  - Picture: Choose screenshots or pictures to send.
  - Tech 2 Tech: To start a remote diagnostic session. For details, refer to Chapter 6.2.4.
  - Camera: Open camera to take pictures.
- Tap "Clear" to delete all the partner's dialog logs.

6.2.4 Launch Remote Diagnosis

The tablet is allowed to initiate remote diagnosis with other diagnostic tools (including but not limited to the MAXIMUSPROHD) of Matco & Launch family, which are equipped with this module.

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* Note: Before performing this operation, please make sure the following conditions are met no matter which side sends the remote request:

Turn on the vehicle power supply.

Throttle should be in a closed position.

The VCI dongle should be properly connected to the vehicle's DLC and a successful communication with the tablet is required.

A. In case you do not add the partner as your friend, directly tap "Remote Diagnose" in Fig. 6-6 to enter Fig. 6-11.

B. If you have added the partner into the Contact, tap ➕ in Fig. 6-10 and select "Tech 2 Tech" from the pull-down option list.
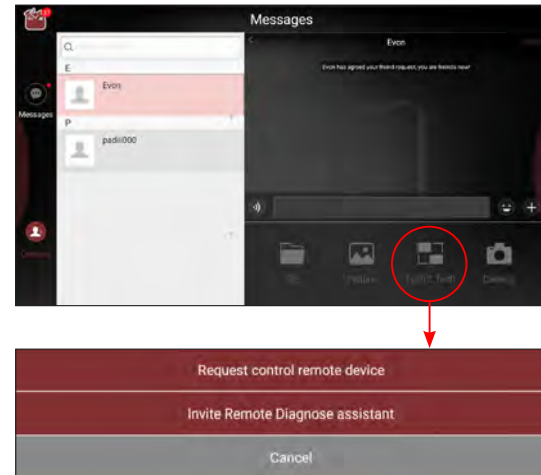

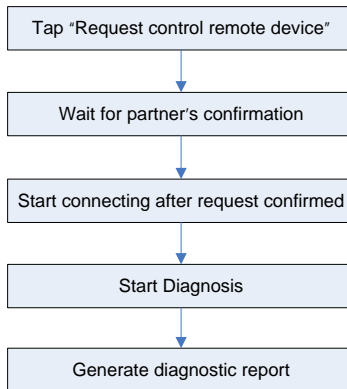
Fig. 6-11

The Tech 2 Tech options are defined as follows:

Actions	Results

Request control remote device	Request to control the partner's device remotely to help him diagnose the vehicle. *Notes: • Remote diagnosis has the same diagnostic steps as manual diagnosis. • In process of remote diagnosis, tap the 🎤 button to send a voice message. • Once vehicle diagnosis is complete, a report will be created. Input your comments on this report, and then tap "Send Report" to send it to the partner. • If you have a local vehicle diagnosis in process, please exit it first before starting remote diagnosis. Tap "Request control remote device" ↓ Wait for partner's confirmation ↓ Start connecting after request confirmed ↓ Start Diagnosis ↓ Generate diagnostic report
Invite remote diagnostic assistant	If you need support, just use this option to invite a technician to perform a remote control on your tool. *Notes: • Remote diagnosis has the same diagnostic steps as manual diagnosis. • In process of remote diagnosis, tap the 🎤 button to send voice message. • Once you received the report from the partner, tap "View Report" to view details. All diagnostic reports are saved "Toolbox" -> "Saved Reports"-> "Remote Reports". Tap "Invite remote diagnostic assistant" ↓ Choose the desired diagnostic software ↓ Wait for partner's confirmation ↓ Start connecting after request confirmed ↓ Start Diagnosis ↓ Generate diagnostic report
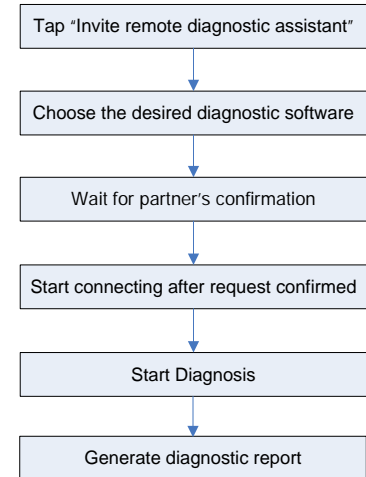
Cancel	To cancel this operation.

6.3 Feedback

This item allows you to feedback your diagnostic problems to us for analysis and troubleshooting.

Tap "Feedback", the following 3 options will be displayed on the left column of the screen.

A. Feedback

Tap a tested vehicle model to enter the feedback screen.

1) Tap "Choose File" to open the target folder and choose the desired diagnostic logs.

2) Choose the failure type and fill in the detailed failure description in the blank text box and telephone or email address. After inputting, tap "Submit Result" to send it to us.

B. History

Tap it to view all diagnostic feedback records. Different process states are marked with different colors.

C. Offline list

Tap it to display all diagnostic feedback logs which have not been submitted successfully due to network failure. Once the tablet gets a stable network signal, it will be uploaded to the remote server automatically.

6.4 Update

This module allows you to update the diagnostic software & App and set frequently used software.

If you did not download the software in process of product activation or a number (indicating the available software quantity) displaying on the upper right corner of the ⬚ icon, you may use this option to download it or keep it synchronized with the latest version.

Tap "Update" to enter the update center.

Fig. 6-12

This page includes two options: All Software and Common Software.

6.4.1 Update Diagnostic Software & APP

By default, the system enters the "All Software" page and all diagnostic software to be updated is selected.

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

• To refresh the downloaded list, tap "Refresh".

• To free up more storage space or you have downloaded several versions of diagnostic software, you can use "Delete" to clear the old versions and only retain the latest versions.

Tap "Install" to start downloading and installing.

* Note: Download and installation may take approximate 10 minutes depending on the internet connection, 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.

6.4.2 Set Frequently Used software

To easily locate and quickly update some frequently used software, you can use the "Common Software" option to create a frequently used software list.

Tap "Common software", the screen displays as follows:

Fig. 6-13

Tap "+", a pop-up window appears. Select the checkbox before the software name and tap "SAVE", the software will be displayed in the Common software list. Next time you want to update it, just go to "Common Software".

6.5 Settings

This module allows you to manage diagnostic reports, VCI devices, configure wireless printer and print information and add favorite website etc.

6.5.1 General

6.5.1.1 Units of Measurement

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

6.5.1.2 Expiration Reminder

All pre-installed diagnostic software is free to use for 30 days. Once it expires, it will be locked automatically and the system will prompt you to activate your VCI if the expiration reminder is ON.

6.5.1.3 Diagnostic Software Auto Update

This option is designed to turn on/off the automatic diagnostic software update function. If set as ON, the system will automatically update the available diagnostic software when the tablet has a network connection and a newer version is detected.

6.5.1.4 Automatic detection once connected

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

6.5.1.5 Auto Generate Health Report once connected

Once it is set as ON, the system will automatically output a health report once the AutoDetect diagnostic session is finished.

6.5.1.6 Diagnostic Application Auto Update

This option is used to set whether to update the available diagnostic application automatically when the tablet has stable Wi-Fi signal.
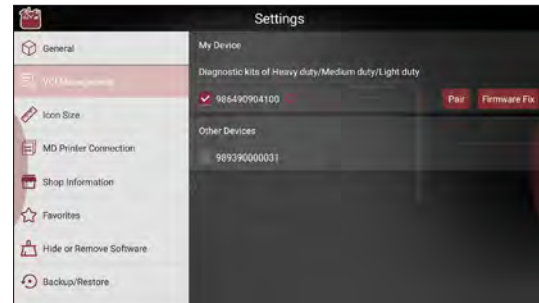
6.5.2 VCI Management

Fig. 6-14

If several VCI devices are activated on this tool, a list of VCI devices will be displayed on the screen. If your tool extends to support heavy-duty trucks, you need to switch to the corresponding VCI module before diagnosing it.

Once you choose the device that belongs to other account, you have to log out, and then input the right account to continue.

• If you use the another VCI to test a vehicle, select the desired checkbox and tap "Pair" to pair it with the tablet.

• If the current VCI comes across communication failure, tap

"Firmware Fix" to update and fix the diagnostic firmware. During fixing, please do not cut power or switch to other interfaces.

• If you use the current account to test a vehicle with another tablet, tap "Unpair" to unpair the VCI device with the previously paired tablet.

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* Note: please be sure to keep the VCI device powered on while performing the operation.

6.5.3 Icon Size

This feature allows you to set the size of the diagnostic software icon according to your preference.

Drag the slider to different size and the system will display the corresponding effect.

6.5.4 MD Printer Connection

This option is used to establish a wireless connection between the tablet and the printer (sold separately) while performing printing operations.

The App is compatible with the "Matco Tools Wi-Fi Printer" (sold separately) and "System" (external printer).

Follow the steps below to connect the Wi-Fi printer.

1. Tap "MD Printer Connection".

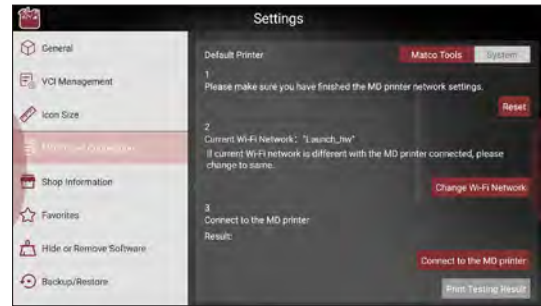Below describes how to configure the Wi-Fi Printer.

Fig. 6-15

A. If it is the first time you have operated this printer, please proceed the following:

2. For initial use, you are suggested to reset the printer: Press and hold [MODE] & [FEED] for 8 seconds, the following resetting command will be printed out:

at + default = 1

ok

at + reboot = 1

rebooting...

3. Tap "Reset" to configure Wi-Fi printer.

Step 1: Connect the printer:

Tap "Scan" to select the desired printer hotspot named with X-431PRINTER-XXXX (XXXX stands for 4 characters), and then tap "Connect" to enter Step 2.

Step 2: Join the printer into LAN:

Tap "Scan" to select the desired local Wi-Fi network from the list, and type in the security password (If it is an open network,

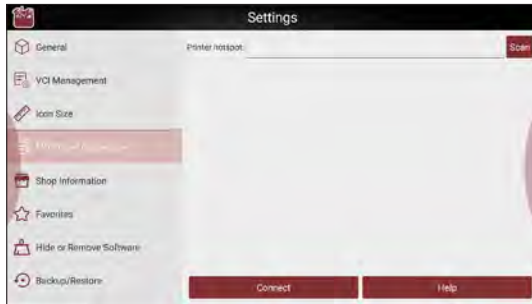password is not required), and then tap "Confirm".

Fig. 6-16

4. Once the Wi-Fi network of the printer is connected and the printer is found, tap "Test Print" to test the printing.

Now you can use the Wi-Fi printer to print!

If the printer is not found, please reset the printer to default factory settings (refer to Step 2 for details) and check whether the current device and the printer are on the same LAN.

B. If you have configured the Wi-Fi printer to the LAN:

2. Tap "Connect to Printer":

a). If the local network remains as it is, tap "Test Print" directly to test the printing.

b). If the local network changes, you have to reboot and reconfigure the Wi-Fi printer.

6.5.5 Shop Information

This option lets you define the detailed information of your workshop. It mainly includes Workshop, Address, Zip Code, Telephone, Email etc.
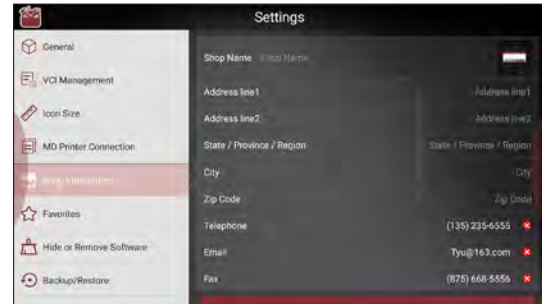

Fig. 6-17

After inputting, tap "Save".

Once you saved the shop information, it will be loaded automatically in the "More Information" box every time you save the diagnostic report.

6.5.6 Favorites

This feature provides you quick accesses to some renowned and popular repair and maintenance website links. These may include general information about a component or system, diagnostic and troubleshooting procedures and/or repair instructions. Moreover you can also add more repair websites into Favorites so that you can quickly open them in future.
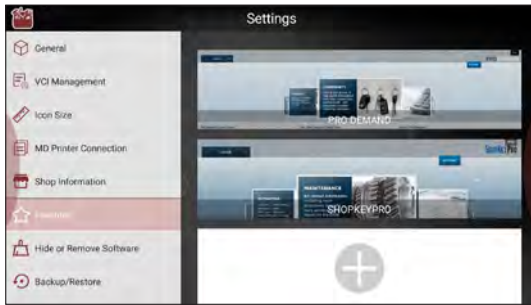
Fig. 6-18

Tap the desired website to visit it.

To add certain website into favorites, scroll the screen to until it reaches to the bottom, tap "+", a dialog box similar to the following appears.
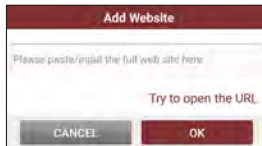

Fig. 6-19

Type in the full web site in the blank, and tap "OK", it will be listed in the Favorites.

6.5.7 Hide or Remove Software

This item allows you to hide/clear the diagnostic software that is not frequently used.

Tap "Hide or Remove Software", the screen displays as follows:

Fig. 6-20

Under the "Hide Software" tab, select the desired software logo (a "Checkmark" will show in the checkbox located at the lower right corner) and tap "Hide", it will become invisible. Tap "Unhide" to undo the hide operation.

Under the "Remove Software" tab, select the desired software logo and tap "Delete", it will disappear from the screen.

*Note: Removing software may completely delete the software from the tablet. If some software is not used and the tablet runs out of space, you can use this feature to remove it. To re-download it, go to "Update" -> "All Software".

6.5.8 Backup/Restore

This option lets you backup/restore the important data to/from external storage device.

A. Backup

1). Insert the U disk into the Data Transmission Port of the tablet.

2). Tap "Backup" to select the data folder to be backed up.

3). Tap "Backup" on the bottom of the screen to copy it to the U disk.

4). Unplug the U disk from the tablet.

<u>B. Restore</u>

1). Insert the U disk into the Data Transmission Port of the tablet.

2). Tap "Restore" to select the data folder to be restored.

3). Tap "Restore" on the bottom of the screen to copy it to the tablet.

4). Unplug the U disk from the tablet.

6.6 About

FAQ, Vehicle Coverage, Quick Start Guide and User Manual are included.

7 Applications

7.1 ADAS

Allows you to perform the ADAS calibration operations.

7.2 TPMS Database

Provides a brief tutorial on how to perform TPMS functions.

7.3 Videoscope

This module allows you to check those unseen parts of engine, fuel tank, braking system.

It needs to work with the compatible Videoscope device (sold separately).

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

7.4 MaxDrive

The MaxDrive is a plug-and-play VCI device, which is used to record and store the OBD live data. After the vehicle data is saved, user can use the MDMAX4 to synchronize and review the data for analysis and troubleshooting.

For more detailed operations, please refer to the In-app User Manual.

7.5 MaxBattery

This MAXBattery works as a professional Bluetooth battery tester.

Through this function, users can perform battery health test, start system test and charging health test.

It needs to work with the included MDMAXBATTERY module.

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

Appendix - FAQ

1. Communication error with vehicle ECU?

Please confirm:

1. Whether diagnostic connector is correctly connected.
2. Whether ignition SW is ON.
3. If all checks are normal, send vehicle year, make, model and VIN number to us using Feedback feature.

2. Failed to enter into vehicle ECU system?

Please confirm:

1. Whether the vehicle is equipped with this system.
2. Whether the VCI dongle is correctly connected.
3. Whether ignition SW is ON.
4. If all checks are normal, send vehicle year, make, model and VIN number to us using Feedback feature.

3. Can I use any power adapter other than the included 5V to charge the tablet?

No. Please use the included 5V power adapter or docking station to recharge the tablet. We assume no responsibility for damage or loss resulting from the use of any other adapters.

4. How to save power?

- Please turn off the screen while Maximus 3.0 keeps idle.
- Set a shorter standby time.
- Decrease the brightness of the screen.
- If Wi-Fi connection is not required, please turn it off.
- Disable GPS function if GPS service is not in use.

5. How to reset the tablet?

There are 2 methods available to reset the tablet:

Method 1

1. Ensure the tablet is in ON mode.
2. Select "Settings" on the Home screen.
3. Select "Backup & reset".
4. Tap on "Factory data reset".
5. Tap on "RESET TABLET" to confirm.

Method 2

1. Ensure the tablet is in OFF mode.
2. Hold and press VOLUME - key and POWER key until the tablet enters system boot mode.
3. Use the VOLUME + / VOLUME - key to switch to system recovery mode and press POWER key to confirm.
4. Use the VOLUME + / VOLUME - key to move the highlight bar on "wipe data / factory reset" and press POWER key to confirm.
5. Press VOLUME + / VOLUME - to select "yes" and press POWER key to confirm.
6. Select "reboot system now" and press POWER key to restart the system.
7. After resetting is complete, follow the on-screen instructions to finish the system settings.

⚠ WARNING : Resetting may cause data loss. Before doing so, please make sure important data has been backed up.

6. How to update Android?

A newer Android version will be released to bring better user experience. Please see below details. Please make sure your tool battery has at least 70%. Do NOT run any other programs during the update.

Step 1 - Press the Home key to navigate to the Home screen.

Step 2 - Tap on "Wireless Update".

Step 3 - Tap on "Check for updates". Once a newer version is found, follow the on-screen instructions to download and install the update file.

Step 4 - Be patient to wait until the update is done.

7. My software subscription has expired, how do I renew it?

(1) Contact your Matco dealer to purchase an upgrade certificate.

(2) Call 877-853-3738 (Option 3) so that the software can be activated.

8. How to register the MAXIMUSPROHD?

1. Turn the MAXIMUSPROHD tablet on.

2. Turn on Wi-Fi: Select "Settings" -> "Wi-Fi". Choose preferred network and tap on "Connect".

3. Open the MAXIMUSPROHD Software. Select "REGISTER UNIT".

4. Fill in the account information and device information (Serial number is a 12-digit number starting with 98-- you can find it on the back of your tool. Verification code is a 8-digit number stored in the included Private & Confidential sheet. Activation code is printed on the receipt, or consult your dealer for it), and then tap on "ACTIVATE".

5. Tap on "RUN DIAGNOSTICS" to launch diagnostics.

6. Tap on the "Toolbox" icon on the top left-hand corner of the screen to switch to the Toolbox module.

7. Tap on "Update" to enter the update center.

8. Make sure all brands are selected, tap on "Update" on the update page to start updating. Download and installation will take approximately 10 minutes depending on the internet connection.

9. What to do if the tablet runs out of space when downloading software?

1. Refer to the item "How to back up data?" to back up the important data.

2. Delete the data that has been backed up to release the storage space.

10. How to back up data?

A. System data backup

1. Turn the MAXIMUSPROHD tablet on.

2. Plug the external storage device into the data transmission port (not type-C port) of the tablet.

   *Note: For this tablet, the USB Type C interface is only for charging and disabled for data exchange. To exchange files with other external storage devices, please use the USB Type A interface only.

3. Tap on the ES icon on the home screen to open the ES File Explorer.

4. After the tablet identifies the storage device, USBxxxx will appear under the Internal Storage.
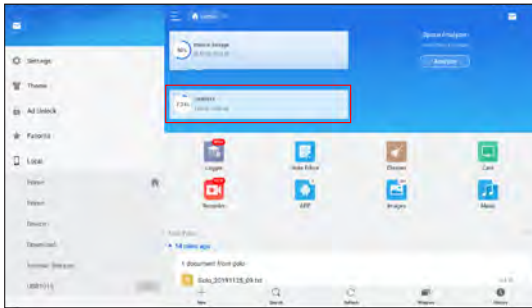
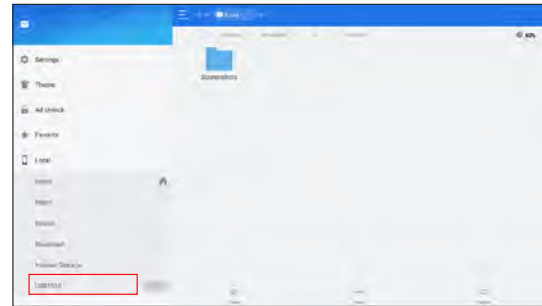5. Tap on "Internal Storage"(*Note: Take "Pictures" for example).
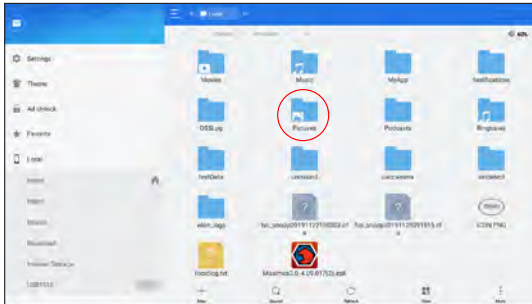
6. To copy all files in the "Screenshots" folder, tap on it for a while, all available operation options will appear.
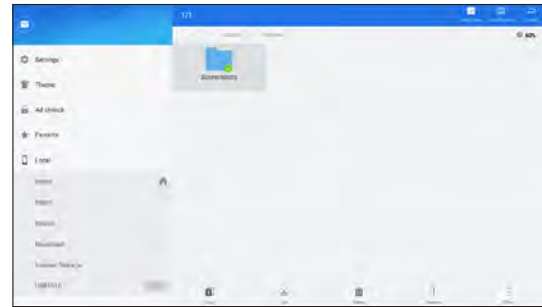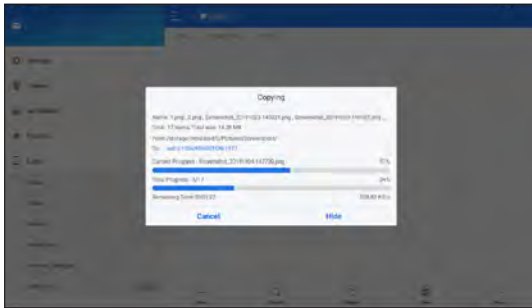

7. Tap on "Copy" on the bottom of the screen, the folder is successfully copied.

8. Tap on "USBxxxx" and select the target folder, tap on "Paste" to start copying.

9. After the total progress reaches to 100%, the backup is OK. Unplug the storage device from the tablet.

*Note: Another method is available for picture backup. User also can go to Gallery to select the desired folder/files and share it to the external storage device via "ES Save to...".

B. In-App data backup

1. Turn the Max 3.0 tablet on.

2. Tap on "RUN DIAGNOSTICS" to launch diagnostics.

3. Tap the "Toolbox" icon on the top left-hand corner of the screen to switch to the Toolbox module.

4. Tap "Settings".

5. Tap "Backup/Restore".
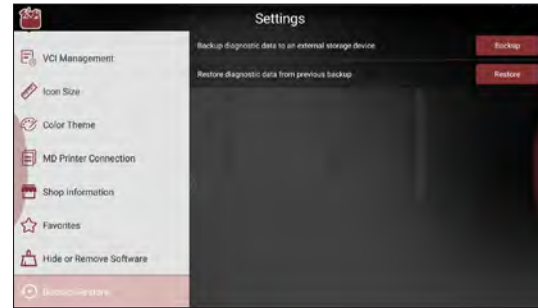
6. Plug the external storage device into the data transmission port (not type-C port) of the tablet.

7. Tap on "Backup" to select the folder to be backed up, tap on "Backup".

8. Tap on the "Allow" button on the pop-up dialog box.
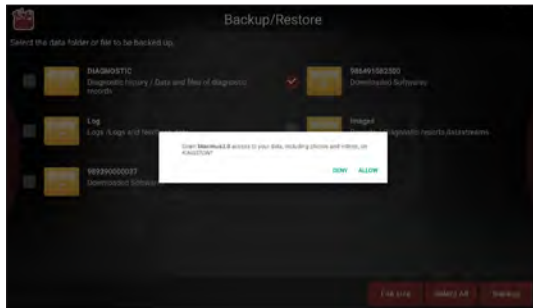
*Note: While performing data backup, make sure that the ES File Explorer is closed.

9. Tap on "OK" to start copying until the process is successfully completed.

11. The diagnostics application is failing.

1. Tap on the Home key to navigate to the Home screen.

2. Select "Settings".

3. Select "Apps".

4. Select the Max 3.0 Application from the Apps list.

5. Select "Force Stop".

6. Tap on "OK" to confirm.

7. Select "Storage" -> "Clear Data".

8. Tap on "OK" to confirm.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class A 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.

To assure continued compliance, any changes or modifications not expressly approved by the party.

Responsible for compliance could void the user's authority to operate this equipment. (Example- use only shielded interface cables when connecting to computer or peripheral devices).

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

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

S4001A FCC Radiation Exposure Statement:

The equipment complies with FCC Radiation exposure limits set forth for uncontrolled enviroment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

If you have any questions on the operation of the unit, please contact Matco customer service number: 877-853-3738

Statement:

We reserve the rights to make any change to product designs and specifications without notice. The actual object may differ a little from the descriptions in the manual in physical appearance, color and configuration. 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 after-sale service center, we shall not bear any responsibility arising from misunderstandings.