⚠ WARNING ⚠

Study, understand and follow all instructions provided with this product. Read these instructions carefully before installing, operating, servicing or repairing this tool. Keep these instructions in a safe, accessible place.

Caution: To help prevent personal 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.
17. 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.

INTENDED USE OF THE TOOL

Compatible with Passenger cars and commercial vehicles, the MDMAX5 diagnostic tool is exclusively intended for professional technicians.

Do not use this tool outside of the designed intent. Never modify the tool for any other purpose or use.

PRODUCT INFORMATION

Made in China
to Matco specifications

Using This Manual

This manual contains device usage instructions.

Some illustrations shown in this manual may contain modules and optional equipment that are not included in your system.

Conventions

The following conventions are used.

Notes

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

Example:

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.

Warning

WARNING indicates a hazardous situation which, if not avoided, could result in minor or moderate injury to the operator or to bystanders.

Example:

Warning: 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.

Danger

DANGER indicates an imminently or potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.

Example:

Danger: 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.

Illustrations

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

FCC Warning

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

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

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

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this

equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The device has been evaluated to meet general RF exposure requirement at 0mm for body worn condition. The highest reported SAR for stand-alone and simultaneous transmission exposure conditions are below the maximum value. End-users must be informed of the operating requirements for satisfying RF exposure compliance. The highest reported SAR value for body worn is 0.773 W/kg, for simultaneous if 1.473 W/kg.

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1 Introduction

1.1 Product Profile

Maximus 5.0 (MDMAX5) is an evolutionary smart solution for professional automotive diagnostics and maintenance. This Android OS-based, tablet-style scanner incorporates the best possible coverage of OE-level diagnostics with multitasking capable software. It s characterized by covering a wide range of vehicles, featuring powerful functions, and providing precise test result.

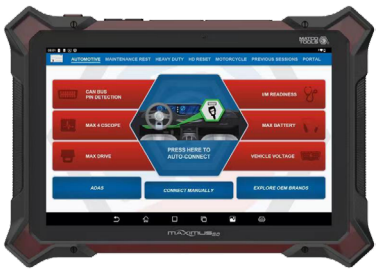
Using the powerful Android 13 operating system,12GB RAM, and a 13.6" IPS capacitive touch screen with a resolution of 2560 x 1600 dots, it delivers quick and complete diagnostic functionalities which technicians need to diagnose, research and repair vehicles in one solution.

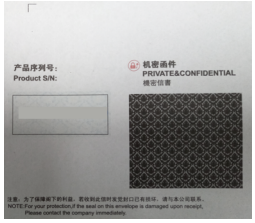
It supports the following functions:

- Smart Diagnosis (VINSCAN): 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.
- Service Reset: 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.
- 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 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 Maximus 5.0 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.
- Add-on Modules: MDMAX4CSCOPE, MDMAXBATTEST and Video Scope are available as add-on modules of the Maximus 5.0.

1.2 Accessory Checklist

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

No.	Name	Qt.	Picture & Notes
1	Maximus 5.0 Scan Tool	1	 (A tablet for showing test results.)
2	VCI (Vehicle Communication Interface) device	1	(A device for accessing vehicle data.)
3	Diagnostic Cable	1	(Connects 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.)
4	Data Cable (Type A- Type B)	1	(Connects the scan tool to the VCI device or add-on module, such as MaxScope).
5	Data Cable (Type A- Type C)		(Connects the scan tool to PC for data exchange.)
6	Power Adapter	1	(For charging the scan tool.)

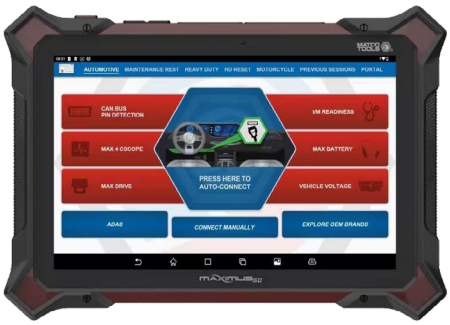
7	Password Envelope	1	 (A piece of paper bearing Product S/N and Activation Code, which is required for your registration.)
8	Battery Cable Clamps	1	(To provide power to the non-16pin connector through connection to the vehicle's battery.)
9	Cigarette Lighter Cable	1	(Supply power to the VCI through connection to cigarette lighter receptacle.)
10	Mini High Definition Media Interface Cable	1	(To mirror the scan tool screen onto an external projector or monitor with HD interface.)
11	4 Channel Scope	1	(Work with the Maximus 5.0 scan tool to configure the tool as a professional Oscilloscope.)
12	MDMAXBATTEST	1	(Work with the Maximus 5.0 scan tool to perform various tests on vehicle battery.)

13	Non-16pin Passenger Vehicles Connector Kit (including OBD-6 and OBD-9 adapter cables for commercial vehicles)	1	(Only applicable to Passenger Vehicles Product Configuration. For detailed non-16pin dongles, please check the package box.)
14	Non-16pin Passenger & Commercial Vehicles Connector Kit	(Optional)	(Only applicable to Passenger & Commercial Vehicles Product Configuration. For detailed non-16pin dongles, please check the package box.)

2 Components & Controls

There are two main components to the diagnostic system:

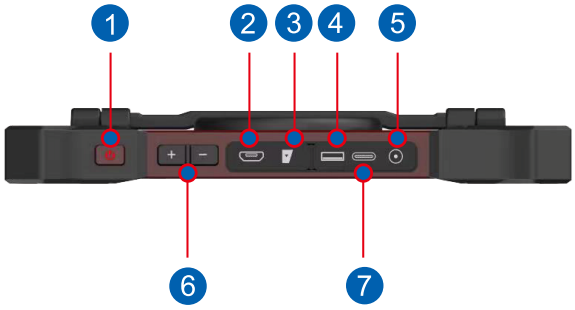
- Maximus 5.0 Scan Tool -- the central processor and monitor for the system (For details, please refer to Chapter 2.1.)



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

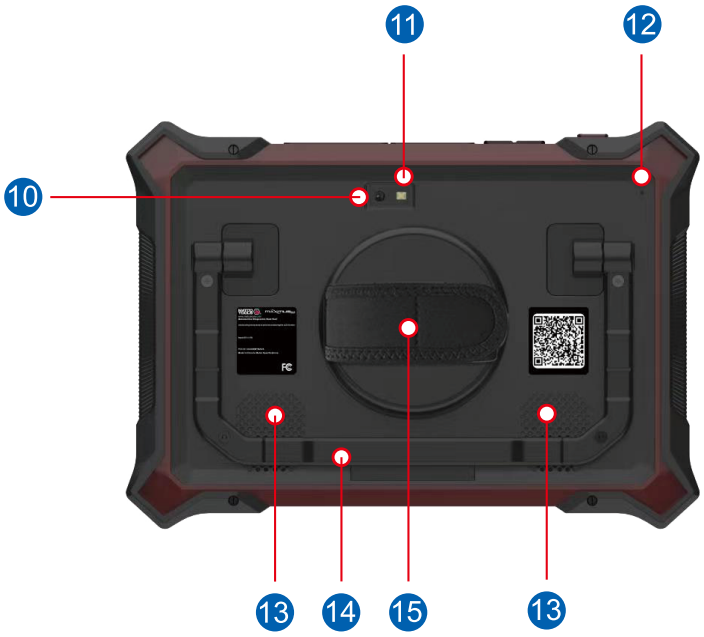
2.1 Scan Tool

The scan tool acts as the central processing system, which is used to receive and analyze the live vehicle data from the VCI device and then output the test result.



The following table formulates ports and indicators of the scan tool:

No.	Name & Descriptions
1	Power/Screen Lock Button -- To turn the scan tool on/off with long press, or lock the screen with short press.
2	High Definition Multimedia Output Port -- Connects it to an external projector or monitor with similar interface.
3	Memory Card Slot -- Stores the memory card for storage expansion.
4	Type-A Port -- Reserved for add-on modules (such as MDMAX4CSCOPE and MDMAX-SENSOR), and other devices with similar port.
5	DC IN Port -- Connects the power adapter to charge the scan tool.
6	Volume Buttons -- To adjust the volume.
7	Type-C Data Transmission Port -- Connects it to the PC for data exchange.
8	Display Screen
9	Front Camera



No.	Name & Descriptions
10	Rear Camera
11	Camera Flash
12	Microphone
13	Audio Speaker
14	Adjustable Kickstand - Flip out it to any angle and work comfortable at your desk, or hang it on automotive part.
15	Handgrip

2.2 VCI Device

The MAXSYNC VCI dongle works as a passenger / 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 scan tool.

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 scan tool to perform diagnosis via the data cable.
5	LAN/WAN Port -- Reserved for other purposes.

2.3 Technical Specifications

A. Scan Tool

Item	Description
Operating system	Android 13
Display	13.6 inch IPS capacitive touch screen with 2560 x 1600 resolution
Memory	12GB
Storage	512GB
Connectivity	• Wi-Fi: Dual Band 2.4 & 5GHz • USB ports (1 x Type-C + 1 x Type-A) • SD card slot • DC-IN port
Cameras	8MP front-facing camera + 20MP rear-facing camera with AF and flashlight
HDMI	MicroHDMI out
Operating Temperature	32 ~122℉
Storage Temperature	-4 ~158℉

B. VCI device

Item	Description
Power Supply	DC 9V ~ 36V
Operating System	Linux
Memory	256MB
Storage	8GB
Connectivity	• Wi-Fi: Dual Band 2.4 & 5GHz • DB15 port + Type-B USB port + RJ15 port + DC-IN port
Working Temperature	32 ~122℉

3 Initial Use

3.1 Charging the Scan Tool

Warning:

- Only use the included power adapter to recharge the scan tool. 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.

To check the battery power level, press and hold the Power button about 3 seconds to turn on the scan tool. Power level is indicated as a percentage in the upper right corner of the screen. If the power level drops below 10% while the scan tool is on, a Connect Charger notification will appear on the screen.

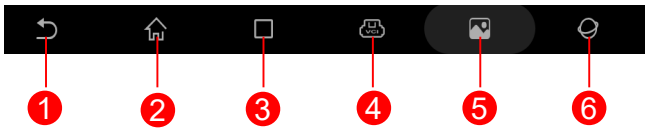
1. Connect one end of the power adapter to the DC-IN port of the scan tool, and the other end to the AC outlet.
2. The charging LED illuminates solid red and the charging symbol will appear on the screen.
3. Once it illuminates solid green, it indicates that the battery is fully charged and the charging 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 scan tool or the scan tool 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 scan tool. The system starts initializing and then enters the Home screen.
2. To turn the scan tool 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 return to previous screen or exit the application.
2	Tap to navigate to the Android System's home screen.
3	Tap to display a list of applications that are currently running or recently used. To open an application, tap it. To remove an application, swipe it upwards.
4	: Shows whether the VCI device is properly connected or not.
5	Tap to capture the current screen and all captured screenshots are stored in the Screenshots folder.
6	Tap to visit the MATCO's official website.

3.4 Wi-Fi Setup

The scan tool has dual built-in Wi-Fi communication modules. One is used to communicate with the scan tool, and the other allows the scan tool to get online. Once you're online, you can register your tool, update diagnostic software & APK, browse the Internet and send email on your network.

If the VCI device is successfully activated, it will be automatically bound to the scan tool. In this case it is not necessary for the user to manually configure it again.

Note: Once WLAN is set as ON, the scan tool 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 WLAN Network

1. On the Home screen, tap Settings -> Network & internet -> Wi-Fi.
2. Slide the Wi-Fi switch to ON, the scan tool starts searching for available wireless LANs.
3. Select the desired WLAN 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 WLAN Network

1. On the Home screen, tap Settings -> Network & internet -> Wi-Fi.
2. Tap the network with a Connected status, then tap Forget.

3.5 Adjust Brightness

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

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

3.6 Change System Language

The tool supports multiple system languages. To change the language of the tool, please do the following:

1. On the home screen, tap Settings -> System -> Language & input -> Languages.
2. Tap Add a language, and then choose the desired language from the list.
3. Tap and hold the desired language and drag it to the top of the screen and then release it, the system will change into the target language.

3.7 Set 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.

1. On the home screen, tap Settings -> Display -> Advanced -> Screen timeout.
2. Choose the desired sleep time.

4 Getting Started

4.1 User Registration

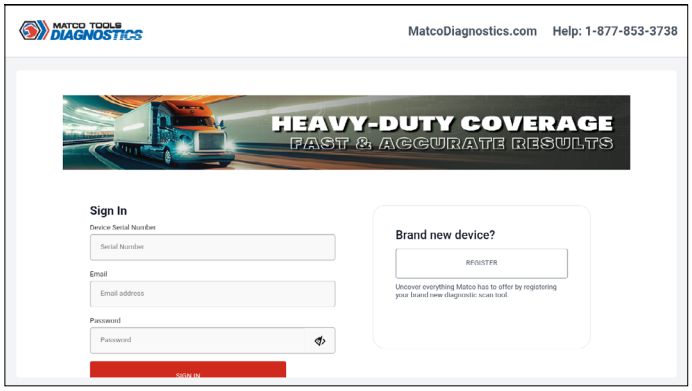
Users need to go through an sign-up process before using Maximus 5.0.

Notes:

- Before registering, please make sure that your tool 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:

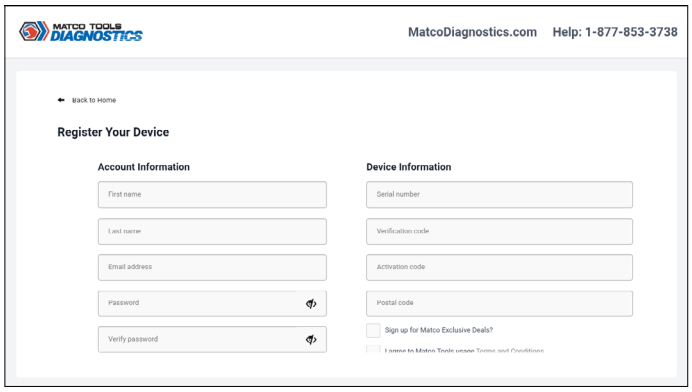
1. Tap "Maximus 5.0" on the home screen. For new user, tap "REGISTER" to go to step 2.



2. Fill in your account information and device information and then tap "ACTIVATE".

Notes:

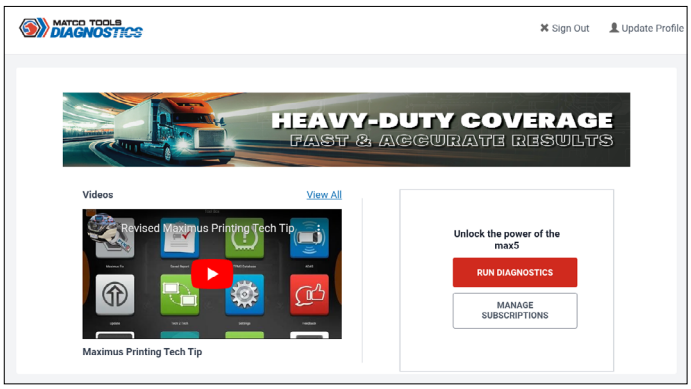
Serial number is a 12-digit number starting with 98 -- you can find it on the back of your tool.
Verification code is a 8-digit number stored in the Private & Confidential sheet.
Activation code is printed on the receipt, or consult your dealer for it.



On-screen Buttons:

Forgot Password: If you forgot the password, tap it and then follow the on-screen instructions to reset a new password.

3. Tap "RUN DIAGNOSTICS" to launch diagnostics.



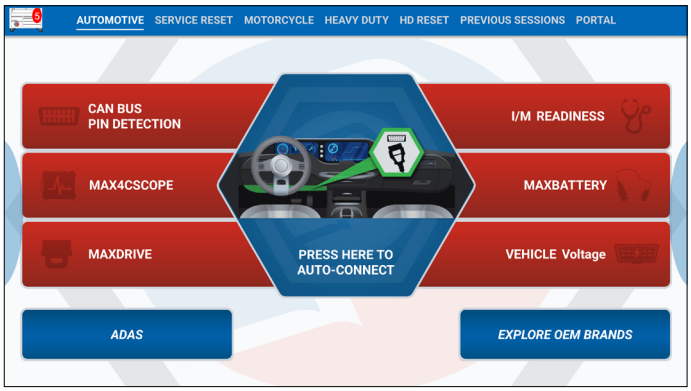
"MANAGE SUBSCRIPTIONS" enables you to renew your subscriptions or purchase new software packages.

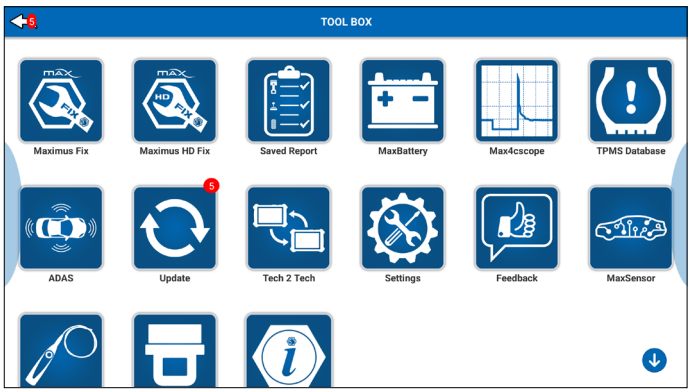
On-screen Buttons:

Sign Out: Tap it to log out the system.

Update Profile: Tap it to modify personal information.

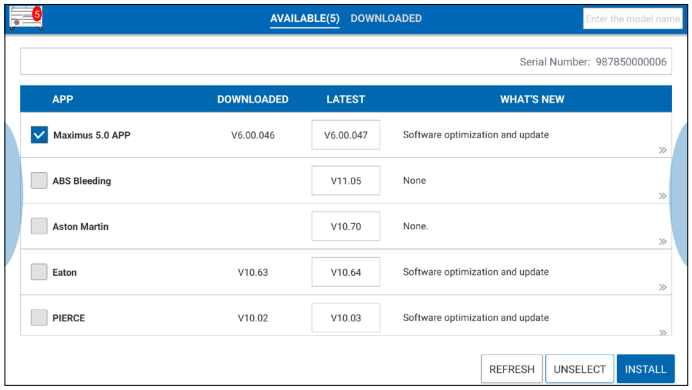
4. Tap "" on the top left-hand corner of the screen to switch to the Toolbox module.





Note: If a number indicator 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.

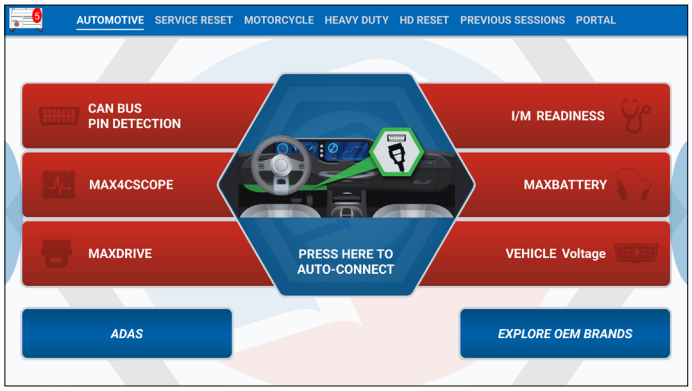
Tap the "OK" button on the pop-up message box when update is complete.

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 Maximus 5.0: 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 will pop 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 Maximus 5.0: **Diagnostics** and **Toolbox**.

4.3.1 Diagnostics

It mainly includes the following items:

Automotive	VINSCAN	Configures the Maximus 5.0 scan tool as a diagnostic tool exclusively for passenger cars. Max VIN (VIN Scan) and Manual Diagnosis are supported.
	CAN BUS Pin Detection	Allows you to detect the voltage of the vehicle OBD II diagnostic socket pins and the supported protocol types to help technicians judge the OBD II diagnostic interface.
	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.
	Max4CScope	Configures the Maximus 5.0 scan tool as a professional oscilloscope. This function requires the scan tool to work together with the compatible 4 channel oscilloscope.
	MaxBattery	Configures the Maximus 5.0 scan tool as a professional battery tester. This function requires the scan tool to work together with the compatible MDMAXBATTEST.
	MaxDrive	Allows you to synchronize and review the data stored on the MaxDrive dongle.
	Vehicle Voltage	Performs a check of the vehicle's battery to ensure the system is operating within acceptable limits.
	ADAS	Performs ADAS (Advanced Driving Assistance System) calibration operations.
	Explore OEM Brands	Retrieve or select the desired vehicle diagnostic software.
Service Reset		It offers coding, reset, relearn and more service functions of passenger vehicles, to help vehicles get back to functional status after repair or replacement.
Motorcycle		Configures that Maximus 5.0 scan tool as a diagnostic tool exclusively for Motorcycles.
Heavy Duty		Configures that Maximus 5.0 scan tool as a diagnostic tool exclusively for commercial vehicles.
HD Reset		It offers coding, reset, relearn and more service functions of heavy-duty vehicles, to help vehicles get back to functional status after repair or replacement.
Previous Sessions		Provides a quick access to the previously tested vehicles. Testing can be resumed from the previous operation without starting from scratch.
Portal		Quickly access our portal website.

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 of passenger vehicles to walk through how to fix and finish the job. Note: Contact your Matco distributor for information on how to get the Maximus Fix.
Maximus HD Fix	This modules allows you to access full instructions, flow charts, wiring diagrams and more of heavy-duty vehicles to walk through how to fix and finish the job. Note: Contact your Matco distributor for information on how to get the Maximus HD Fix.
Saved Report	Includes Health report, Recorded Data, Remote Report, Data Samples and ROXIE Reports.
MaxBattery	To test whether vehicle's battery is good or not.
Max4CScope	To determine vehicle electrical equipment and circuit trouble.
TPMS Database	A tutorial on how to perform TPMS operations.
ADAS	Allows you to perform the ADAS calibration operations.
Update	To update vehicle diagnostic software and APK.
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.
Settings	To make some system settings, including VCI Management, MD Printer Connection, Shop Information, Icon Size, Vehicle Voltage and Hide/ Remove Software etc.
Feedback	This item allows you to feedback your diagnostic problems to us for analysis and troubleshooting.
MaxSensor	To diagnose/simulate vehicle ECU sensor trouble.
Videoscope	To check unseen or unreachable parts or components.
MaxDrive	Allows you to synchronize and review the data stored on the MaxDrive dongle.
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 ••• 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.

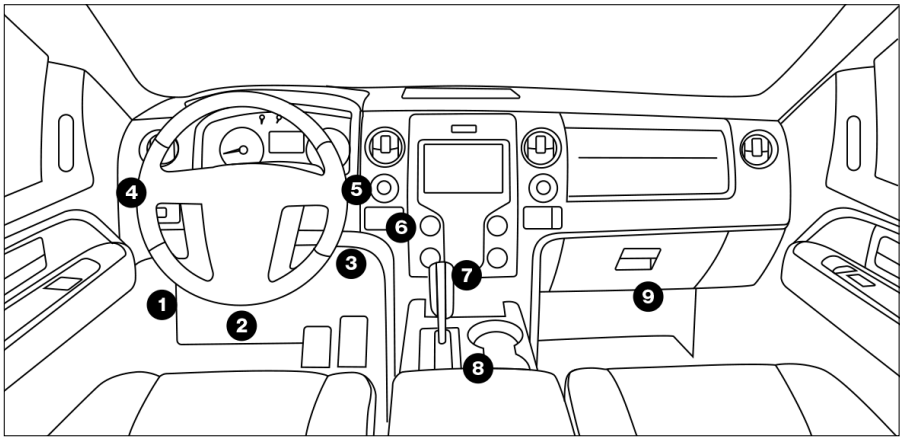
5 Start Diagnostics

5.1 Connections

5.1.1 Preparation

1. Make sure that the ignition is turned off and vehicle battery voltage range is 9-14V or 18-30V.
2. Find DLC location.

   For Passenger Vehicles, the DLC(Data Link Connector) 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 location.



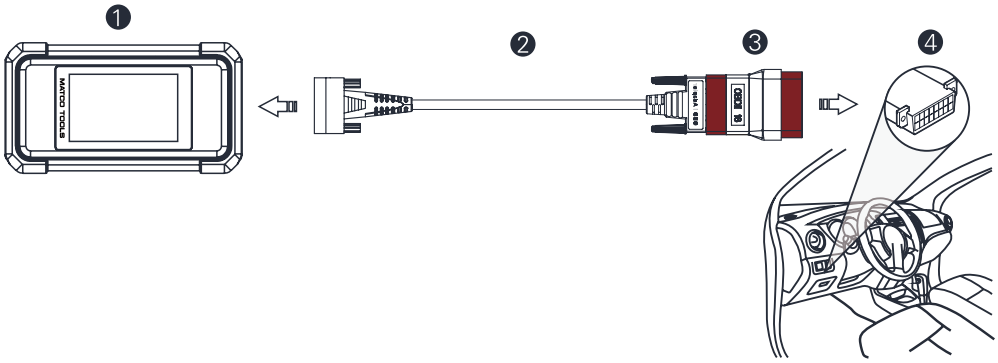
   For Commercial Vehicles, the DLC is generally located in driver's cab.

3. Refer to Chapter 5.1.2 to make connection.
4. Turn the vehicle' ignition ON with engine OFF.
5. Now the tool is ready for diagnostics.

5.1.2 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 scan tool.

5.2 Communication Settings

There are two kinds of ways available for the scan tool to communicate with the VCI device: wireless and wired (USB).

After the user registration is successfully finished, the wireless communication between the scan tool and the VCI device is automatically established and user has no need to configure it again.

The USB connection is a simple & quick way to establish communication between the scan tool and the VCI. After properly connecting the data cable from the scan tool to the VCI, the VCI navigation button at the bottom of the screen will be enabled indicating the USB connection is successful.

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

5.3 Start Diagnostics

On the Diagnostics page, tap "Automotive/Heavy Duty" 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 Wi-Fi communication between the Maximus 5.0 scan tool and VCI device, 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 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 5.1.2 "Vehicle Connection".
- A stable network connection is required for this function.

Follow the steps below to proceed.

1. Tap "VINSCAN", the system starts connecting the VCI and decoding the VIN.

A. If the scan tool successfully decodes the vehicle VIN, it will automatically enter the vehicle information confirmation screen.

- 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".
- 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 scan tool failed to obtain the vehicle VIN,

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

a). Camera Scan: Tap "⛶"to scan it.

b). Manual Input: 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.

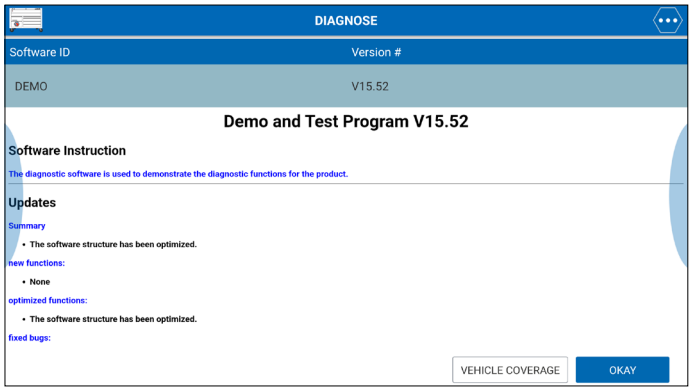
Note: In general, vehicle identification numbers are standardized - all contain 17 characters. VIN characters may be capital letters A through Z and numbers 1 through 0; however, the letters I, O and Q are never used in order to avoid mistakes of misreading. No signs or spaces are allowed in the VIN.

If the scan tool successfully identifies the vehicle model, it will directly enter the diagnostic function selection menu.

5.3.2 Manual Diagnosis

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

1). Select diagnostic software version: Tap "DEMO (Version 15.52)" to go to Step 2.

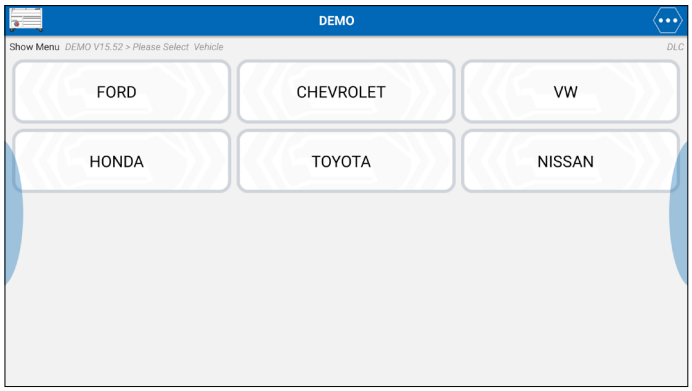


On-screen Buttons:

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

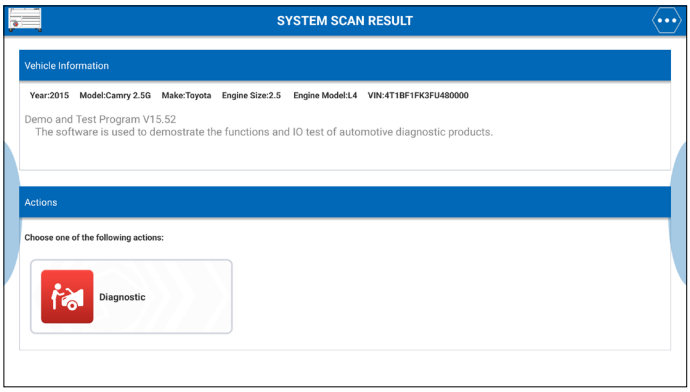
OK: Tap it to go to next step.

2). Select test vehicle (varies with different versions): Select the desired vehicle (Take "TOYOTA" for example) to continue.

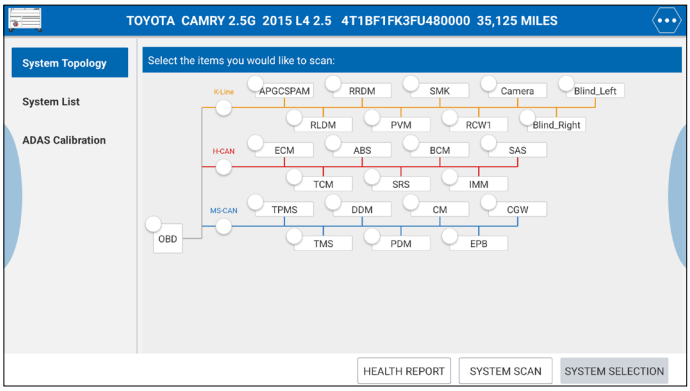


3). Turn on the ignition: Set the ignition switch to ON.

4). Confirm the vehicle information: Double check if the vehicle information is correct or not. If Yes, tap "Diagnostic" to go to the next step.



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



System Topology: Displays all available vehicle systems in form of topology structure.

System List: Displays all available vehicle systems in form of list.

ADAS Calibration: Performs ADAS calibration operations. It is extracted from the system list as a functional module and provides a quick access to ADAS system.

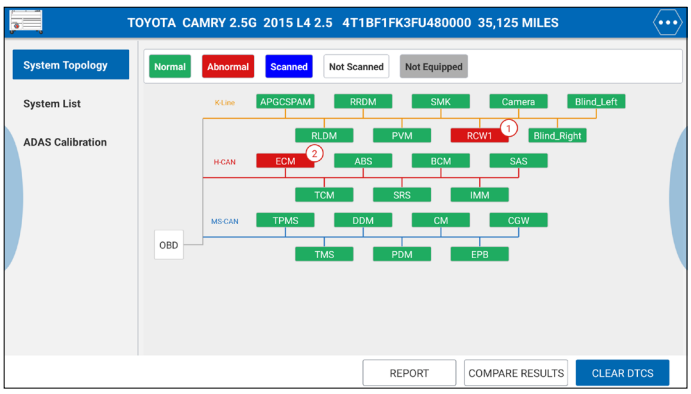
5.3.2.1 Health Report (Quick Test)

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.

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.

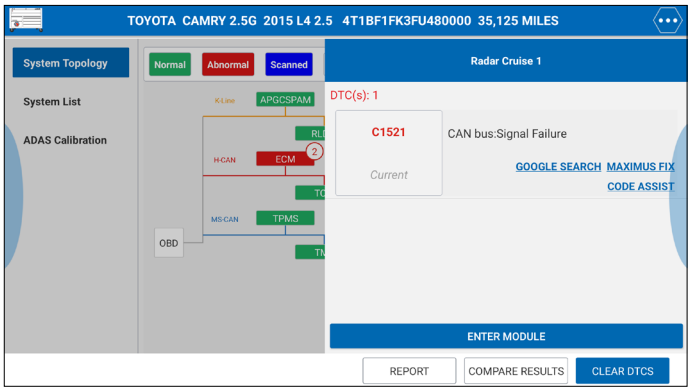
1). When working in System topology mode,

On the test item selection screen, tap "Health Report", the scan tool will start scanning all available control modules. After scanning is complete, the following screen will appear:



All systems functioning normally are displayed in green and systems functioning abnormally are displayed in red.

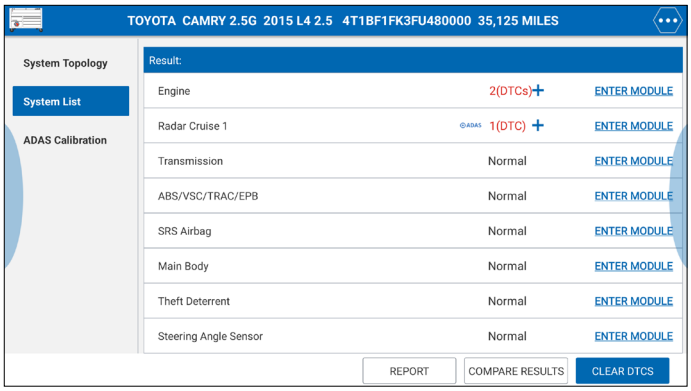
Tap the system displayed in red to view the existing DTCs in thumbnail.



Or tap the system functioning normally to perform other diagnostic functions.

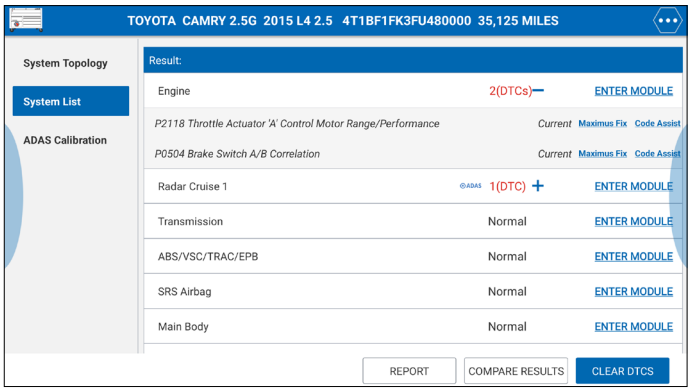
2). When working in System list mode,

Tap Health Report, the scan tool will start scanning all available systems. After scanning is complete, the following screen will appear:



All systems functioning normally are displayed in green and systems functioning abnormally are displayed in red.

Tap the system displayed in red to view the existing DTCs in full screen.



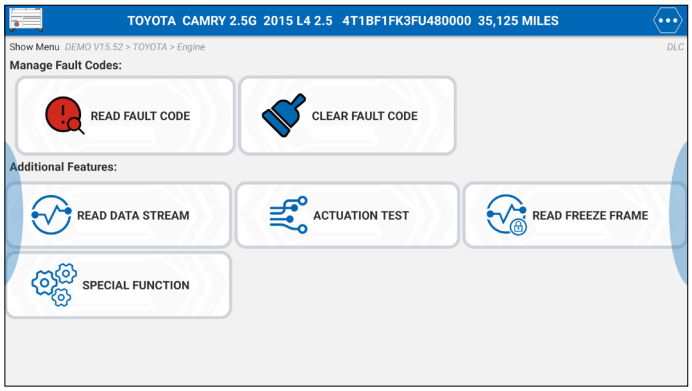
Or tap the system functioning normally to perform other diagnostic functions.

On-screen Buttons:

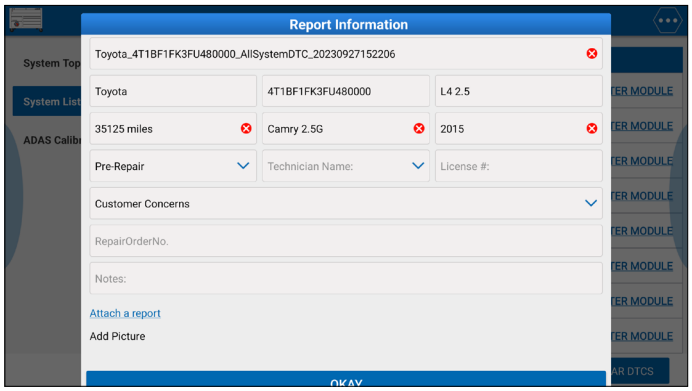
Maximus Fix: Tap to retrieve it and find possible cause & verified solution from the Maximus Fix.

Code Assist: Tap to check more details on the current DTC from the Maximus Code Assist.

Enter Module: 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.

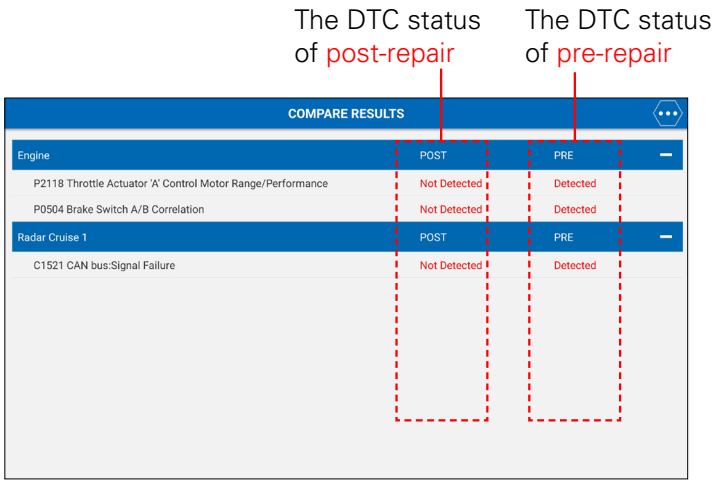
- In Technician Name field, input the technician name (*If you have entered the technician name before, tap ▼ directly to select it from the pull-down list).
- Tap "Customer Concerns", select the fault symptom information from the list and tap "OK" to confirm.
- In Notes text box, write down more description about the diagnostic trouble codes.
- To make the fault symptom more intuitive, you may also tap "Add Picture" 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.



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 DTCs: 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

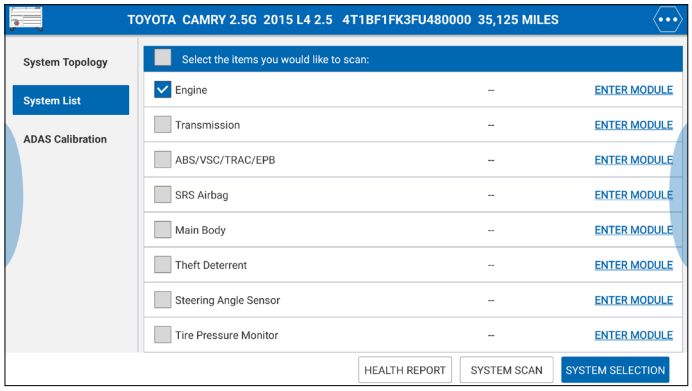
Use this option to quickly scan and identify which systems are installed on the vehicle.

On the test item selection screen, tap "System Scan" to scan the vehicle control modules. When scanning is complete, 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

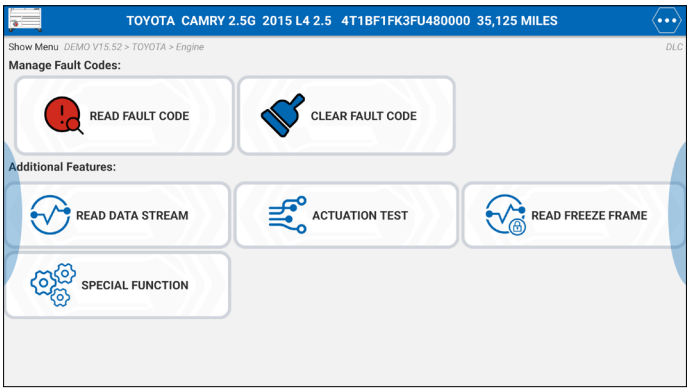
This option allows you manually select the test system and function step by step.

On the test item selection screen, tap "System Selection", the following screen will appear.



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

Tap the desired system (take "Engine" for example) to enter the following diagnostic function selection screen.

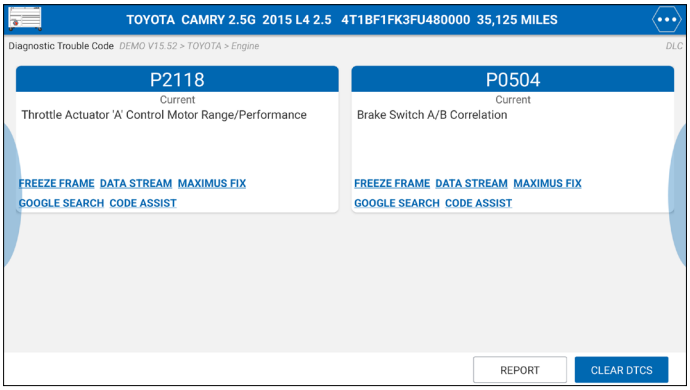


Note: Different vehicle has different diagnostic menus.

A. Read Fault Code

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

On the diagnostic 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.

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

Code Assist: Tap to check more details on the current DTC from the Maximus Code Assist.

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.

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

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.

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 diagnostic 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.

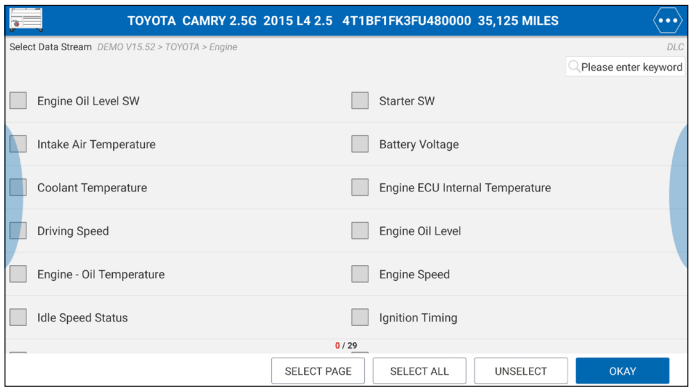
Warning: After clearing, you should retrieve trouble codes once more or turn ignition on and retrieve codes again. If there are still some trouble codes in the system, please troubleshoot the code using a factory diagnosis guide, then clear the code and recheck.

C. 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.

Danger: 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 diagnostic function selection screen, tap "Read Data Stream", the system will display data stream items.



On-screen Buttons:

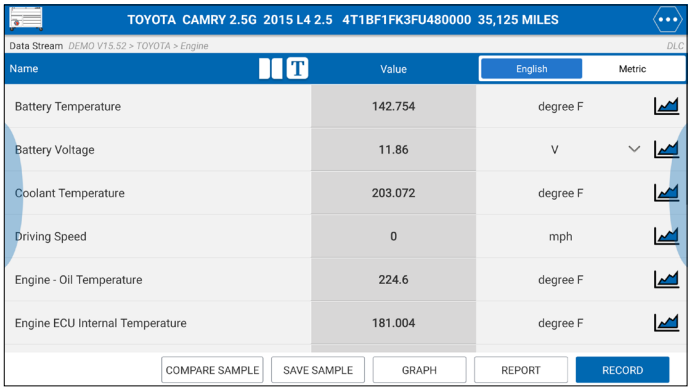
Select Page: Tap it to select all items of the current page. To select certain data stream item, just check the box before the item name.

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. Tap [ ] to split data stream items into two columns for display. Tap [T] to set different display style for each selected item.

indicates sticky top. If it is tapped, it will change into . On the data stream display screen, the data stream item with will be shown on the top of the selected data stream list. To remove it from the top of the list, just tap it again.

B indicates this item will be displayed in Bold.

A indicates this item will be displayed in Red.

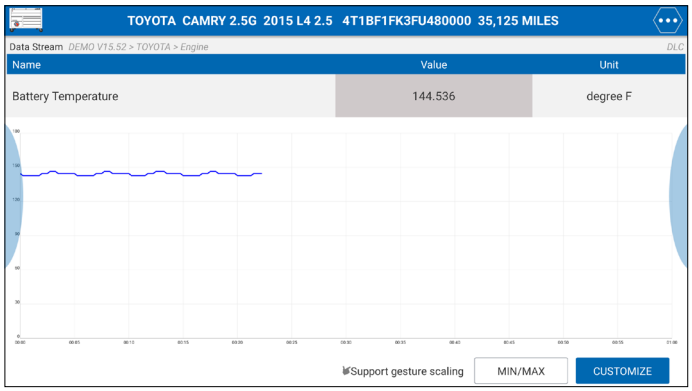
2. Tap English or Metric to switch the measurement unit.
3. If the value of the data stream item is out of the range of the standard (reference) value, the whole line will display in red. If it complies with the reference value, it displays in blue (normal mode).
4. The indicator 1/X shown on the bottom 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).

Compare Sample: Tap it to select the sample file, the values you customized and saved in process of DS sampling will be imported into the "Standard Range"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 data stream file.

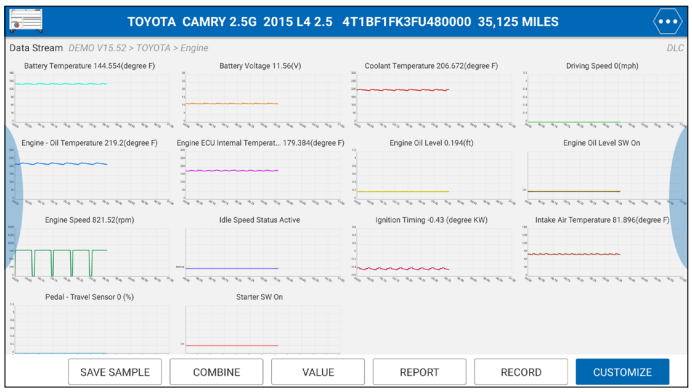
Save Sample: This item enables you to customize the standard range of live data stream items and save it as DS sample file. Each time you run the data stream items, you can call out the corresponding sample

data to overwrite the current standard range.

Tap it to start recording the sample data (*Only data stream items with units will be recorded). 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 "Saved Reports" in "Toolbox".

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.

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 (To differentiate between files, please configure the accurate system time).

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 Maximus 5.0 scan tool 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. Each time when an operation is successfully executed, "Completed" displays.

E. Special Function

It offers coding, reset, relearn and more service functions, to help vehicles get back to functional status after repair or replacement. For more information on detailed operations, refer to Chapter 5.4.

5.4 Service/HD Reset

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, the available service functions are subject to change at any time. To enjoy more service functions, you are suggested to check for updates on a regular basis.

5.5 Diagnostic History (Previous Session)

Generally once a vehicle diagnosis is performed, Maximus 5.0 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 starting from scratch.

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

- 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

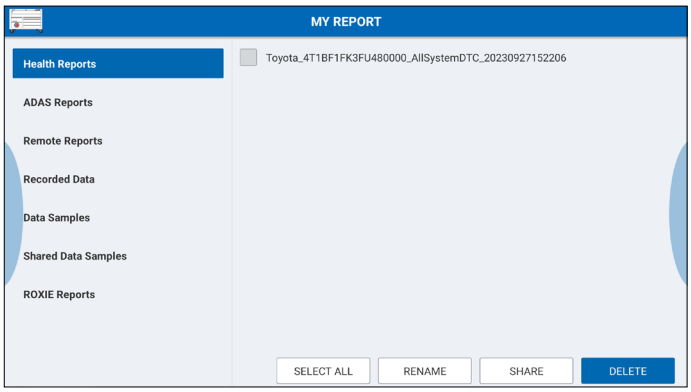
6.1 Maximus/Maximus HD Fix

This modules allows you to access full instructions, flow charts, wiring diagrams and more to walk through how to fix and finish the vehicle repair job.

Note: Contact your Matco distributor for information on how to get the Maximus Fix/Maximus HD Fix.

6.2 Saved Report

Tap "Saved Report", the following screen will appear.



6.2.1 Health Reports

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

6.2.2 ADAS Reports

This option lists all ADAS diagnostic reports generated in process of ADAS calibration operations.

6.2.3 Remote Reports

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

6.2.4 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.

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.

6.2.5 Data Samples

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

6.2.6 Shared Data Samples

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

6.2.7 ROXIE Reports

This feature lets you manage all ROXIE reports generated by the bound ROXIE devices.

6.3 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 MAXBATTERY module.

It also can be quickly accessed by tapping **Diagnostics** -> **MaxBattery**.

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

6.4 Max4cscope

The Maximus 4-Channel Oscilloscope (MDMAX4CSCOPE) allows the auto repair technician to quickly judge the faults on automotive electronic equipment and wiring. It not only can quickly acquire the circuit signal, but also can slowly display the waveform to observe and analyze. It can also record and store the tested signal waveform.

It needs to work with the included MAX4CSCOPE module.

It also can be quickly accessed by tapping **Diagnostics** -> **Max4cscope**.

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

6.5 TPMS Database

A brief tutorial on how to perform TPMS functions.

6.6 ADAS

This function enables users to perform ADAS (Advanced Driver Assistance System) calibration operations. The ADAS calibration software is disabled by default. Before using this function, users must activate the ADAS function using the ADAS Activation Card.

It also can be quickly accessed by tapping **Diagnostics** -> **ADAS**.

Note: This function requires the diagnostic tool to work with the MDADASADAPT calibration tool (calibration tools from other manufacturers will not be supported).

6.7 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.

6.7.1 Update Diagnostic Software & APP

The Available tab displays a list of software that can be updated. Under it, all software is categorized into three kinds:

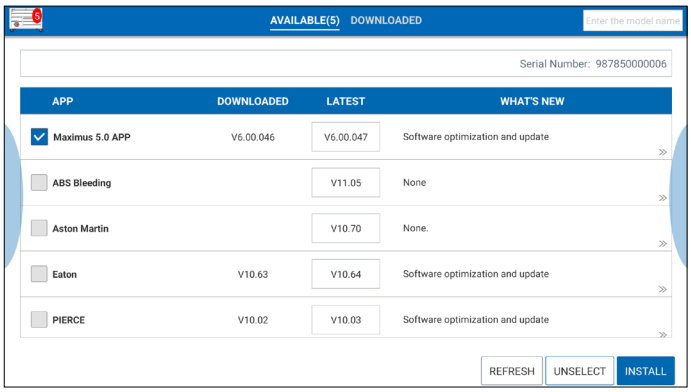
- Common software: mainly includes some common apps that are associated with the diagnostic app. The software of this kind always stays at the top of the list, which can be deselected manually (excluding the system app, such as firmware and ECU aid).
- Frequently used vehicle software: refers to the diagnostic software that is frequently used, including the vehicle diagnostic software and Reset software. It is generally displayed following the Common software

list.

- Other vehicle software: refers to the diagnostic software that is rarely used or never used. It is generally displayed following the Frequently used software list.

1). If the user does not download any diagnostic software during the sign-up process, all diagnostic software is selected by default. Tap "Install" to start downloading.

2). If the user downloaded all/some vehicle software during the sign-up process and had it serviced for a long period of time, only the frequently used software is selected. Tap "Install" to start downloading. Other vehicle software that is rarely used will also be listed under the Available tab, but it is not selected at default.



To download certain software that is not frequently used, check the box before the vehicle model. Tap "Install" to start downloading.

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

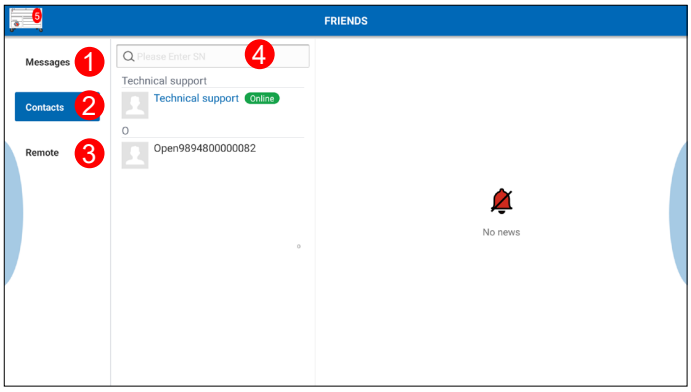
6.7.2 Update Frequently Used software

If the user only intends to update the frequently used software, tap the Downloaded tab.

Tap "Install" to start downloading. Once download is finished, the software packages will be installed automatically.

6.8 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.



1	Message tab	Once an incoming message reaches, a red dot will appear on the upper right corner of the tab.
2	Contacts List	Tap to enter the friend list.
3	Remote tab	Set it to ON when asking for remote control.

4	Search bar	Directly input the partner's S/N of the Maximus 5.0 to start searching, and tap the desired one to add it into your friend list.

6.8.1 Add Friends

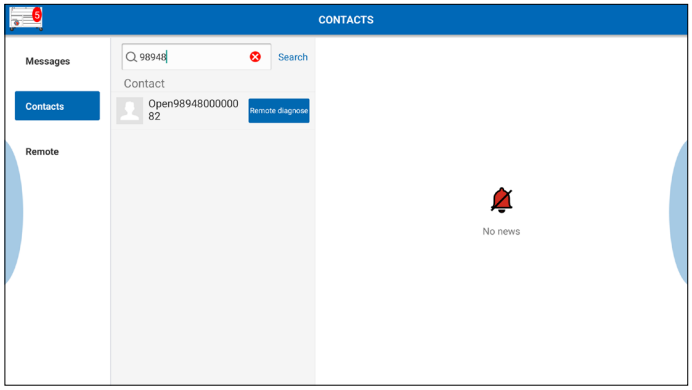
Tap "Contacts" to enter the contact page. By default it appears blank.

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, the following screen will appear:



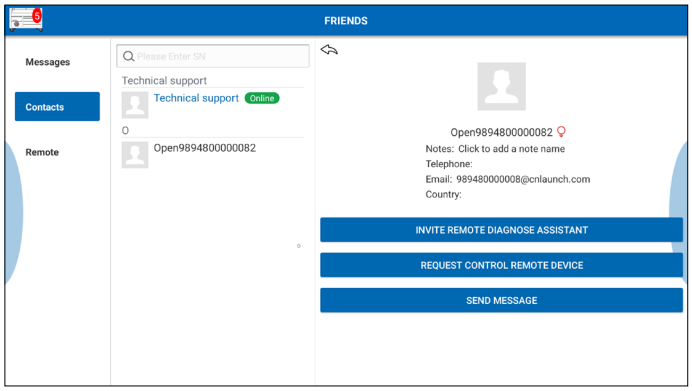
- To launch the remote diagnostics directly, tap "Remote Diagnose" to invite a remote control or request control remote device.
- To view the partner's detailed information, tap to add him/her as your friend. Once the partner agreed your request, you will receive a piece of verification information and he/she will automatically be listed in the Contact tab.

6.8.2 Start Instant Messaging

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

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

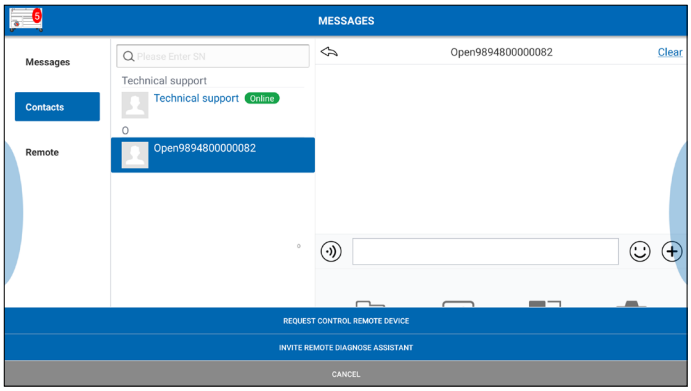
A. <u>If you do not add the partner as your friend</u>, tap "Send Message" to enter the following screen:



B. <u>If you have added the partner into the Contacts</u>, 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, and tap "Send".



Here you can send voice messages and 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.

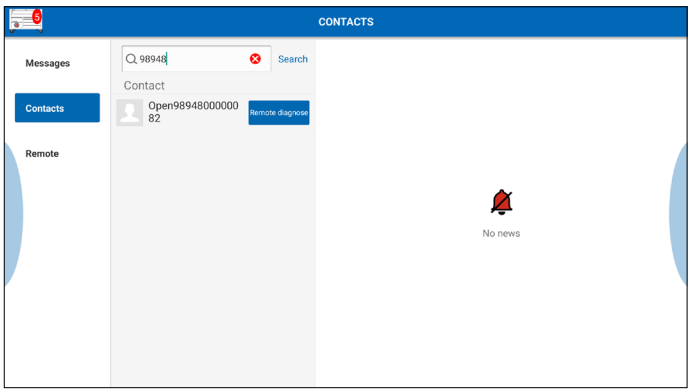
6.8.3 Launch Remote Diagnosis (Scanner to Scanner)

The scan tool is allowed to initiate remote diagnosis with other scan tools (including but not limited to the Maximus 5.0) of Matco family, which are equipped with this module.

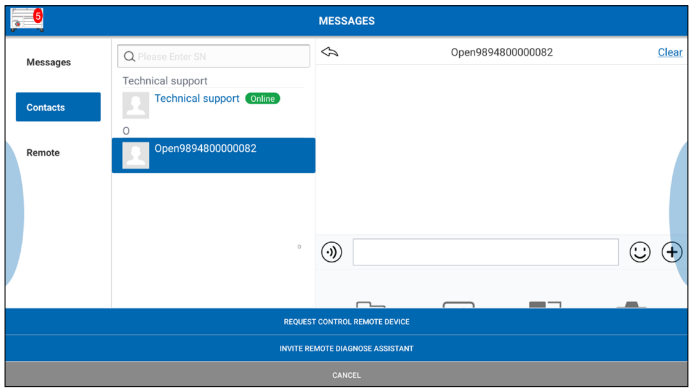
Note: Before performing this operation, please make sure the following conditions are met no matter which side sends the remote request:

- 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 scan tool is required.

A. In case you do not add the partner as your friend, directly tap "Remote Diagnose".



B. If you have added the partner into the Contact, tap + and select "Tech 2 Tech" from the pull-down option list.



The Tech 2 Tech options are defined as follows:

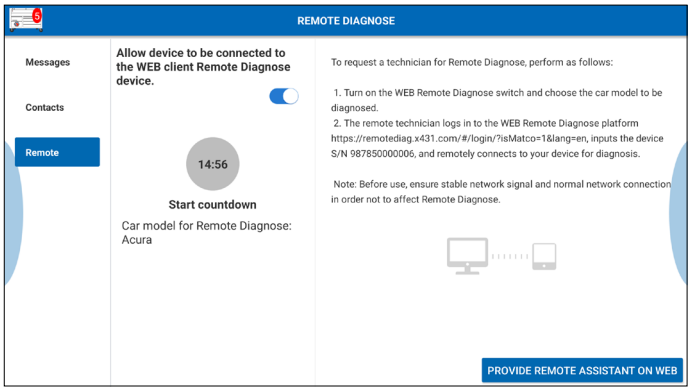
Actions	Results
Request control remote device	Request to control the partner's device remotely to help him diagnose the vehicle. Notes: • Remote diagnosis has the same diagnostic steps as manual diagnosis. • In process of remote diagnosis, tap the button to send a voice message. • Once vehicle diagnosis 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.

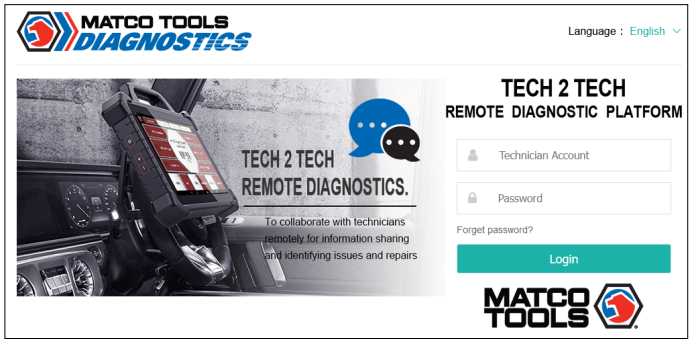
6.8.4 Launch Remote Diagnosis (Scanner to PC)

User also can ask for remote control from a PC client technician.

1. Tap "Remote". Slide the switch to ON so that the partner can connect to your scanner, then select the target vehicle model. The following screen will appear:

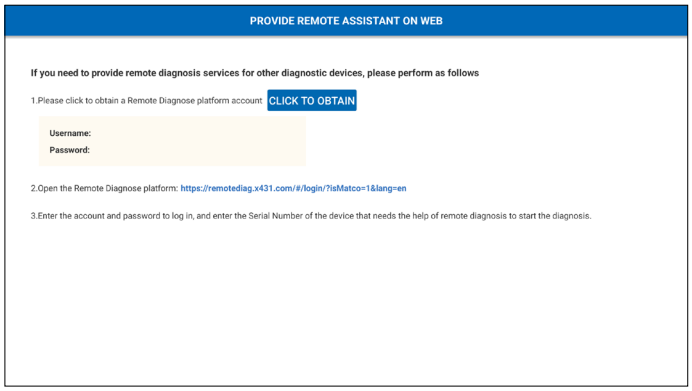


2. Notify the partner to visit the Matco web remote diagnostics platform (https://remotediag.x431.com/#/login/?isMatco=1&lang=en) until the following screen appears on the PC.



3. After the partner successfully logs in (using his own official technician account and password), the following screen will appear.
4. Tell the partner to enter the Serial Number of your scanner, and then tap Start remote diagnosis to control your scanner remotely.

If you need to provide remote diagnosis service for other diagnostic scanners, tap "Provide remote assistant on web", the following screen will appear:



1. Tap "Click to obtain" to get a temporary remote diagnostics platform account.
2. Open the Matco web remote diagnostics platform (https://remotediag.x431.com/#/login/?isMatco=1&lang=en).
3. Enter the obtained username and password to log in and then enter the Serial Number of the scanner that needs the help of remote diagnosis to start the diagnosis.

Notes: In process of remote diagnosis, please note the following things:

1) You are not suggested to execute any actions.

2) The partner is not allowed to save any diagnostic reports or records on your scan tool.

Once the session is complete, a remote diagnostic report will be automatically generated.

6.9 Settings

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

6.9.1 General

6.9.1.1 Units of Measurement

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

6.9.1.2 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.

6.9.1.3 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 scan tool has a network connection and a newer version is detected.

6.9.1.4 Diagnostic Application Auto Update

This option is used to set whether to update the available diagnostic application automatically when the scan tool has stable Wi-Fi signal.

6.9.2 VCI

If several VCI devices are activated on this tool, a list of VCI devices will be displayed on the screen.

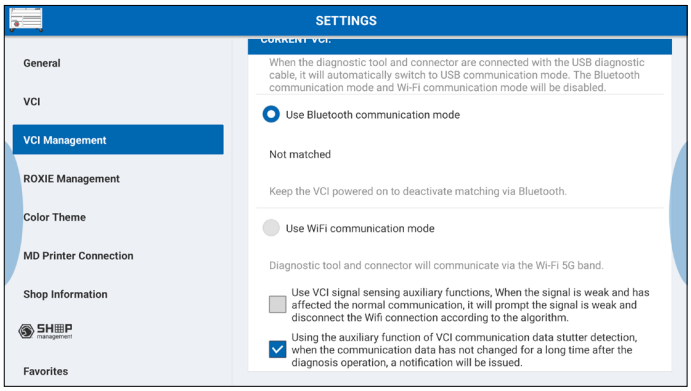
Once you choose the device that belongs to other account, you have to log out, and then input the right account to continue.

- If you use another VCI to test a vehicle, select the desired checkbox and tap "Pair" to pair it with the scan tool.
- 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 scan tool, tap "Unpair" to unpair the VCI device with the previously paired scan tool.

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

6.9.3 VCI Management

This option is allows you to set the communication method between the VCI device and the scan tool. Wi-Fi is set as the default communication method.



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

6.9.4 ROXIE MANAGEMENT

This option is used to activate and bind the ROXIE W device to the tool. Once bound, the reports generated by the ROXIE device will be automatically pushed to the tool each time the inspection session is finished.

All ROXIE reports can be accessed from "Toolbox" -> "Saved Reports" -> "ROXIE Reports".

Fill in the ROXIE S/N and Activation Code (printed on the sticker on the Quick Start Guide included with the ROXIE device), then tap "BIND".

6.9.5 Color Theme

This feature allows you to set the color theme according to your preference.

Note: After the desired color theme is selected, the application must reboot for the changes to be applied.

6.9.6 MD Printer Connection

This option is used to establish a wireless connection between the scan tool 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).

1. For Matco Tools Wi-Fi printer, follow the instructions described in the User Manual included with the printer to configure it.

2. For other Wi-Fi printers,

Before printing, make sure the following conditions are met:

- The Wi-Fi printer is powered on and working normally.
- The print service plug-in associated with the printer is already installed on the scan tool (Go to Google Play or use the Browser to download and install it).

Follow the steps below to proceed:

1. Set the default printer as System.
2. Go to "Settings" -> "Network & Internet" -> "WLAN", set the WLAN switch to Off.
3. On the report details page, tap .
4. Touch next to Select a printer on the upper left corner of the screen.
5. Select "All Printers" -> "Add printer" and enable the installed printer service, the system starts searching for all available Wi-Fi printers of the brand.
6. Select the desired Wi-Fi printer from the list. If the chosen Wi-Fi printer hotspot is open, the scan tool can connect it directly. If it is encrypted, a password may be required. Refer to the Wi-Fi printer user manual to get the default password.
7. Now the printer is ready for printing.
8. Alternatively, you can also choose Save as PDF to save the current diagnostic report as a PDF file for later printing.

6.9.7 Shop Information

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

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.

6.9.8 Shop Management

This option allows you to synchronize the diagnostic reports generated by your Maximus 5.0 to your SHOPBOSS Shop ID for easier management.

6.9.9 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.

6.9.10 Hide or Remove Software

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

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

6.10 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 scan tool gets a stable network signal, it will be uploaded to the remote server automatically.

6.11 MaxSensor

The Maximus Sensor Simulator (also called "MDMAXSENSOR") enables users to easily and quickly diagnose and simulate the sensor.

Moreover, the MDMAXSENSOR also supports the multimeter function, which measures the physical parameters of voltage, resistance, capacitance etc.

The MDMAXSENSOR is not available in the package box of MDMAX5, which needs to be purchased separately.

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

6.12 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.

6.13 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 MDMAX5 to synchronize and review the data for analysis and troubleshooting.

It also can be quickly accessed by tapping **Diagnostics** -> **MaxDrive**.

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

6.14 About

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

7 FAQ

1. How to save power?

- Please turn off the screen while the tool keeps idle.
- Set a shorter standby time.
- Decrease the brightness of the screen.
- If WLAN connection is not required, please turn it off.

2. Communication error with vehicle ECU?

Please confirm:

- Whether the VCI device is correctly connected.
- Whether ignition switch is ON.
- If all checks are normal, send vehicle year, make, model and VIN number to us using Feedback feature.

3. Failed to enter into vehicle ECU system?

Please confirm:

- Whether the vehicle is equipped with this system.
- Whether the VCI device is correctly connected.
- Whether ignition switch is ON.
- If all checks are normal, send vehicle year, make, model and VIN number to us using Feedback feature.

4. 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 "Wireless Update".

Step 3 - tap "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.

5. 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.

6. The diagnostics application is failing.

1. Tap the Home key to navigate to the Home screen.
2. Select "Settings".
3. Select "Apps".
4. Select the Maximus 5.0 Application from the Apps list.
5. Select "Force Stop".
6. Tap "OK" to confirm.
7. Select "Storage" -> "Clear Data".
8. Tap "OK" to confirm.

8 Appendix - Glossary of Terms & Abbreviations

ABS – Anti-Lock Brake System

AC – Alternative Current

ADAS – Advanced Driver Assistance Systems

AFS – Adaptive Front-lighting System

APP - Application

BT - Bluetooth

CAN – Controller Area Network

Communication Protocol – 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

DC – Direct Current

DLC – Data Link Connector

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

DPF – Diesel Particulate Filter

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.

Drive Cycle – A set of driving procedures that, when met, provide the Enabling Criteria for the I/M Monitors to run and complete their diagnostic tests.

EGR - Exhaust Gas Recirculation

Freeze Frame Data – A digital representation of engine and/or emissions system conditions present when a fault code was recorded.

Generic Code – A DTC that applies to all OBD2 compliant vehicles.

I/M – Instant Messaging

I/M Readiness – An indication of whether or not a vehicle's emissions-related system are operating properly and are ready for Inspection and Maintenance testing.

LCD – Liquid Crystal Display

LED – Light Emitting Diode

Manufacturer Specific Code – A DTC that applies only to OBD II-compliant vehicles made by a specific manufacturer.

MIL – Malfunction Indicator Lamp

The vehicle's "Check Engine" warning light that activates when a DTC is stored.

OBD I – On-Board Diagnostics Version 1

OBD II – On-Board Diagnostics Version 2

OEM – Original Equipment Manufacturer

PCM – Powertrain Control Module

PID – Parameter Identification Data

Data returned by the vehicle's Control Modules to the diagnostic tool.

TPMS – Tire Pressure Monitor System

VCI – Vehicle Communication Interface

WLAN – Wireless Local Area Network

Customer Service

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.