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Important Safety Precautions

To avoid personal injury, property damage, or accidental damage to the product, read all of the information in this section before using the tool.

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.
- Please use the included battery and power adaptor. Risk of explosion if the battery is replaced with an incorrect type.
- DO NOT attempt to operate the tool while driving the vehicle. Have second personal operate the tool. Any distraction may cause an accident.

WARNING

- Always perform automotive testing in a safe environment.
- Do not connect or disconnect any test equipment while the engine is running.
- 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.
- 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.

- Keep a fire extinguisher suitable for gasoline/chemical/electrical fires nearby.
- Wear an ANSI-approved eye shield when testing or repairing vehicles.
- Put blocks in front of the drive wheels and never leave the vehicle unattended while testing.
- 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.
- 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.
- Automotive batteries contain sulfuric acid that is harmful to the skin. In operation, direct contact with the automotive batteries should be avoided. Keep the ignition sources away from the battery at all times.
- 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.
- Keep clothing, hair, hands, tools, test equipment, etc. away from all moving or hot engine parts.
- Store the tool and accessories in a locked area out of the reach of children.
- Do not use the tool while standing in water.
- Do not expose the tool or power adaptor to rain or wet conditions. Water entering the tool or power adaptor increases the risk of electric shock.
- This tool is a sealed unit. There are no end-user serviceable parts inside. All internal repairs must be done by an authorized repair facility or qualified technician. If there is any inquiry, please contact the dealer.
- Keep the tool far away from magnetic devices because its radiations can damage the screen and erase the data stored on the tool.
- Do not attempt to replace the internal rechargeable lithium battery. Contact the dealer for factory replacement.
- Do not disconnect the battery or any wiring cables in the vehicle when the ignition switch is on, as this could avoid damage to the sensors or the ECU.
- Do not place any magnetic objects near the ECU. Disconnect the power supply to the ECU before performing any welding operations on the vehicle.
- Use extreme caution when performing any operations near the ECU or sensors. Ground yourself when you disassemble PROM, otherwise ECU and sensors can be damaged by static electricity.
- When reconnecting the ECU harness connector, be sure it is attached firmly, otherwise electronic elements, such as ICs inside the ECU, can be damaged.

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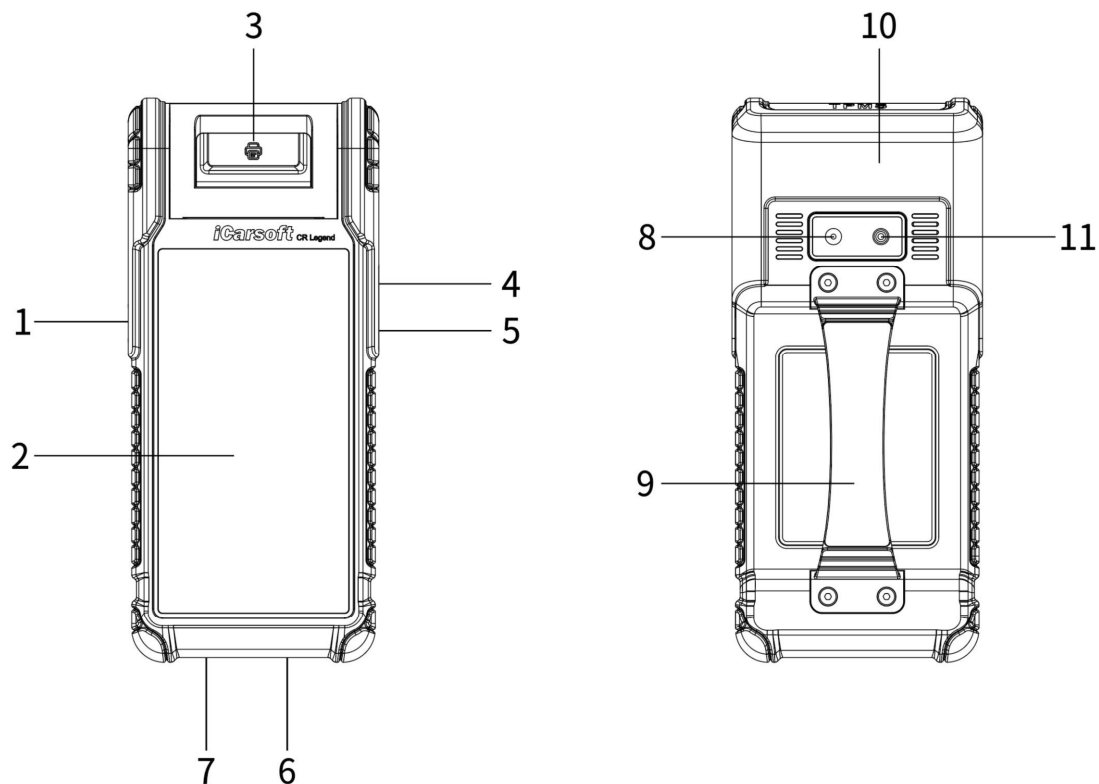
1 Introduction

1.1 Package List

The following accessories are for reference only. Please consult from the local agency or check the package list supplied with this tool together.

No.	Item	Descriptions	Qt.
1	CR Legend	Indicate the test result.	1
2	Diagnostic cable	Collect the tool to the vehicle's DLC (Data Link Connector) port.	1
3	Battery cable clamps	Connect the vehicle battery to perform the battery detection.	1
4	External power adaptor	Charge the tool via AC outlet.	1
5	USB cable	Type C to Type C, for charging.	1
6	Password envelope	A piece of paper bearing the product Serial Number and Activation Code for product registration.	1
7	User manual	Instructions on the tool operations.	1
8	Cigarette lighter cable	Supply power to the non-16pin connector from the vehicle's cigarette lighter receptacle.	1
9	OBD I adaptor box	Connect the diagnostic cable and non-16pin adaptor cable.	1
10	Non-16pin adaptor cable kit	Connect to the vehicle equipped with non-OBD II management system.	1

1.2 Components & Controls



1. POWER key - Press it to turn the tool on/off.
2. LCD screen – Indicates the test results.
3. Printer – Prints the diagnostic reports or screenshots.
4. USB Type A port – Connects the Videoscope or USB storage device.
5. USB Type C port – Connects the power adaptor for charging.
6. DB15 diagnostic connector – Connects the diagnostic cable to the vehicle's DLC (Data Link Connector) port.
7. Circular connector – Connects the battery tester clamps to perform battery detection.
8. Rear camera
9. Handgrip belt
10. TMPS antenna
11. Camera flash

1.3 Technical Parameters

Operating system: Android 10

Memory: 4GB

Storage: 64GB

Screen: 5.99 inch capacitive touch screen with a resolution of 1440 x 720 pixels

Camera: Rear-facing 8.0MP camera

Wi-Fi: 2.4GHz/5GHz dual band

Connectivity:

- DB15 Diagnostic connector
- USB Type A port x 1 + USB Type C port
- Circular Connector for battery tester clamps


Working temperature: 0°C ~ 45°C


Storage temperature: -10°C ~ 60°C

2 Initial Use

2.1 Charging & Turning On

1. Plug one end of the included USB cable into the USB Type C port of the tool, and the other end to the DC external power adaptor.
2. Plug the other end of the power adaptor to the AC outlet to start charging.
3. Press the **POWER** button to turn the tool on.

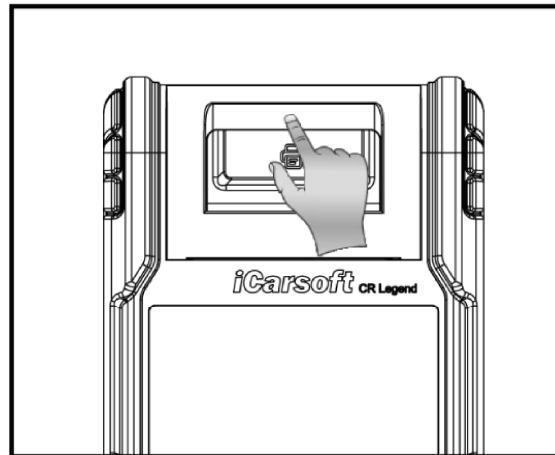
 **Caution:** Please use the included power adaptor to charge your tool. No responsibility can be assumed for any damage or loss caused as a result of using power adaptors other than the one supplied.

 **Note:** If the battery remains unused for a long period of time or the battery is completely discharged, it is normal that the tool will not power on while being charged. Please charge it for a period of 5 minutes and then turn it on.

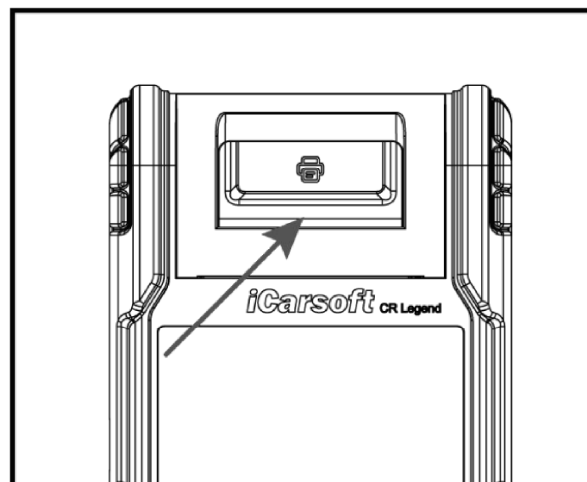
2.2 Printer Setting

The tool has a built-in printer available for printing reports or screenshots. The printer applies thermal paper roll with size of $\Phi 30 \times 57$ mm. Follow the steps described as below to load it.

1. Dig your finger from the gap and lift it up gently until the printer cover is opened.



2. Place the unpacked thermal paper into the compartment with its starting end approaching to the paper outlet. Reversing paper direction will result in that no results will be printed out.
3. Pull out some printing paper and introduce it along with the slot until it comes out of the paper outlet shown as below. Otherwise, paper can not be fed.



4. Close the paper cover and press it down until you hear a click.

Note: The printer applies the thermal paper, which should be prevented from being heated before printing, otherwise, the paper would be no longer effective or printing results disappear.

2.3 Basic Operations



Single-tap: To select an item or launch a program.



Double-tap: To zoom in so that the text on a webpage appears in a column that fits your device's screen.



Long press: Tap and hold on the desired vehicle software to delete it.



Slide: To jump to different pages.

Swipe from the right edge of the screen: Back to the previous screen or exits.

2.4 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.

2.5 Network Setup

The tool has built-in Wi-Fi that can be used to get online. Once you're online, you can register your tool, surf the Internet, send email, launch the remote diagnosis, and check for software updates etc.

5. On the home screen, tap **Settings -> Network & Internet -> Wi-Fi**.
6. Slide the Wi-Fi switch to ON, the tool starts searching for available wireless networks.
7. Select a wireless network to connect. When **Connected** appears, it indicates the Wi-Fi connection is complete.



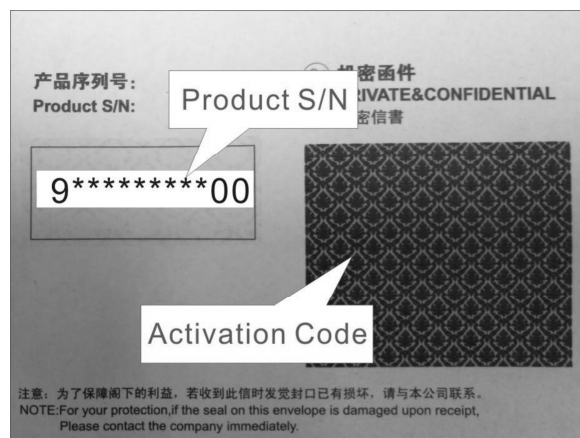
Note: When Wi-Fi is not required, this should be disabled to conserve battery power.

2.6 Register & Download Diagnostic Software

Tap **Login** on the upper right corner of the Job menu, the following login popup will appear on the screen.


A. If you are a new user, tap **New Registration** and follow the on-screen instructions to finish the registration.

1. Create App account: Fill in the information in each field (Items with * must be filled). After inputting, tap **Register**.
2. Activate VCI: Input the 12-digit Product Serial Number and 8-digit Activation Code (can be obtained from the password envelope), and then tap **Activate**.



3. Download diagnostic software: Tap **OK** to enter the update center to download all available software.

B. If you have registered to be a member, input your name and password, and then tap **Login** to enter the main menu screen directly.

 Note: The tool has an auto-save function. Once the username and password are correctly entered, the system will automatically store them. Next time you login the system, you will not be asked to input the account manually.

C. If you forgot the password, tap **Retrieve password** and then follow on-screen instructions to set a new password.

2.7 Job Menu

The following modules are included.

Battery:

Perform the battery detection and battery matching. See Chapter 4.

TPMS:

Configure the tool as a professional Tire Pressure Monitoring System (TPMS) service tool. It provides the ability to perform all kinds of various TPMS functions. See Chapter 5.

Diagnose:

Diagnose the electronic control units of the vehicle manually. See Chapter 3.

Maintenance:

Perform all kinds of common maintenance and reset items.

Reports:

Manage the battery report, TPMS report, diagnostic report and recorded data.

Update:

Update vehicle diagnostic software and APK.

Settings:

Configure the system settings of the tool.

Videoscope:

Check the unseen or unreachable parts or components.

Personal center:

Manage personal information, configure system settings of the application and logout etc.

Feedback:

Feedback the diagnostic issues or bugs to us for analysis and troubleshooting.

Others:

Include product manual, remote diagnosis and some frequently used system apps.

3 Vehicle Diagnosis

3.1 Preparation

- The vehicle ignition is turned on.
- The vehicle battery voltage range is 11-14 volts.
- The throttle is in the closed position.
- Find DLC location.

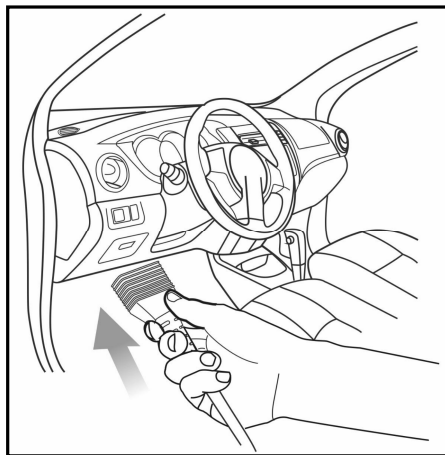
The DLC (Data Link Connector) is usually located 12 inches from the center of the instrument panel, under or around the driver's side for most vehicles. For some vehicles with special designs, the DLC location may vary.

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

3.2 Vehicle Connection


Follow the steps mentioned below to connect OBD II vehicle:

Connect one end of the included diagnostic cable to the DB15 diagnostic connector, and the other end to the vehicle's DLC port.



For non-OBDII vehicle, proceed as follows:

1. Select the corresponding adaptor cable according to the vehicle's DLC type.
2. Plug the non-16pin end of the adaptor cable into the vehicle's DLC port, then connect the other end to the OBD I adaptor, and then tighten the captive screws.
3. Connect the other end of the OBD I adaptor to the diagnostic cable.

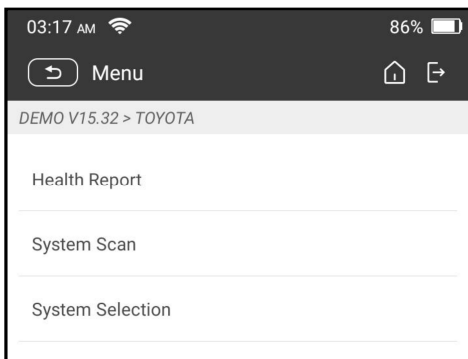
 **Note:** If the pin of the DLC is damaged or the DLC has insufficient power, you can get power via the Cigarette Lighter Cable: Plug one end of the cable into the vehicle's cigarette lighter receptacle, and other end to the DC port of the OBD I adaptor.

3.3 Start Diagnostics

Tap a corresponding diagnostic software logo, and then follow the on-screen instruction to access the diagnostic software.

Take Demo (Version 15.32) as an example to demonstrate how to diagnose a vehicle.

- 1). Select diagnostic software version: Tap the **DEMO** to go to Step 2.
- 2). Select vehicle model (varies with different versions): Select the desired vehicle model. Here we take **TOYOTA** for example to demonstrate how to diagnose a vehicle.
- 3). Turn the ignition key to ON: Set the ignition switch to on.
- 4). Read vehicle information: After reading the vehicle information, double check if the vehicle information is correct or not. If yes, tap **Yes** to continue.
- 5). Select test item: Select the desired test item to proceed.



1. Health Report (Quick Test)

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

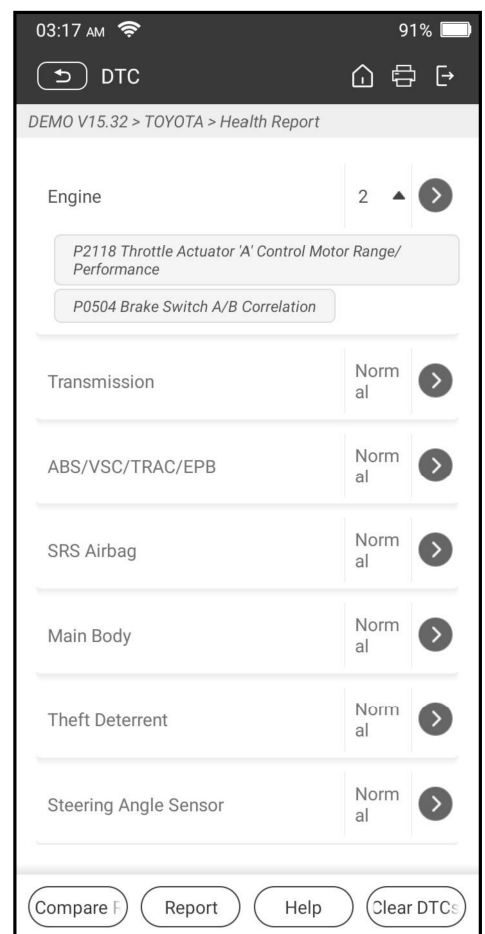
Tap **Health Report**, the system will start scanning the ECUs. Once the scanning process is complete, the following screen will appear:

Explanation of terms:

: Back to the Job menu.

: Print the content of the current screen.

: Exit the current program.



Report: Save the current data in text format.

Help: View the DTC help information.

Compare Results: Tap 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.

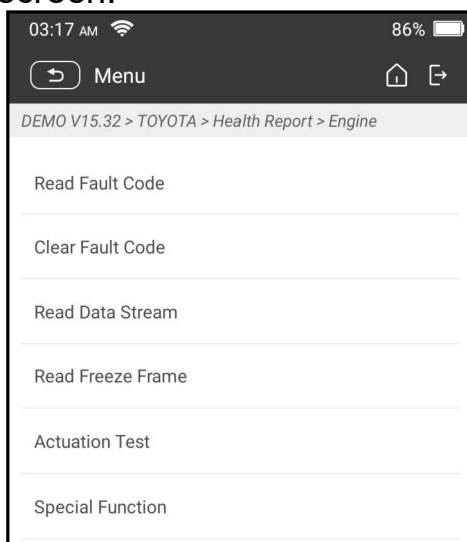
Clear DTCs: Tap to clear the existing diagnostic trouble codes.


2. System Scan

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

3. System Selection


This option allows you to manually select the test system and function step by step. Tap **System Selection** and select the target system (take **Engine** for example) to enter the test function screen.



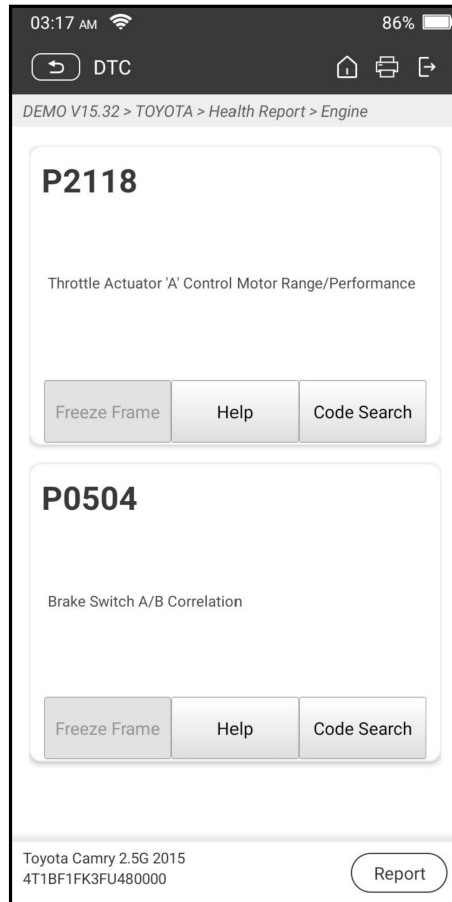
 Note: Different vehicle has different diagnostic menus.

A. Read Fault Code

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

 **Caution:** 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.

Tap **Read Fault Code**, the following screen will appear.



Explanation of terms:

Freeze Frame: A snapshot of critical parameter values at the time the DTC is set.


Help: View the help information.

Code Search: Search for more information about the current DTC online.

Report: Save the current data in text format. All reports are saved in **Reports -> Diagnostic**.

B. Clear Fault Code

This function enables you to erase the codes from the vehicle after reading the retrieved codes from the vehicle and certain repairs have been carried out.

 **Note:** Make sure the vehicle’s ignition key is in the ON position with the engine off before operating.

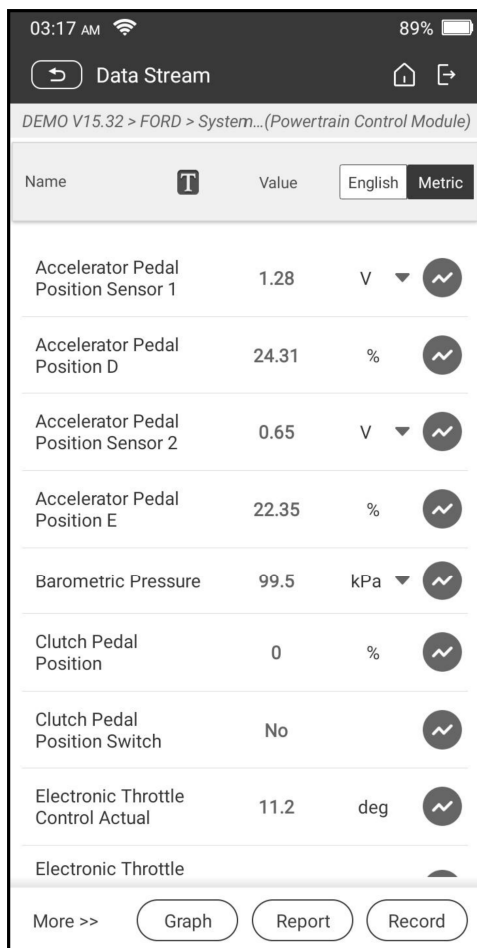
C. Read Data Stream

This option lets you view and capture (record) real-time Live Data.

 **Warning:** 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.

Tap **Read Data Stream** and select the desired data stream items to enter the data stream reading page, which is the Value default mode displaying the parameters in texts and shows in list format.



Notes: Tap **T** to set the display style. indicates sticky top. **B** indicates this item will be displayed in **Bold**. **A** indicates this item will be displayed in Red.

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 – Display the parameters in texts and shows them in list format.
- ✓ Graph – Display the parameters in waveform graphs.
- ✓ Combine – Display the parameters in merged graph mode for data comparison.


Explanation of terms:

: View the parameter in waveform graph of the current data stream item.


Graph: View the parameters in waveform graphs of all data stream items. When in graph mode, the following operations are supported:

- **Combine / <:** Combine different data stream items for data comparison.
- **Value:** View the parameters in text format.

Compare Sample: Select the sampled data stream file. All the values you customized and saved in process of data sampling will be imported into the **Standard Range** column for your comparison.

 **Note:** Before executing this function, you have to sample the values of the data stream items and save them as a sample Data Stream file.

Save Sample: Save the running parameters as a data stream sample file.

 **Note:** Only data stream items with measurement units will be recorded.

Report: Tap to save the current data in text format. All reports are saved in **Reports -> Diagnostic**.

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 **Reports -> Datastream**.

D. Actuation Test

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

E. Special Function

In addition to amazing & powerful diagnostic function, the tool also features various reset functions, which varies from vehicle to vehicle.

3.4 Feedback

This function enables you to feedback the diagnostic issues to us for analysis and troubleshooting.

Tap **Feedback**, and tap **OK** to enter into the vehicle diagnostic record page.

A. Feedback

Tap the target vehicle to enter the feedback page.

B. History

Tap it to view the diagnostic feedback logs which are marked with different color

indicating the process status of the diagnostic feedback.

C. Offline list

Tap it to enter the diagnostic feedback offline list page. Once the tool gets a stable network signal, it will be uploaded to the remote server automatically.

4 Battery

4.1 Battery Test

Battery test is specifically designed to help car owners, repair workshops, battery factory determine whether the battery is normal or not. It supports various battery standards and specifications, including CCA, DIN, IEC, EN, JIS, SAE and GB etc.

Two test modes (Out-of-car Inspection & In-car Inspection) are available and applicable to battery test.


There are mainly 5 battery states as follows:

1. **Good battery** - Indicates that the battery is normal.
2. **Replace battery** - Indicates that the battery is aged or becomes rejected, or battery life cycle is nearly exhausted. In this case, battery voltage appears to be normal, but the battery itself is not well, i.e. battery polarity board has been completely vulcanized or aged. Please replace battery immediately.
3. **Good-recharge** - Stands for low battery. The battery is good itself.
4. **Charge-retest** - It is better for a few batteries to be fully charged before testing in order to avoid judging in error under special conditions.
5. **Bad cell** - Indicates one of the battery cells is bad and cannot work normally, but for which one is bad, it can't be verified. In this case, battery voltage is generally lower than 11V, mainly resulting from internal circuitry damage, such as short circuit, open circuit, dummy weld etc.

4.1.1 Out-of-car Inspection

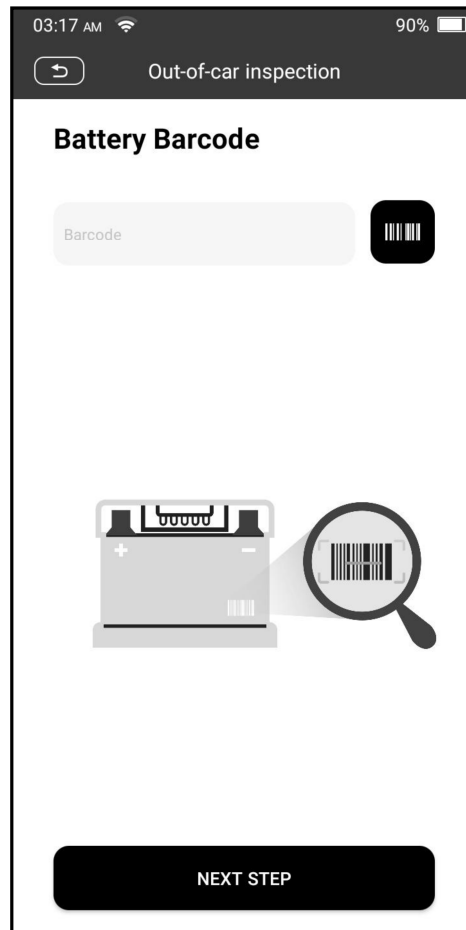
Out-of-car inspection indicates that the battery is disconnected from all loading devices on vehicles. Only battery test is supported for this inspection.


1. Plug one end of the battery cable clamps into the circular connector of the tool. **Clamp the BLACK and RED clips of the battery cable clamps on the Negative (-) and Positive (+) terminals of the vehicle battery respectively.**

 Note: The cable connector is keyed and will only fit one way. If you have problems

connecting the cable connector to the circular connector, rotate it 180° and try again.

2. Tap **Battery** -> **Out-of-car inspection** on the tool, the following screen will appear:



3. Tap  to scan the barcode on the battery or manually input the code printed on the battery if necessary. Or tap **Next Step** to enter the next step.
4. Do appearance check of the battery or directly tap **Next Step** to ignore it.
5. Select the correct battery type, standard and capacity according to the battery name plate and tap **Start the Detection**.
6. After the detection is complete, the test result and battery state will appear on the screen.

Tap **Save Report** to save the battery test report. The report can be accessed from **Reports** -> **Battery**.