

THINKCAR

Version: V1.00.001

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Safety Precautions and Warnings

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

Handle equipment carefully

Do not drop, bend, or puncture the tool, or insert extra objects into or place heavy objects on the device. The vulnerable components inside may be damaged.

Do not disassemble or modify the equipment



The device is a sealed device with no user-serviceable parts inside. All internal repairs must be performed by an authorized maintenance organization or qualified technician. Attempts to disassemble or modify the device will void the warranty.

Do not try to replace the internal battery

The internal rechargeable lithium battery must be replaced by an authorized maintenance organization or qualified technician. Contact the dealer for factory replacement.

Adapter information


Avoid immersing the device in water or placing it in a location where it may absorb moisture or other liquids. During normal use, the charging device may become hot. Please ensure that there is good ventilation while charging device.

If any of the following situation occurs, please unplug the charging device:

- The charging device is exposed to rain, liquid or in an environment with excessive overlap.
- The charging device showed physical damage.
- Cleaning the charging device.

Data and Software Protection

Do not delete unknown files or change the names of files or directories created by others, otherwise the device software may not run.

 **Note:** Access to network resources makes the device vulnerable to computer viruses, hackers, spyware, and other malicious behaviors, and may damage the device, software, or data. To make ensure that you are using firewalls, anti-virus software and anti-spyware software to provide adequate protection for your computer and keep these software up to date.

Precautions on Using this tool

- To make sure the ignition switch should be in the OFF position when plugging and unplugging the diagnostic connector.
- Keep the connector in the storage box on the back of the main unit, when the vehicle diagnosis is finished.
- Gently press the diagnostic connector to pop up the diagnostic connector. Do not pull or use sharp objects to pry the diagnostic connector.

Precautions on Operating Vehicle's ECU

- Do not disconnect 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. Quick Start Manual

1.1 Initial Use

The following settings should be made when you initially use the tool.

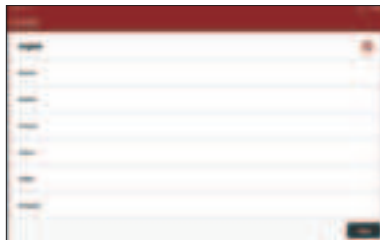
1.1.1 Turn on the Machine

After pressing the power button, images will be shown on the screen as follows.



1.1.2 Language Setting

Select the tool language from the languages displayed on the interface.



1.1.3 Connect WIFI

The system will automatically search all available WIFI networks and you can choose the WIFI needed. If the chosen network is open, you can connect it directly; If the chosen network is encrypted, you must enter the correct password. Then You can connect WIFI after clicking "connect".

⚠️ Tips: Wi-Fi must be set. If no Wi-Fi network is available nearby, you can enable "Portable Mobile Hotspot".



1.1.4 Choose Time Zone

Choose the time zone of the current location, then the system will automatically configure the time according to the time zone you chose.



1.1.5 User Agreement

Please read all the terms and conditions of the user agreement carefully. Choose “Agree all the above terms”, and click the “Agree” button to complete the registration process. Then the page will jump to the “Congratulations on your successful registration” interface.



1.1.6 Create an Account

You need to register an account through your e-mail box. If you have owned other products of THINK series, you can directly log in by using the account available.



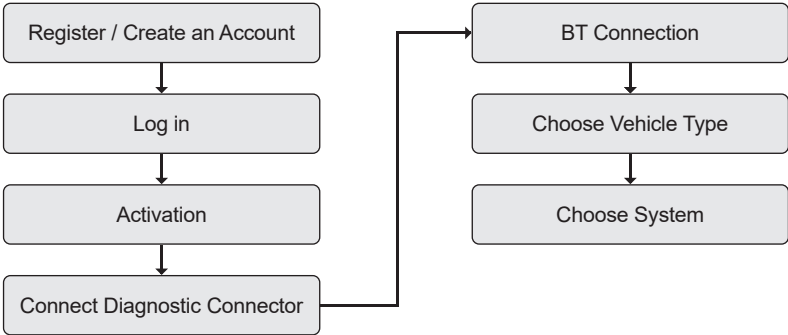
1.1.7 VCI activation

Enter the connector serial number and activation code to activate and bind the diagnostic connector. If you have not activated it, you can also click "Settings" on the main interface to enter and select "Activate" to operate.

⚠ Tips: The activation code is an 8-digit number and is pasted on the "password letter".



1.2 Diagnosis Flowchart



1.3 Function menu

Power on the main units, the system will automatically enter into the function menu selection interface:




It mainly includes the following features:

- The main unit and diagnostic connector support Bluetooth and wired communication. Wired communication is superior to Bluetooth connection in terms of transmission rate and anti-interference. Also wired connection is recommended for online programming function.
- Supports powerful intelligent VIN recognition technology, which is convenient, fast and efficient.
- Quick Check Printing: Automatic Identification of Vehicle Information, Auto Check and Report Printing
- Programming: Support intelligent recognition of programming files, convenient and quick operation. Support Mercedes-Benz, Benz_EV, BMW, BMW_EV, Ford, Ford_EV, Volkswagen, Volkswagen_EV, Audi, Audi_EV, Land Rover, Nissan, Skoda, Seat, Mazda and other models Programming function.
- VCI supports Heavy Duty diagnosis (optional).
- Modular expansion: Support 8 optional modules: printer, work light, videoscope, battery tester, scope box, thermal imager, mouldedock, wireless TPMS tool.
- It can detect faults in the electronic control systems of most high-, medium-, and low-end vehicles in Asia, Europe, the United States and China. Powerful diagnostic functions include reading fault codes, clearing fault codes, reading data streams, action tests, and special functions.
- Maintenance function: matching, coding, programming of most vehicles' programmable modules, and most commonly used maintenance and reset functions: Oil Reset, Elec. Throttle Adaption, IMMO Service, Injector Coding, Break-pad Reset, Steering Angle Reset, ABS Bleeding, AFS Reset, Battery Matching, A/T Learning, DPF Regeneration, EGR Adaption, TPMS Reset, Sunroof Initialization, Suspension Matching, Gear Learning, Airbag Reset, ODO Meter Reset, AdBlue Reset, A/F Reset, Coolant Bleeding, Language Change, NOx Sensor Reset, Seat Calibration, Stop/Start Reset, Transport Mode, Tyre Reset, Windows Calibration.
- TPMS function: with wireless TPMS tool (optional), TPMS activation, programming and learning functions can be supported.
- Online one click to update diagnosis software, client and firmware.
- Feedback: Any abnormal of software or function during the diagnosis, just feedback to us, our professional technician will track and deal with it in time.

1.4 Charging

Follow the steps below to charge the main unit:

- Connect one end of the power cord to the USB socket of the power adapter.
- Connect the other end to the charging jack on the bottom of the main unit.
- Plug the charger power plug into a power outlet to start charging.
- When the battery status icon displays , the main unit has been charged.

When it displays , the charging process has been completed and you shall disconnect the main unit.

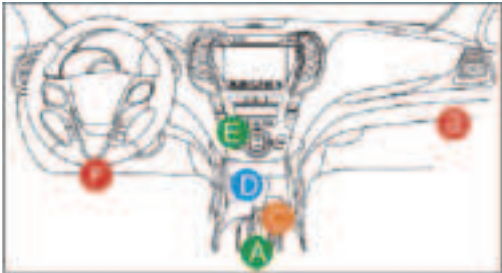
1.5 Battery

- It is normal that the main unit won't turn on when charging because the battery has not been used for a long time or it is exhausted. Please turn on the main unit again after charging the battery for a while.
- Please charge the main unit through the charger in the package. The company assumes no responsibility for damages and losses caused by charging with chargers other than those specified by the company.
- The battery can be recharged repeatedly. However, as the battery is wearable, the standby time of the device will be shortened after long-time use. Please avoid frequent repeated charging so as to extend battery life.
- The battery charging time varies with temperature and battery status.
- When the battery power is low, the system will pop up a prompt reminding you to connect the charger.
- When the battery power is too low, the device will turn off.

1.6 VCI Connections

Connection steps as below:

- (1) Locate vehicle's DLC socket. Most of the DLC are standard OBD II diagnostic sockets (non-standard OBD II vehicle diagnostic sockets need to use the corresponding adapter).The DLC is usually located 12 inches from the center of the instrument panel (dash), under or around the driver's side for most vehicles. If the DLC cannot be found, refer to the vehicle's service manual for the location.
- (2) For OBDII vehicle, follow the steps mentioned below to proceed:
 - a) Plug the VCI device into the vehicle's DLC socket
 - b) Use the OBD II extension cable to connect the VCI device and DLC socket.
- (3) For non-OBDII vehicle, If the pin of the DLC is damaged or has insufficient power, please follow the either of the following methods to proceed:
 - a) Cigarette Lighter cable
 - b) Battery Clamps Cable



A	Opel, Volkswagen, Audi
B	Honda
C	Volkswagen
D	Opel, Volkswagen, Citroen
E	Changan
F	Hyundai, Daewoo, Kia, Honda, Toyota, Nissan, Mitsubishi, Renault, Opel, BMW, Mercedes-Benz, Mazda, Volkswagen, Audi, GM, Chrysler, Peugeot, Regal, Beijing Jeep, Citroen and most prevailing models

1.7 Printer Installation

The printer is installed on the back of the main unit. Please follow the steps below:

- (1) Unscrew the backplane screws and remove the host backplane.
- (2) Insert the main unit card slot into one side of the printer.
- (3) Press the buckle on the side of the printer to snap on it into the host.
- (4) When the main unit is on, it will automatically identify and connect the printer.



2. Introduction

2.1 Product Profile

THINKTOOL Pros, based on the Android 10 System, is a new generation of modular high-end programming intelligent diagnostic equipment developed by THINKCAR. With new VCI, it supports Programming function on Mercedes-Benz, BMW, Volkswagen, Audi, Nissan, Ford, GM and other models. THINKTOOL Pros adopt a unique modular design to meet various application scenarios, including diagnostic module, printer, videoscope, work light, thermal imager, scope box, moduledock and TPMS tool.





2.2 Components & Controls



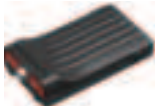



- (1) **Display**
- (2) **Power Key**
Press and hold it for 3 seconds to turn it off.
Press and hold it for 8 seconds to perform forced shutdown.
Press it once to activate or turn off the device.
- (3) **Type C Charging Slot**: connect the supplied charger for charging
- (4) **USB Port**: Reserved for add-on modules and other devices with similar port.
- (5) **Rear Camera**
- (6) **Speaker**
- (7) **Backplane**: Remove the backplane of the tablet, and install function modules on the backend.
- (8) **Pin**: Used for communication between the function expansion module and the host.
- (9) **Adjustable Kickstand**: Flip out it to 180-degree angle and work comfortable at your desk, or hang it on automotive part.
- (10) **Rubber Protection Sheet**

2.3 Function Modules

THINKTOOL Pros support below optional function modules, list as below:

S/N	Module Name	Image du module	Description
1	THINK PRINTER		Thermal printer, work with the main unit, also can work with moduledock. Quick print diagnostic reports anytime and anywhere.
2	THINK WORKLIGHT		High Brightness Work light, ultra-high 25000K white-light with 144 high brightness LED lights. Service life is more than 10,000 hours. It works with the main unit or use independently with the dock. Application scenarios: 1. Go out to rescue at night; 2. Car repairing in dark environment.
3	THINK Video Scope		Super long custom coil pipeline design, flexible bending with durable materials, suitable for a variety of complex environments. Multiple uses with 3 kinds of special connectors (Hook, side view mirror, magnet). Supports 720P HD image. With 6 auxiliary lights for brighter light, easily used in dark environment. Application scenarios: 1. Engine combustion chamber inspection; 2. Engine internal carbon deposit inspection; 3. Three-way catalytic inspection; 4. Air-conditioning pipeline inspection; 5. The corners of the vehicle that are not easy to detect, such as falling screws, or water leakage, cracks, and foreign objects...
4	THINK MODULEDOCK		Designed for the printer, work light and other modules to use independently for different work scenarios. The dock is equipped with a universal tripod connection for easy fixation. The 900mAh extra-large capacity battery can meet the requirements of long-term use and display the remaining power in real time.

5	THINK Thermal Imager		<p>320*240 ultra-high pixel with its own thermal tracking point, which can be used for image superposition (refers to the coincidence of real image and thermal image collected by the camera, so as to achieve more accurate positioning). The thermal sensitivity reaches 0.07 °C (32.126 °F), which is more accurate.</p> <p>Higher image acquisition resolution is displayed on the high-definition display. THINK Thermal Imager has a large number of car diagnostic fault thermal comparison maps. Technicians can accurately locate car problems by image comparison.</p> <p>Application scenarios: 1. Cylinder misfire; 2. Generator power generation; 3. Belt and bearing aging; 4. Relay overload; 5. Three-way catalytic blockage, etc.</p>
6	THINK Scope Box		<p>Equipped with 4 channels 100MHz bandwidth, sampling rate reaches up to 1GS/ s. Combined with the THINKTOOL Pros screen to achieve full touch control + knob mixed operation. Specially developed auto repair and detection special menu and HD waveform display brings more convenient for usage.</p> <p>Application scenarios: The THINK Scopebox can accurately determine the problems of sensors, actuators, control modules or lines</p>
7	THINK Battery Tester		<p>Detect the battery voltage, resistance service life current and other battery information.</p> <p>Integrated with THINKTOOL Pros high-resolution screen and high-precision data monitoring to make the detection efficiency greatly improved.</p> <p>Application scenarios: detection of car battery health, starting system and charging system.</p>
8	Wireless TPMS G1		<p>Work with THINKTOOL Pros to complete tire pressure diagnosis related functions.</p> <p>Application scenarios: 1. Read tire pressure information such as pressure, temperature, and battery status; 2. Change the sensor for programming; 3. Change the position of the tire or other abnormalities that require sensor learning.</p>

2.4 Parameters

THINKTOOL Pros host computer

- Operating System: Android 10.0
- Memory: 4G
- Storage: 64G
- Battery: 6000mAh/7.6V
- Screen: 10 inches
- Camera: Rear camera 8.0MP
- Network: Wi-Fi, WLAN 802.11b/g/n
- Bluetooth: Bluetooth 5.0
- Working Temperature: 32 °F ~122 °F (0°C ~ 50°C)
- Storage Temperature: -4 °F ~140 °F (-20°C ~ 60°C)

3. Begin to Use

Diagnostic function, coverage more than 100 car brands, support intelligent diagnosis and traditional diagnosis, including OBD II full-function diagnosis, full-system diagnosis including: read fault code, clear fault code, read real-time data stream, special function, actuation test. A diagnosis report can be generated after the diagnosis.

3.1 Intelligent Diagnose

Connect the vehicle first, click "Diagnosis" on the main interface, and tap "Intelligent Diagnose", the tool will start the smart diagnosis program and automatically read the vehicle VIN, as shown in below:



If the device failed to access the VIN information, please use "Local Diagnose"

3.2 Local Diagnose

In this mode, user can manually select vehicle models and systems for diagnosis

3.2.1 Manual Diagnose

THINKTOOL Pros also supports step-by-step manual selection of menus for diagnosis.

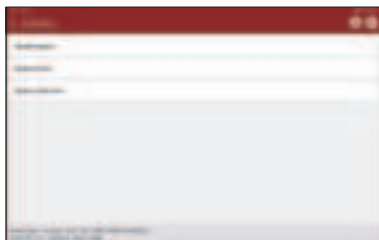
To use the "DEMO" as an example to introduce how to start the diagnosis as below.

1) Select vehicle type: click on the "demo " icon on the main diagnostic interface to enter.

⚠ Tips: The diagnosis menu varies with different vehicles



2) Select Diagnostic method: After the connection is successful, the screen will enter the test item selection interface.



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

Click "Quick Test", the system will start scanning the ECUs to see if there is fault code and and displays the specific results.



Click "Report" to generate a vehicle health report.



B.System Scan: automatically scan all systems of the vehicle



C.System Selection: manually choose the automotive electronic control system.

3.2.2 System Selection

Choose the system: Click “ECM” (e.g.), and the screen will enter selection interface



3.2.3 Function Selection

Click the function to be tested

⚠ Tips: The diagnosis menu varies with different vehicles



a) Version Information

As shown in the picture, click “Version Information” to read the current version information of the car ECU.

b) Read Fault Code

This function is to read the DTC in the ECU memory, helping maintenance personnel to quickly identify the cause of the vehicle breakdown.

As shown below, click “Read Fault Code”, and then the screen will display diagnostic results.

⚠ Tips: Reading the DTC when troubleshooting a vehicle is only a small step in the entire diagnostic process. Vehicle DTC are for reference only, and parts cannot be replaced directly based on the given DTC definition. Each DTC has a set of test procedures. The maintenance technician must strictly conform to the operation instructions and procedures described in the car maintenance manual to confirm the root cause of the breakdown.



c) Clear DTC

On the diagnostic function selection screen, tap Clear Fault Code, the system will automatically delete the currently existing DTCs and display the dialog box of "DTCs Cleared".

⚠ Note: For general models, please operate strictly according to the normal sequence: read DTC - clear DTC - test the car - retrieve DTC for verification - repair the car - clear DTC – recheck the car, to confirm that the DTC no longer appears.

d) Read data stream

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

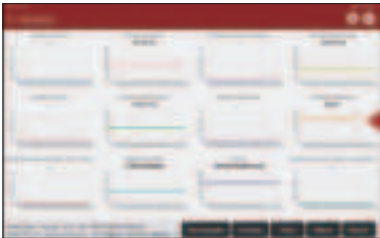
⚠ Note: If you must drive the vehicle in order to perform a troubleshooting procedure, ALWAYS have a second person help you. Trying to drive and operate the diagnostic tool at the same time is dangerous, and could cause a serious traffic accident.


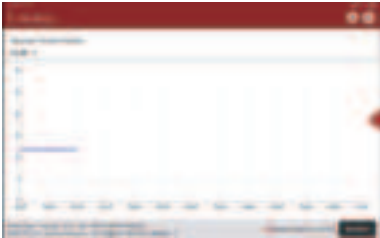

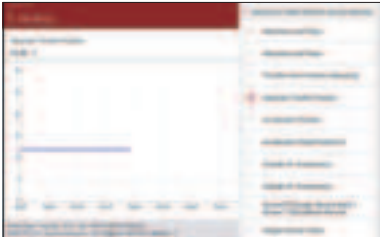


The indicator 1/X shown stands for the current data stream not fully displayed. Swipe the screen from the bottom to the top, to read the remaining parts. There are 3 types of display modes available for data viewing, allowing you to view various types of parameters in the most suitable way.

- [Graph]: Displays the parameters in waveform graphs.
- [Value]: This is the default mode which displays the parameters in values and shows in list format. (note: If the value of data stream read is not within the standard value range, the data stream is shown in red).
- [Combine]: This option is mostly used in graph merge status for data comparison. (Note: different items are marked in different colors.)

On-screen Buttons:

<p>[Graph]</p>	<p>Displays the parameters of the selected data stream in waveform. On the data stream waveform page, you can do the following:</p> <ul style="list-style-type: none">[Combine]: Displayed in graph merge status for data comparison.[Value]: Displayed the parameters in values and shown in list format.[Customize]: Customize the data stream option to be viewed. Tap the button, a pull-down list of the data stream items appears on the screen. Select the desired items (max 12 items), and then screen will display the waveforms corresponding to these items immediately. If need to remove any items, just deselect them. 
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<p>[]</p>	<p>Tap to display the current (single) data stream in waveform graph. On the waveform graph page, you can do the following:</p> <p>[Min/Max]: Tap to define the maximum / minimum value. Once the value goes beyond the specified value, the system will alarm.</p>  <p>[Customize]: Tap "<" on the right side of the screen, to define the data stream option to be viewed.</p> <p> Note: Max 4 data streams can be displayed.</p> 
<p>[Select data stream sample]</p>	<p>Tap to select the sample DS file. All the values you customized and saved in process of DS sampling will be imported into the Standard Range column for your comparison.</p> <p>Note: Before executing this function, you have to sample the values of data stream items and save it as a sample Data Stream file.</p>

[Report]	Tap to save the value of current data stream.
[Record]	<p>To record diagnostic data, for you to replay and review. Tap “Stop” button to end reading.</p> <p>The saved file follows the naming rule: It begins with vehicle type, and then the product S/N and ends with record starting time. All diagnostic records can be replayed from User Info -> My Report.</p>
[Help]	Select a certain data flow and tap the button to view the help information.
[Data Stream Sampling]	<p>To sample data stream. After sampling, recording and saving the data stream, each time you review the data stream items, you will be able to call out the corresponding sample data to overwrite the current standard range.</p> <p>Tap it to start recording the sample data stream (Note: Only data stream items with measurement units will be recorded). Once the recording process is complete, tap to end recording, the system will automatically jump to the data revision screen.</p> <p>Tap the Min./Max. value to change it. After modifying all desired items, tap Save to save it as a sample DS file. All DS files are stored in User Info -> Data Stream Sample</p>

e) Actuation Test

This function is used to test whether the execution components in the electronic control system can work normally.

3.3 Quick Check and Printing

It adopts smart detection mode. After the vehicle is connected, the system will automatically recognize the vehicle information, automatically check the vehicle, and automatically generates a report. Automatic printing can be set so that no human intervention is needed throughout the process.





3.4 Programming

ThinkTool Pros supports programming and coding, which is to write the relevant control information of the software into the automotive computer's programmable EPROM or FLASH by making use of the electronic communication transmission technology.

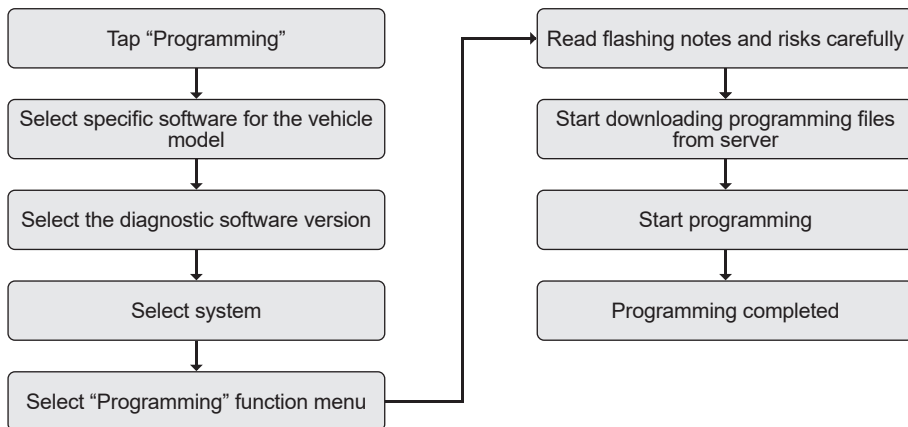
⚠ Note:

- This function is required only if any of the following scenarios occur:
 - 1) A new ECU is replaced;
 - 2) The ECU doesn't work properly;
 - 3) The ECU is required to update the software version;
 - 4) After the vehicle completes routine self-diagnosis (read and clear DTCs, read data streams, and actuation tests), its malfunction still exists.
- If there is a hardware failure in the operating units of the vehicle systems or in the ECU, it makes no sense to program the car computer.

Before programming, please double-check the following:

- Check the vehicle, turn off the engine, and in non-ignition state.
- Put the transmission into P or N position.
- Turn off all electrical equipment, such as air conditioner, headlights, turn signals, audio, etc. Otherwise, unstable automotive currents can cause programming interruptions.
- Connect the vehicle to an approved programmed (or stable) battery charger to ensure that the battery voltage is between 13V and 14V.
- Diagnose the vehicle, troubleshoot possible problems and clear the vehicle DTC.
- When programming, do not start or move any part of the vehicle modules related to programming. If it is started, it may cause programming disruption, which might damage the modules.
- Make sure that THINKTOOL Pros has sufficient power.
- For communication and program stability, please connect ThinkTool Pro and diagnostic connector with a wired connection.
- The operation of programming is at your own risk. Besides, not all vehicle problems can be resolved via programming, please make your decision carefully.
- During programming, make sure not to abnormally terminate the process, otherwise it will result in serious consequences such as the failure of the ECU.

Generally, programming of the vehicle computer need go through the following steps (Varied from vehicles. The programming processes of vehicles may be complex, please strictly follow the screen instructions.):



3.5 Maintenance

THINKTOOL Pros supports matching, coding, programming of most vehicles' programable modules, and most commonly used maintenance and reset functions, namely, Oil Reset, Elec. Throttle Adaption, IMMO Service, Injector Coding, Break-pad Reset, Steering Angle Reset, ABS Bleeding, AFS Reset, Battery Matching, A/T Learning, DPF Regeneration, EGR Adaption, TPMS Reset, Sunroof Initialization, Suspension Matching, Gear Learning, Airbag Reset, ODO Reset, AdBlue Reset, A/F Reset, Coolant Bleeding, Language Change, NOx Sensor Reset, Seat Calibration, Stop/Start Reset, Transport Mode, Tyre Reset, Windows Calibration.

3.5.1 Oil Reset

The lightening of the car maintenance light indicates that the vehicle needs maintenance. Reset the mileage or driving time to zero after the maintenance, so the maintenance light will go out and the system will start a new maintenance cycle.

3.5.2 Elec. Throttle Adaption

Elec. Throttle Adaption is to utilize the car decoder to initialize the throttle actuator so that the learning value of the ECU returns to the initial state. By doing these, the movement of the throttle (or idle motor) can be more accurately controlled, thus adjust the intake volume. Situations when throttle matching is needed:

- a) After replacing the electronic control unit, the relevant characteristics of the throttle operation have not been stored in the electronic control unit.
- b) After the electric control unit is powered off, the memory of the electric control unit's memory is lost.
- c) After replacing the throttle assembly, you need to match the throttle.
- d) After replacing or disassembling the intake port, the controlling of the idle speed by the coordination between the electronic control unit and the throttle body is affected.
- e) Although the characteristics of the idle throttle potentiometer have not changed, the intake volume has changed and the idle control characteristics have changed at the same throttle openings.

3.5.3 Steering Angle Reset

To reset the steering angle, first find the relative zero point position for the car to drive in straight line. Taking this position as reference, the ECU can calculate the accurate angle for left and right steering. After replacing the steering angle position sensor, replacing steering mechanical parts (such as steering gearbox, steering column, end tie rod, steering knuckle), performing four-wheel alignment, or recovering car body, you must reset the steering angle.

3.5.4 Battery Matching

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

Battery matching must be performed in the following cases:

- a) Main battery is replaced. Battery matching must be performed to clear original low battery information and prevent the related control module from detecting false information. If the related control module detects false information, it will invalidate some electric auxiliary functions, such as automatic start & stop function, sunroof without one-key trigger function, power window without automatic function.
- b) Battery monitoring sensor. Battery matching is performed to re-match the control module and motoring sensor to detect battery power usage more accurately, which can avoid an error message displaying on the instrument panel.

3.5.5 ABS Bleeding

When the ABS contains air, the ABS bleeding function must be performed to bleed the brake system to restore ABS brake sensitivity. If the ABS computer, ABS pump, brake master cylinder, brake cylinder, brake line, or brake fluid is replaced, the ABS bleeding function must be performed to bleed the ABS.

3.5.6 Break-pad Reset

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

Reset must be performed in the following cases:

- a) The brake pad and brake pad wear sensor are replaced.
- b) The brake pad indicator lamp is on.
- c) The brake pad sensor circuit is short, which is recovered.
- d) The servo motor is replaced

3.5.7 DPF Regeneration

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

DPF regeneration may be performed in the following cases:

- a) The exhaust back pressure sensor is replaced.
- b) The PM trap is removed or replaced.
- c) The fuel additive nozzle is removed or replaced.
- d) The catalytic oxidizer is removed or replaced.
- e) The DPF regeneration MIL is on and maintenance is performed.
- f) The DPF regeneration control module is replaced.

3.5.8 Gear Learning

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

3.5.9 IMMO Service

To prevent the car being used by unauthorized keys, the anti-theft key matching function must be performed so that the immobilizer control system on the car identifies and authorizes remote control keys to normally use the car. When the ignition switch key, ignition switch, combined instrument panel, ECU, BCM, or remote control battery is replaced, anti-theft key matching must be performed.

3.5.10 Injector Coding

Write injector actual code or rewrite code in the ECU to the injector code of the corresponding cylinder so as to more accurately control or correct cylinder injection quantity. After the ECU or injector is replaced, injector code of each cylinder must be confirmed or re-coded so that the cylinder can better identify injectors to accurately control fuel injection.

3.5.11 TPMS Reset

After the tire pressure MIL turns on and maintenance is performed, the tire pressure resetting function must be performed to reset tire pressure and turn off the tire pressure MIL. Tire pressure resetting must be performed after maintenance is performed in the following cases: tire pressure is too low, tire leaks, tire pressure monitoring device is replaced or installed, tire is replaced, tire pressure sensor is damaged, and tire is replaced for the car with tire pressure monitoring function.

3.5.12 Suspension Matching

This function can adjust the height of the body. When replacing the body height sensor in the air suspension system, or control module or when the vehicle level is incorrect, you need to perform this function to adjust the body height sensor for level calibration.

3.5.13 AFS Reset

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

3.5.14 A/T Learning

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

3.5.15 Sunroof Initialization

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

3.5.16 EGR Adaption

This function is used to learn the EGR (Exhaust Gas Recirculation) valve after it is cleaned or replaced.

3.5.17 ODO Reset

- a) ODO reset is to copy, write, or rewrite the value of kilometers in the chip of odometer by using a car diagnostic computer and data cable, so that the odometer shows the actual mileage.
- b) Usually when the mileage is not correct due to the damaged vehicle speed sensor or odometer failure, it is necessary to do ODO reset after maintenance.

3.5.18 Airbag Reset

This function resets the airbag data to clear the airbag collision fault indicator. When the vehicle collides and the airbag deploys, the corresponding fault code of the collision data appears, the airbag indicator lights up, and the fault code cannot be cleared. Since the data inside the airbag computer is disposable, it is required that all new accessories must be replaced, but after performing this function, the data of the airbag computer can be recovered and the fault code can be cleared, the airbag light will go out, and the airbag computer can continue to use.

3.5.19 Transport Mode

In order to reduce power consumption, the following functions may be disabled, including limiting the vehicle speed, not waking up the door opening network, and disabling the remote control key, etc. At this time, the transport mode needs to be deactivated to restore the vehicle to normal.

3.5.20 A/F Reset

This function is applied to set or learn Air/Fuel ratio parameters.

3.5.21 Stop/Start Reset

This function is used to open or close the automatic start-stop function via setting the hidden function in ECU (provided that the vehicle has a hidden function and supported by hardware).

3.5.22 NOx Sensor Reset

NOx sensor is a sensor used to detect the content of nitrogen oxides (NOx) in engine exhaust. If the NOx fault is re-initialized and the NOx catalytic converter is replaced, it is necessary to reset the catalytic converter learned value stored in the engine ECU.

3.5.23 AdBlue Reset (Diesel Engine Exhaust Gas Filter)

After the diesel exhaust treatment fluid (car urea) is replaced or filled up, urea reset operation is required.

3.5.24 Seat Calibration

This function is applied to match the seats with memory function that are replaced and repaired.

3.5.25 Coolant Bleeding

Use this function to activate the electronic water pump before venting the cooling system.

3.5.26 Tyre Reset

This function is used to set the size parameters of the modified or replaced tire.

3.5.27 Windows Calibration

This feature is designed to perform door window matching to recover ECU initial memory, and recover the automatic ascending and descending function of power window.

3.5.28 Language Change

This function is used to change the system language of the vehicle central control panel.

3.6 TPMS Diagnostics

THINKTOOL Pros can work with wireless tire pressure diagnostic tool (optional accessory) to achieve the features of TPMS activation, programming and learning.

- a) Activation: to activate the sensor's ID, wheel pressure, sensor frequency, tire temperature and battery status.



- b) Programming: to program sensor data to a blank Thinkcar sensor, so as to replace a sensor that is in low battery and does not function properly. There are three sensor programming methods available: automatic, manual, and via activation replication.



- c) Learning: to write the sensor ID into the vehicle ECU for sensor identification.



3.7 Diagnostic Feedback

If you encounter an unresolved problem or diagnostic software bug during diagnosis, you can revert the most recent 20 test records to Thinkcar Team. When we receive your feedback, we will analyze and troubleshoot it in a timely manner, to improve the quality of our products and user experience. Tap Diagnostic Feedback, the below pop-up message will appear:



Tap OK to enter the vehicle diagnostic feedback selection screen. There are three options:

Diagnostic Feedback: to show the list of all tested vehicle models

History: Tap to view all diagnostic feedback reverted and the processing progress.

Offline List: Tap to display all diagnostic feedback logs which have not been submitted successfully due to network failure. Once the tablet gets a stable network signal, it will be uploaded to the server automatically. In Diagnostic Feedback page, tap the diagnostic record of certain vehicle model or special function to next step.

Tap Choose File to open the target folder and choose the desired diagnostic logs. Choose the failure type and fill with the detailed failure description in the text box, and leave your telephone or email address. After inputting, tap Upload Logs to revert feedback to us.

We will follow up your feedback as soon as we receive your diagnostic feedback, please keep an eye on the progress and results of your diagnostic feedback in Diagnostic Feedback History.

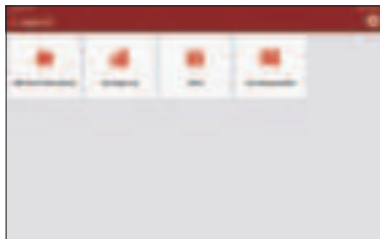
3.8 Repair info

3.8.1 Fault code enquiry

You can enquire the definition of OBD fault codes.

3.8.2 Vehicle coverage enquiry

You can enter the vehicle brand, model, year and other information to enquire the support functions and diagnostic system.

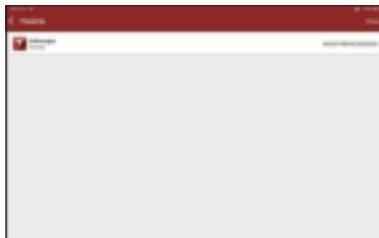


3.8.3 Learning course

You can view the operation playback of the special functions of each brand model, to help users study the operation of the special functions online without connecting the vehicle.

3.9 ThinkFile

It is used to record and establish the file of the diagnosed vehicles. The file is created based on the vehicle VIN and check time, including all VIN-related data such as diagnostic reports, data stream records and pictures.



3.10 ThinkStore

ThinkStore, released by THINKCAR TECH, in which you can download all diagnostic software and purchase hardware products. In the store, vehicle diagnostic and maintenance software can be bought. Each diagnostic software has a detailed function introduction. All hardware products can also be purchased online.



3.11 ADAS

Advanced Driver Assistance System (ADAS) is an electronic component in a vehicle, including various safety functions of the vehicle, such as automatic emergency braking (AEB), lane departure warning (LDW), lane keeping assist, blind spot elimination, night vision camera and Adaptive lighting.

The function on the equipment is disabled by default, and the user needs to activate the function with an activation card before using it. And this function needs to be matched with THINKCAR ADAS calibration tools. Mainly used to calibrate various camera and radar of driver assistance systems, such as: front camera for lane departure warning system, radar sensor for ACC and camera for adaptive headlights.



4. Software update

4.1 Upgrade all software

In order to let you enjoy better functions and upgrade services, we recommend you make software upgrades irregular. When there is a newer software version, the system will remind you to upgrade.

Click "Software Upgrade" to enter the upgrade center. There are two function tabs on the upgrade page:



Upgradeable software: A list of software that can be upgraded to newer versions.

Upgraded software: a list of software that has been downloaded.

⚠ Note: During the upgrade, please keep normal network connection. Upgrade many software may take a few minutes, please wait.

If you need to cancel certain software, just click the check box.

5. Set up

5.1 My VCI

If several VCI connectors are registered on this ThinkTool Pros, this option allows you to choose one from those.

5.2 Activate VCI

This item lets you activate a new VCI connectors or get help. Input the Serial Number and Activation Code, and then tap “Activate” to activate it.



Once the VCI connector activated, the serial number of it will be displayed in the list.

5.3 VCI firmware repair

Used to repair the connector firmware. During the repair, please don't power off or switch interfaces.

5.4 Data Stream Sample

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

5.5 My order

Used to manage order details.

5.6 Personal information

Used to set and manage personal information.

5.7 Change Password

This item allows you to modify your login password.

5.8 Settings

This option is used to make system settings.

5.9 Wi-Fi settings

Set up Wi-Fi networks that can be connected.

5.10 Workshop Management

Add the information of the workshop, to which the scanner belongs, and it will be displayed to the customers in the diagnostic report.

5.11 Customer Management

Manage information of all customers, who did vehicle diagnostic on this equipment and display in turn.

5.12 Hotkey Setting

Including: Wi-Fi, Bluetooth, screen recording, screenshot, screen flip, brightness and sound.



6.FAQ

Q: Can I use the same type of charger to charge the tablet?

A: No, please use original charger. Our company is not responsible for any damage and economic loss caused by using charger, which is not provided by THINKCAR.

Q: How to save power?

A: Please turn off the screen while the equipment isn't used, set a shorter standby time, and decrease the brightness of the screen.

Q: The tablet cannot be turned on after charging

Passible reasons	Solution
The equipment has not been used for a long time, and the battery loss	Charge it for more than 2 hours before turning it on
Problem of Charger	If there is a quality problem, please contact the dealer or after-sales service of THINRCAR.

Q: Why can't make register?

Passible reasons	Solution
The equipment isn't connected	Please make sure the network is connected
Notes that your email has been registered.	Use another email for register or log in with the username registered by the email (If you forget the username, you can retrieve it by email)
The email didn't receive the verification code during the registration	Check if the email is correct and get the verification code again

Q: Why can't log in?

Passible reasons	Solution
The equipment isn't connected	Please make sure the network is connected
The user name or password is incorrect	Check the user name and password Contact THINKCAR after-sales service or regional sales to retrieve the user name and password
Server problem	Server maintenance, please try again later

Q: Why can't activate the equipment?

Passible reasons	Solution
The equipment isn't connected	Make sure the network is connected
The serial number and activation code are inputted wrong	Check the serial number and activation code and make sure they are correct (Serial number 12 digits, activation code 8 digits).
The activation code is invalid	Contact THINKCAR after-sales service or regional sales
Notes that the configuration is empty	Contact THINKCAR after-sales service or regional sales

Q: Notes: the equipment is not activated during update software ?

Passible reasons	Solution
The VCI connector may not be activated during registration	Use the serial number and activation code to activate the connector Steps are as follows: Click [Settings]-[Connector Activation] Enter the correct serial number and activation code in the interface, and click [Activate].

Q: Software upgrade failed

Passible reasons	Solution
The equipment is not connected to the Internet	Check its network connection
The user name or password is wrong The equipment has not enough memory	Check the user name and password Uninstall irrelevant applications and delete uncommonly used vehicle software (on the [Traditional Diagnosis] page, long press the vehicle software to delete)
Server problem	Server maintenance, please try again later

Q: What should do when there is not electricity after the diagnostic connector is connected to the vehicle?

Passible reasons	Solution
Poor contact of the connector	Please replug the diagnostic connector
The wiring of the DLC socket is in poor contact	Check the user name and password Uninstall irrelevant applications and delete uncommonly used vehicle software (on the [Traditional Diagnosis] page, long press the vehicle software to delete)
The battery of the vehicle is really low	Server maintenance, please try again later
Damage of the connector	Contact THINKCAR after-sales service or regional sales

Q: The Tablet cannot be connected to the diagnostic connector

Passible reasons	Solution
The diagnostic connector is not plugged in as well.	Please replug the it
The diagnostic connector is not plugged in as well.	Cancel the Bluetooth pairing of the diagnostic connector and make its automatic pairing again
Server problem The firmware is not repaired.	Enter the settings and click [Firmware Repair] to upgrade the firmware.

Q: How about non-standard OBDII VCI connector

A: There is a several non-standard adapters in the box, Follow the instructions to connect.

Q: Communication error with vehicle ECU?

A: Please confirm:

Whether the VCI is correctly connected and whether the vehicle ignition switch is ON.

If all are normal, send vehicle production year, model and VIN number by Feedback feature.

Q: Failed to enter into vehicle ECU system?

A: Please confirm:

Whether the vehicle is equipped with the system, whether the VCI is correctly connected, and whether the vehicle ignition switch is ON.

Q: What to do if the connector is missing

A: Contact THINKCAR after-sales service or regional sales.

Q: Error of the diagnostic software

A: Click [Feedback] to send specific problems to us for improvement.

Long press the car icon to delete the software, then enter the upgrade center to download new version of it.

Q: The downloaded diagnostic software is inconsistent with the serial number

A: There are several connectors registered under the equipment account, and the serial number of right connector has not been selected.

Enter the settings-[My Connector] and select the right serial number of connector. Long press to delete the software with problems, then enter the upgrade center to download the diagnostic software again.

Warranty Terms

This warranty applies only to users and distributors who purchase THINKCAR TECH INC products through normal procedures. Within one year from the date of delivery, THINKCAR TECH warrants its electronic products for damages caused by defects in materials or workmanship. Damages to the equipment or components because of abuse, unauthorized modification, use for non-designed purposes, operation in a manner not specified in the instructions, etc. are not covered by this warranty. The compensation for dashboard damage caused by the defect of this equipment is limited to repair or replacement. THINKCAR TECH does not bear any indirect and incidental losses. THINKCAR TECH will judge the nature of the equipment damage according to its prescribed inspection methods. No agents, employees or business representatives of THINKCAR TECH are authorized to make any confirmation, notice or promise related to THINKCAR TECH products.

Service Line: 1-833-692-2766

Customer Service Email: support@thinkcarus.com

Official Website: en.mythinkcar.com

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