

THINKCAR

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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.

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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.
- The charging device is under cleaning.

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

- 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.
- Be extremely careful 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, make 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 listed on the interface.



1.1.3 Connect Wi-Fi

The system will automatically search all available Wi-Fi networks for you to choose. 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 Wi-Fi after clicking "connect".

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



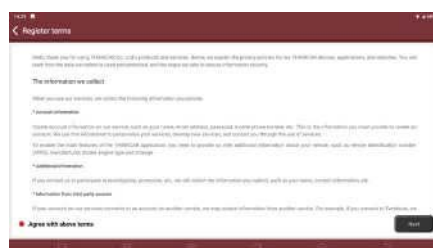
1.1.4 Choose Time Zone

Select the time zone of your current location, then the system will automatically configure the time according to the time zone you selected.



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 with your e-mail box. If you have owned other products of THINK series, you can directly log in by using the existing account.

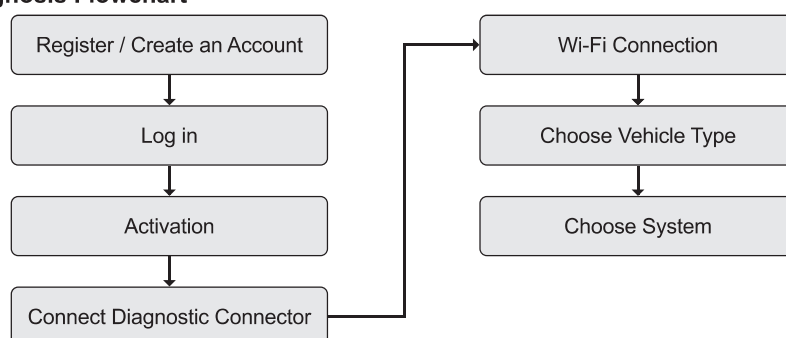
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1.1.7 VCI Activation

Input 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



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1.3 Function Menu

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



It mainly includes the following features:

- The main unit and diagnostic connector support Wi-Fi, 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.
- Heavy Duty Diagnosis (Optional) : Diagnose 24V cars, like trucks, buses, construction vehicles.
- Modular expansion: Support 4 optional modules: videoscope, battery tester, scope box, 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' programable 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, TPMS activation, programming and learning functions can be supported.
- Online one click to update diagnosis software, client and firmware.
- Feedback: In case of any abnormal of software or function during diagnosis, please report to us. Our professional technician will track and fix it shortly.

1.4 Charging

Follow the steps below to charge the main unit:

- 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. Thinkcar Tech takes no responsibility for damages and losses caused by charging with chargers other than those specified by the company.
- The battery is rechargeable. However, as the battery is a wear part, 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.

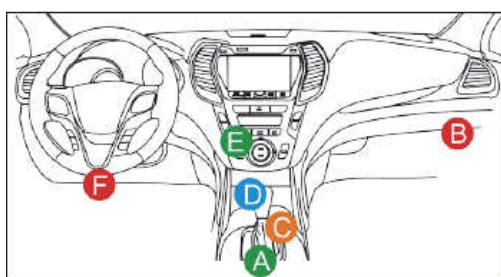
- (2) For OBDII vehicle, follow the steps described below to proceed.

a) Use the OBD II extension cable to connect the VCI dongle 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

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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

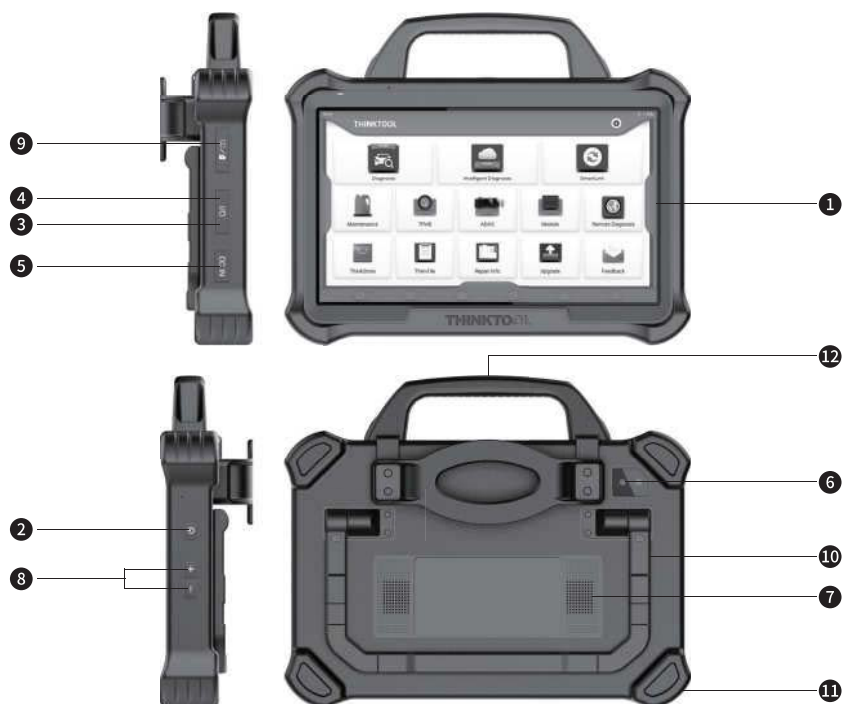
2. Introduction

2.1 Product Profile

THINKTOOL is a new generation intelligent diagnostic equipment. With advanced technology and stronger hardware, THINKTOOL is the most powerful diagnostic tool in the market.

THINKTOOL has 13.3' LED touch screen and 720 nits brightness, as well as robust plastic cover and perfect industrial design. By Wi-Fi connection, diagnostic speed is more fast.

2.2 Components & Controls

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(1) **Screen**

(2) **Power/Lock Screen Key**

Press the key about 5s to power on the pad. Single click to sleep or awake the pad.

(3) **Type C Port:** connect with computer to transmit the data.

(4) **USB Port:** connect with USB tool or extensive modules.

(5) **DC Port**

(6) **Rear Camera**

(7) **Speaker**

(8) **Volume Icon**

(9) **HDMI Interface**

(10) **Adjustable Holder:** 180° adjustable angle. Support lift, support and normal model.

(11) **Rubber Corner**

(12) **Handle**

2.3 Function Modules

S/N	Name	Image	Description
1	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...
2	THINK Scope Box		Equipped with 4 channels 100MHz bandwidth, sampling rate reaches up to 1GS/ s. Combined with the THINKTOOL screen to achieve full touch control operation. Specially developed auto repair and detection special menu and HD waveform display brings more convenient for usage. Application scenarios: The THINK Scopebox can accurately determine the problems of sensors, actuators, control modules or lines
3	THINKEASY		With high resolution screen and high precision data, can diagnose battery information, like battery power, voltage, internal resistance, lifetime, starting current and so on. Application: Check the car battery health status, starting system and charging system.
4	Wireless TPMS G1		Work with THINKTOOL to complete tire pressure diagnosis related functions. 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.

2.4 Smartlink C

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- 1) VCI (Vehicle Communication Interface) is used together with diagnosis tool.
- 2) When used as a local J2534 tool, it can be used with the original diagnostic software for vehicle ECU flashing.



- (1) **OBD-16 diagnostic interface:** used to connect with the OBD II extension cord.
- (2) **Display:** display working status.
- (3) **I/O data transmission port:** used to connect with the diagnosis host/computer and SmartLink C equipment for wired communication.

2.5 Parameters

Host computer

- Operating System: Android 9.0
- Memory: 8G
- Storage: 256G
- Battery: 9300mAh/7.6V
- Screen: 13.3 inches
- Camera: Rear camera 13.0MP
- Network: Wi-Fi, WLAN 802.11b/g/n
- Bluetooth: Bluetooth 4.2

- Working Temperature: 32 °F ~122 °F (0°C ~ 50°C)
- Storage Temperature: -4 °F ~140 °F (-20°C ~ 60°C)

Smartlink C

- Memory: 256M
- Storage: 8G
- Screen: 3.97 inches
- Power: ≤6W
- Operating Voltage: 9~36V
- Communication method: Local diagnostic mode: Wi-Fi/USB
- Working Temperature: 14 °F ~122 °F (10°C ~ 50°C)
- Storage Temperature: -4 °F ~140 °F (-20°C ~ 60°C)

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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 Diagnosis

Connect the vehicle first, click "Intelligent Diagnosis" on the main interface, 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 Diagnosis".

3.2 Local Diagnosis

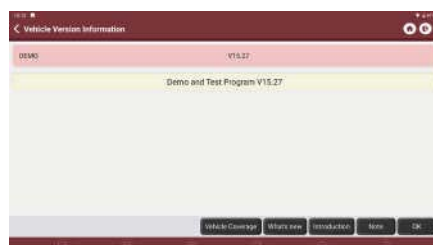
In this mode, user can manually select vehicle models and systems for diagnosis.

3.2.1 Manual Diagnosis

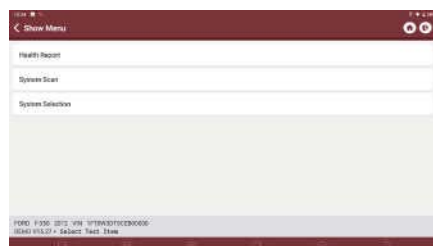
THINKTOOL also supports step-by-step manual selection of menus for diagnosis. To use the "DEMO" as an example to introduce how to start the diagnosis as below.

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

⚠ Tips: The diagnosis menu varies with different vehicles

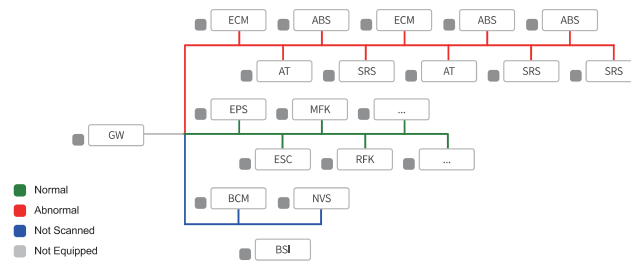


2) Select Diagnostic method: After the connection is successful, the screen will enter the test item selection interface.

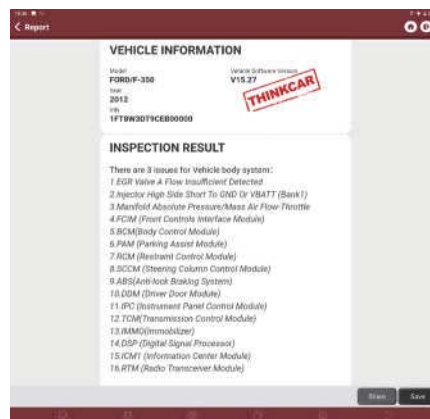


A.Health Report: It enables you to quickly access all the electronic control units of the vehicle and generate a detailed report about vehicle health. (This function varies from vehicle to vehicle.)

Click "Health Report", the system will start scanning the ECUs to see if there is fault code and display 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 select the automotive electronic control system.

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



Click the function to be tested

 Tips: The diagnosis menu varies with different vehicles

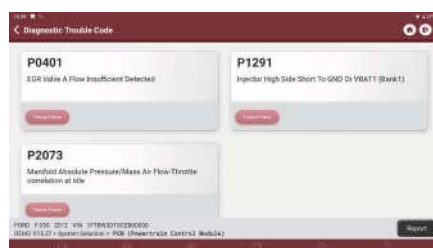


As shown in the picture, click “Version Information” to read the current version information of the car ECU.

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.



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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 allows you to 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.

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On-screen Buttons:

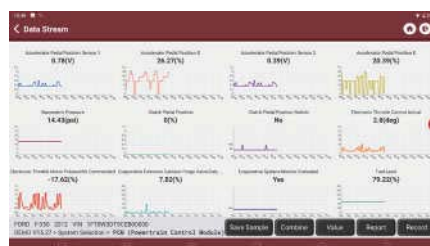
[Graph]

Displays the parameters of the selected data stream in waveform. On the data stream waveform page, you can do the following:

[Combine]: Displayed in graph merge status for data comparison.

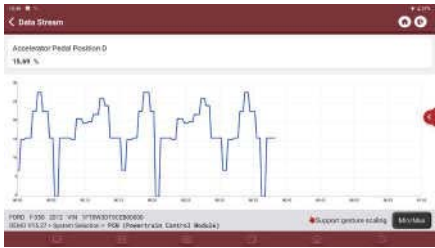
[Value]: Displayed the parameters in values and shown in list format.

[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.



[]

Tap to display the current (single) data stream in waveform graph. On the waveform graph page, you can do the following:
[Min/Max]: Tap to define the maximum / minimum value. Once the value goes beyond the specified value, the system will alarm.



[Customize]: Tap "<" on the right side of the screen, to define the data stream option to be viewed.

⚠ Note: Max 4 data streams can be displayed.



[Compare Sample]

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.

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

[Report]	Tap to save the value of current data stream.
[Record]	To record diagnostic data, for you to replay and review. Tap “Stop” button to end reading. 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.
[Save Sample]	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. 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. 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

e) Actuation Test

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

3.3 Maintenance

THINKTOOL supports matching, coding, programming of most vehicles' programable modules, and most commonly used maintenance and reset functions, including, 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.

3.3.1 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 vanish and the system will start a new maintenance cycle.

3.3.2 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