

SAIC Motor Corporation Limited

SAIC Vehicle Diagnostic System (VDS)



User Manual

Revision History

Version #	Revision Date	Revisions
V1.0	2011-11-11	The document was created
V1.1	2011-06-15	The document was updated
V1.2	2011-11-30	Chapter "VDS Installation" was added; VDS launch was updated
V1.3	2011-12-2	1. The network architecture diagram was updated; 2. Pre-launch preparations were added
V1.4	2011-12-15	VDS-specific software environment was added
V1.5	2012-02-03	1. A solution for "Cannot be activated under Windows 7" was added; 2. Section 2.5 "Installing VCI Driver" was added
V1.6	2012-02-15	Section 2.3 "Requirements for VDS Installation, Running, and Uninstallation" was added
V1.7	2012-02-20	A solution for garbage characters when installing VDS on English operating systems was added
V1.8	2012-04-10	1. Section 6.5 "Data Log" was updated to add hints on the use of half-width characters
V1.9	2013-01-28	1. Chapter 7 about logfile was added; 2. The graphical display part of live data was updated; 3. The real-time playback part was updated; 4. The force output grading was updated; 5. Pictures were updated
V2.0	2013-04-03	1. VDS installation was updated; 2. The installation of Bullzip PDF Printer was added
V2.1	2013-12-04	1. 360 Total Security whitelisting setup
V2.2	2015-03-06	AFS and VDI User Manual were added
V3.0	2022-02-24	The interface was updated and additional features were added; VDS Solution to FAQs was added

Table of Contents

1.	Introduction to the VDS.....	3
1.1	System Introduction.....	3
2.	VDS Installation.....	4
2.1	Applicable Operating Systems	4
2.2	Configuration Requirements.....	4
2.3	Requirements for VDS Installation, Running, and Uninstallation.....	5
2.4	Installation Preparation.....	5
2.5	Installing VCI Driver.....	5
2.6	Installing VDS.....	5
2.6.1	Installing VDS major version	5
2.6.2	Installing VDS hotfix version	12
2.7	Installation Verification.....	13
2.8	Antivirus Software Whitelisting Setup.....	14
3.	VDS Software Launch	15
4.	VDS System Manager Menu Functions.....	17
4.1	Home	17
4.2	System	18
4.2.1	System information.....	19
4.2.2	Setting.....	19
4.3	VDI.....	20
4.4	Record	21
4.5	Signal Strength	23
4.6	Remaining Battery Power.....	23
4.7	[Close] Button	24
5.	VDS Diagnostic Functions.....	25
5.1	Vehicle Identification	25
5.1.1	Auto ID	25
5.1.2	Manual ID.....	27
5.2	Diagnostic.....	29
5.2.1	Vehicle Scan	30
5.2.2	DTC	31
5.2.3	Live Data	34
5.2.4	Force Output	38
5.2.5	ECU Info.....	40
5.3	Programming.....	42
5.3.1	Configuration.....	42
5.3.2	Flash ECU.....	45
5.3.3	Replace ECU	46
5.3.4	Key Programming.....	48

5.4	Routines	50
5.4.1	PDI.....	50
5.4.2	Maintenance.....	52
5.4.3	Reset Adaptions	53
5.4.4	Other	53
5.5	Data Log	53
5.5.1	R.T. Playback (real-time playback)	53
5.5.2	Ani. Playback (animation playback)	55
5.5.3	Logfile Output	55
5.6	Disable OBD Protection Function	56
6.	Common Issues and Solutions	60
7.	Issue Feedback Method.....	64
7.1	Objective	64
7.2	Logging Scope and Content	64
7.3	Logging Method	64
7.3.1	Trigger Points	64
7.3.2	Examples	65

1. Introduction to the VDS

1.1 System Introduction

SAIC Motor Passenger Vehicle Company (SMC)/SAIC Motor Technical Center (SMTC), as a leading automotive group company in China, has three brands of models: ROEWE, MG, and Rising Auto. With the launch of hybrid electric vehicles, due to slow data update, the original automotive aftermarket diagnostic software system can no longer meet the required technical requirements. Therefore, a new aftermarket diagnostic software system, VDS (Vehicle Diagnostic System), has been developed.

The VDS integrates the data of all models such as ZP11, BP12, BP13 and ZS11. Through vehicle identification and vehicle scan functions of VDS, it is able to accurately locate the specific ECU of a certain model for diagnosis. The VDS provides DTC, live data, force output, ECU information, programming and coding, routines and other functions for each ECU of each model. In addition, VDS also provides remote control technology, uploading, saving and analyzing vehicle fault data, and updating data for new models. The use of VDS will surely bring users a brand new feeling.

2. VDS Installation

2.1 Applicable Operating Systems

Windows 7

Windows 10

Note: DO NOT use Ghost system, otherwise it may cause problems during use!

2.2 Configuration Requirements

The minimum configuration requirements of the software for a laptop are as follows:

- 1) Intel Core 2 Duo Processor, 1.66 GHz
- 2) At least one USB 2.0 port
- 3) RAM: 1 GB
- 4) At least 2 GB of hard disk space for VDS installation
- 5) Screen resolution: 1,280 * 800 or 1,366 * 768
- 6) CD-ROM/DVD drive
- 7) Network Adapter: 10/100 Mbps Ethernet network interface card
- 8) 802.11b/g Wi-Fi card
- 9) Windows 7/10 OS installed

The recommended computer configuration requirements for the software are as follows:

- 1) Intel Core 2 Duo Processor, 2.4GHz
- 2) At least one USB 2.0 port
- 3) RAM: 2GB
- 4) At least 4GB of hard disk space for VDS installation
- 5) Screen resolution: 1,280 * 800 or 1,366 * 768
- 6) CD-ROM/DVD drive
- 7) Network Adapter: 10/100 Mbps Ethernet network interface card
- 8) 802.11b/g Wi-Fi card
- 9) Windows 7/10 OS installed

The specific software environment requirements are as follows:

- 1) Adobe Reader V9.4 (Simplified Chinese Version)
- 2) 360 Total Security 3.0 Air V3.0.0.2093 official version
- 3) Microsoft Office 2007 Chinese version (Outlook, Word)
- 4) .net framework 4.5.2

2.3 Requirements for VDS Installation, Running, and Uninstallation

The following requirements must be met when installing, running, and uninstalling the software:

- 1) Have the administrator permissions of the operating system to be used
- 2) Have the permission to create a folder and to write in the root directory of the C drive
- 3) Have the permission to create a folder and to write in the ACTI_DIAG_WORKSHOP directory
- 4) Have the administrator permissions of the operating system to be used installed in the root directory

2.4 Installation Preparation

1. Pre-install the genuine Windows 7/10 OS;
2. Install the ETAS VCI Manager driver before installation.

2.5 Installing VCI Driver

1. Install the driver that matches the ETAS VCI hardware. Note: If the VCI driver does not match the hardware, it may result in VDS communication failure. Make sure that the installed VCI driver matches the hardware version before installation.
2. Proceed to the next step as prompted by the VCI until completion. Refer to the ETAS VCI User Manual for details.
3. Since the VDS supports multiple VCIs, it is required to install the VCI2 driver first and then the VCI3 driver during the installation.

2.6 Installing VDS

Note: If VDS has not been installed on your computer, install the major version first, and then install the latest hotfix version.

2.6.1 Installing VDS major version

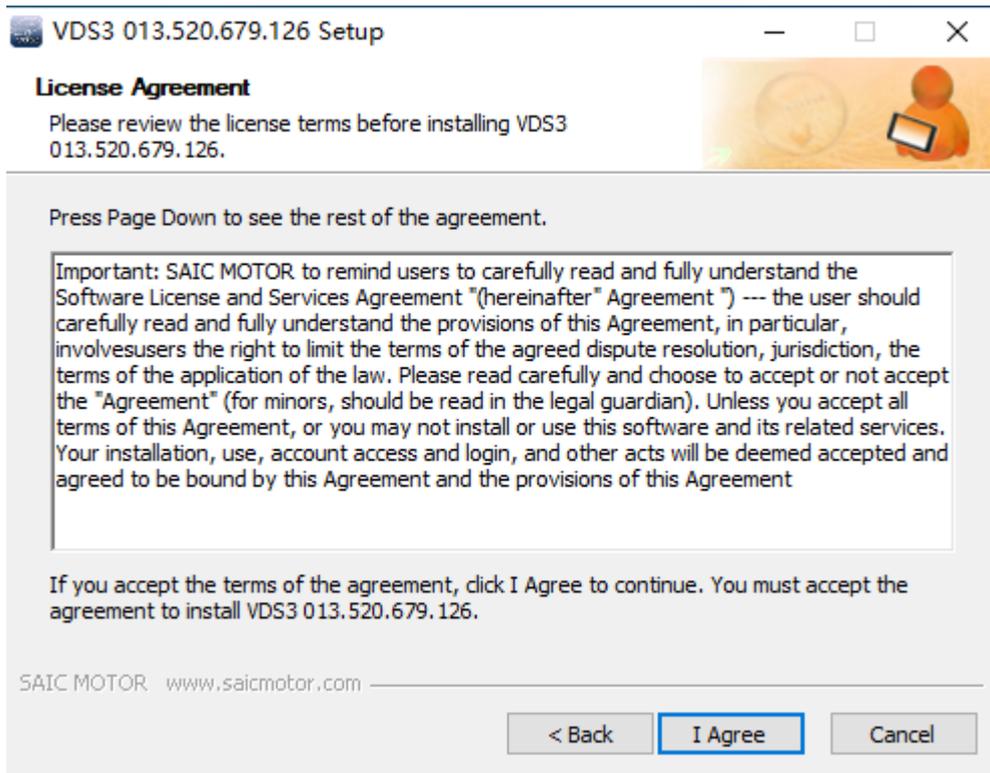
1. Obtain the installer of the VDS major version.
2. Double-click the VDS major version installer, and the following interface pops up.



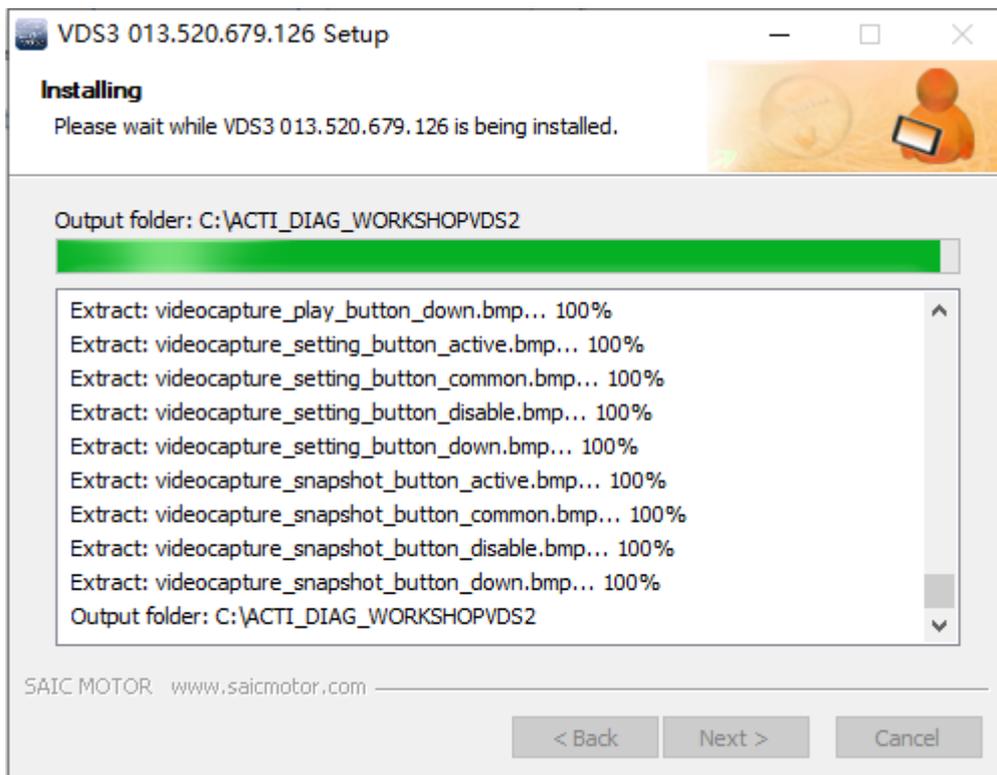
3. Select the language, and click [OK].



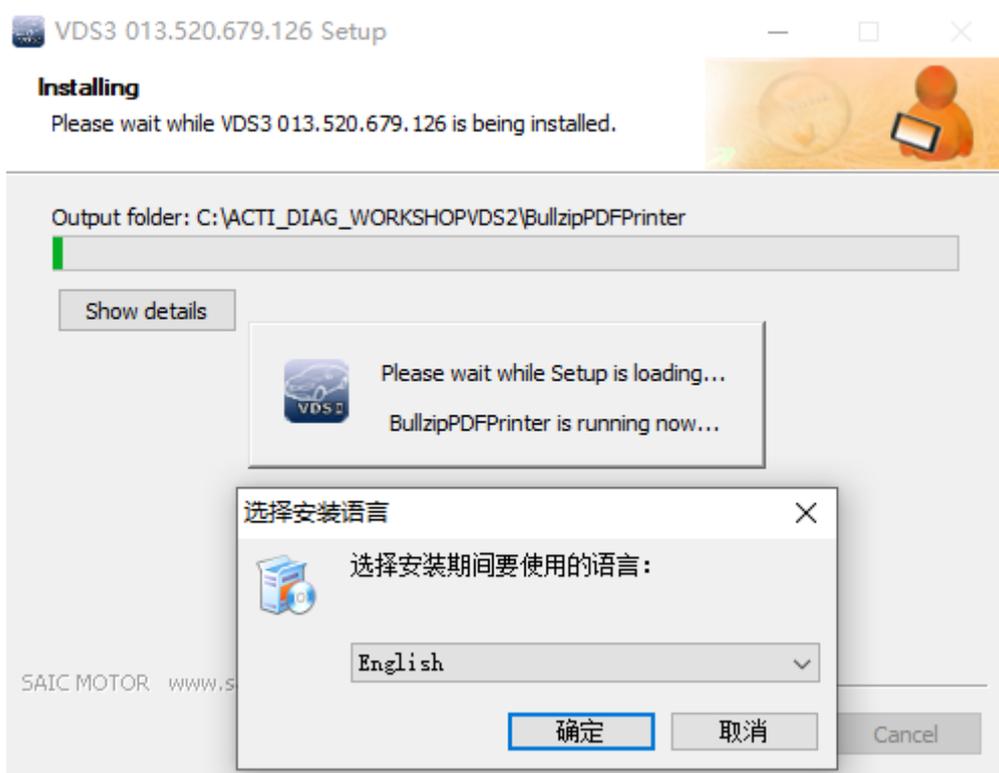
4. Click [Next].



5. Click [I Accept], and the installation process is displayed.



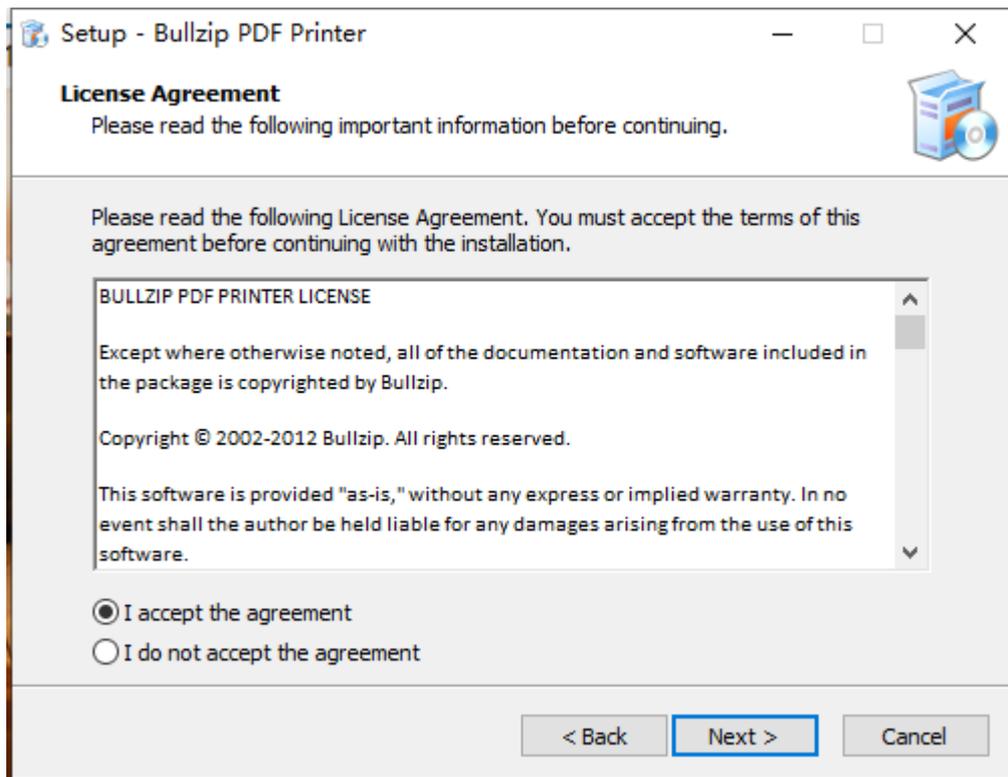
6. During the installation process, if Bullzip PDF Printer has not been installed on your computer, the [Select Installation Language] dialog box will be displayed. Select [OK]. If Bullzip PDF Printer has been installed, directly skip to Step 14.



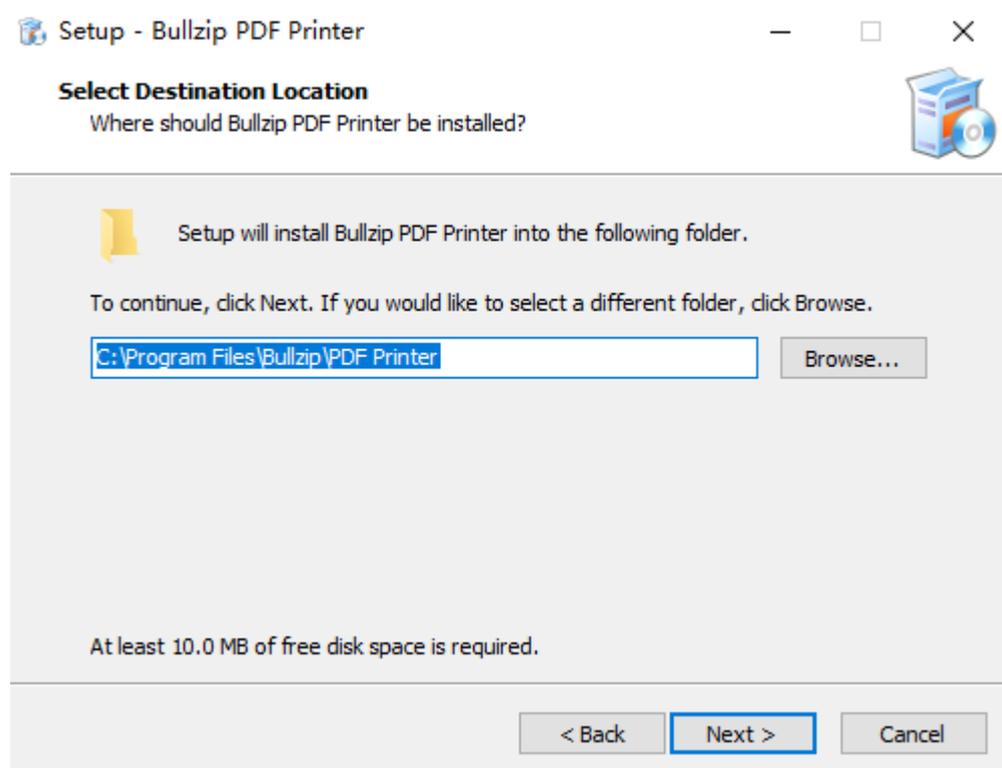
7. Go to "Bullzip PDF Printer Setup Wizard", and click [Next].



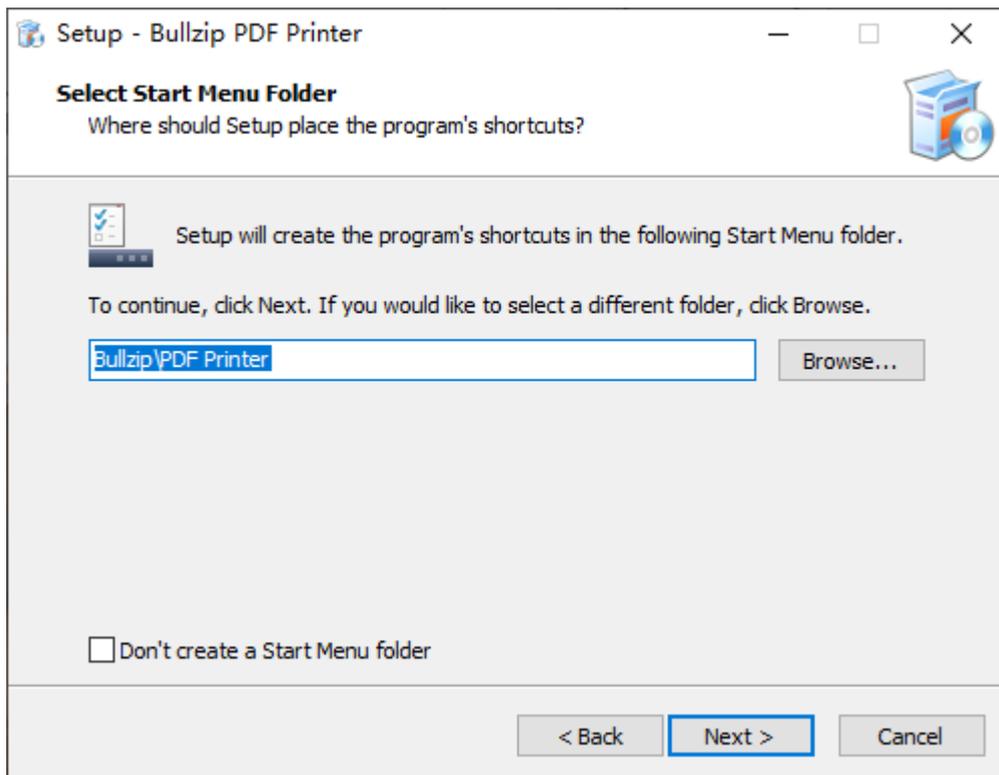
8. Select [I accept the agreement], and click [Next].



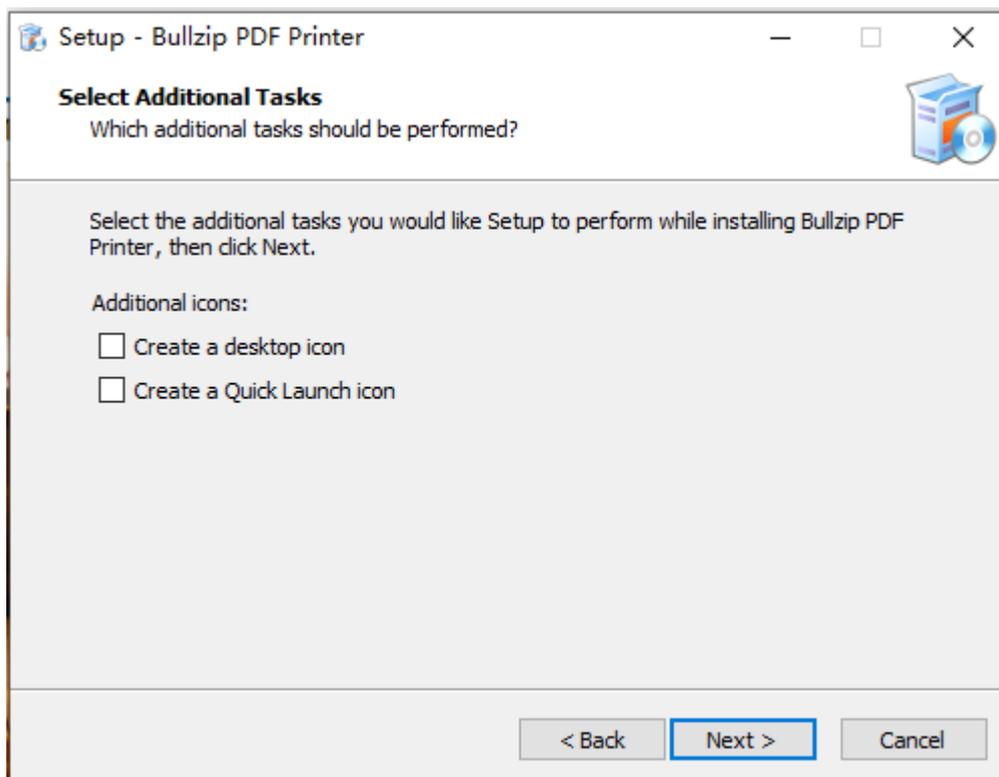
9. Select the "destination location", and click [Next].



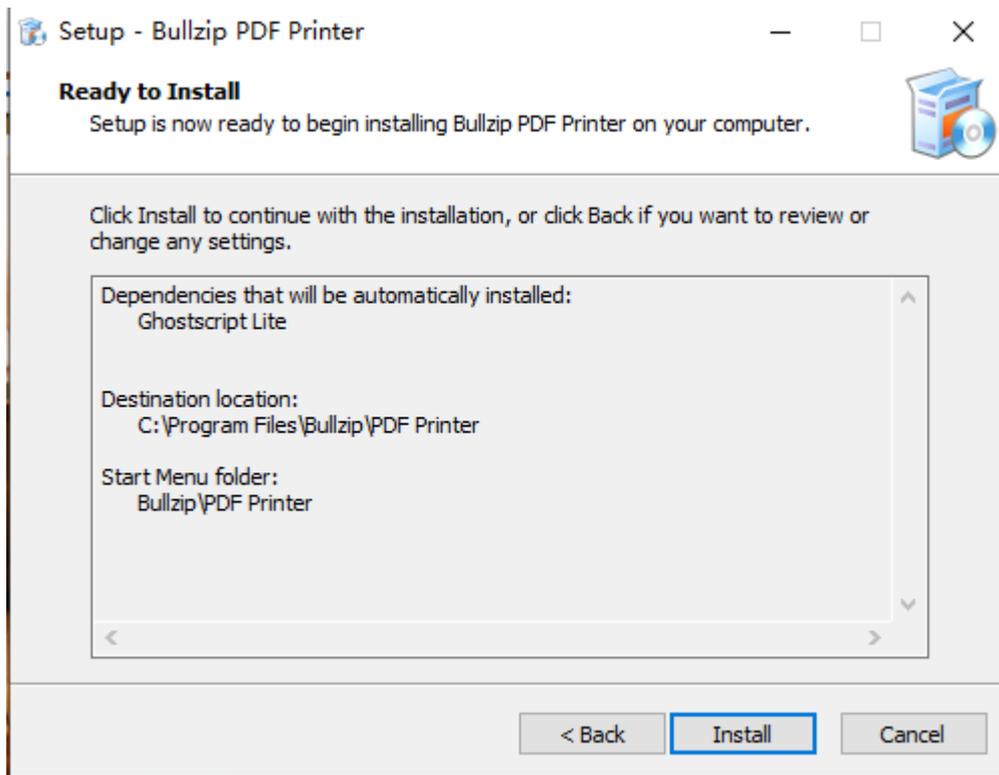
10. Select a "Start Menu Folder", and click [Next].



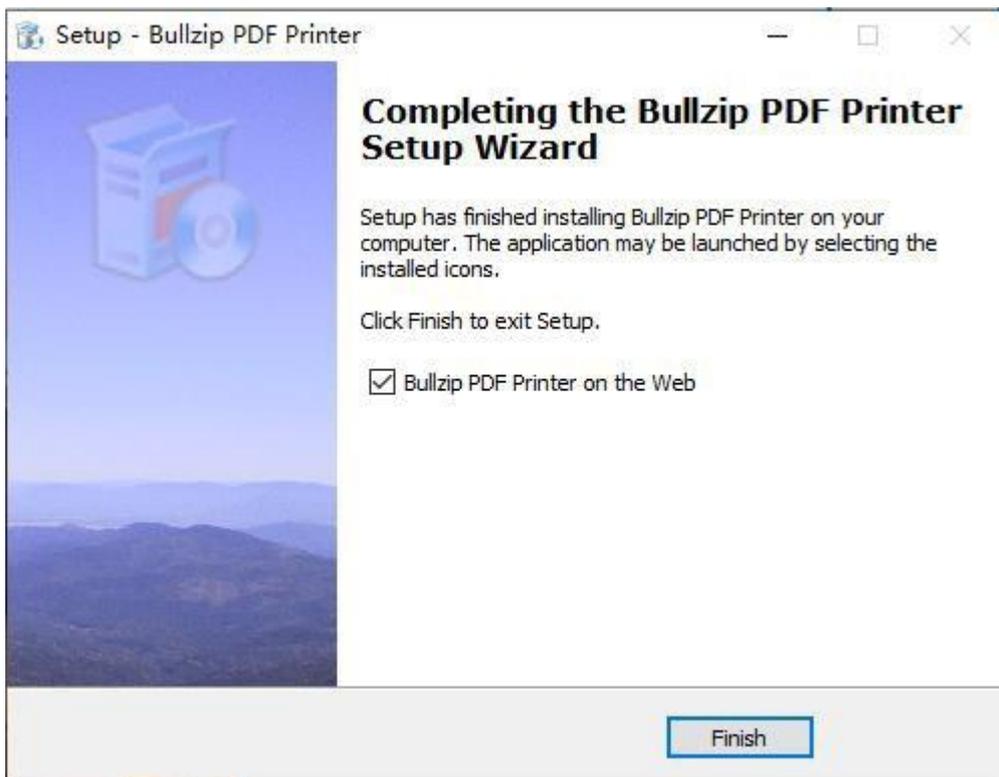
11. Select "additional tasks", and click [Next].



12. Bullzip PDF Printer is ready to install. Click [Install].



13. Bullzip PDF Printer installation is completed. Click [Finish].

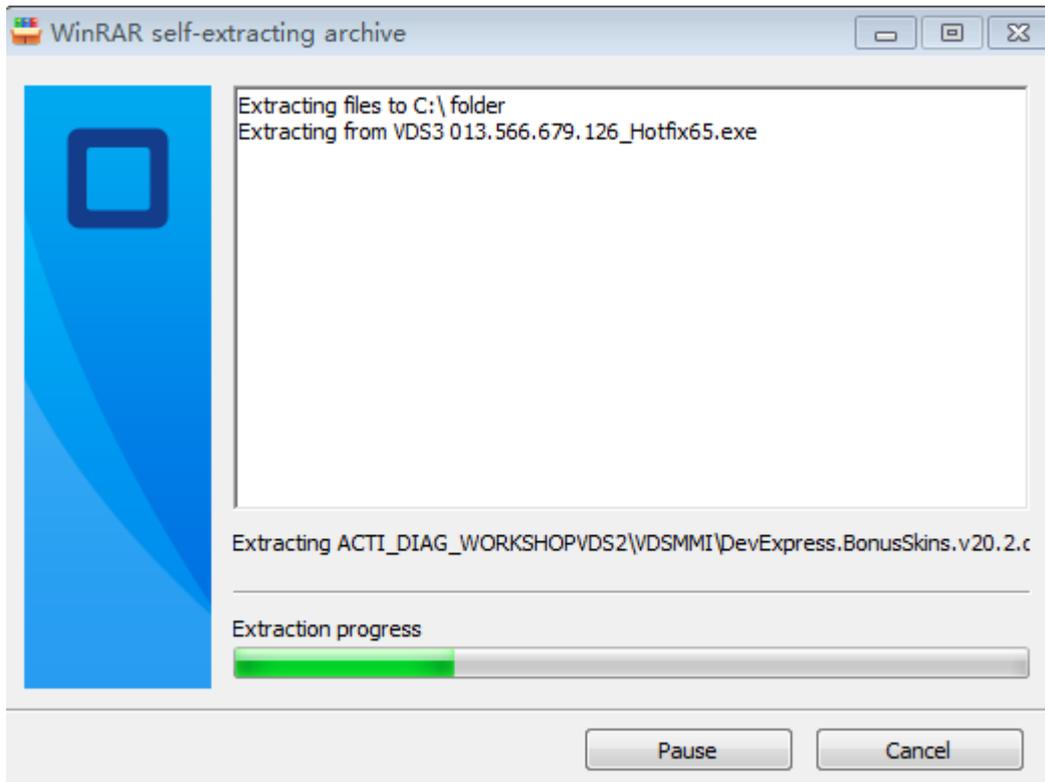


14. VDS installation is completed. Click [Finish].



2.6.2 *Installing VDS hotfix version*

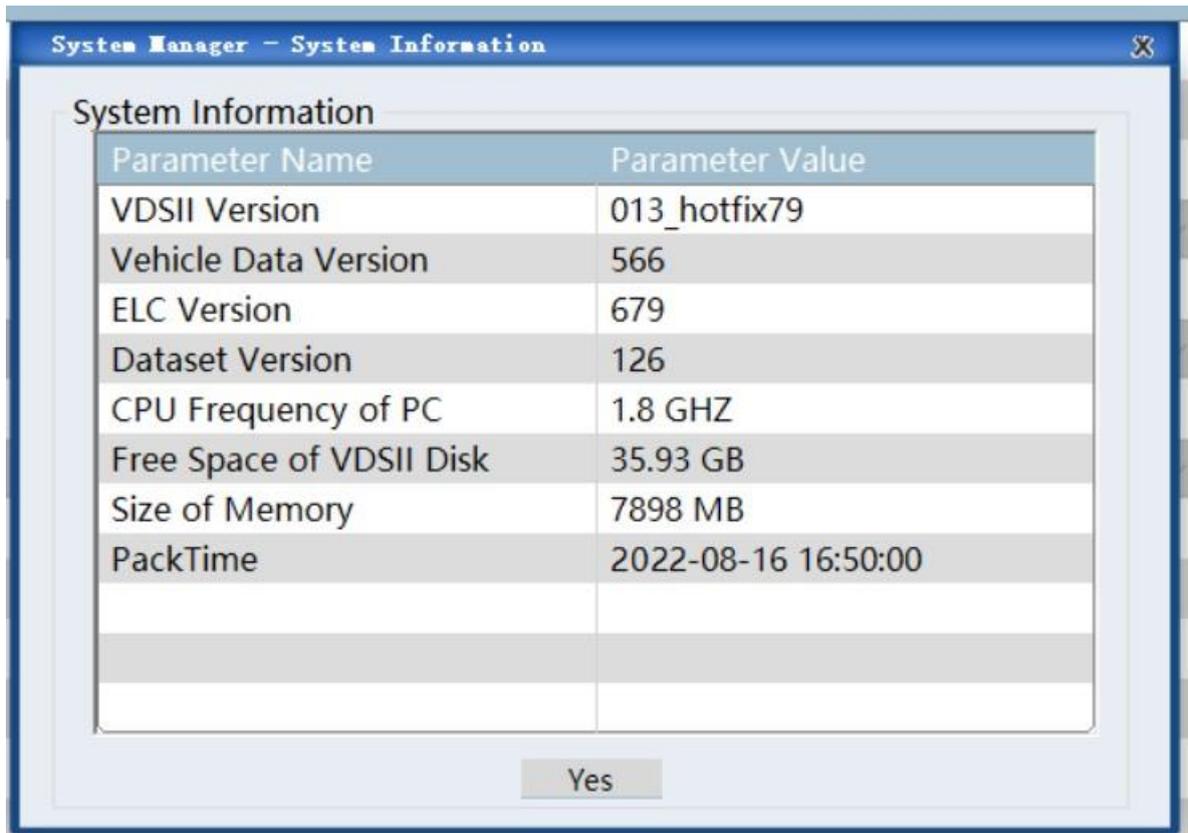
1. Obtain the VDS hotfix installer. (**Note: The hotfix version must be installed on the basis of the major version already installed on the computer to be used!**)
2. Double-click the VDS_XXXXXXHotfix.exe file, and the following interface pops up.



3. When the installer finishes running, the interface closes automatically.

2.7 Installation Verification

- After the major version is successfully installed, the installation is considered successful if the VDS can automatically or manually identify successfully and can communicate with the real vehicle.
- After the hotfix is successfully installed, you can check the hotfix version in "Menu - System Manager - System Information". As shown in the figure below, the installation is considered successful if the program version shown is consistent with the version of the installer.



2.8 Antivirus Software Whitelisting Setup

After the antivirus software upgrade, the VDS is mistaken for a virus when refreshing, resulting in the VDS process being shut down and the refresh process cannot be displayed correctly. It must be set in the whitelisting of the antivirus software.

3. VDS Software Launch

1. After installation of the VDS software, the desktop of the diagnostic tool will generate the icon of VDS software, as shown in the figure below.

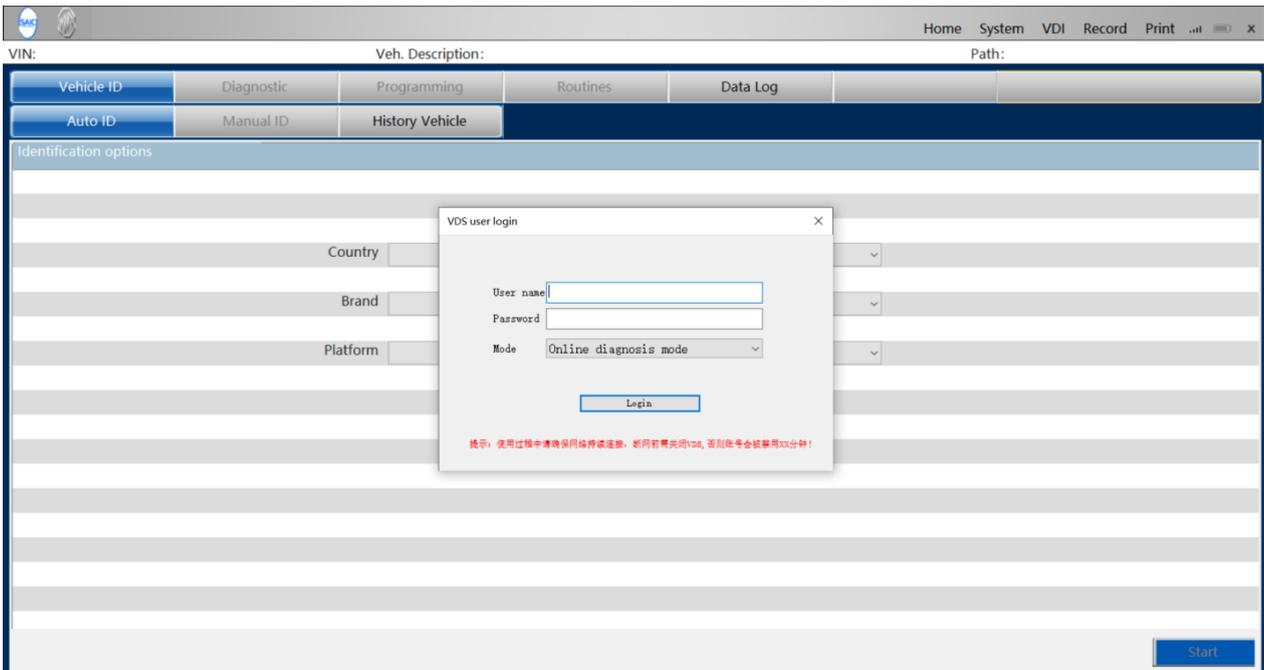


2. Double-click the desktop shortcut of VDS software [] to launch it. On the desktop of the diagnostic tool, the diagnostic software launch interface will pop up, as shown in the figure below. The dynamic progress bar in the interface indicates the progress of software launch, and the current version of diagnostic software is displayed at the bottom right.

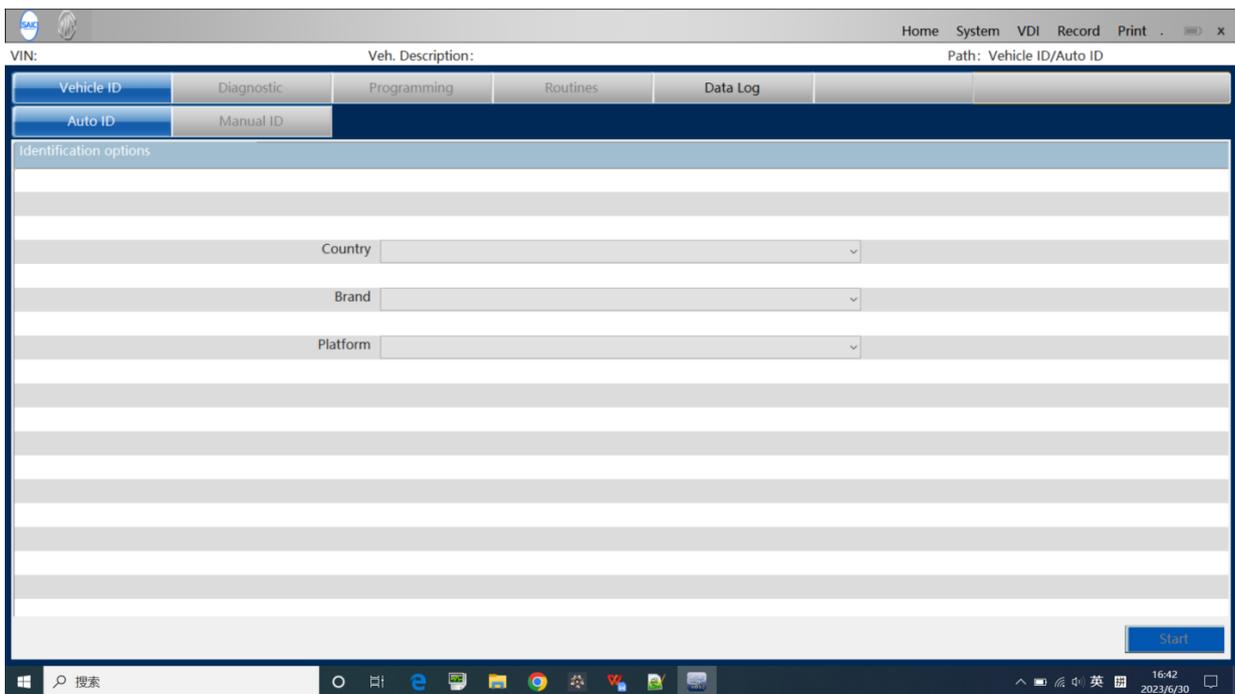


Diagnostic software launch interface

3. After the VDS is launched, a login box will pop up. The user enters the correct user name and password, and clicks [Login]. The VDS vehicle identification interface will be displayed, as shown in the figure below.



Diagnostic software login interface

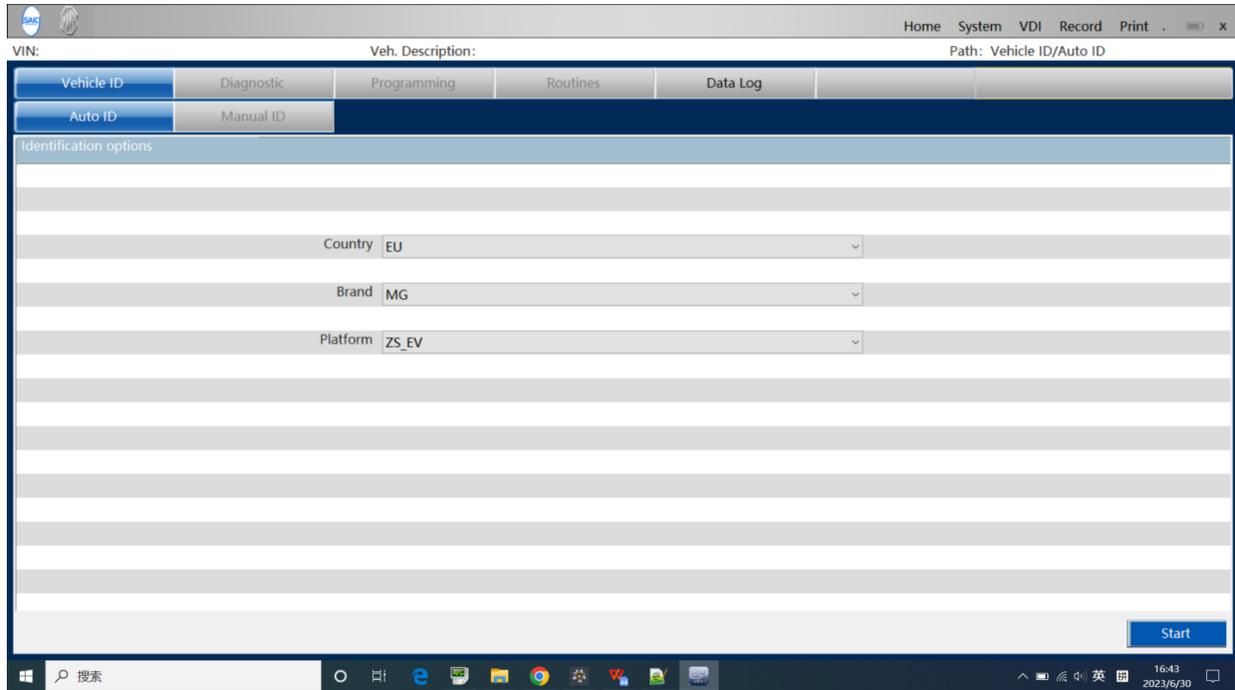


Diagnostic software homepage

4. VDS System Manager Menu Functions

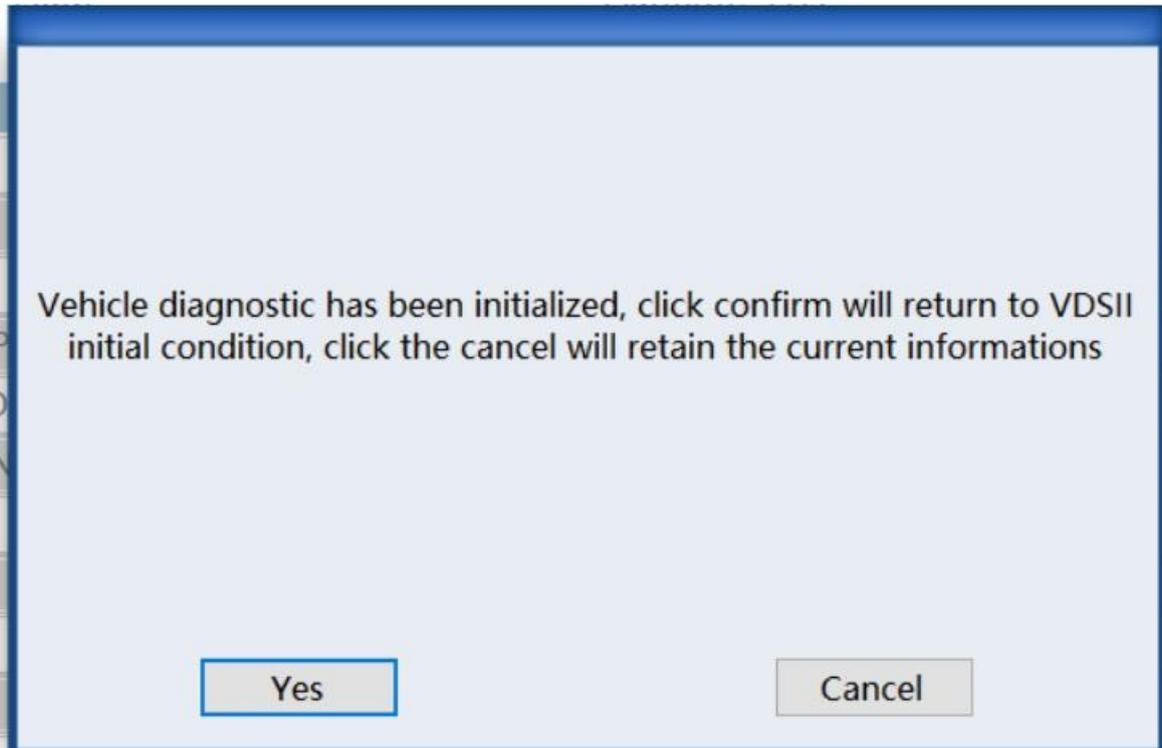
4.1 Home

The function of this menu is to restore the initial state of the system.



Diagnostic software homepage

As shown in the figure below, after clicking [Home], a confirmation dialog box will pop up. Click [Yes] in the dialog box to complete system recovery.



System initial state interface

4.2 System

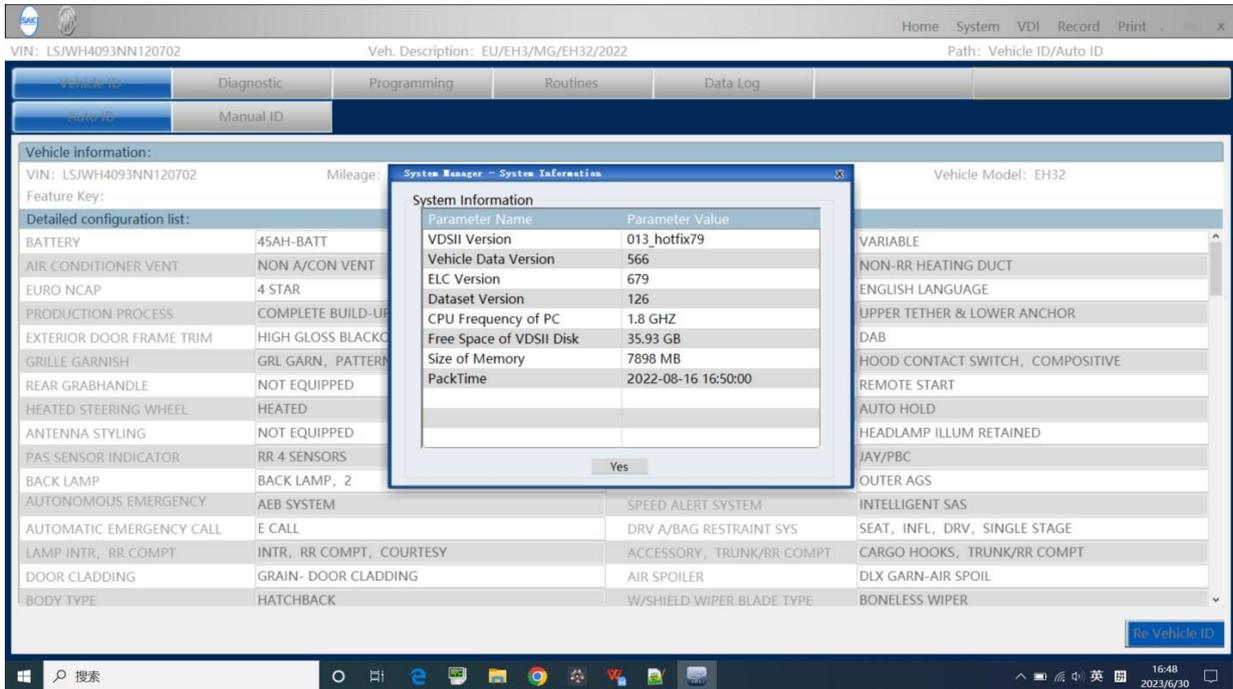
After clicking [System], the drop-down menu shown below appears.



System manager interface

4.2.1 System information

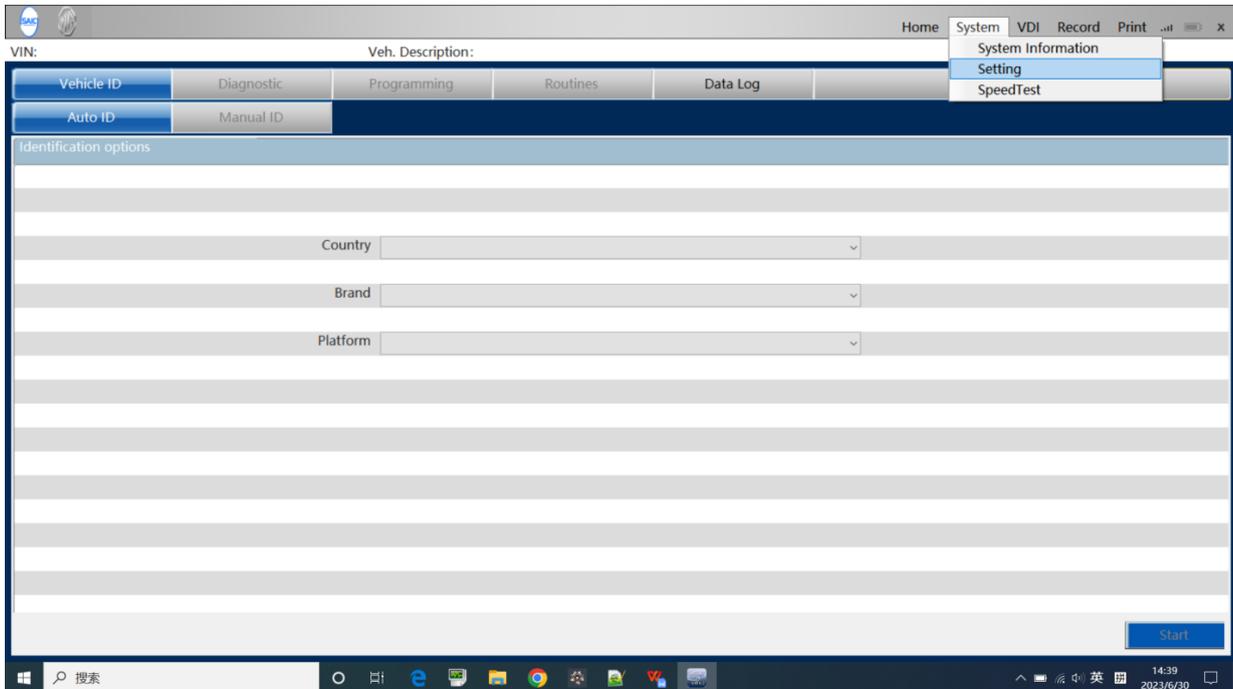
As shown in the figure below, click [System information], and the system information display box appears, showing information about the system.



System information interface

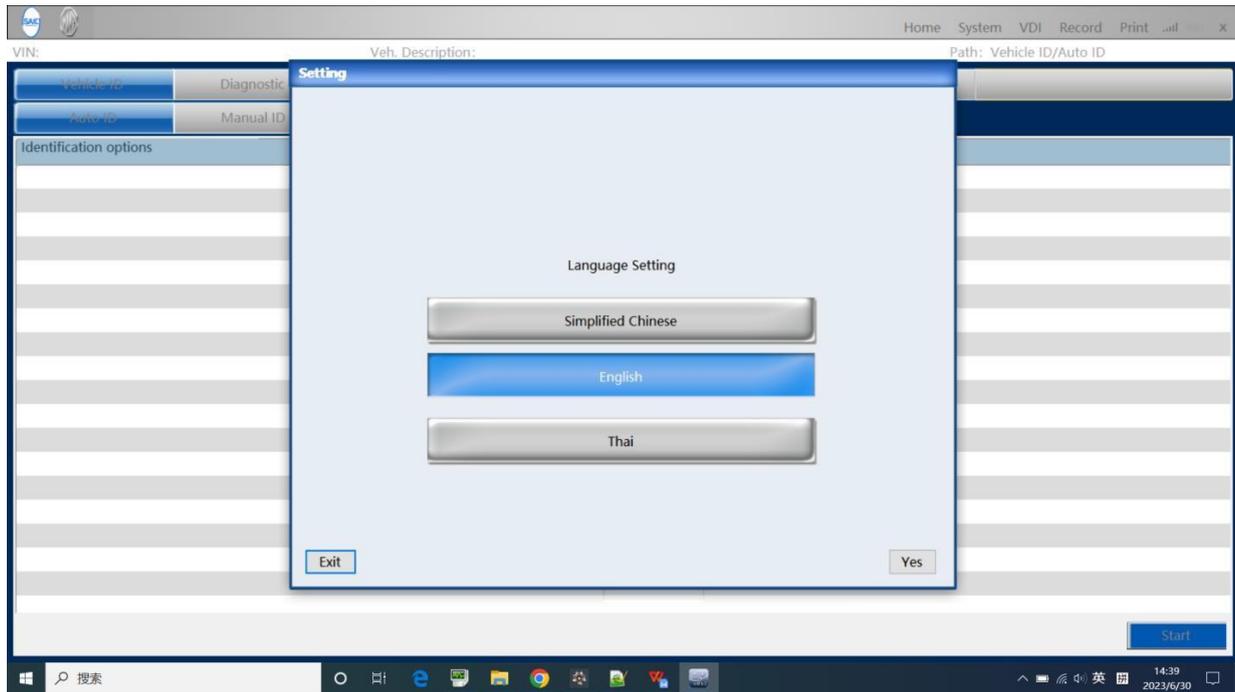
4.2.2 Setting

Click [Setting] to select the language of the diagnostic software system.



System - Setting submenu interface

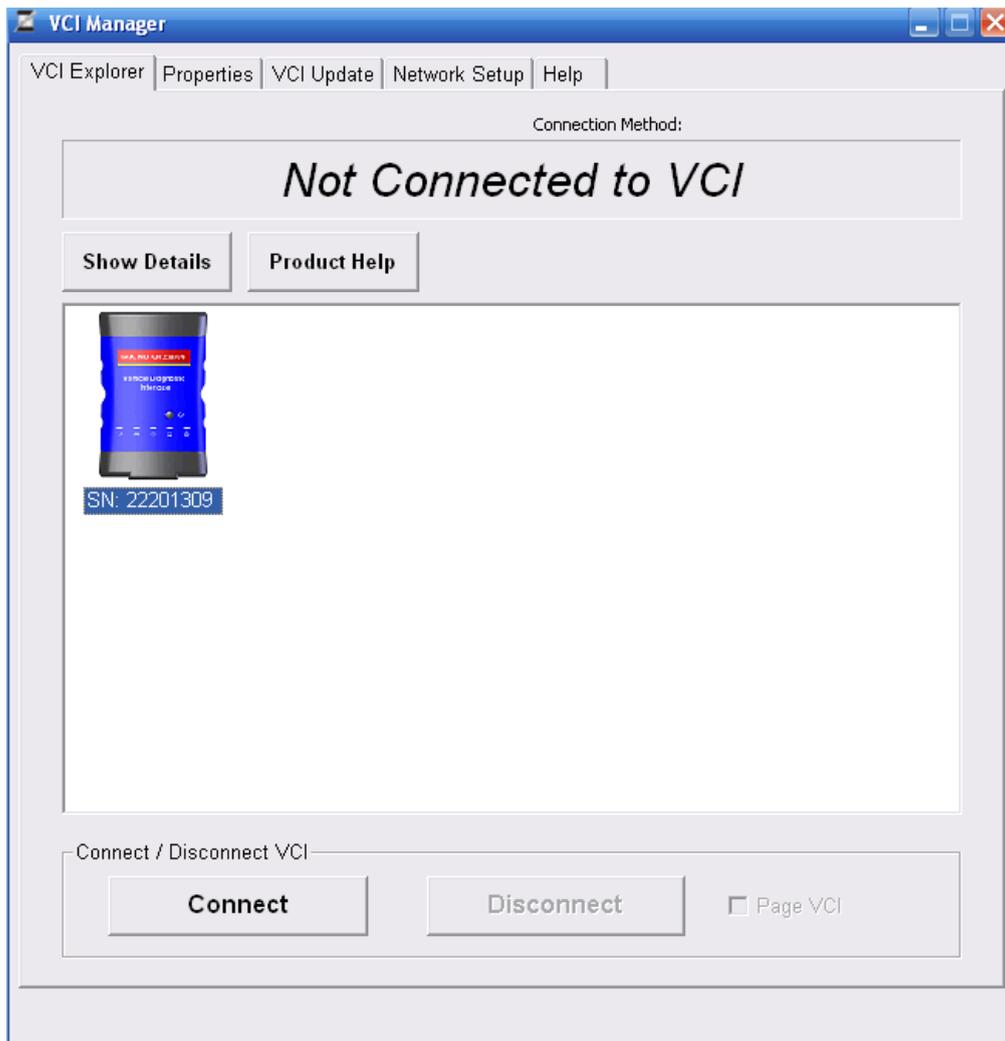
Select the desired language and click [Yes] to complete the language function setting, as shown below.



Change Language interface

4.3 VDI

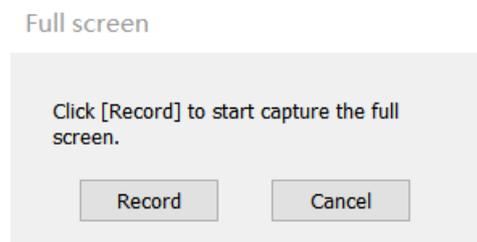
Click [VDI] to open VCI Manager, as shown in the figure below, to manage VCI.



VDI Interface

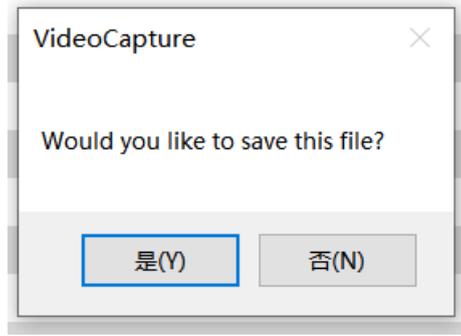
4.4 Record

After clicking [Record], a confirmation dialog box will pop up, as shown in the figure below. Click [Record], and the recording starts.



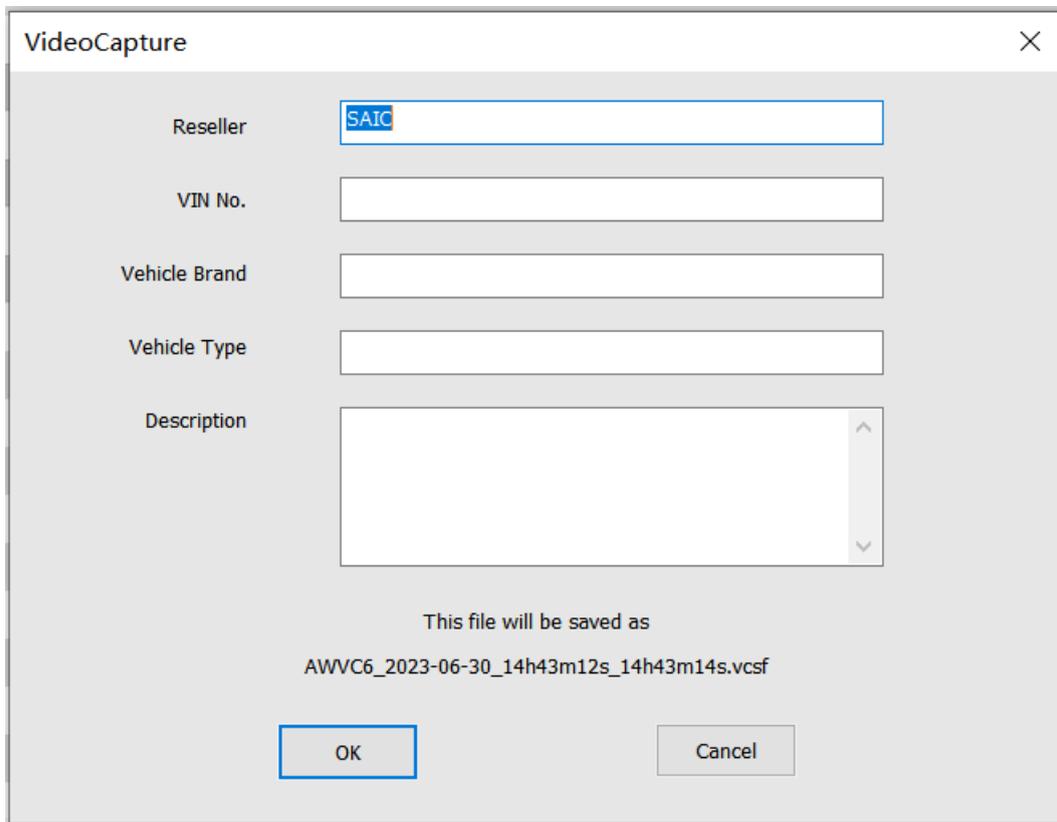
Record interface

After clicking [Stop], a confirmation dialog box will pop up, as shown in the figure below.



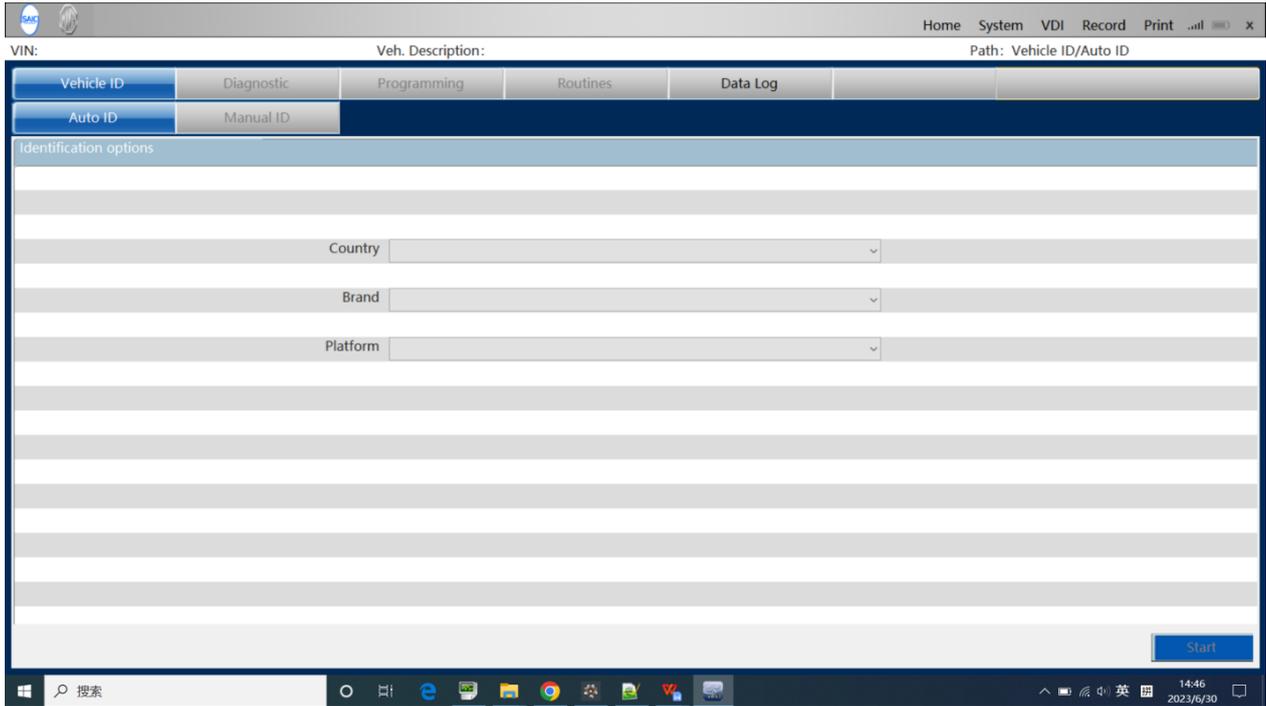
Record subinterface

Click [Yes] to save the video you just recorded. Enter relevant information in the pop-up dialog box and click [OK] to save. If the recording stops after "vehicle identification", the model information will be saved automatically when saving the recording.

A larger dialog box titled "VideoCapture" with a close button (X) in the top right corner. It contains several input fields: "Reseller" with "SAIC" entered, "VIN No.", "Vehicle Brand", "Vehicle Type", and "Description" (a text area with scrollbars). Below the fields, it says "This file will be saved as" followed by the filename "AWVC6_2023-06-30_14h43m12s_14h43m14s.vcsf". At the bottom, there are "OK" and "Cancel" buttons.

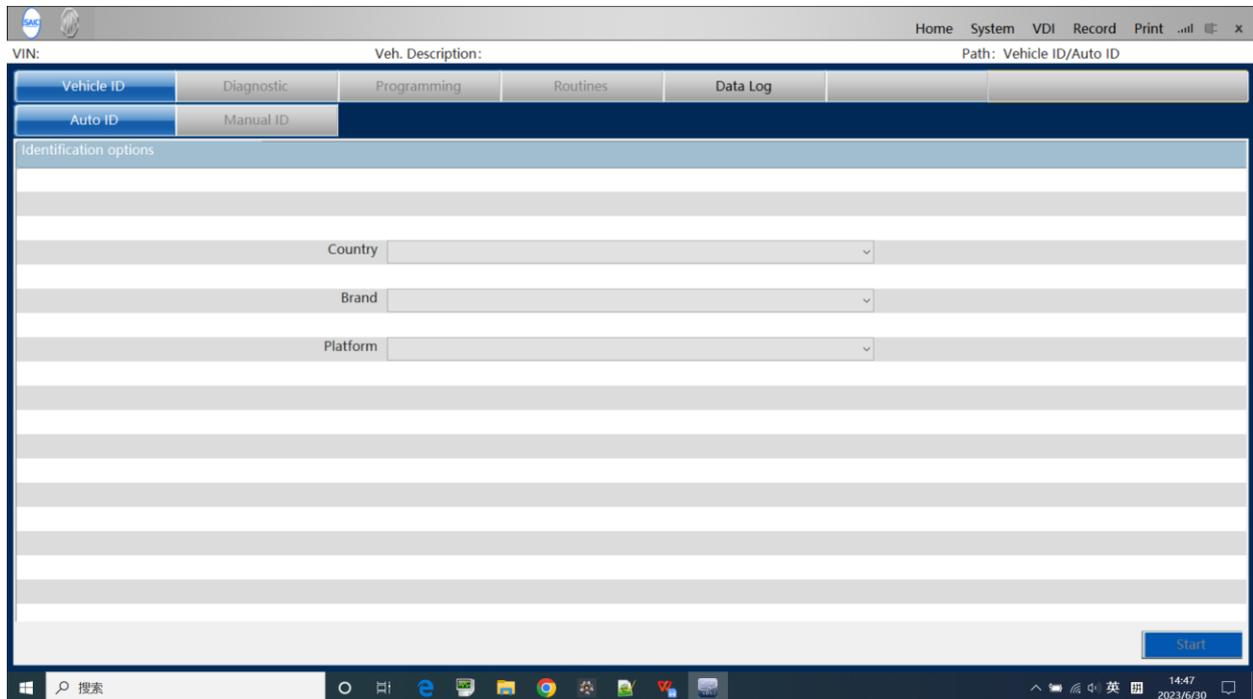
Save Video interface

4.5 Signal Strength



 As shown, the icon represents the signal strength. When VDI is connected wirelessly, the signal strength can be observed from here. The more bars, the better the signal.

4.6 Remaining Battery Power

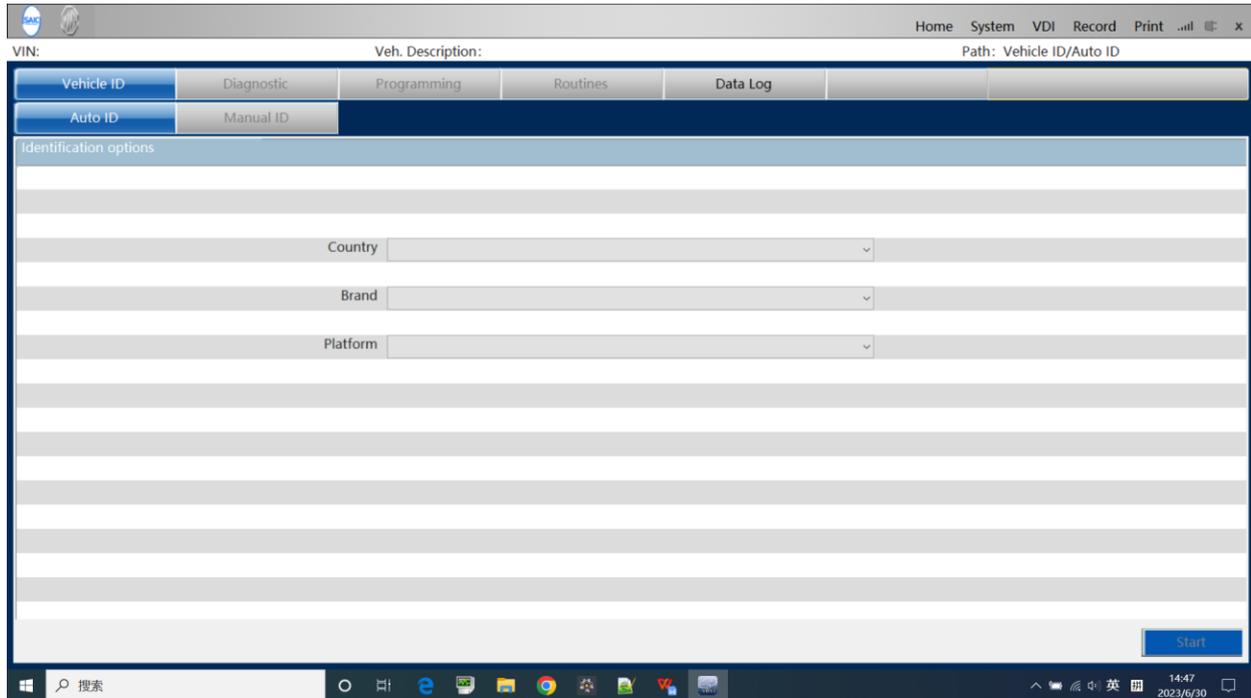




As shown in the figure, this icon indicates the remaining power of the detection device (laptop). Move the cursor over the icon to display the percentage of remaining battery power.

4.7 [Close] Button

Click [X] at the top left of the interface to close the diagnostic software system. **Note: It is recommended to use the [X] button to turn off the VDS system in all cases without exception.**



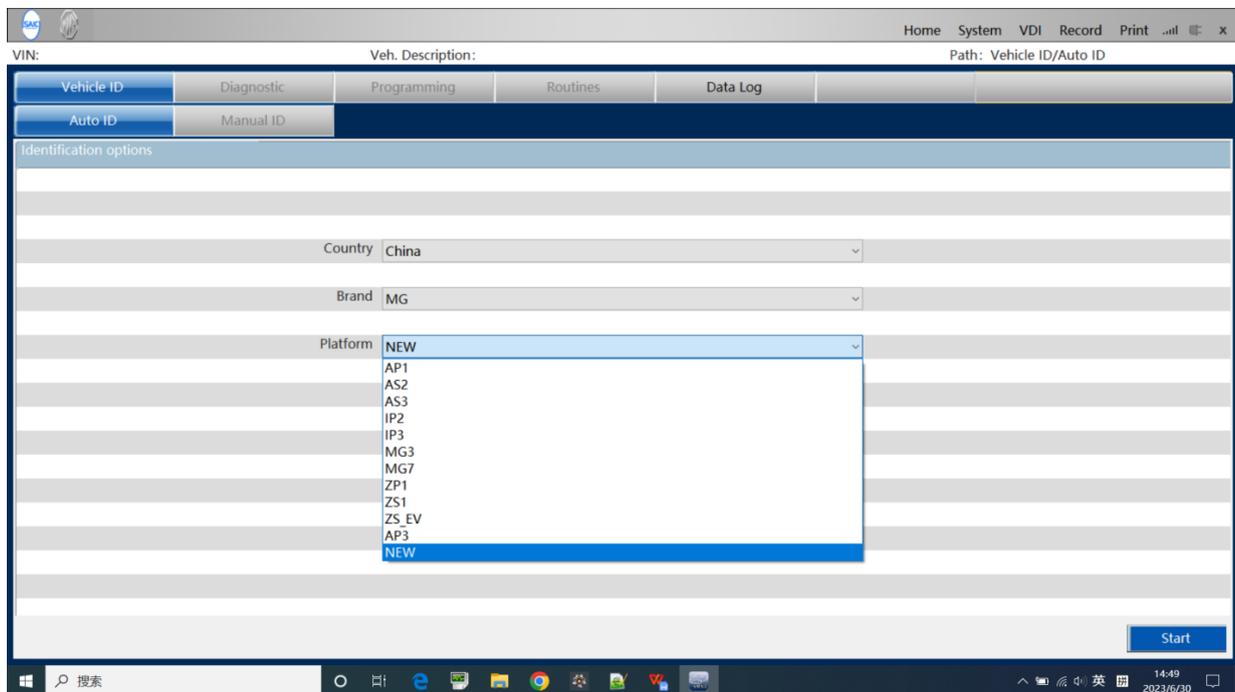
5. VDS Diagnostic Functions

5.1 Vehicle Identification

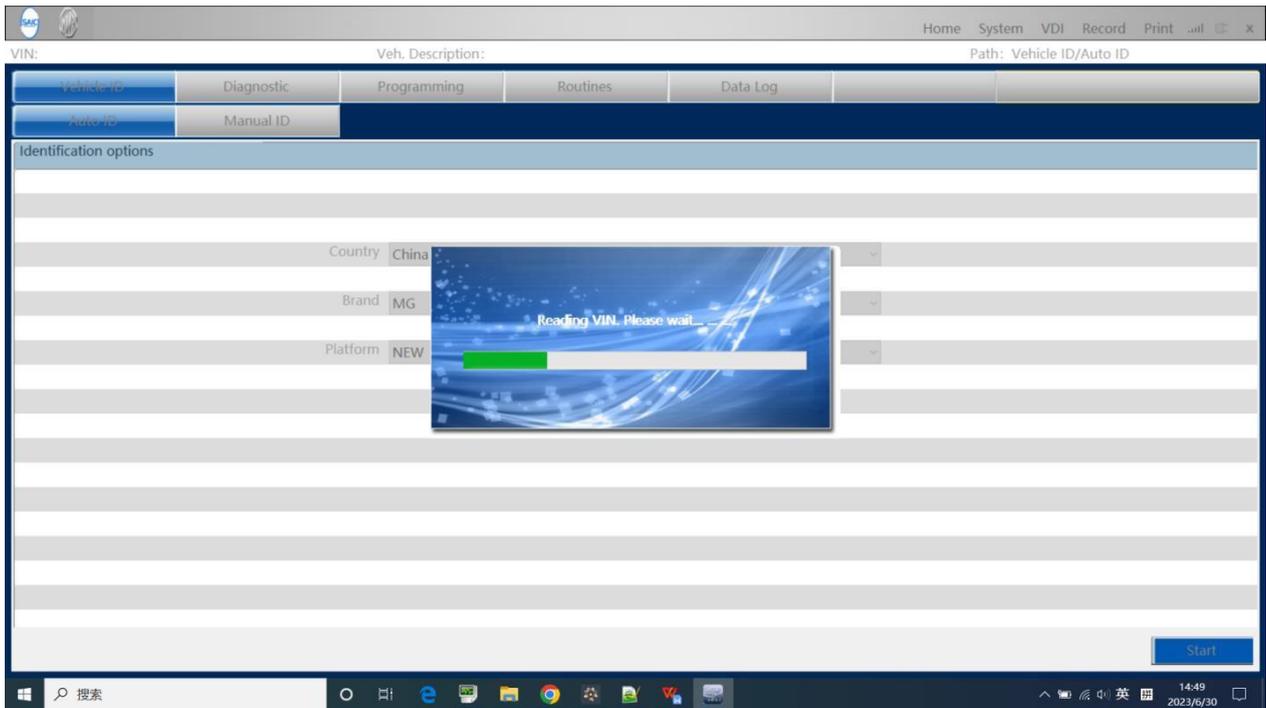
5.1.1 Auto ID

After launching the VDS, the following interface is displayed. In this case, feature tabs like "Diagnostic", "Programming" and "Routines" are grayed out and unavailable. The "Diagnostic" tab can only be available after vehicle identification is successful, and the "Programming", "Routines", etc. tabs are only available after vehicle scan.

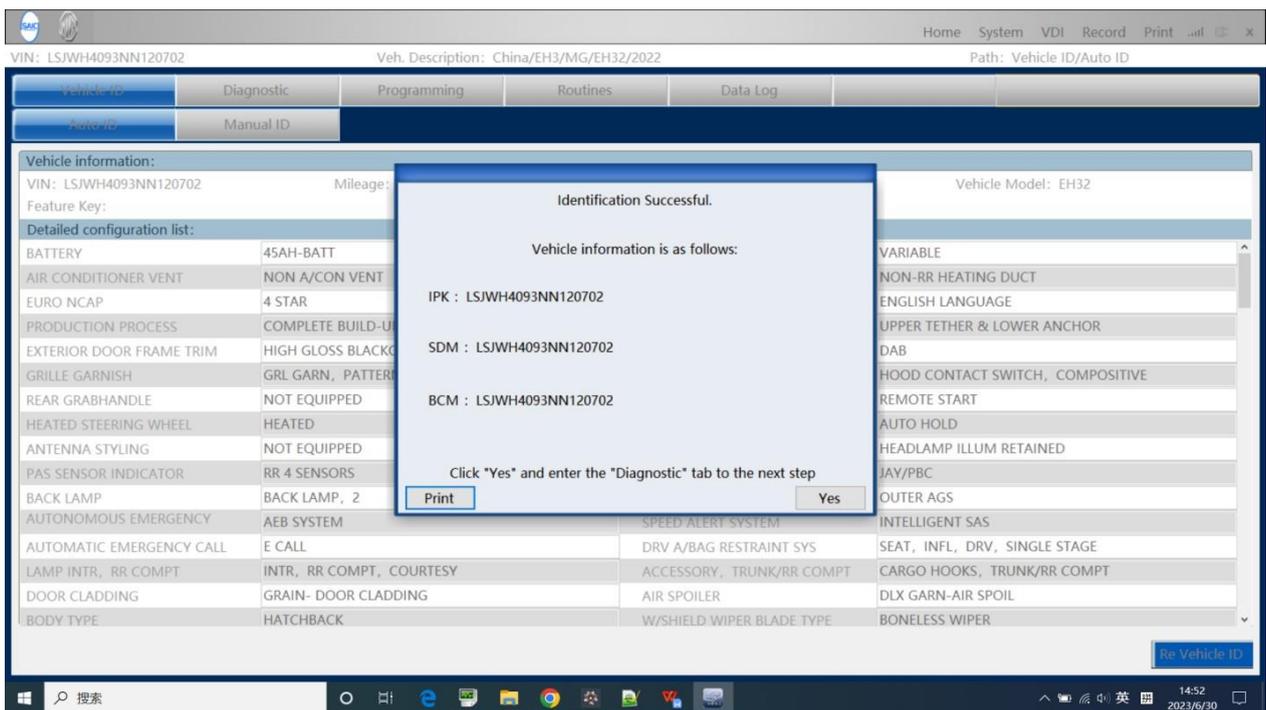
According to the vehicle information to be used, select the appropriate configuration, and click [Start] at the bottom right to enter the semi-automatic identification result display interface. First, the VIN is read, and then the Feature Key is read. When both are correct, the semi-automatic identification result display interface is shown.



Main interface after user login



Reading VIN



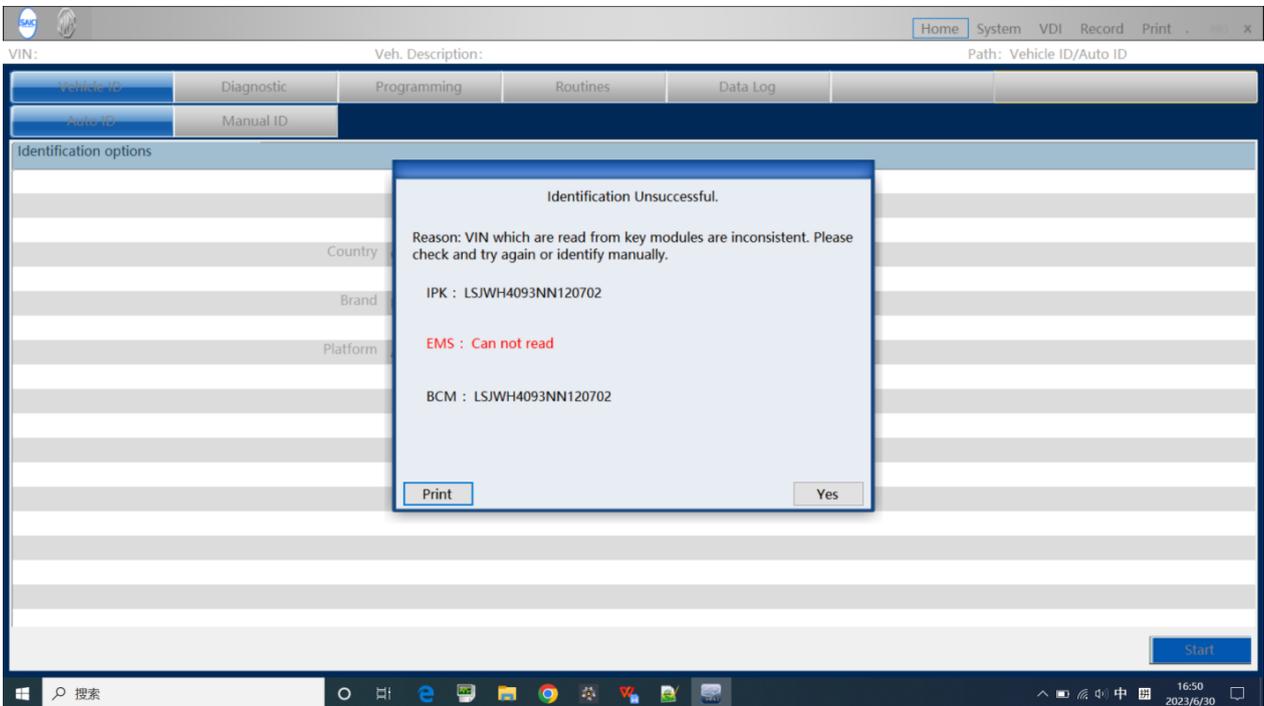
Semi-automatic identification successful interface



Interface entered after successful semi-automatic identification

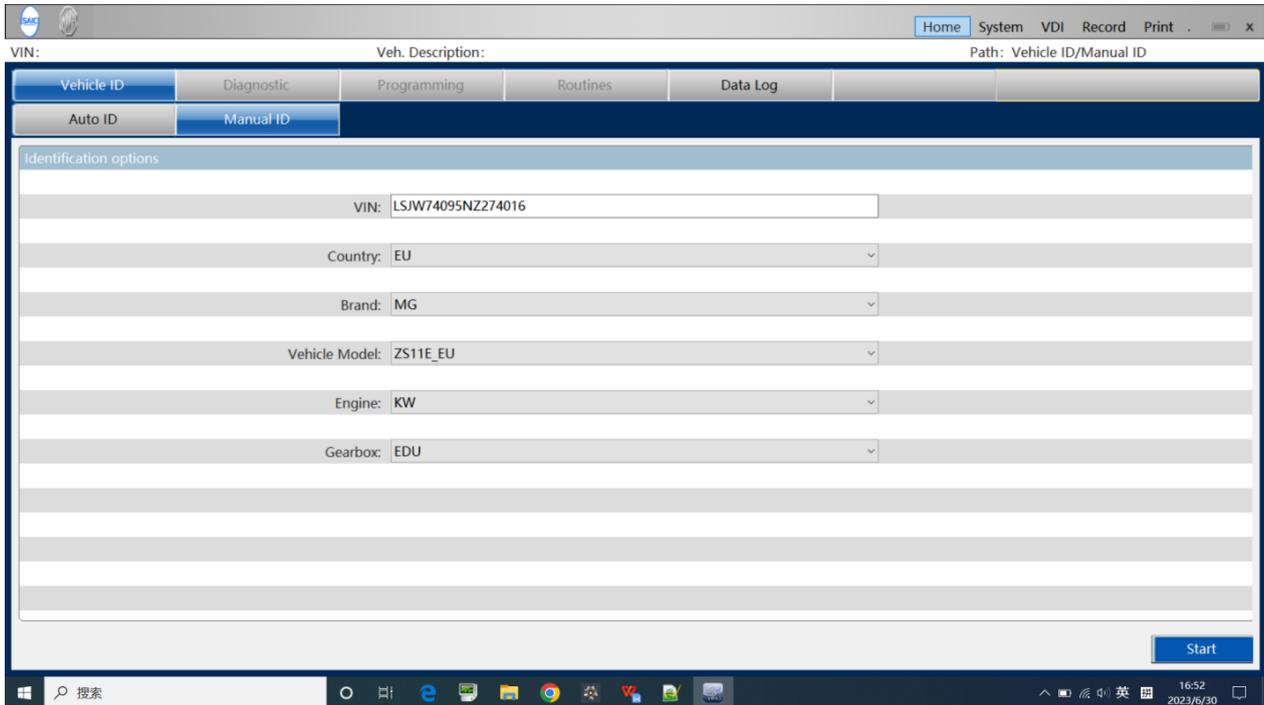
5.1.2 Manual ID

When semi-automatic identification fails, the "Manual ID" tab becomes selectable and can be selected to enter.



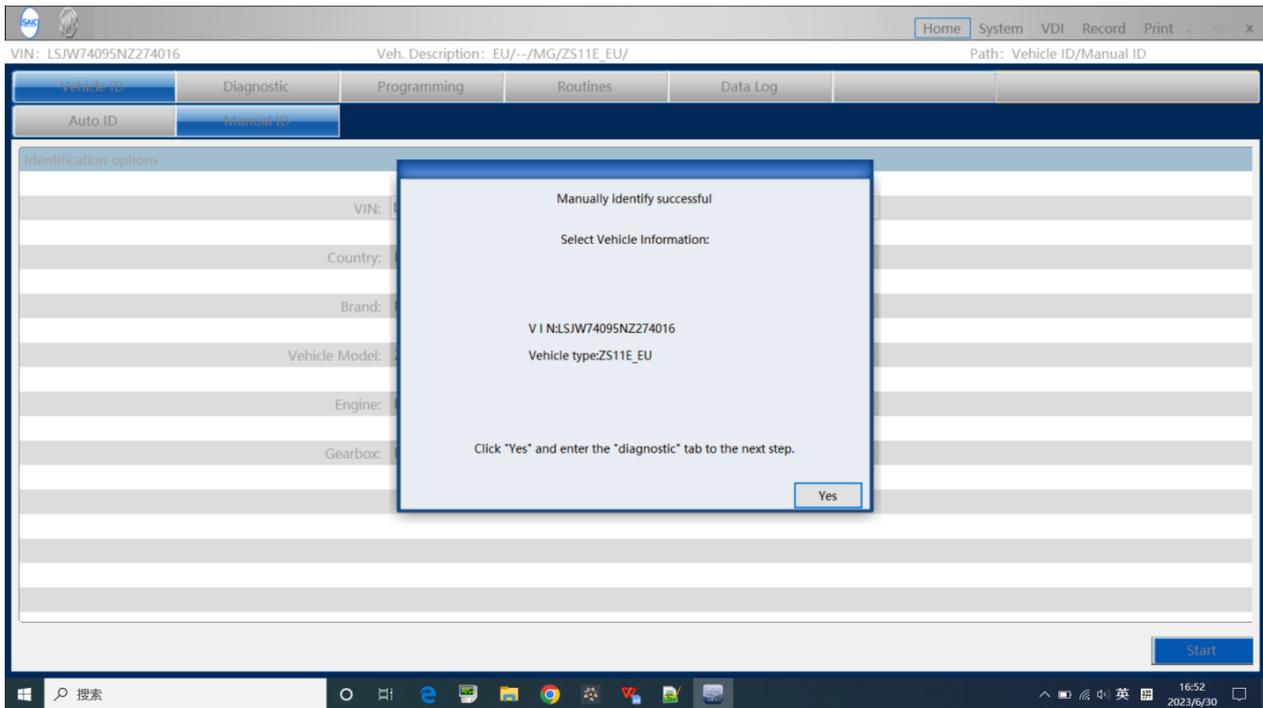
Semi-automatic identification fails, it is prompted to make a manual identification

Among them, the VIN number is entered by the user in the form of a manual input box (only 17 digits can be entered), and the other items are selected in the form of a drop-down box. For example, the selection of country, platform, brand, model year, engine, vehicle model, gearbox, etc. See the figure below for the interface.



Manual identification interface

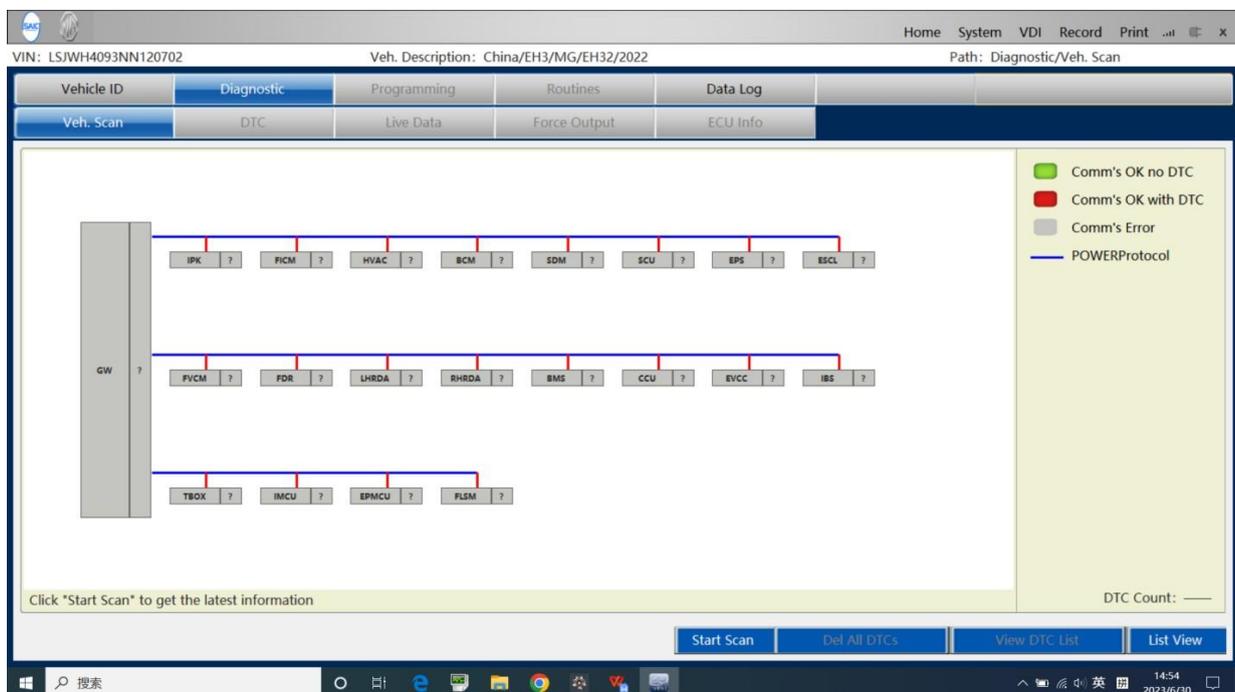
After selecting the model, click [Start] at the bottom right. After manual identification succeeds, the main interface is displayed.



Manual identification successful interface

5.2 Diagnostic

When "vehicle identification" is completed, select the "Diagnostic" tab to open the diagnostic interface.



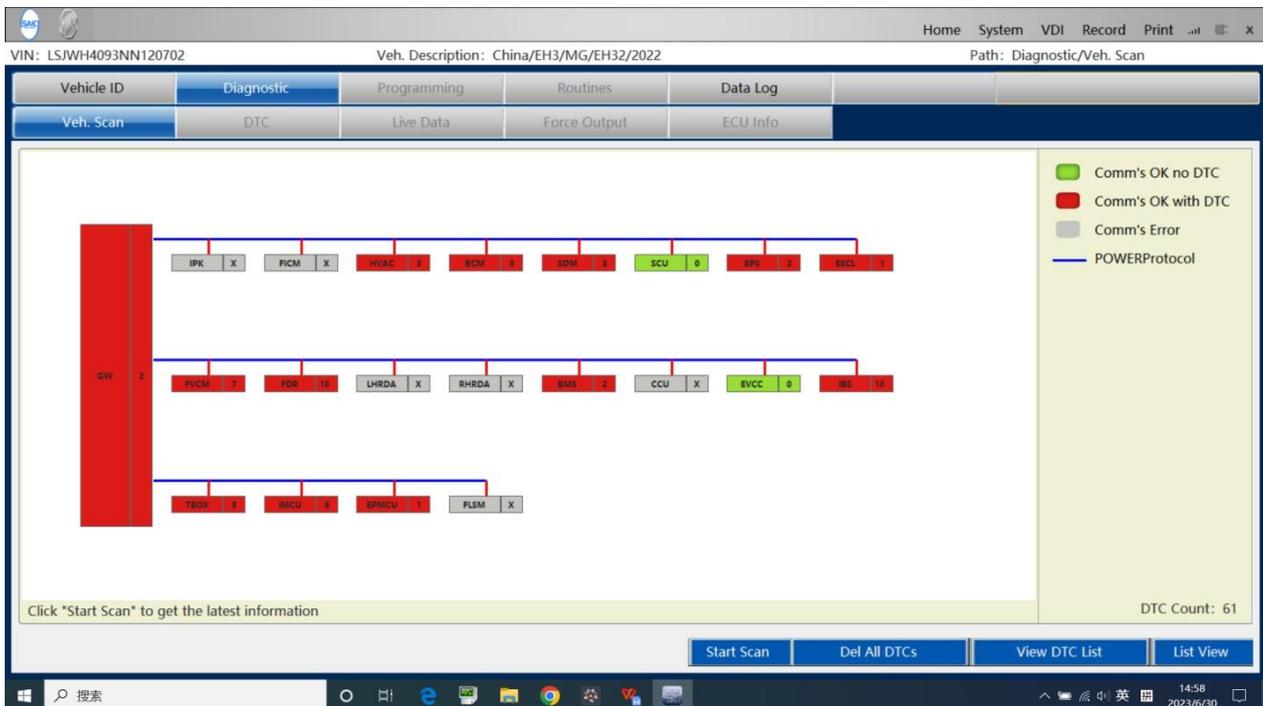
Opening the vehicle dialog box

It can be seen from the figure that the diagnostic interface consists of "Veh. Scan", "DTC", "Live Data", "Force Output", "ECU Info", etc.. Under the tabs shows the network architecture diagram. Before "Vehicle Scan", the ECU icons in the architecture diagram are grayed out, and the corresponding DTC count is displayed as "?". Prompt messages are displayed at the bottom left, and the total number of DTCs [DTC Count] is displayed at the bottom right. The connecting lines for different communication protocols (including data cables not for detection use) are displayed in different colors.

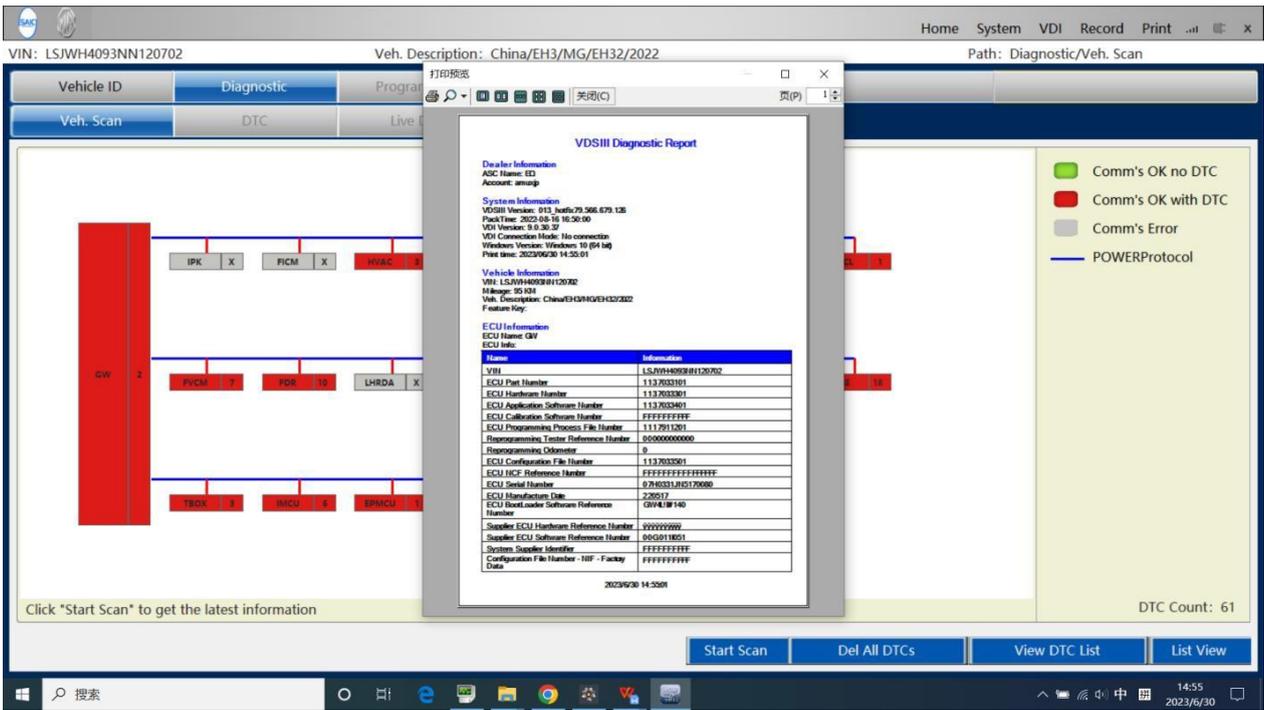
When "Vehicle Scan" is not performed, only [Start Scan] is selectable in the lower right corner, and the other buttons are grayed and unselectable. "DTC Count" is displayed "---" before scanning. The other buttons become selectable only when the scan is finished.

5.2.1 Vehicle Scan

Select "Veh. Scan" and click [Start Scan] in the lower right corner to start vehicle scan. During the scanning process, the [Start] button is grayed out and unselectable. After the scan is completed, ECUs with communication and no DTC [Comm's OK no DTC] will display in green, with "0" at the corresponding DTC count; ECUs without communication [Comm's Error] will display in gray and "X" at the corresponding DTC count; ECUs with communication and DTC will display in red, with their corresponding DTC counts. During the scanning process, "DTC Count" at the bottom right is displayed "---". After the scan is completed, a Print Report window pops up. As shown in the figures.



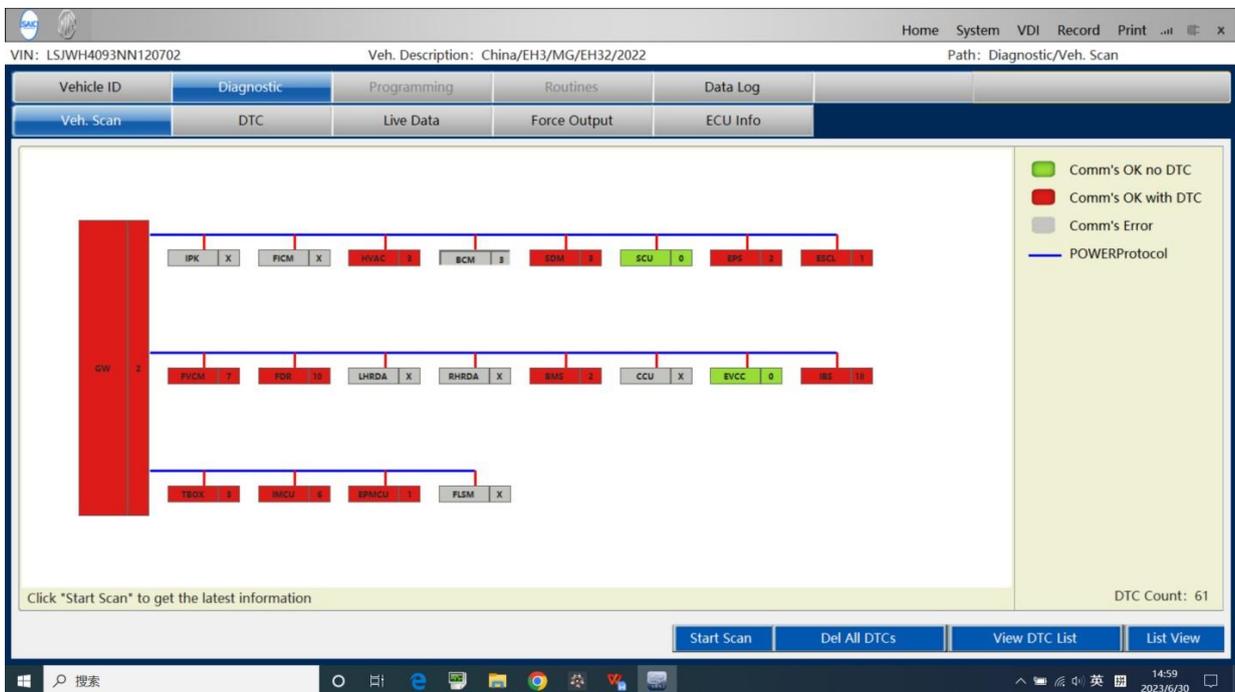
Interface after completion of vehicle scan



5.2.2 DTC

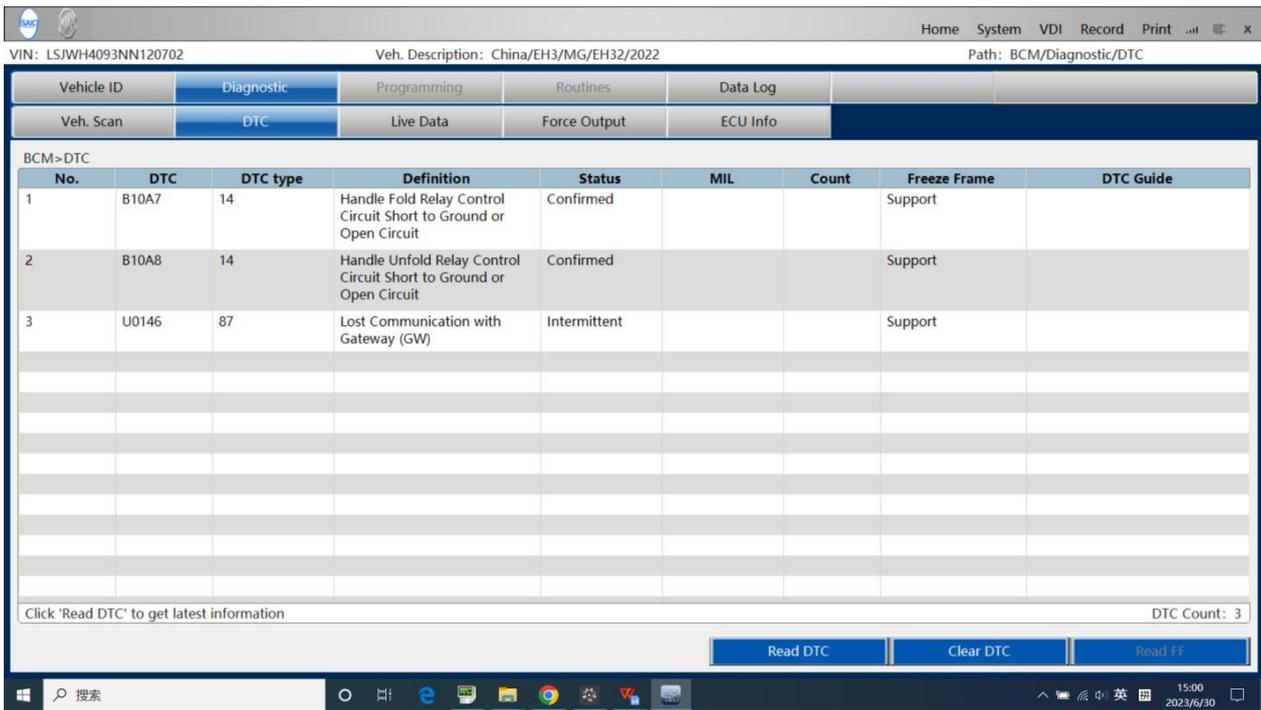
1. Read DTC

Select an ECU with DTC. Here we choose the BCM ECU with 1 DTC. First, select "BCM", and then select the "DTC" tab, as shown in the figure below.



DTC interface

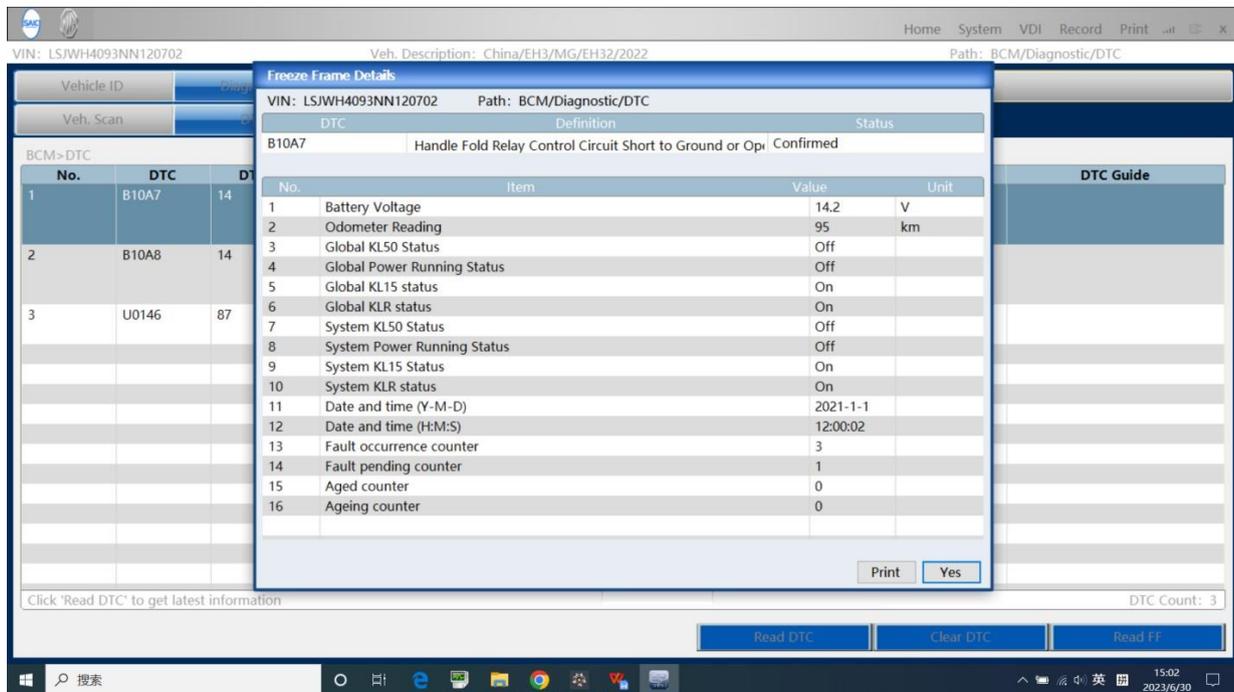
Click [Read DTC] at the bottom right, and the corresponding DTC information will be displayed on the interface, as shown below.



Read DTC interface

2. Read Freeze Frame

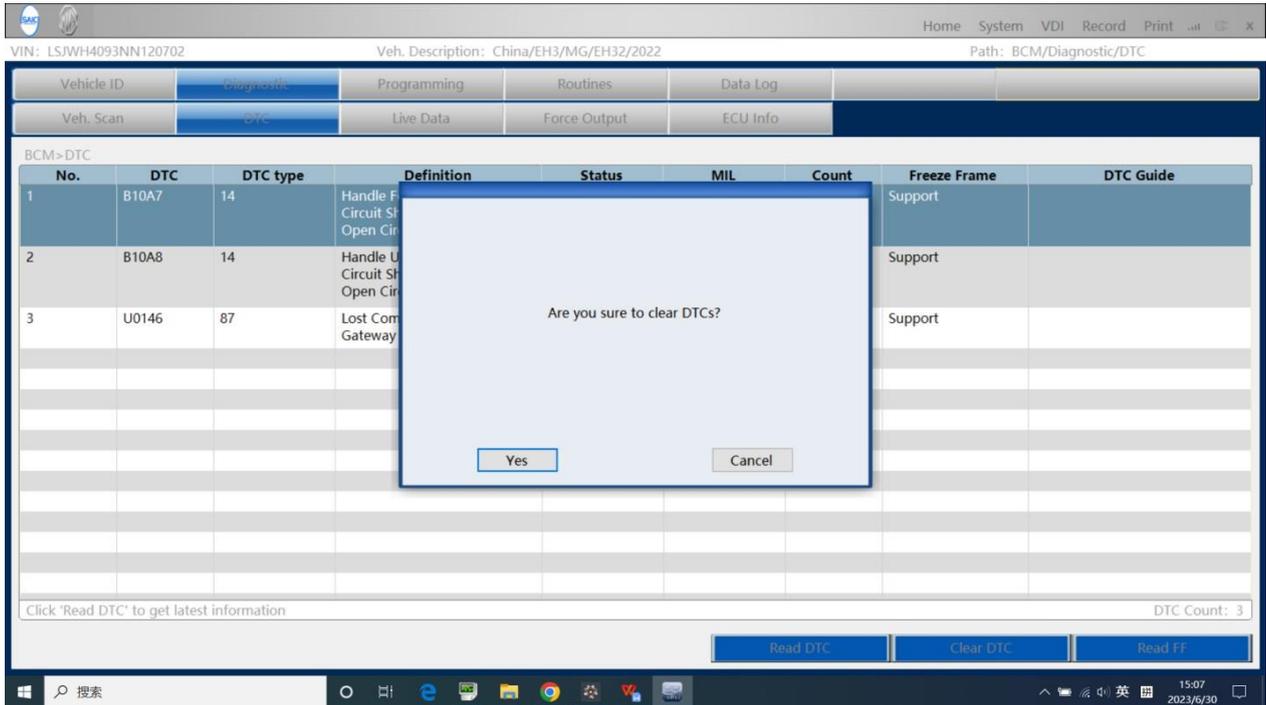
Select the DTC to read the freeze frame, click [Read FF], and "Freeze Frame Details" pops up, as shown below.



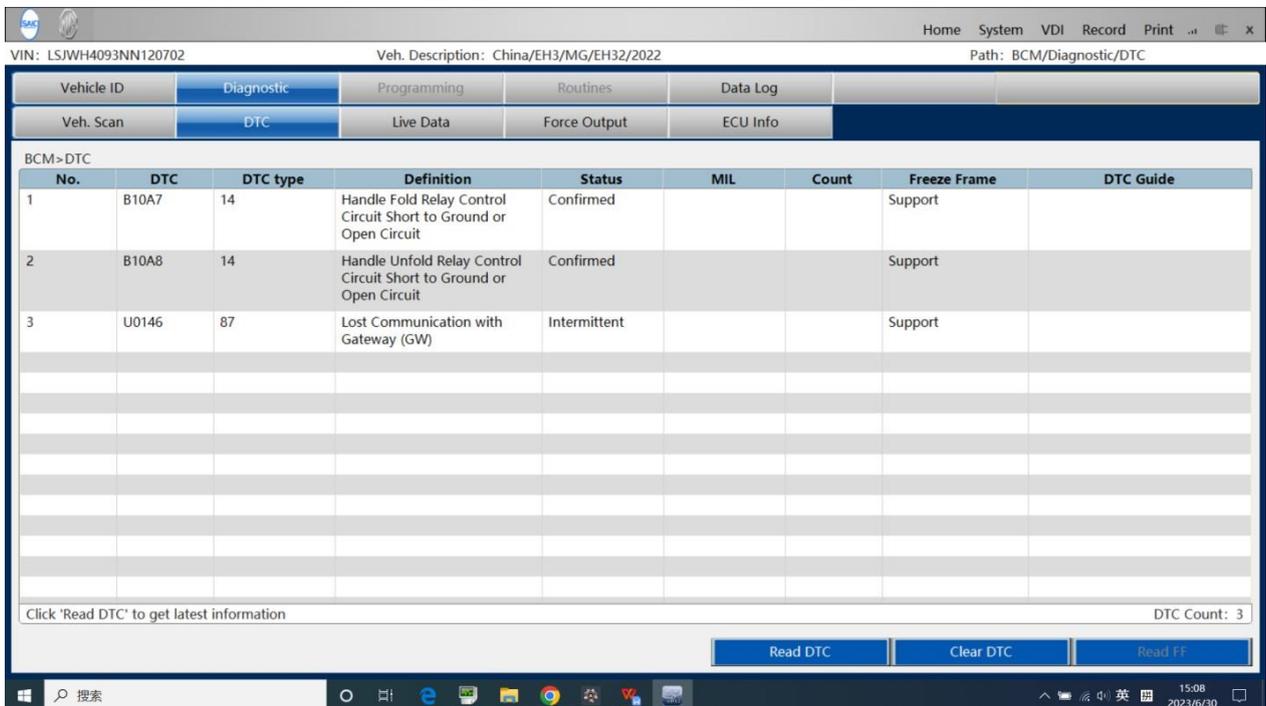
Read Freeze Frame interface

3. Clear DTC

Click [Clear DTC] at the bottom right, and the dialog box as shown below appears. Click [Yes], and "Clear DTC" is completed.



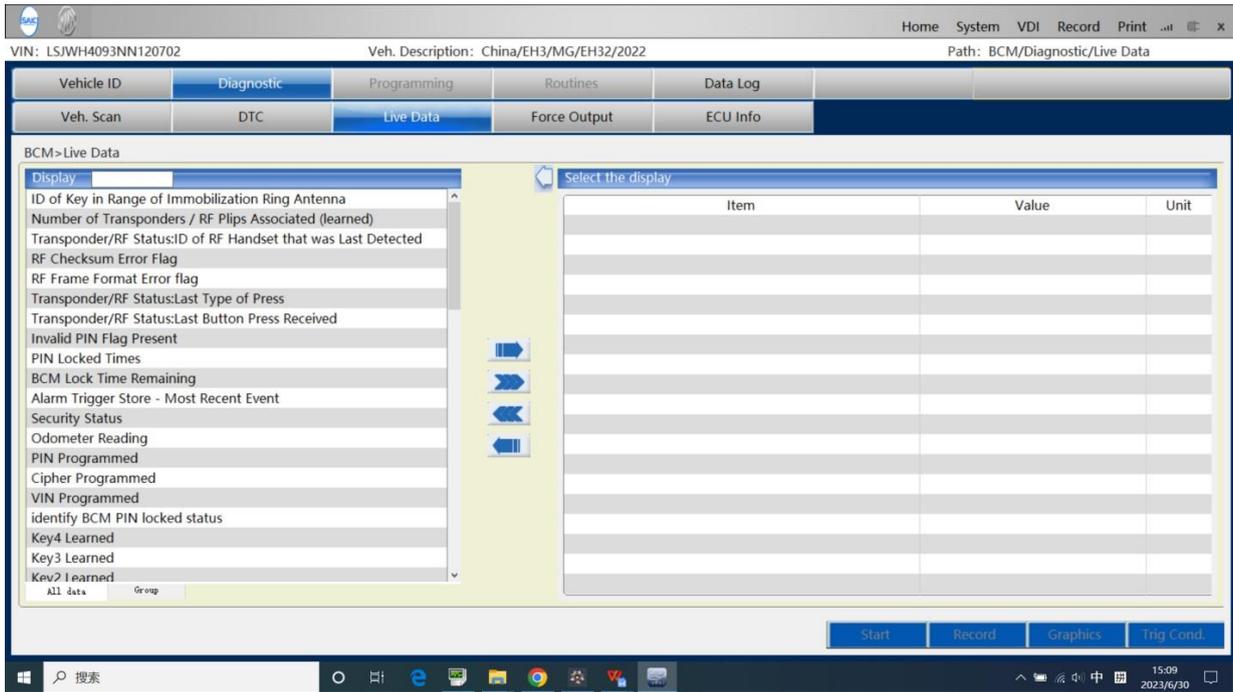
Clear DTC interface



Clear Successful interface

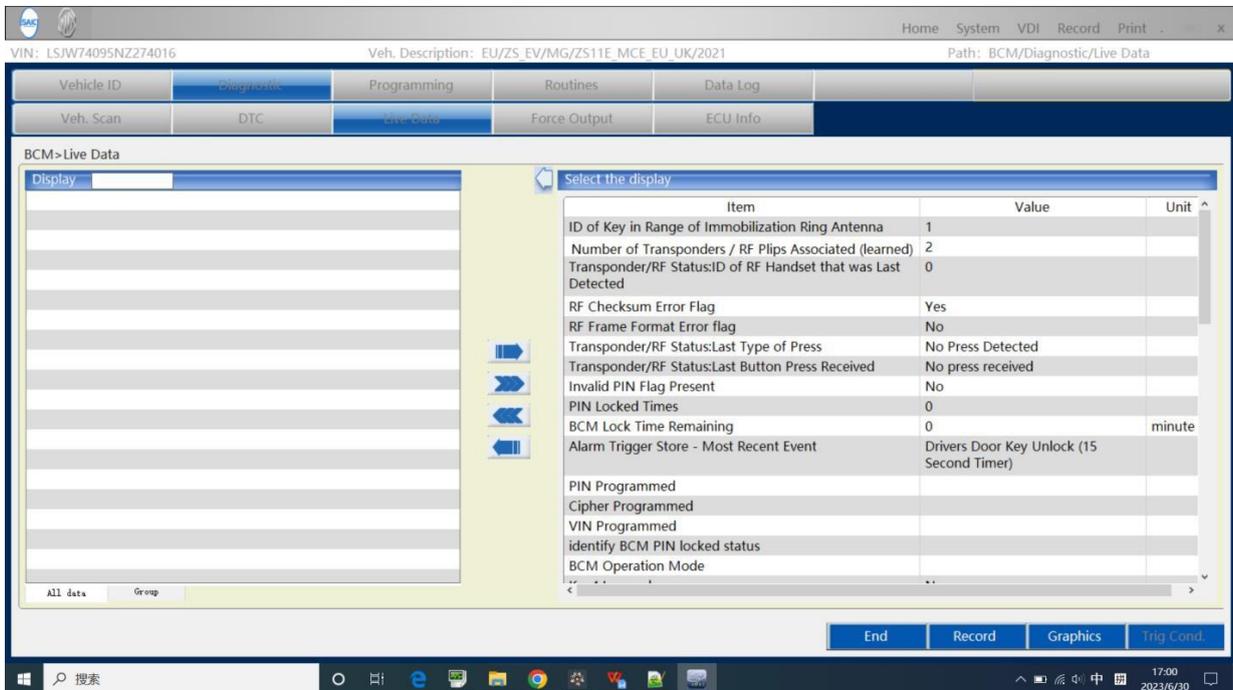
5.2.3 Live Data

1. Select the "Live Data" tab to enter the ECU - Live Data interface.

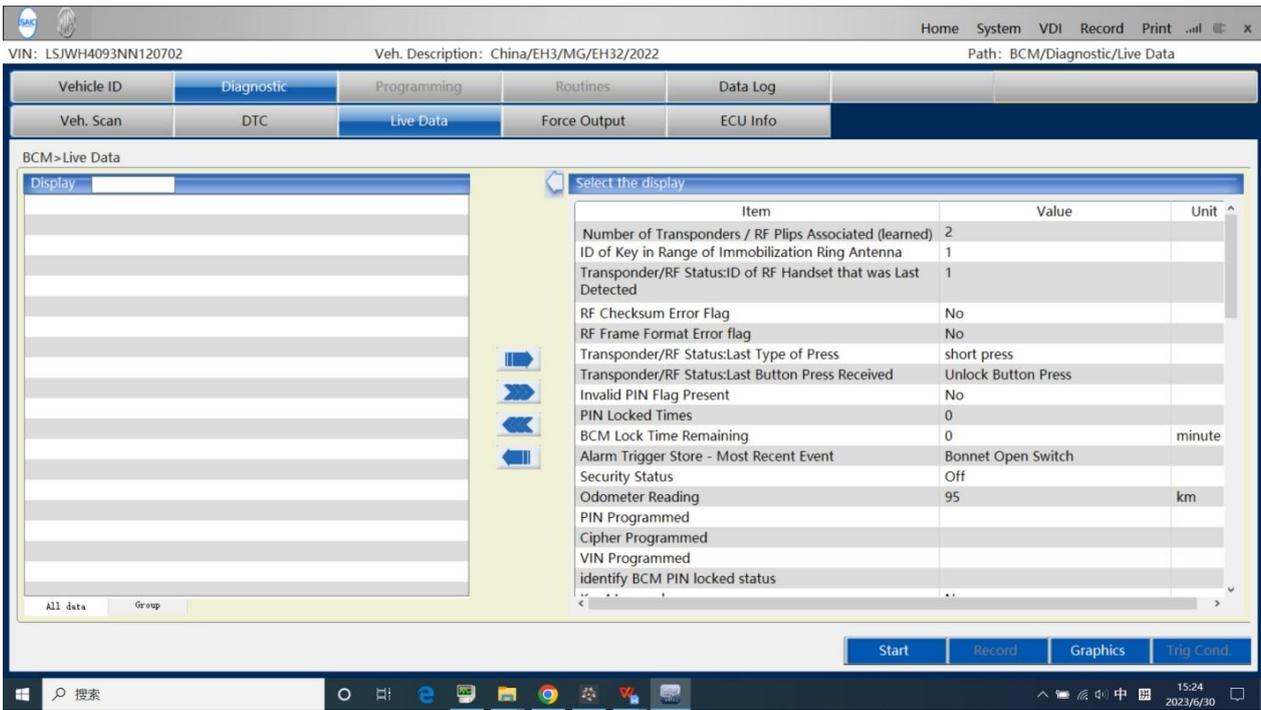


Live Data initial interface

2. The display box on the left side of the interface shows all ECU real-time parameters, from which you can choose one or several to read, as shown below.

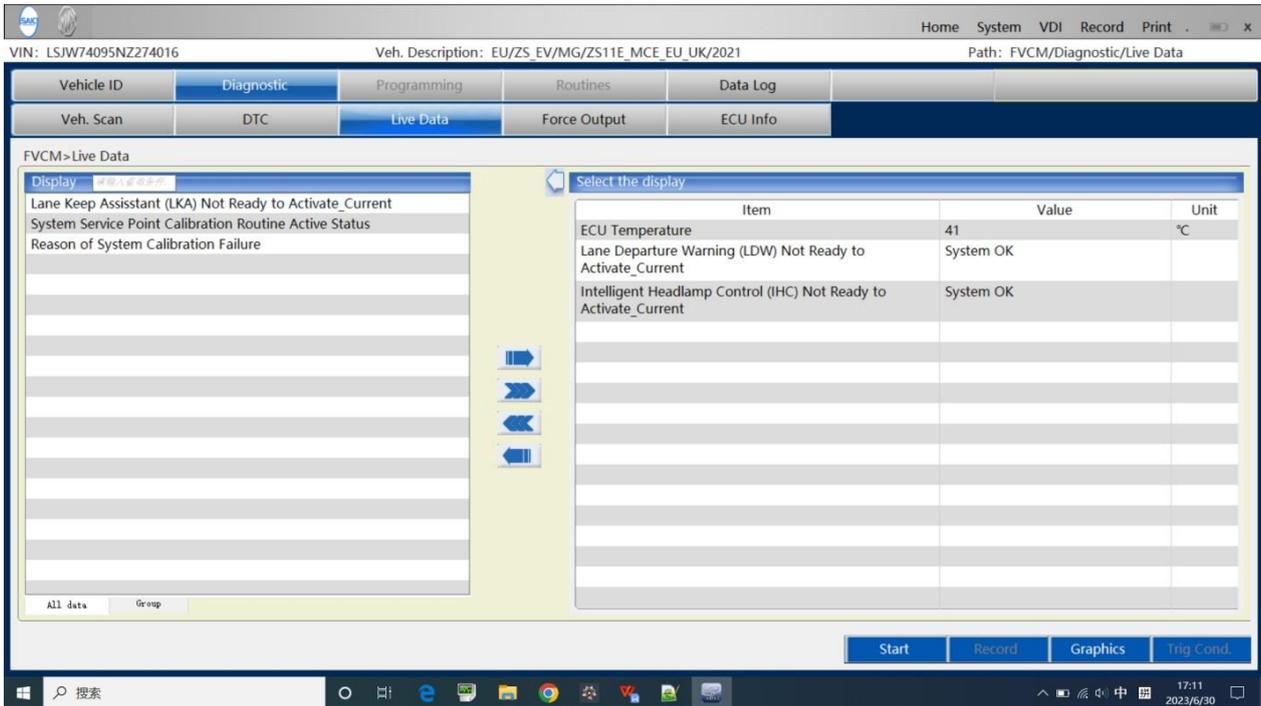


Selecting parameters to read interface



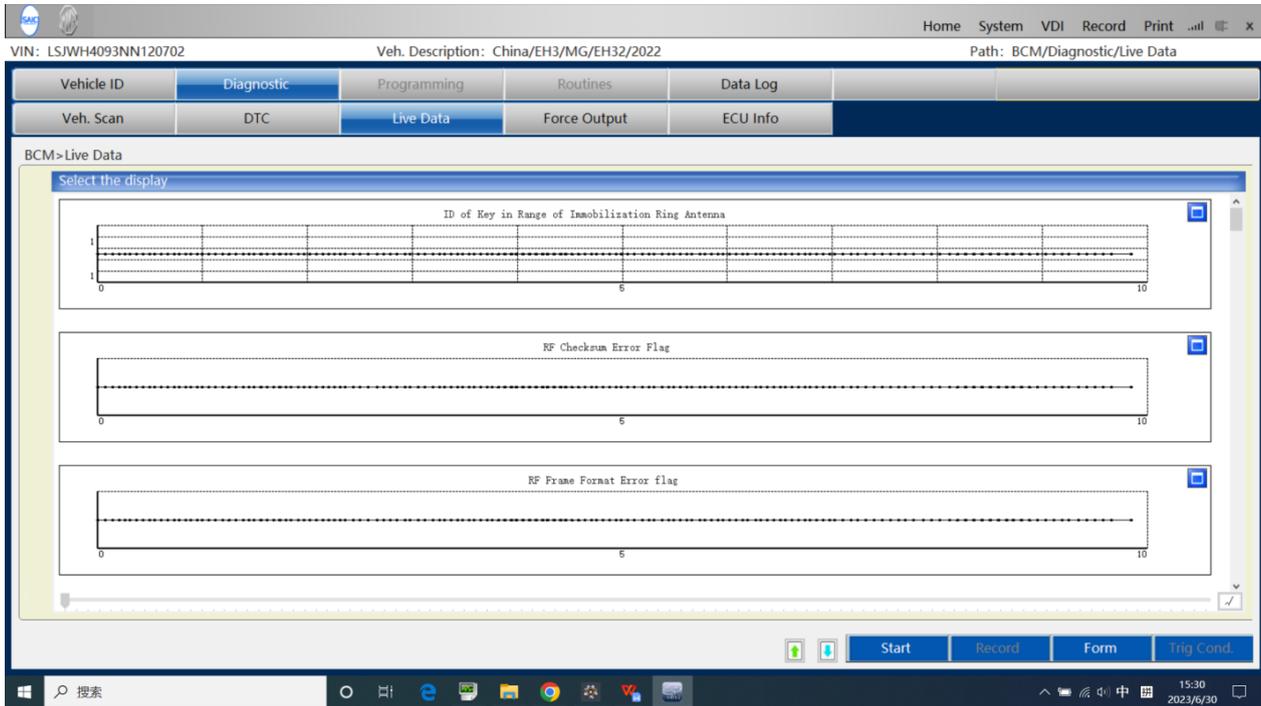
ECU live data interface

- If you want to display the status values of all parameters in full screen, click the left arrow button, , as shown below.



ECU live data interface

- If you want to view the graphical interface with dynamically changing status values of parameters, click the [Graphic] button , and the chart interface will be converted into a dynamically changing graphical interface, as shown below.



ECU live data interface

5.2.4 Force Output

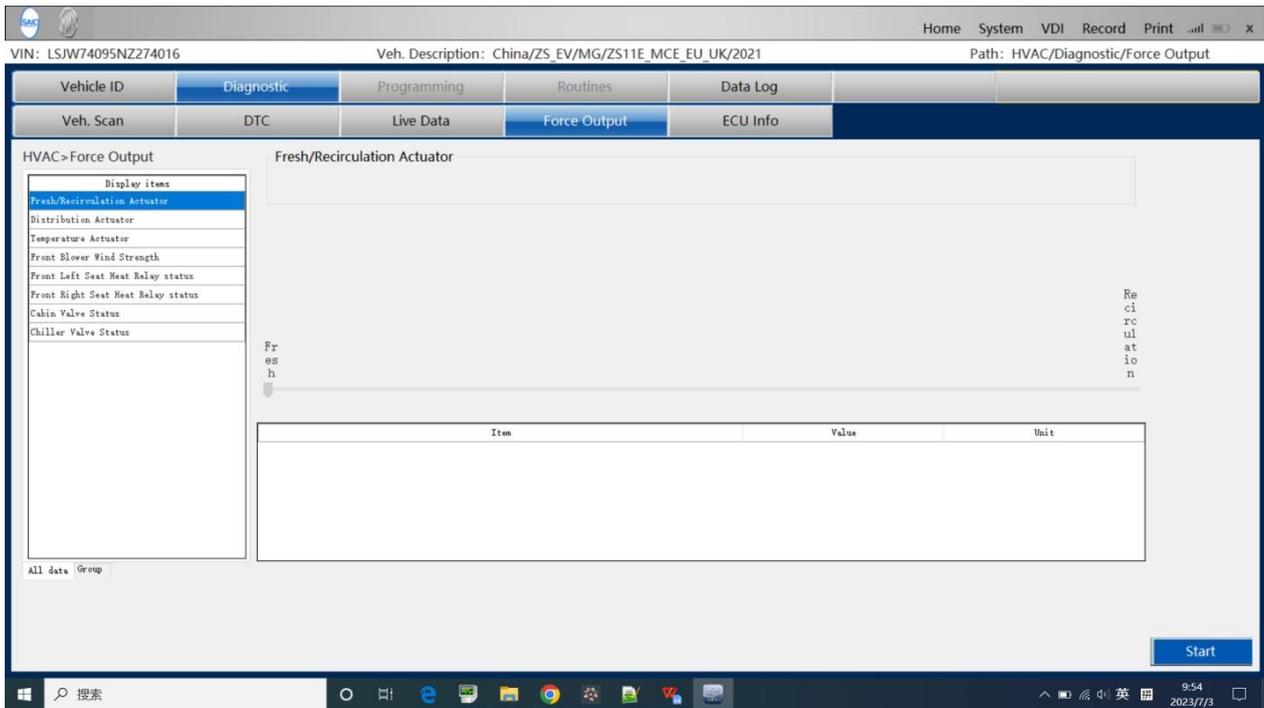
- Select the "Force Output" tab to enter the ECU - Force Output interface.
- The left display box of the interface shows the ECU force output parameters, from which you can choose one to force output.

Click the [Yes] button , and the right display box will show the target value and actual value of the force output parameter.

Click the [Start] button , and the right display box will read out the actual value of the force output parameter.

Click the [On] button , and the right display box will execute the target value status of the force output parameter.

Click the [Off] button , and the right display box will convert the target value status of the force output parameter.

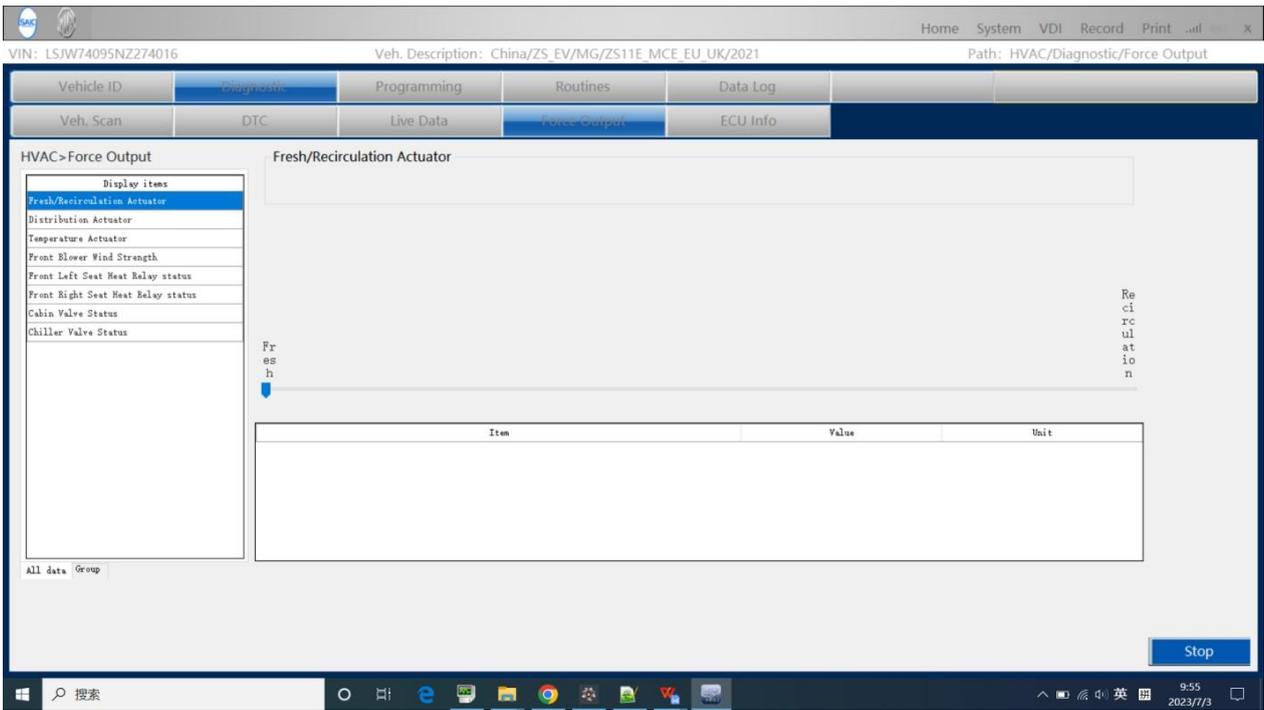


Force output interface

3. If the target value of the force output parameter is of an incremental/decremental numeric type, then click [Yes], and the right display box will show the target value and actual value of the force output parameter.

Click the [Start] button , and the right display box will read out the actual value of the force output parameter. Click the [+] button  in turn, and the right display box will increment the target value status of the force output parameter in turn. Click the [-] button  in turn, and the right display box will decrement the target value status of the force output parameter in turn.

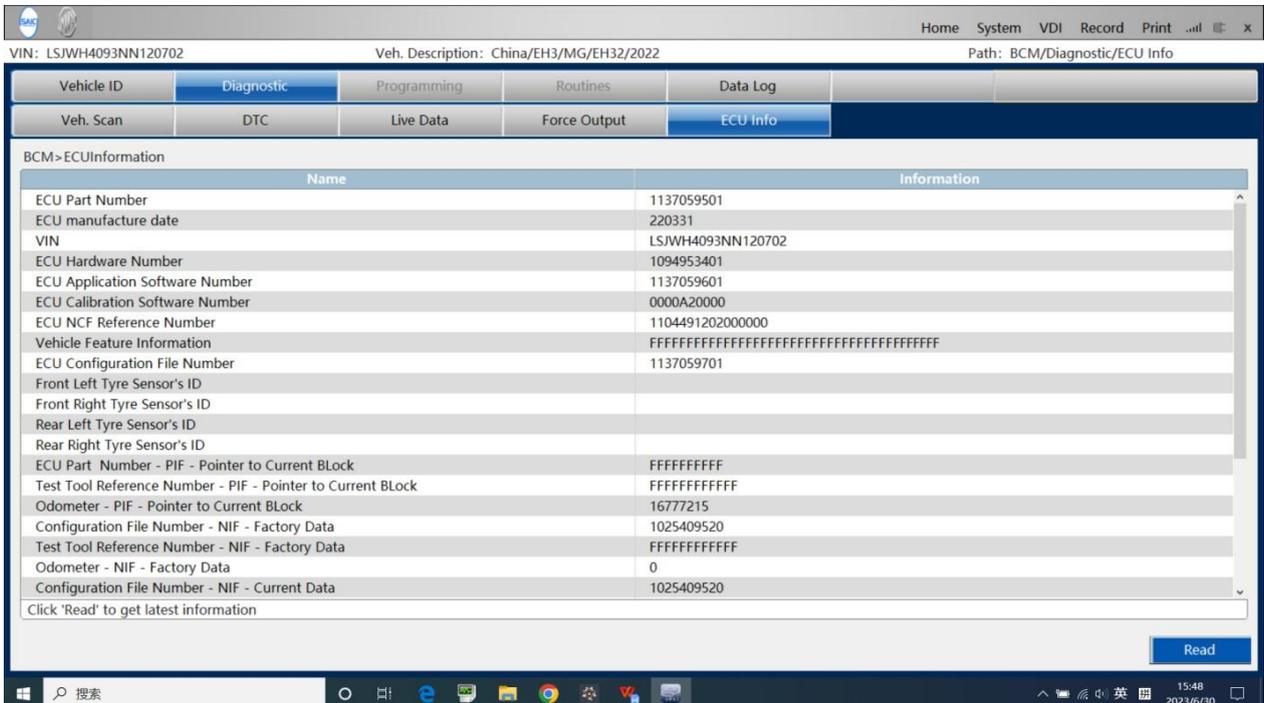
Until the initial state is restored, click the [Stop] button , and then test the force output of other parameters.



Force output interface

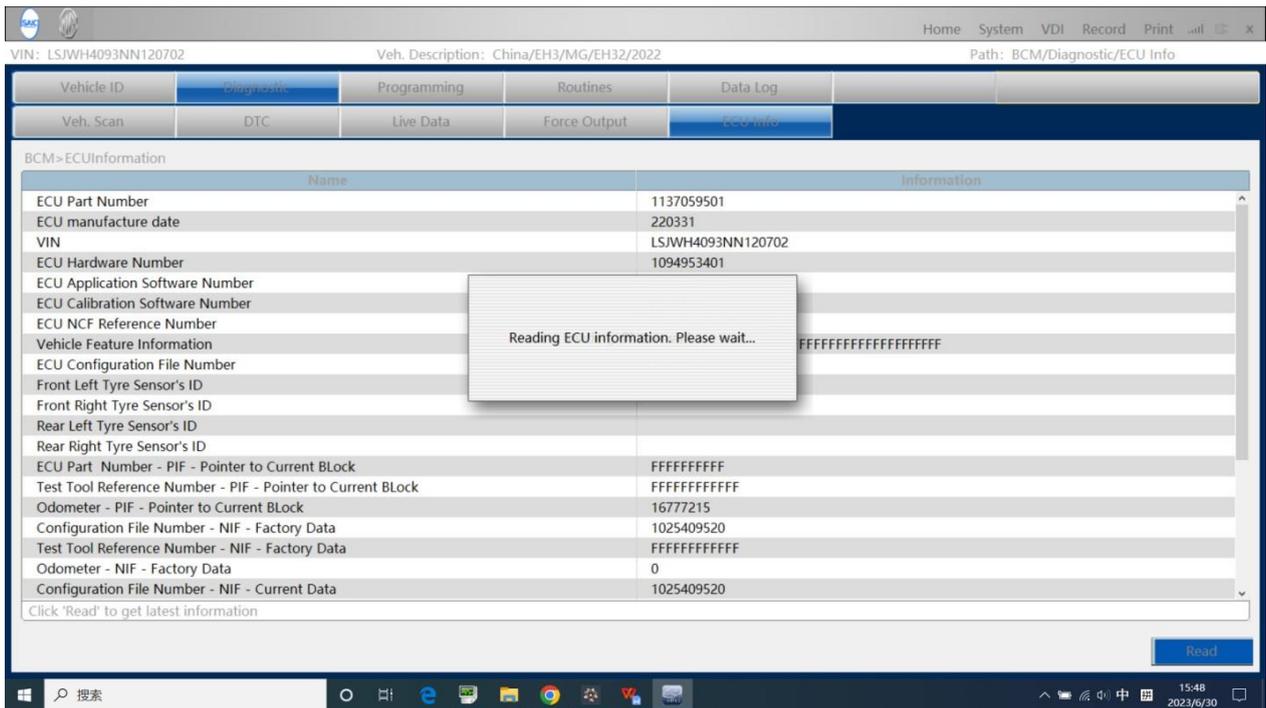
5.2.5 ECU Info

Select the "ECU Info" tab to enter the ECU Info interface, as shown below.

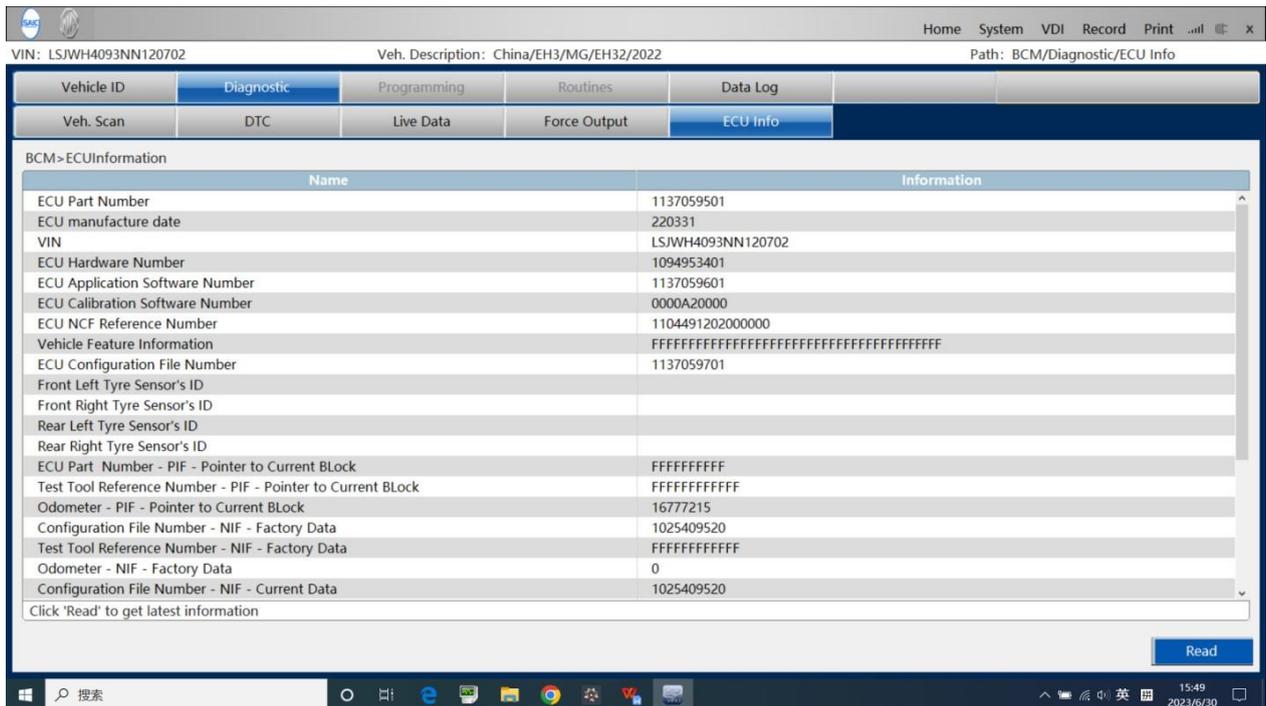


ECU Info initial interface

After clicking [Read] at the bottom right, you will be prompted with "Reading ECU information. Please wait...". When finished, the ECU information interface is displayed, as shown below.



Reading ECU information interface



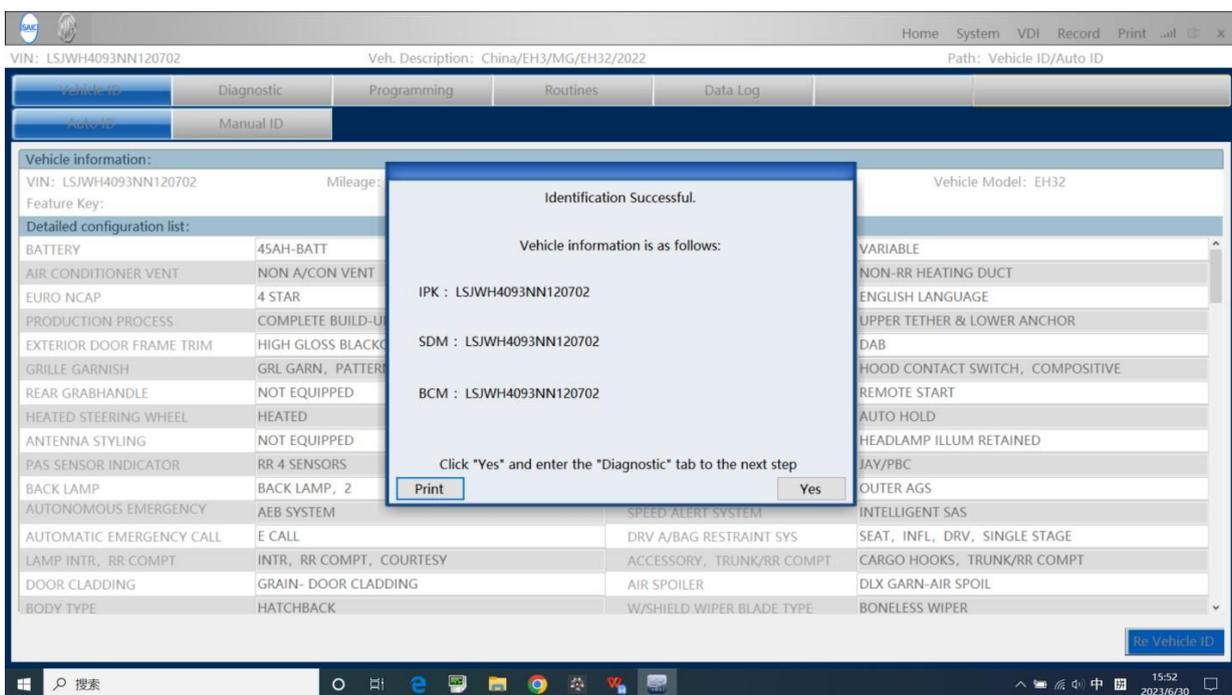
ECU information display interface

5.3 Programming

The function mainly involves reading vehicle configuration, modifying vehicle configuration, flashing ECU, replacing ECU, matching the key and so on. **Note: The function for new models is not implemented in this system. Therefore, the procedures described in this part are only for old models.**

5.3.1 Configuration

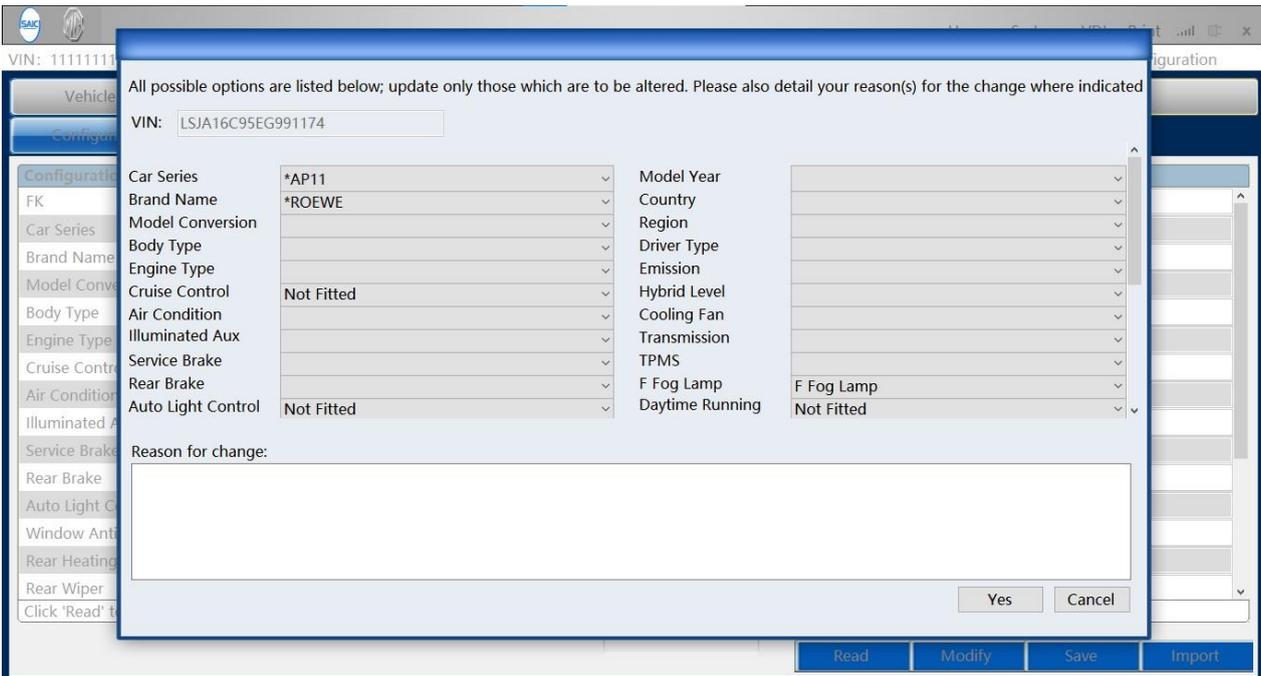
1. Use the VDS software to enter the Configuration initial interface.
2. Click [Re Vehicle ID], and the VDS starts to read the vehicle configuration. After reading successfully, the result is displayed, as shown below.



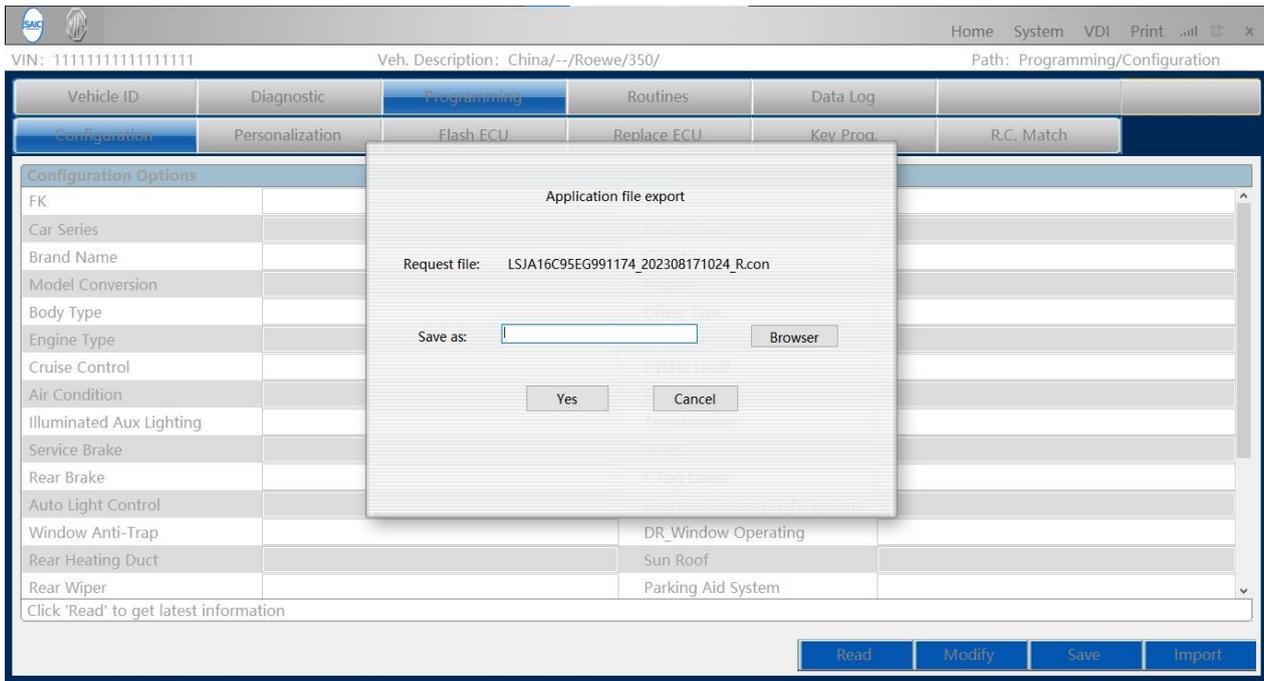
3. Click [Yes] to display the detailed vehicle configuration data.



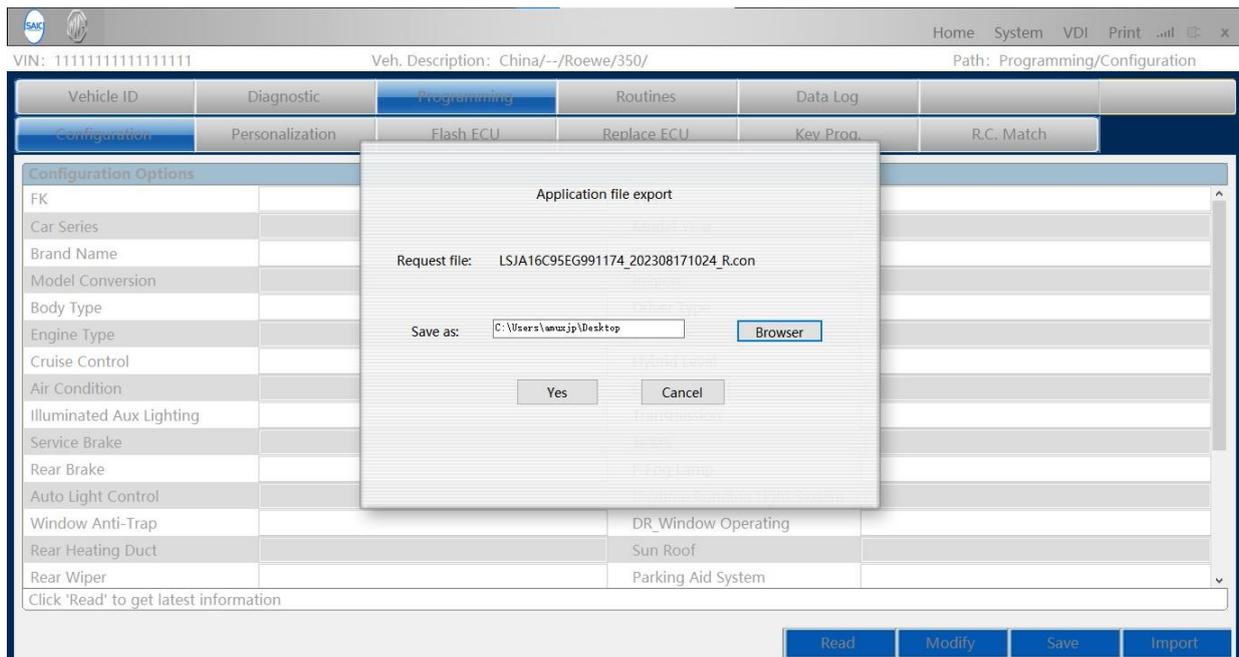
- Click [Modify], and the Modify Configuration interface will pop up. You can enter the new content as needed (be sure to fill in the reason for change accordingly). After completing the input, click [Yes] to generate an application file. Click [Cancel] to end the current operation.



- Modify where it is necessary, enter the reason for change in the bottom box, click [Yes] to enter the following application for file export interface, and then send the exported file to SAIC TAC through the after-sales service system. SAIC TAC will generate an authorization file according to the application file, and send it to the user through the after-sales service system.

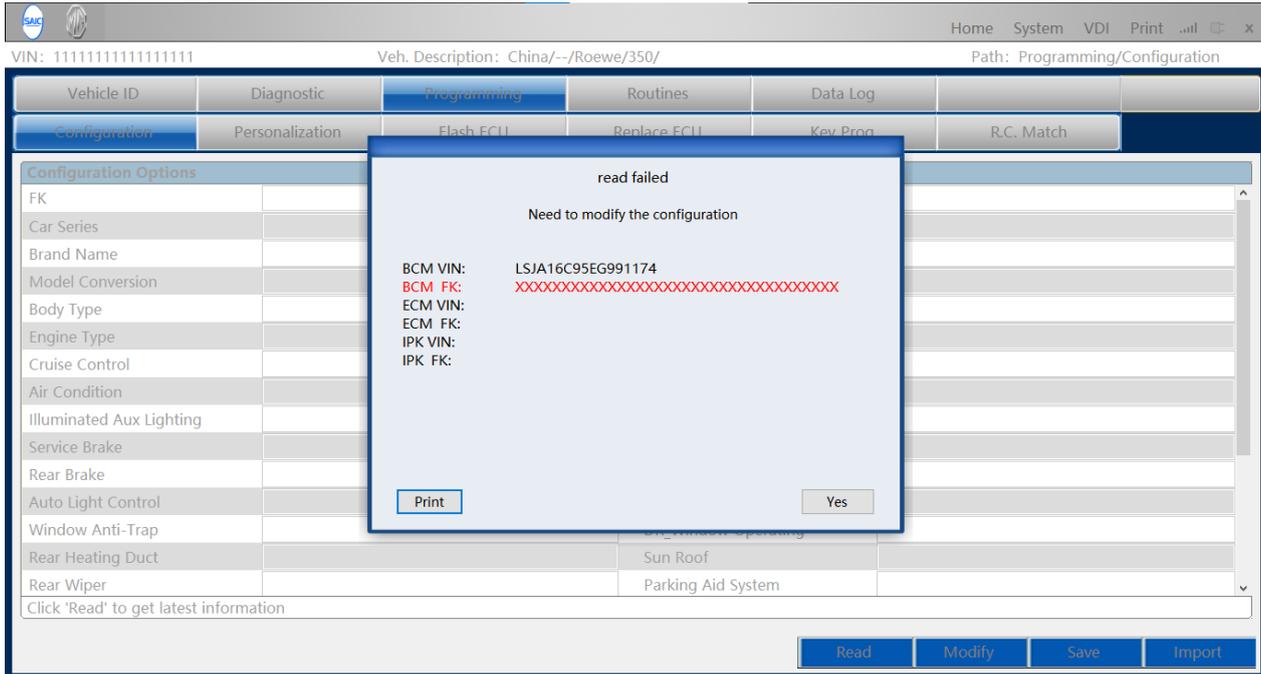


- Click [Import] to enter the following interface. After selecting the SAIC TAC authorization file, the modified feature key will be imported and displayed in the interface.



- Click [Save] to write the changed feature key to the corresponding ECU of the vehicle, thus completing the modification of vehicle configuration information.
- For 550 and 750 models before 2009, the modification function is open to users. After reading the configuration information, users can directly click [Modify], and then click on a drop-down option for each item of configuration to modify it directly, and then click [Save] after the modification is completed to realize the change of vehicle configuration by themselves.

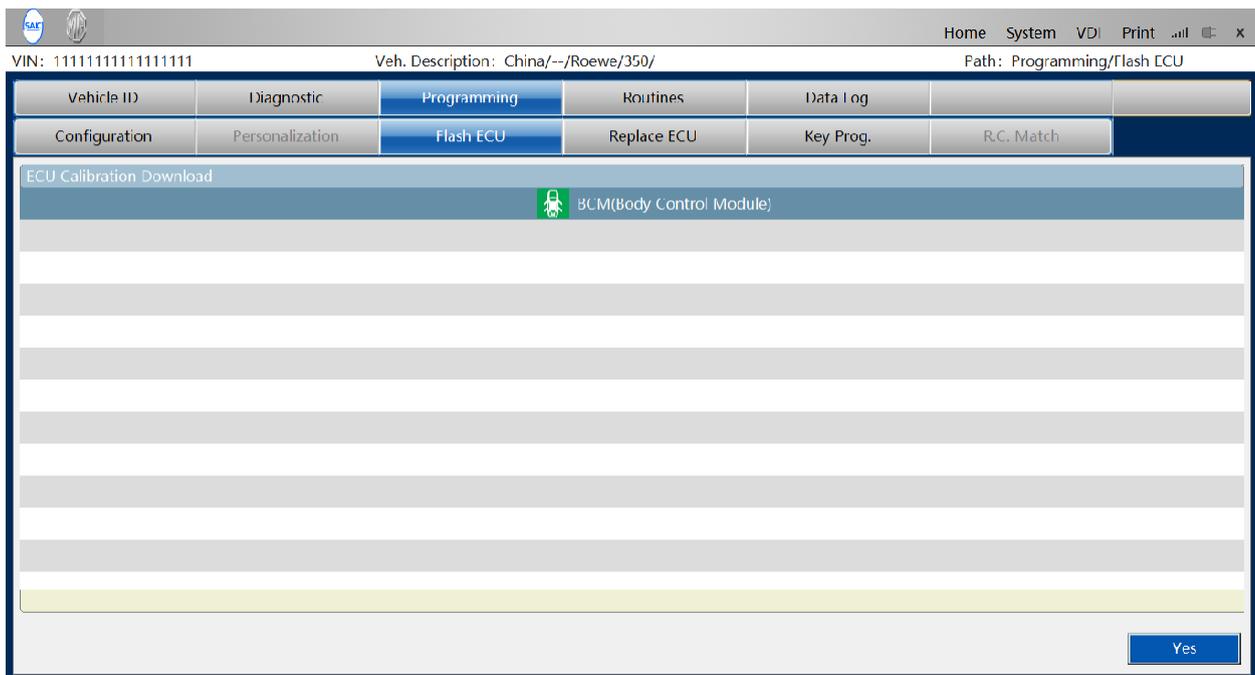
9. The Read Successful interface is shown below.



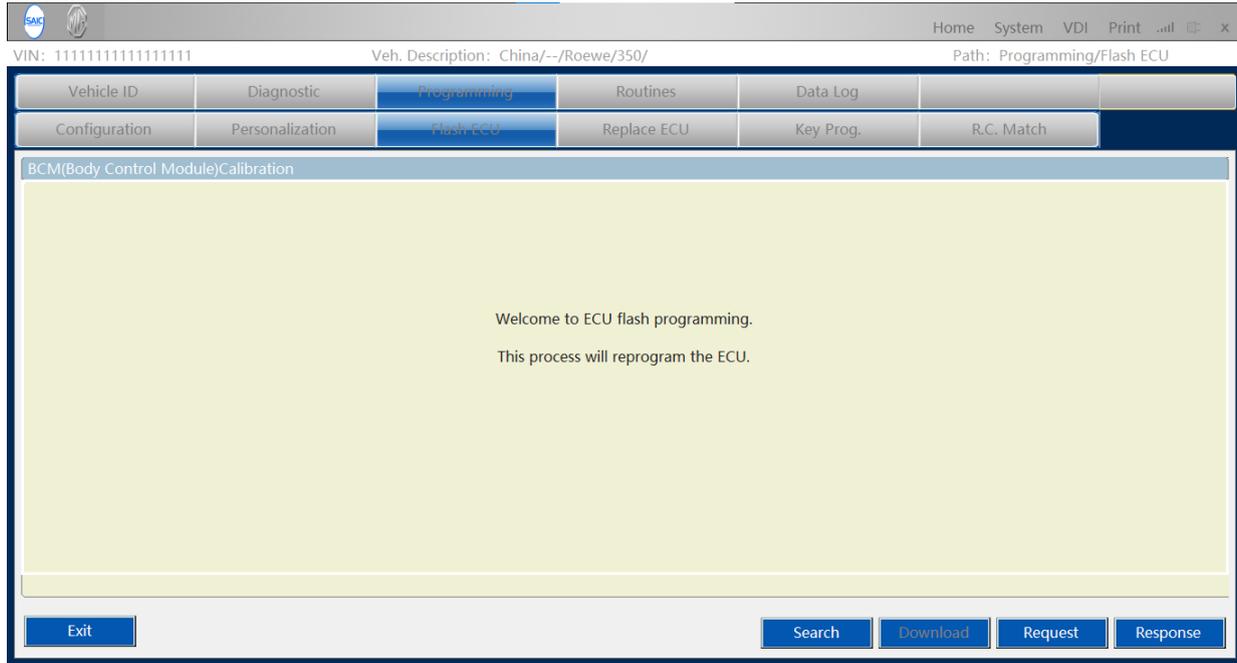
5.3.2 Flash ECU

The function is mainly used to calibrate and upgrade ECU software and flash software after replacement of the damaged ECU.

1. Use the VDS software to enter the Flash ECU initial interface.
2. Select an ECU to be programmed, and click [Yes] to enter the corresponding ECU programming process, as shown below.



- Click [Search] to enter the vehicle information search stage.

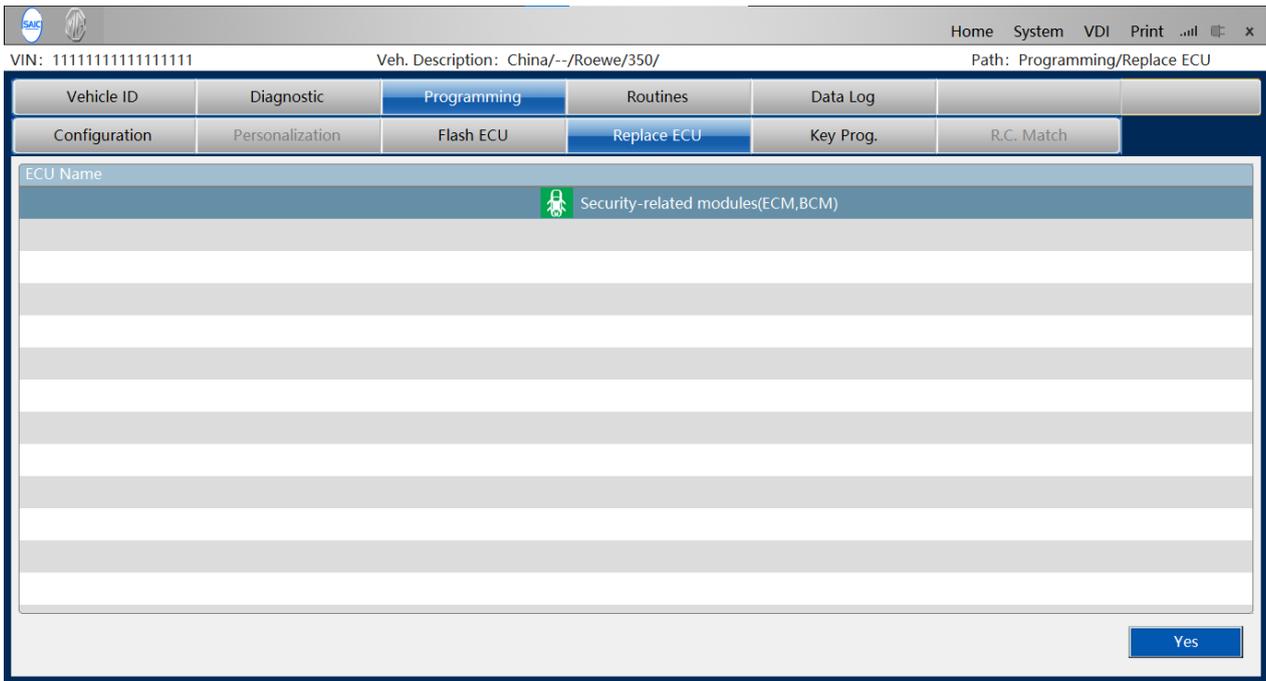


- If the search is successful, clicking [Yes], the [Start] button will be lit. If the search fails, a dialog box will be displayed indicating that the calibration file cannot be found.
- Click [Start] to start flashing.

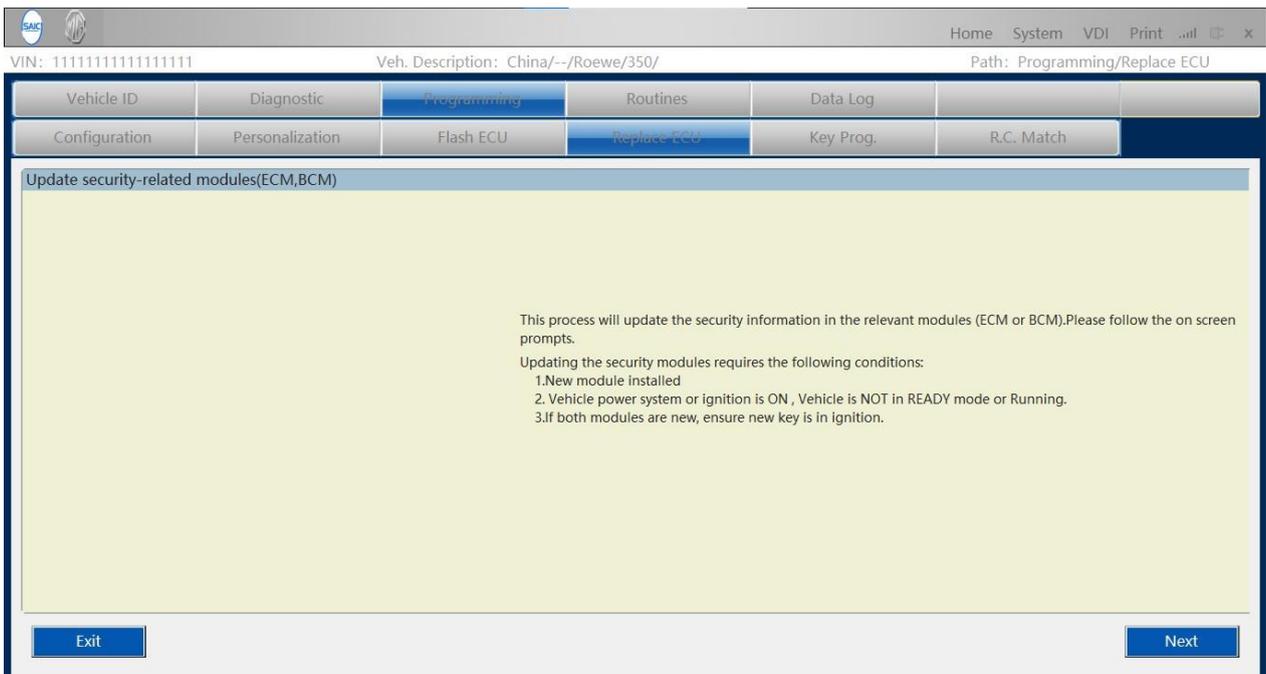
5.3.3 Replace ECU

The function is mainly used to perform operations on the new ECU after the replacement, such as configuring the new ECU and reading and writing parameters between ECUs.

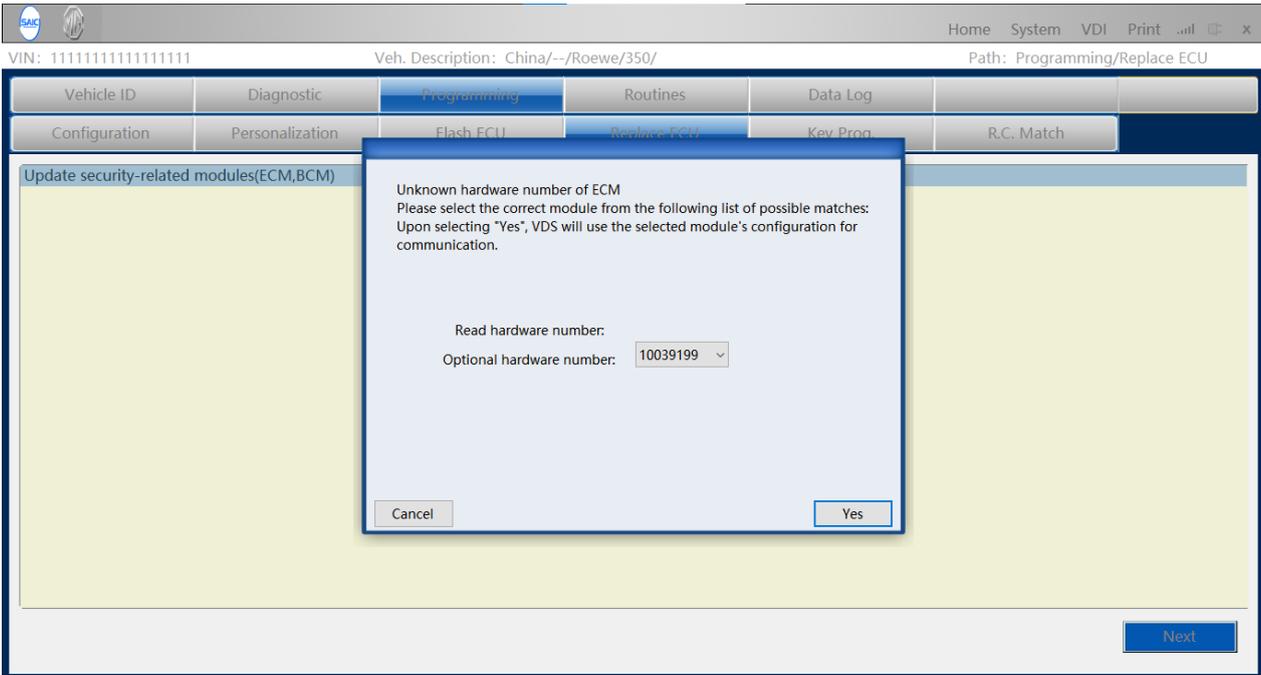
- Use the VDS software to enter the Replace ECU initial interface. The initial interface shows the list of ECUs that can be selected for replacement, as shown below.



2. Select an ECU to be replaced, click [Yes], and complete the process as per the prompts.

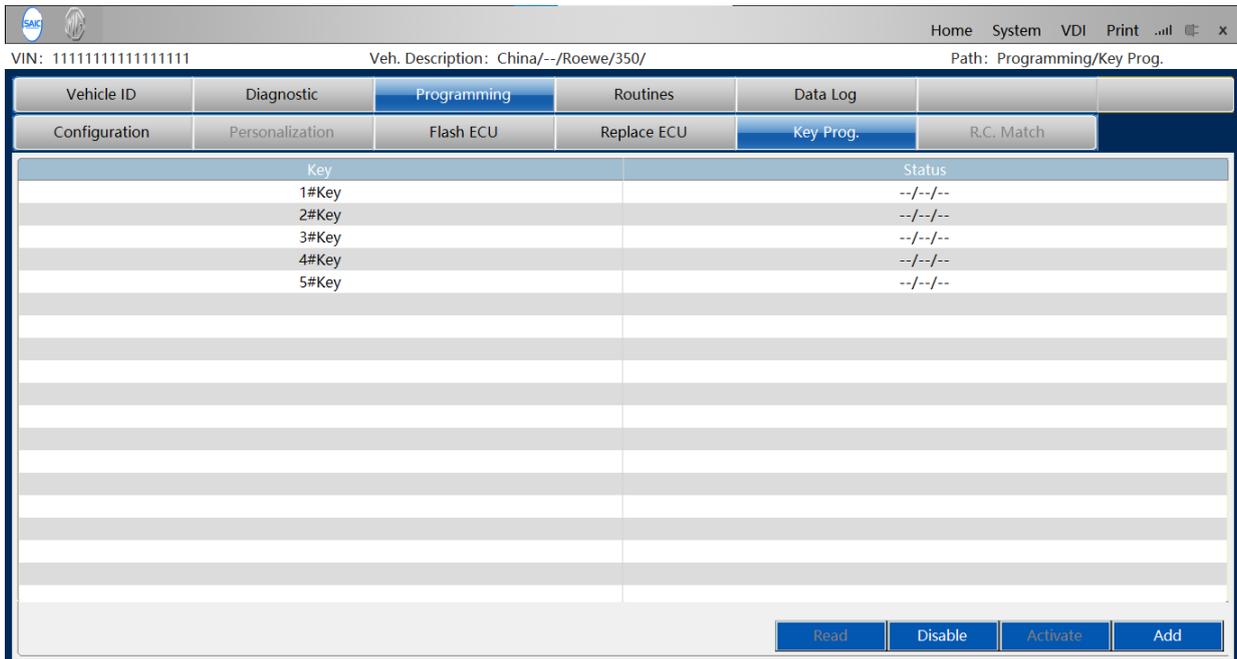


3. Click [Yes] to enter the specific ECU replacement process, and complete the operations by following the interface prompts.

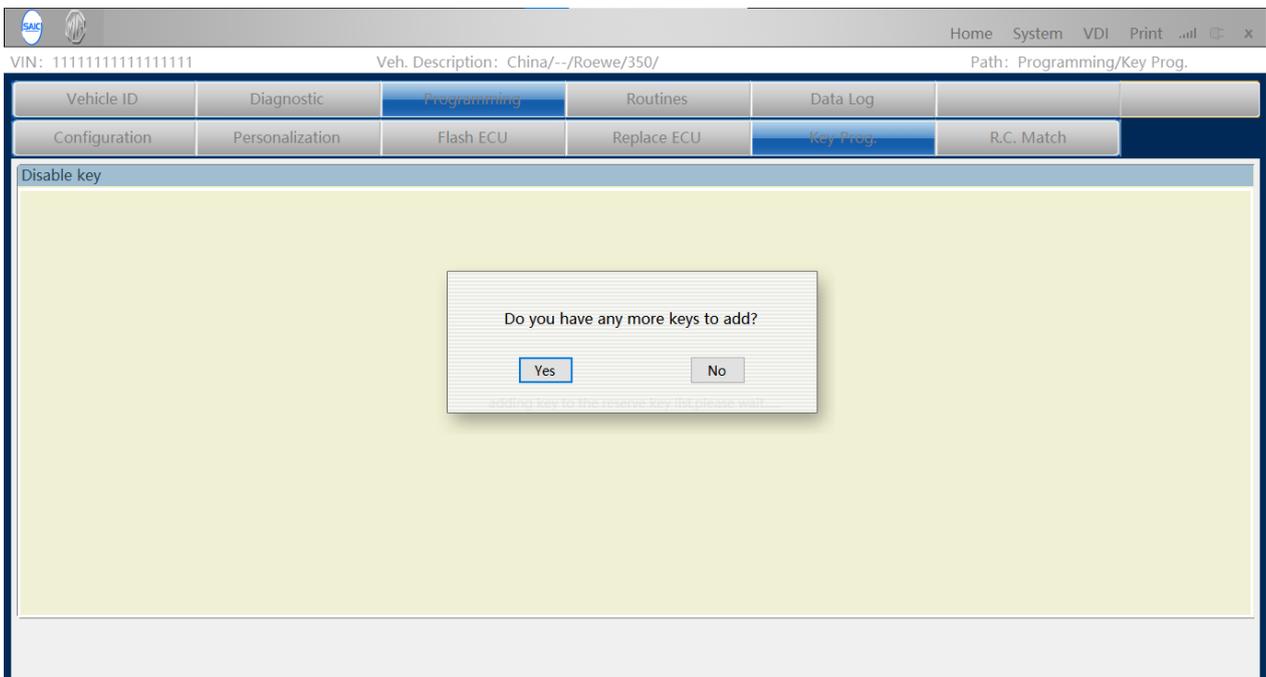
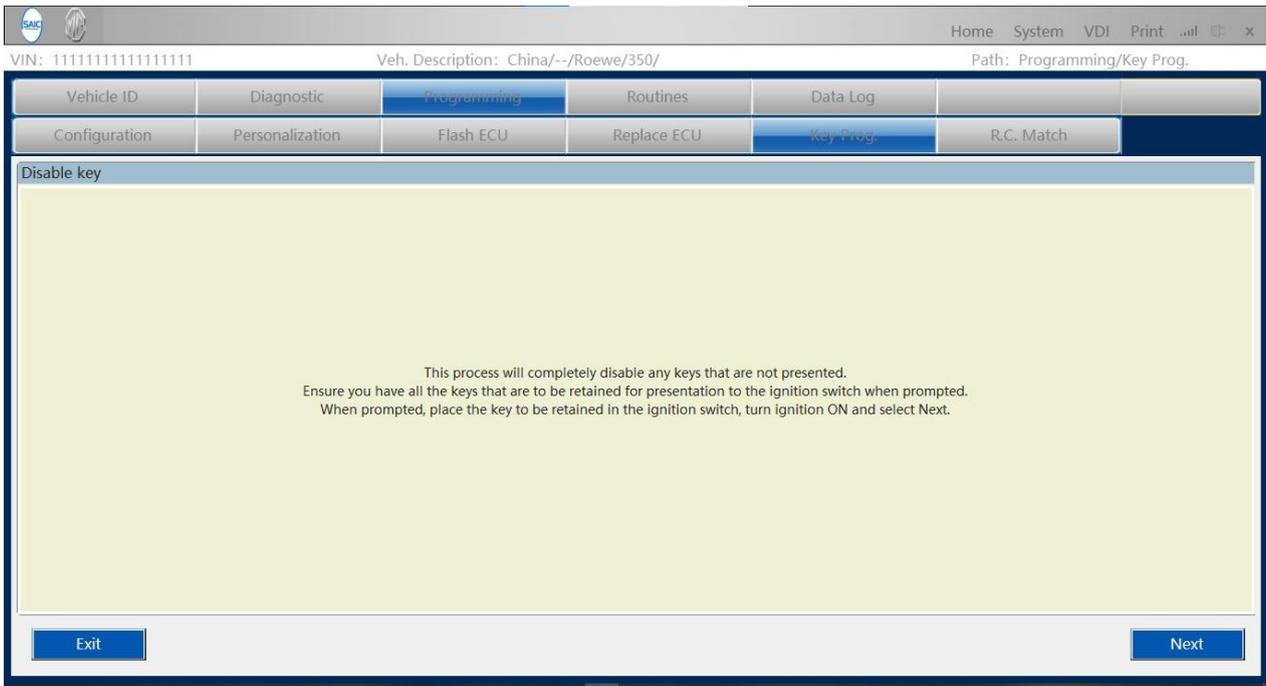


5.3.4 Key Programming

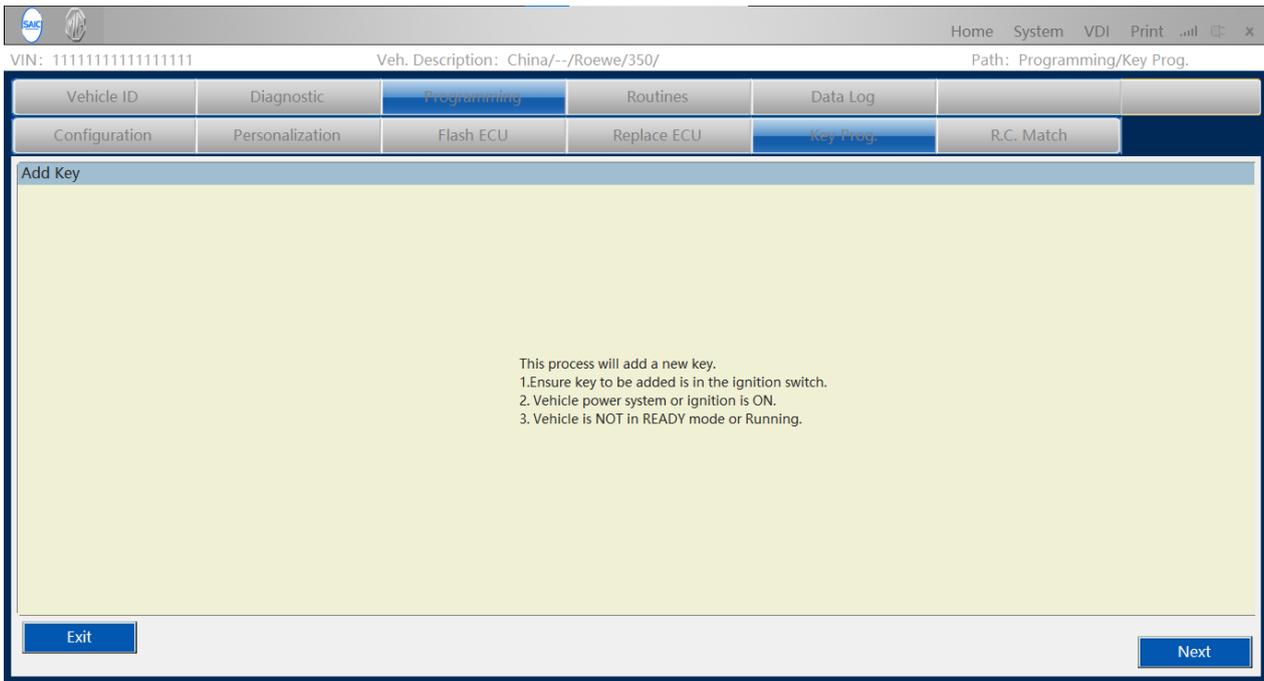
1. Use the VDS software to enter the Key Programming initial interface. The initial interface shows the list of keys that can be matched at most.



2. Click [Read] to get the list of matched keys and the information of the current key.
3. Click [Disable] to disable the lost or unwanted keys. You can follow the pop-up prompt message boxes to complete the disabling process.



- Click [Add] to add the key inserted in the ignition switch. You can follow the pop-up prompt message boxes to complete the adding process.



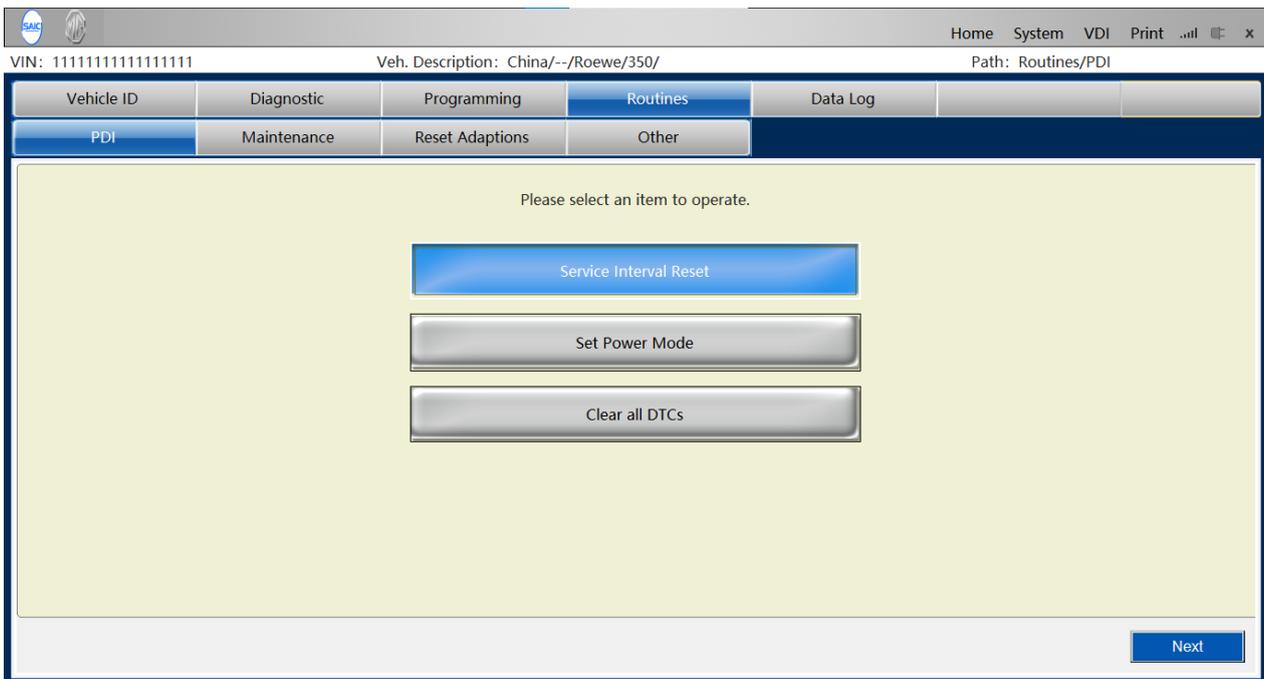
5.4 Routines

The function is designed mainly to provide dealers with a convenient way to test and configure the vehicles sold. **Note: The function for new models is not implemented in this system. Therefore, the procedures described in this part are only for old models.**

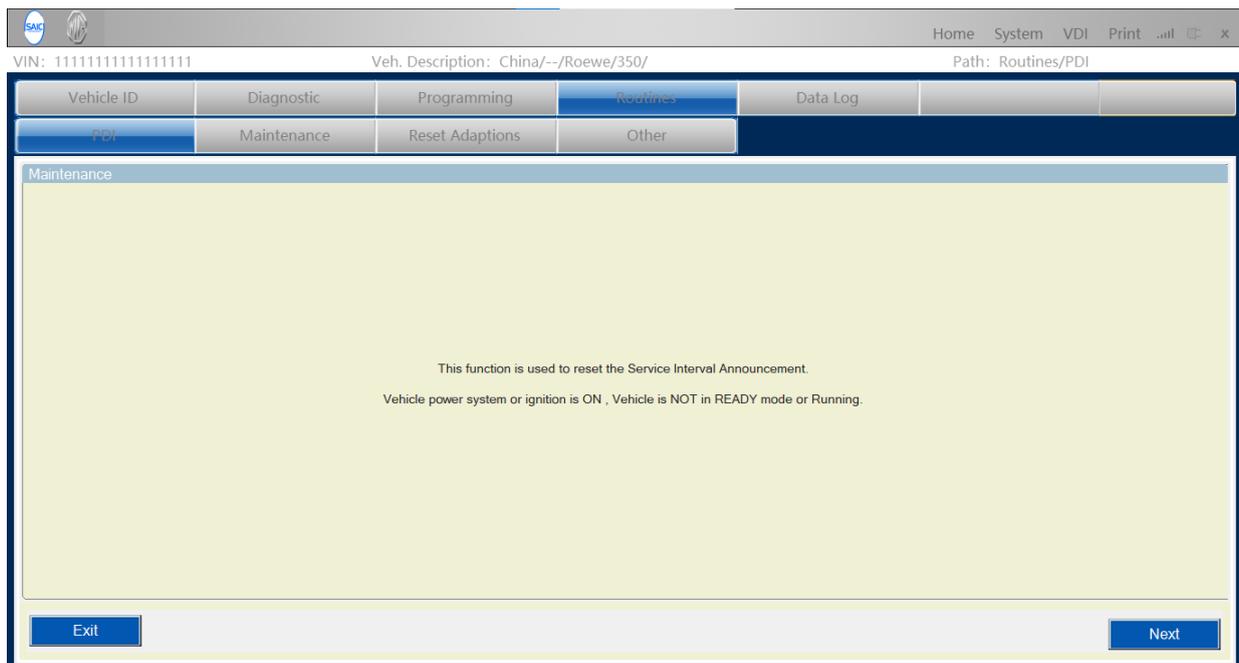
5.4.1 PDI

This function mainly realizes the adjustment of transport mode and vehicle PDI mode. Transport mode adjustment mainly includes adjustment to normal mode, transport mode, and production mode, and the adjustment of vehicle PDI mode mainly includes adjusting transport mode to transport mode, clearing all ECU DTCs, etc.. The following is the vehicle PDI mode adjustment as an example to illustrate the use procedures.

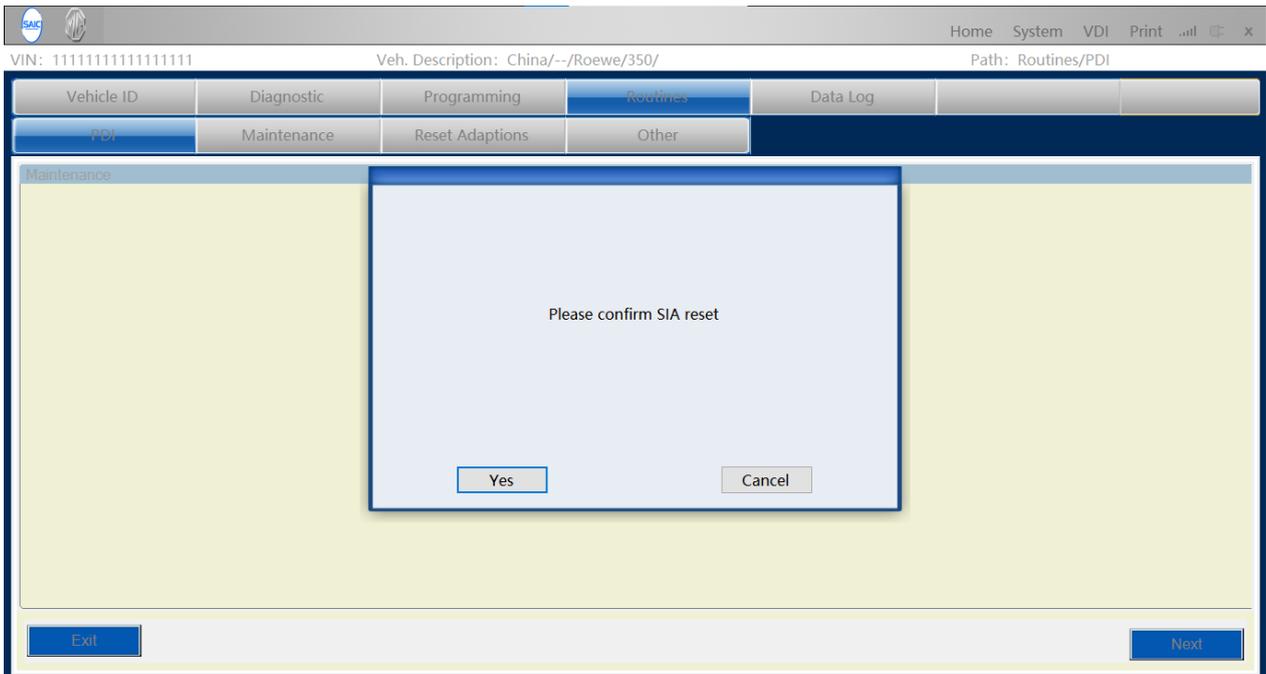
1. Use the VDS software to enter the Routines initial interface. The initial interface shows the list of functions under PDI, as shown below.



2. Select "Service Interval Reset", and click [Next] to enter the operation prompt interface, as shown below.



3. Click [Next], and a confirmation dialog box pops up. Click [Yes] to execute "vehicle PDI mode adjustment" data operations in the background. Click [Yes] to execute service interval reset. The result box will pop up after the execution. In this way, the operation of "vehicle PDI mode adjustment" is finished.

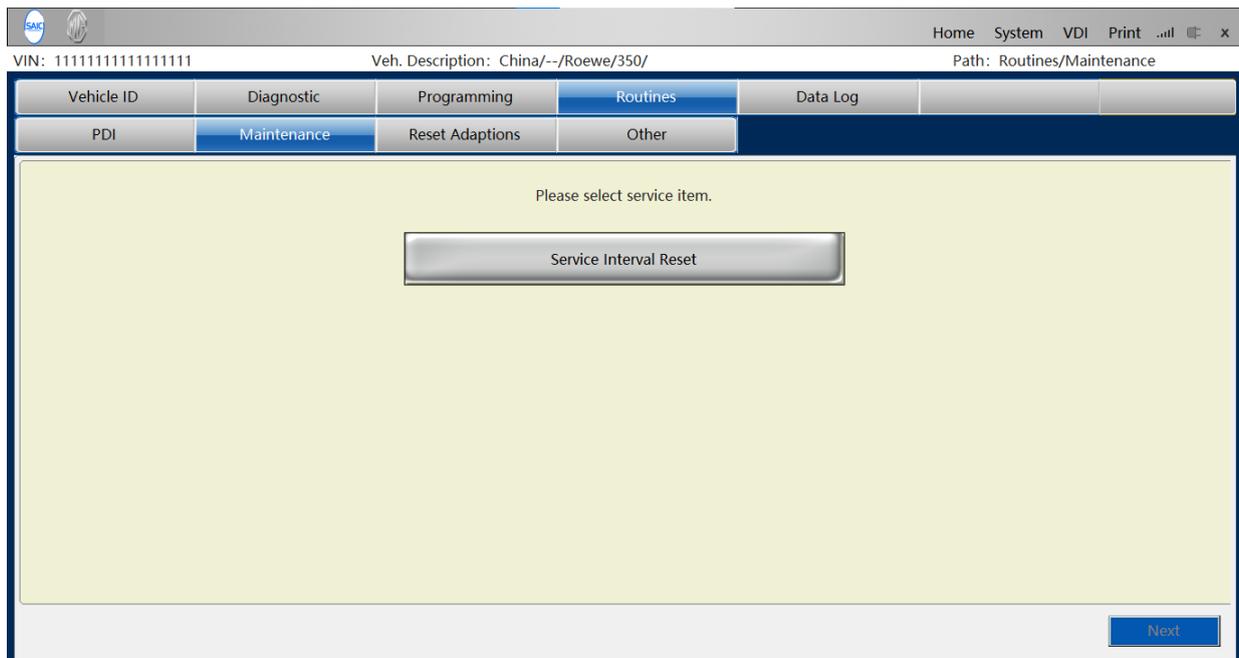


4. Refer to steps 1 to 3 above in this section for power mode and vehicle DTC deletion procedures.

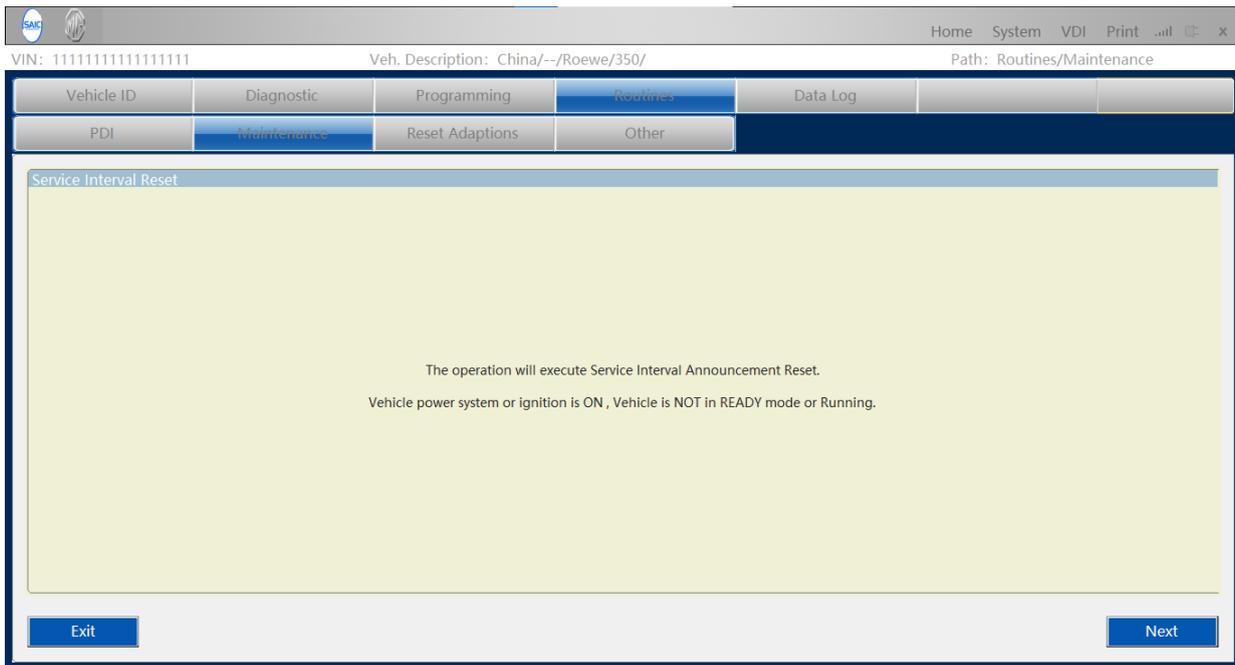
5.4.2 Maintenance

The function mainly realizes the reset of service interval displayed on the instrument.

1. Use the VDS software to enter the Routines - Maintenance initial interface. The initial interface shows the list of functions under Maintenance", as shown below.



2. Select "Service Interval Reset", and click [Next] to enter the operation prompt interface, as shown below.



3. Click [Next], and a prompt box pops up. Click [Yes] to enter the "service interval reset" procedure. The result box will pop up after the procedure is finished. In this way, the operation of "service interval reset" is finished.

5.4.3 *Reset Adaptions*

Refer to 5.4.1 and follow the prompts.

5.4.4 *Other*

Refer to 5.4.1 and follow the prompts.

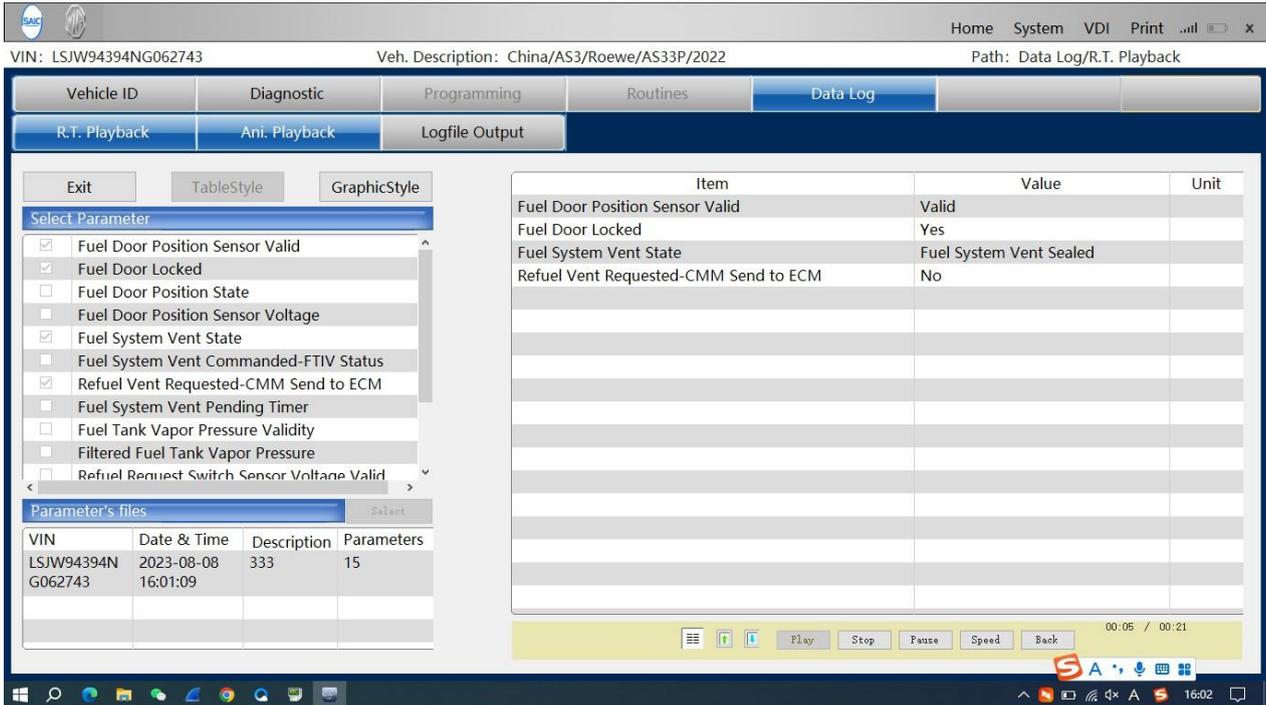
5.5 Data Log

The function mainly includes real-time data playback, animation playback, and log file export.

5.5.1 *R.T. Playback (real-time playback)*

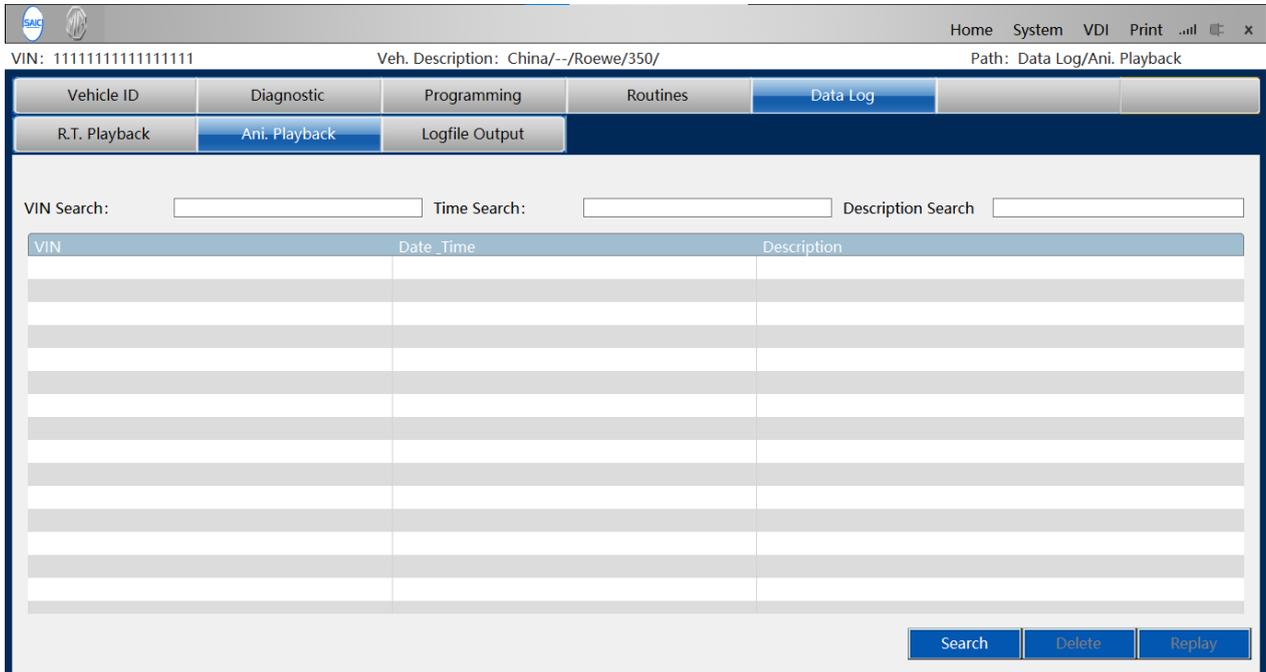
1. Data search function

in the right box. Click [Play] at the bottom to start playback, as shown in the figure below.



5.5.2 Ani. Playback (animation playback)

Select an animation record, and click [Replay] to play it back.



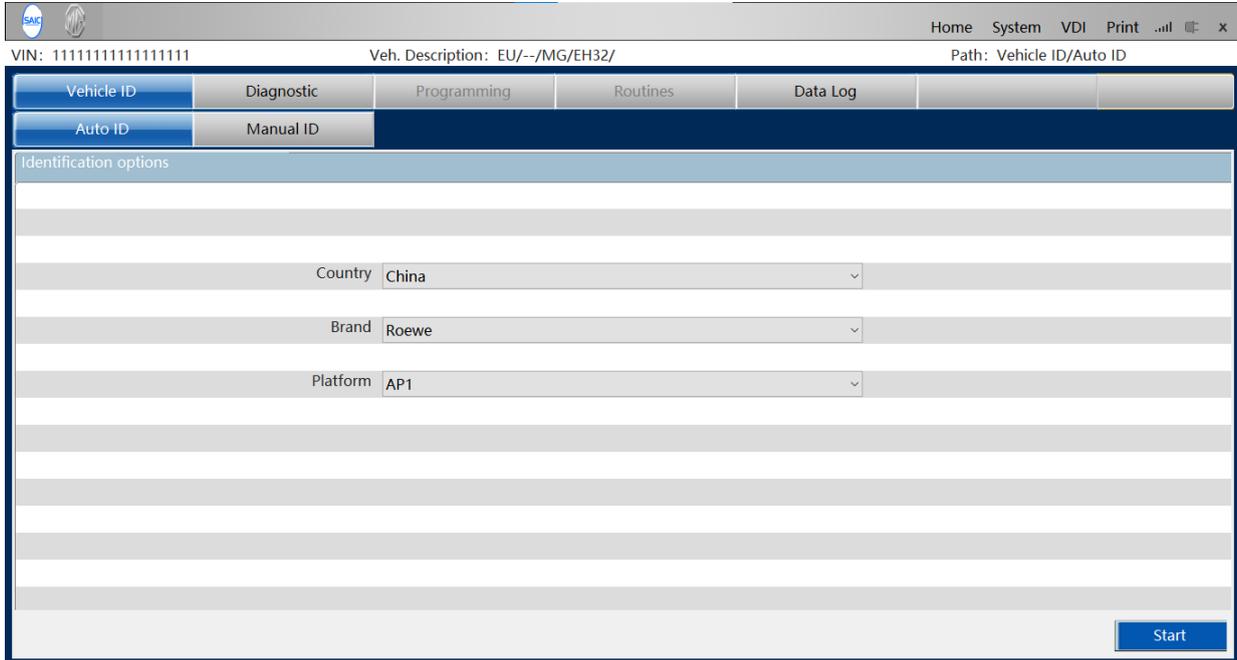
5.5.3 Logfile Output

When a problem arises while using the VDS, you need to assist the TAC in resolving the problem. In this case, you need to export the log file and send it to the TAC together with a screenshot and a description of the problem. The specific operation is described in Chapter 7.

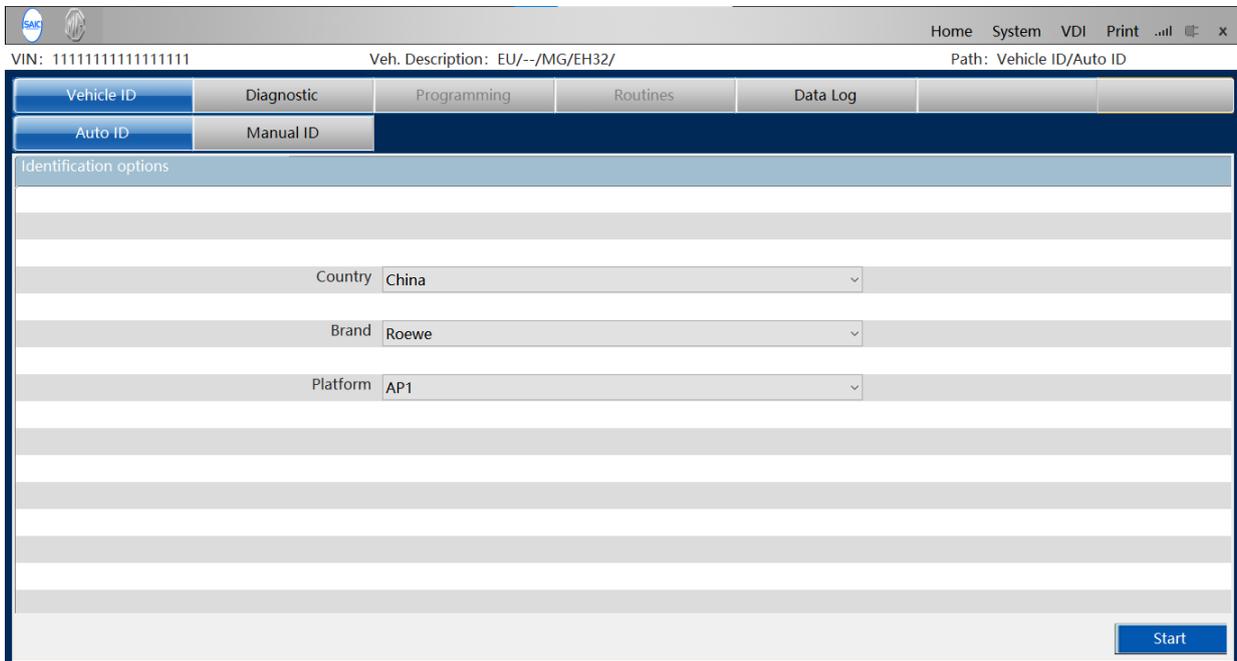
5.6 Disable OBD Protection Function

The vehicle's OBD protection function may be activated after a BCM replacement or a failed flashing, and you can use the Disable OBD Protection function in the VDS to address this situation. The specific use method is as follows:

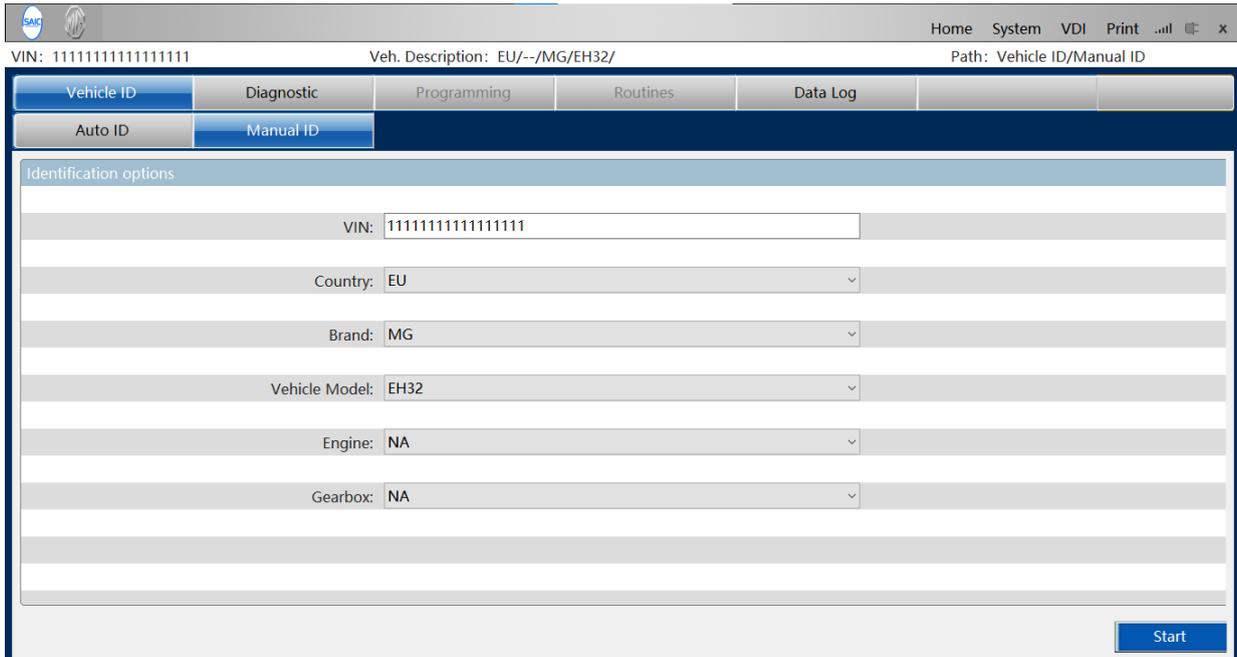
1. Select the appropriate platform.



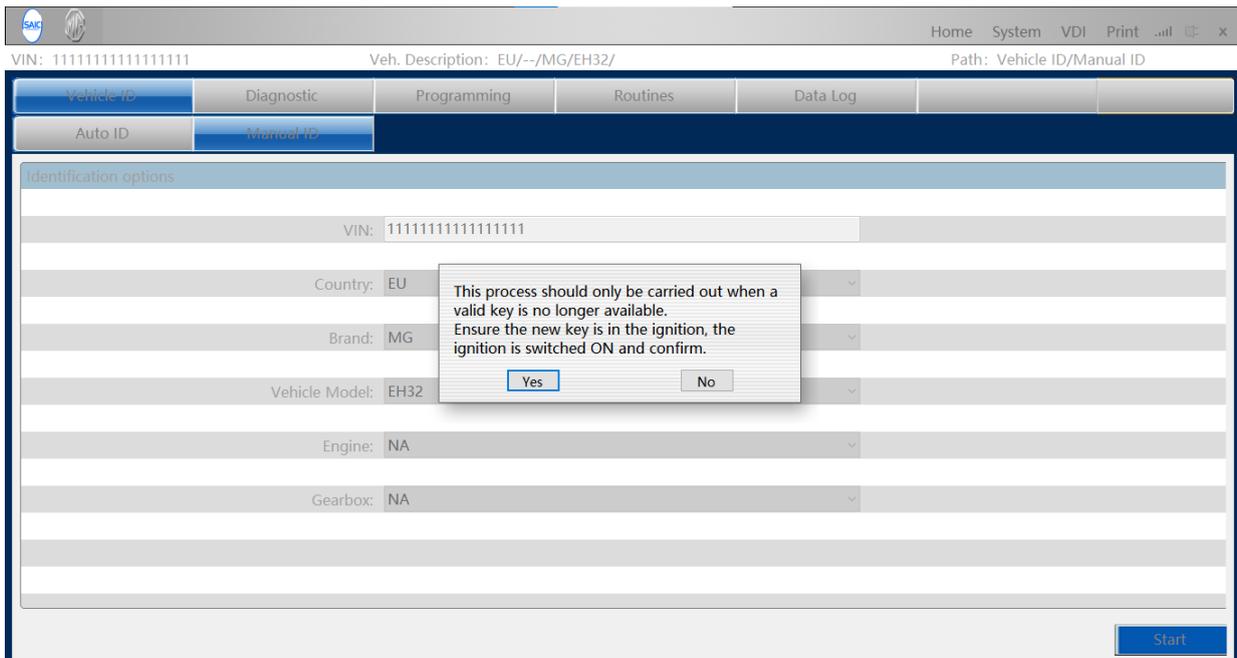
2. Go to the Manual ID interface.



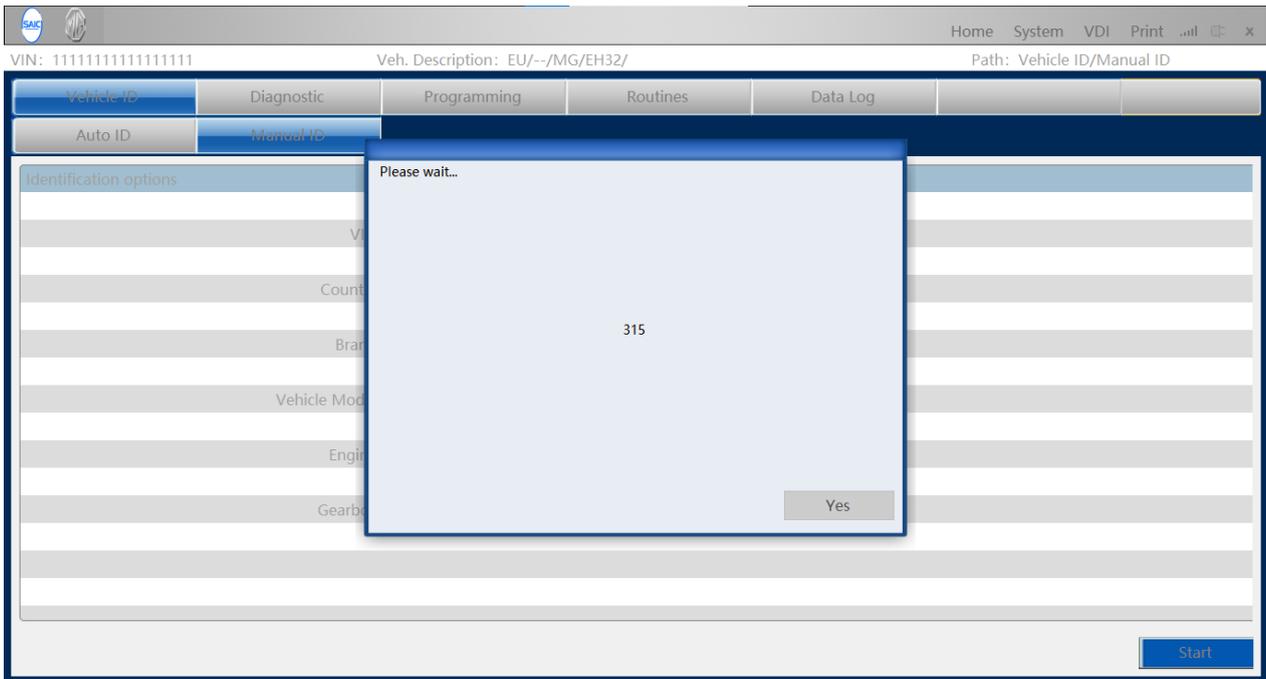
3. Click "Manual ID", and enter necessary information to start manual identification.



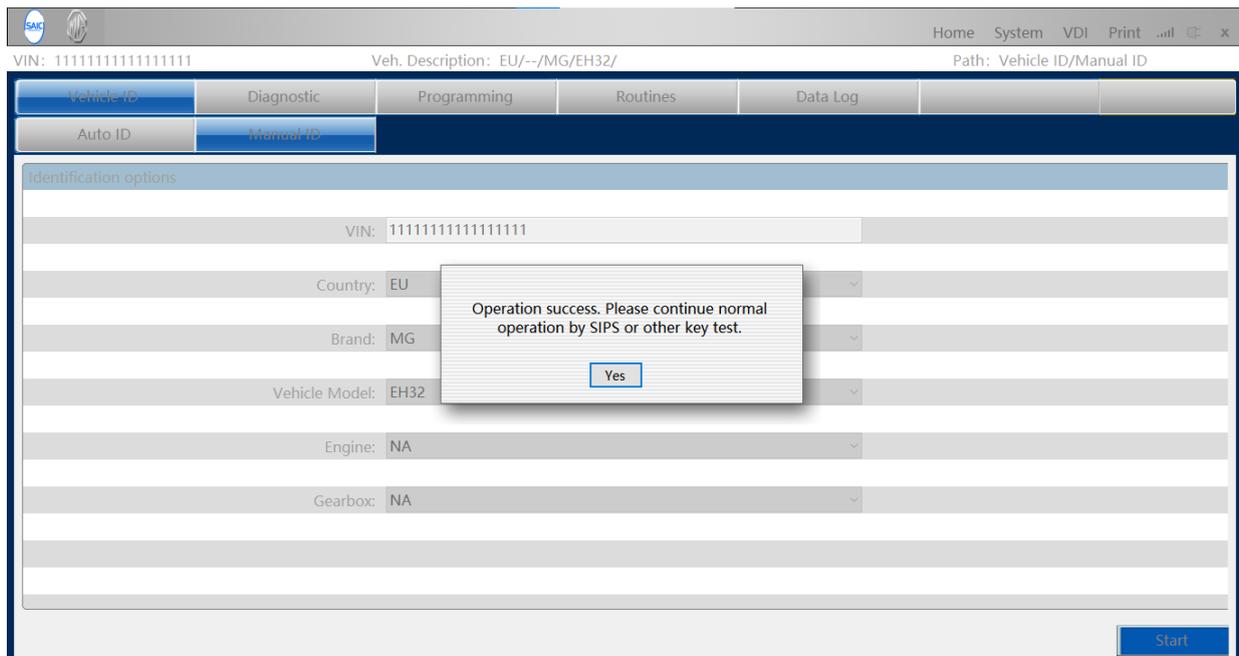
4. Proceed to OBD protection procedures.



5. Click [Yes] in the pop-up TAC authorization code confirmation window.



8. 5 minutes later, the system displays a prompt message indicating that the function is completed. Click [Yes], and the VDS is automatically turned off.

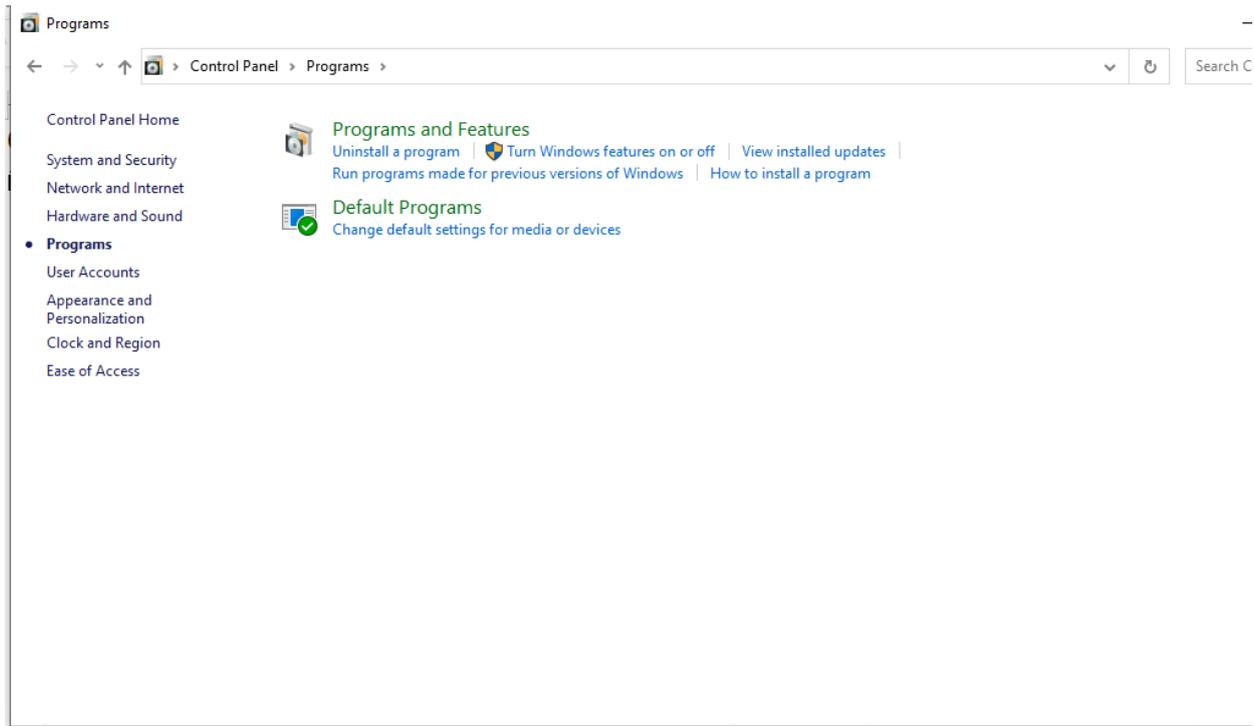


6. Common Issues and Solutions

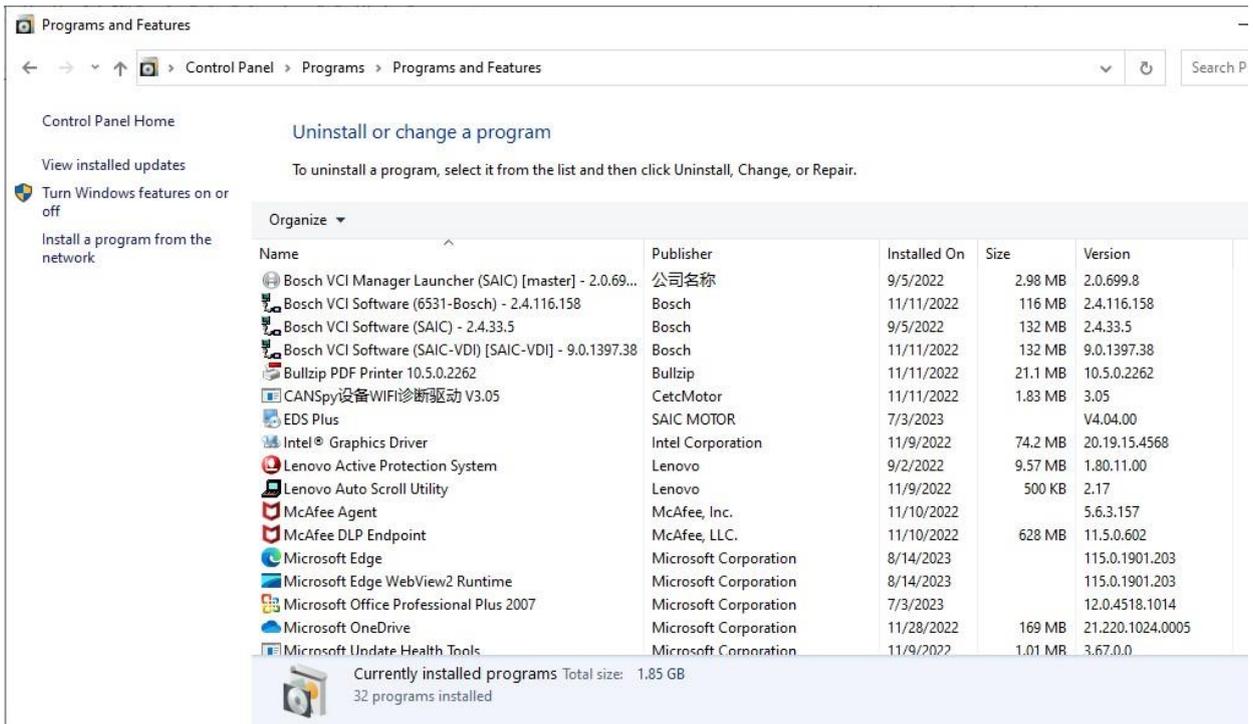
Issue 1: Clicking the VDS icon to launch the VDS, after a long wait, the program does not start.

Solution: Usually, the causes for this issue are: there is no effective external network connected or the MSMQ feature is not turned on on your computer.

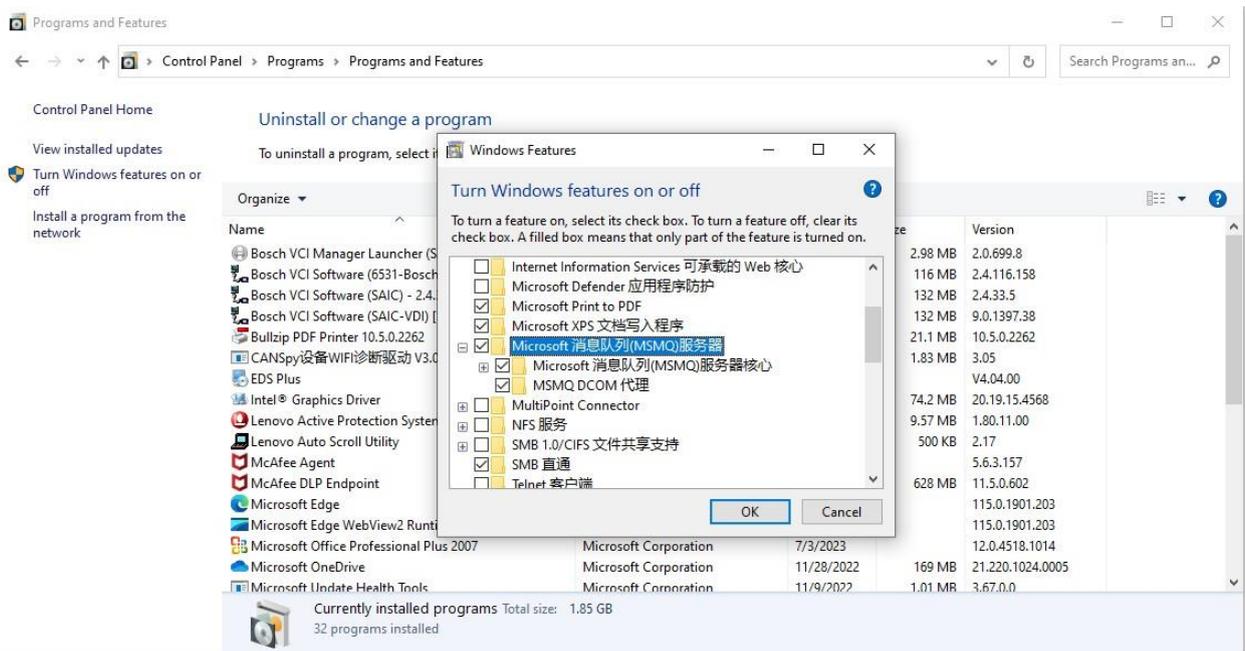
1. Before using VDS3, ensure that an effective external network is connected.
2. Check if the MSMQ feature is turned on. On your computer, select Start - Control Panel - Programs - Programs and Features, as shown below.



3. Click "Turn Windows features on or off".



- Find "Microsoft Message Queuing (MSMQ) Server" in the list, and make sure it is checked. If unchecked, check the box and click [OK].



Issue 2: The software cannot be launched normally after successful installation.

Solution:

- The reason why the diagnostic software cannot launch and enter the main interface normally may be because the software is not fully installed. Please uninstall the software and reinstall it.

2. Check the operating system on your computer. You may be using a non-recommended version, such as Ghost Windows 7, which has a confusing OS environment and can easily cause the VDS to fail to launch normally.

Issue 3: When launching the VDS, it prompts: The program is running and cannot be opened repeatedly.

Solution: Check if there is any security software installed on your computer, such as 360 Total Security or Tencent Computer Guanjia. Before using the VDS, you need to whitelist the VDS first, or directly exit the VDS.

Issue 4: When launching or using VDS3, it prompts: Sorry, VDS has an unhandled exception and is about to shut down. Or, Sorry, VDS2 has an unhandled exception and is about to shut down.

Solution: Check if the MSMQ feature of the Window system is turned on. See "Issue 1" for detailed operations.

Issue 5: Unable to log in.

Solution:

1. Check if your network connection is working.
2. Contact SAIC TAC engineers to confirm whether your username is legal and whether your password is correct.
3. On the Windows 7 operating system with UAC enabled, the user must have administrator permissions, and install and run the VDS following these requirements: when installing the VDS, instead of double-clicking the VDS installer, right-click it and choose "Run as administrator" from the shortcut's contextual menu; every time you run the program after installation, instead of double-clicking the VDS desktop shortcut icon, right-click it and choose "Run as administrator" from the shortcut's contextual menu.

Issue 6: VDS shuts down abnormally, making it impossible to launch or install VDS.

Solution: Please execute the Kills.exe program in the \ACTI_DIAG_WORKSHOP\Launcher directory first.

Issue 7: VDS prompts: Please make sure that the VCI device is connected to the computer.

Solution:

1. First of all, disconnect the vehicle from the VCI device, and the VCI device from the computer.
2. After powering on and off the vehicle, reconnect the vehicle with the VCI device, and the VCI device with the computer.
3. Wait a little longer, and then re-launch the VDS to check if it returns to normal.

If the issue still exists after performing the above operations several times, reinstall the driver. Note: Install the VCI2 driver first, and then install the VCI3 driver. Pay attention to the sequence.

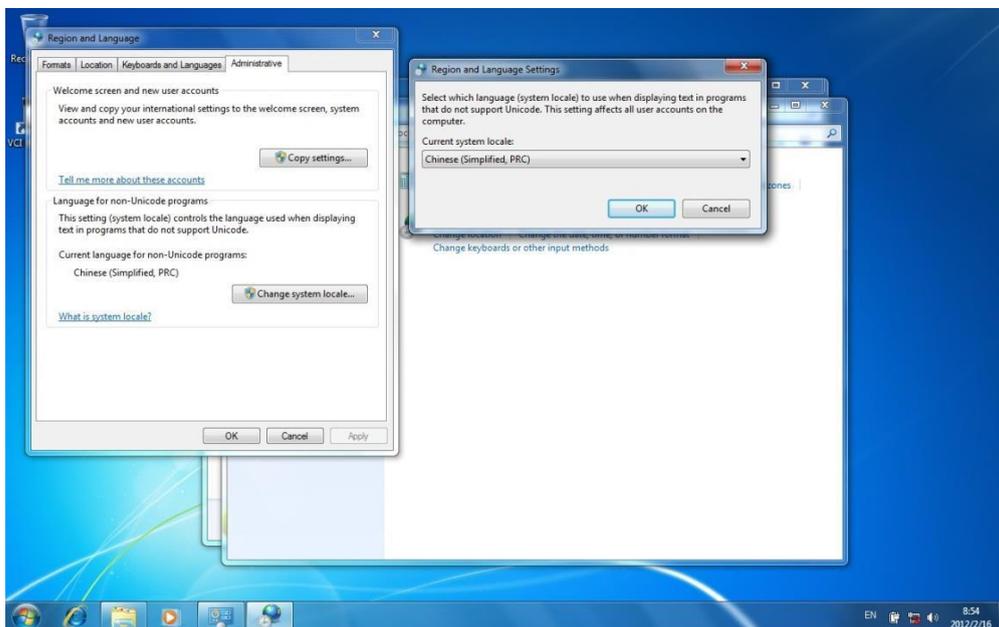
Issue 8: Domestic models encounter the prompt: Using an illegal device.

Solution: It is required to reinstall the driver. In order to support multiple devices at the same time, please install the VCI2 driver first and then the VCI3 driver. Pay attention to the sequence.

Issue 9: During installation, unrecognized characters appear in the installer.

Solution: Generally, this is due to the operating system being an English version. In case of an English operating system, please follow the settings below:

1. Windows 7 OS: Open "Control Panel", and double-click "Regional and Language Options". As shown in the figure below, click "Change system locale..." under "Administrative". In the pop-up "Regional and Language" tab, choose "Chinese (Simplified, PRC)" and click [OK].



7. Issue Feedback Method

7.1 Objective

If issues encountered cannot be solved by referring to the "Common Issues and Solutions" above, a logfile, a screenshot and a description of the issue will be provided to the TAC for issue feedback, as described in Section 5.5.3.

The VDS logfile function is designed to log user actions and interaction data, making off-site analysis possible.

7.2 Logging Scope and Content

The scope of the logfile consists of four functional modules: Vehicle ID, Diagnostic, Programming, and Routines.

7.3 Logging Method

No additional action is required by the user. The logging trigger point is a button in the VDS. When the corresponding button is clicked, logging starts automatically.

7.3.1 *Trigger Points*

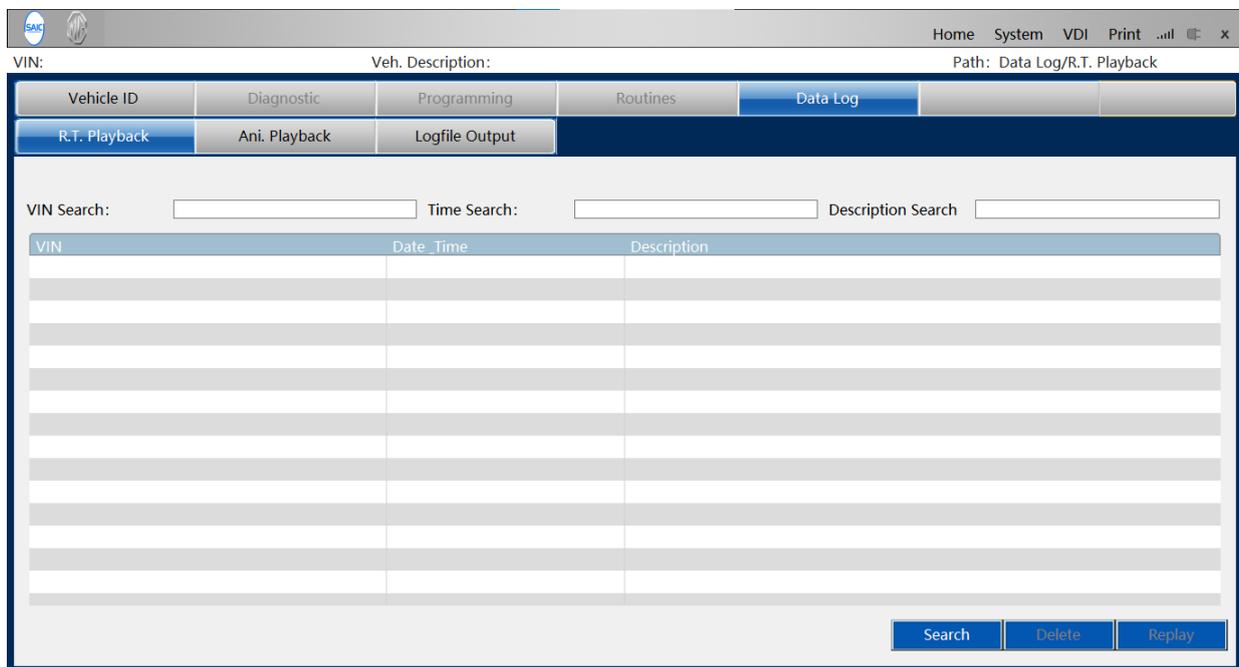
- Vehicle scan: [Start Scan] button
- Delete all DTCs: [Del All DTCs] button
- Read DTC: [Read DTC] button
- Clear DTC: [Clear DTC] button
- Read freeze frame: [Read FF] button
- Live data: [Start] button
- Force output: [Start] button
- ECU information: [Read] button
- Read configuration: [Read] button
- Modify configuration: [Modify] button
- Save configuration: [Save] button
- Import configuration: [Import] button
- Search calibration: [Search] button
- Start calibration: [Start] button
- Authorize calibration: [Request] button

- Import authorization: [Import] button
- Replace ECU: [Yes] button
- Key programming - Read: [Read] button
- Key programming - Disable: [Disable] button
- Key programming - Add: [Add] button
- Routines: [Start] button

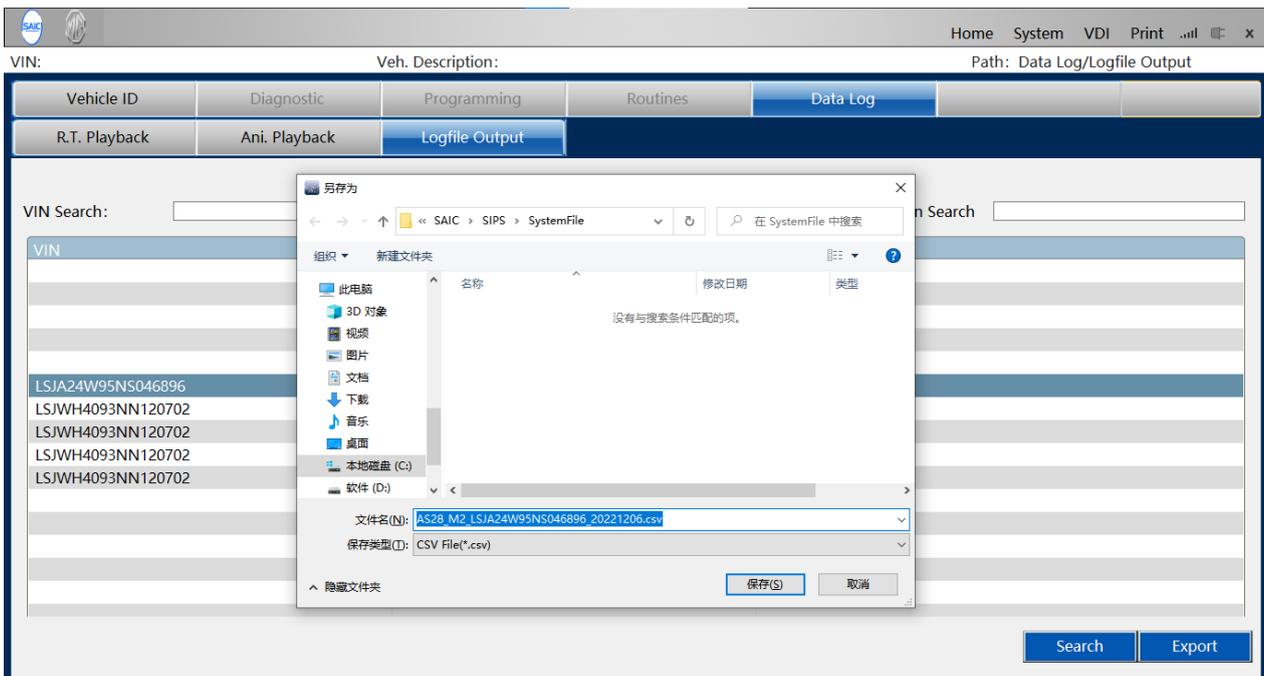
7.3.2 Examples

The following is an example of live data.

Locate the Data Log - Logfile Output feature, and select the data logs you want to export.



Click [Export], choose a local path, and click [Save] to save the logfile.



If the VDS logfile output feature is not available when the VDS issue occurs, the trace.txt file will be provided: C:\ACTI_DIAG_WORKSHOPVDS2\VDSMMI\logs.