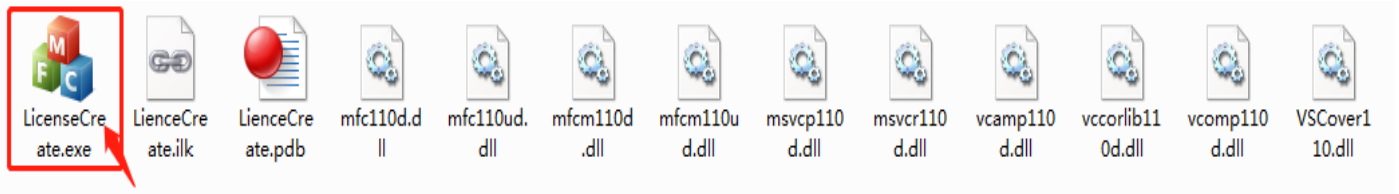


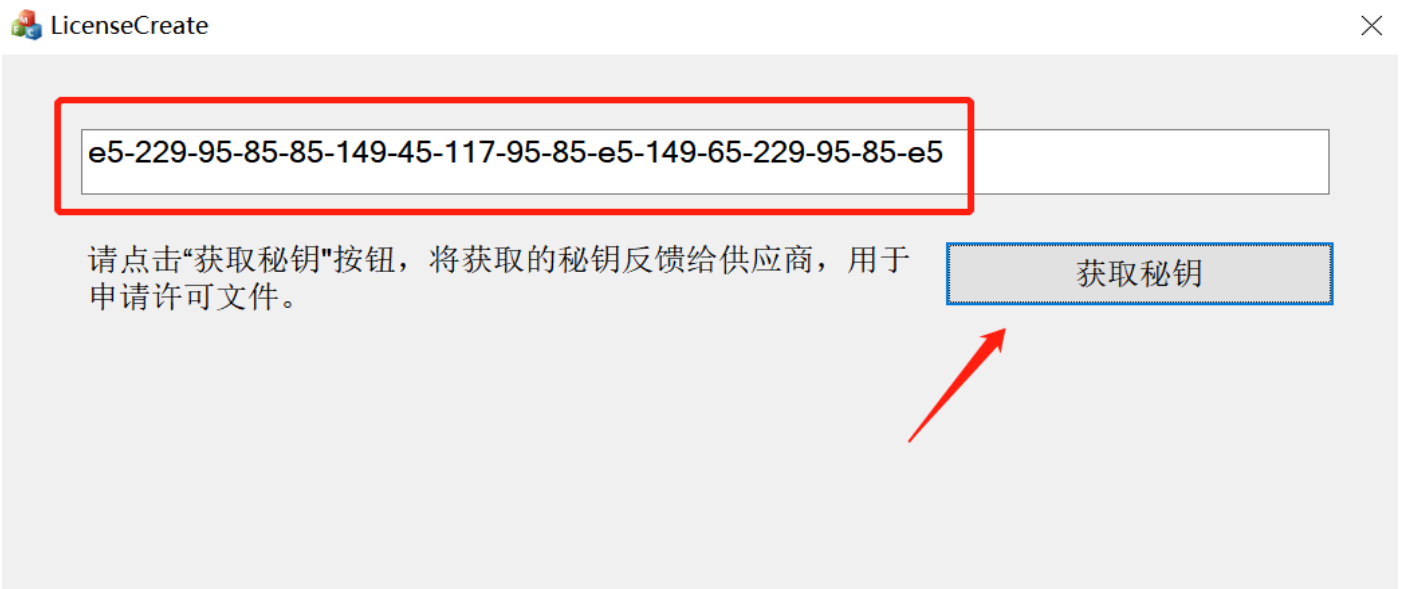
TEBS diagnostic software user manual

1、 Applying for a License File

When using this software for the first time on a new computer, you need to apply for a license. First, open the software to obtain the license key (double-click the LicenseCreate.exe icon in the figure above).







































After clicking "Get Key", a secret key will be generated and sent to the VIE technician. The VIE technician will provide a License.ini file and put it into the diagnostic software folder (if a License.ini file already exists, replace the original file) .



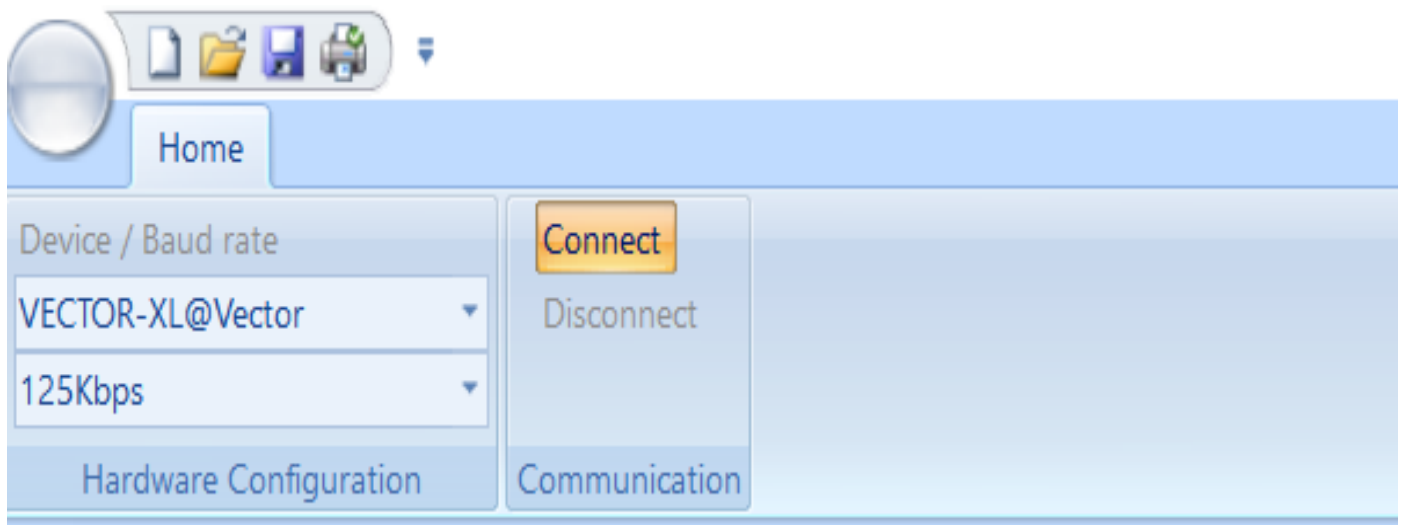
Double-click the "VIECalD.exe" icon to open the software.

Each new computer needs to apply for a license file from VIE before using the diagnostic software .

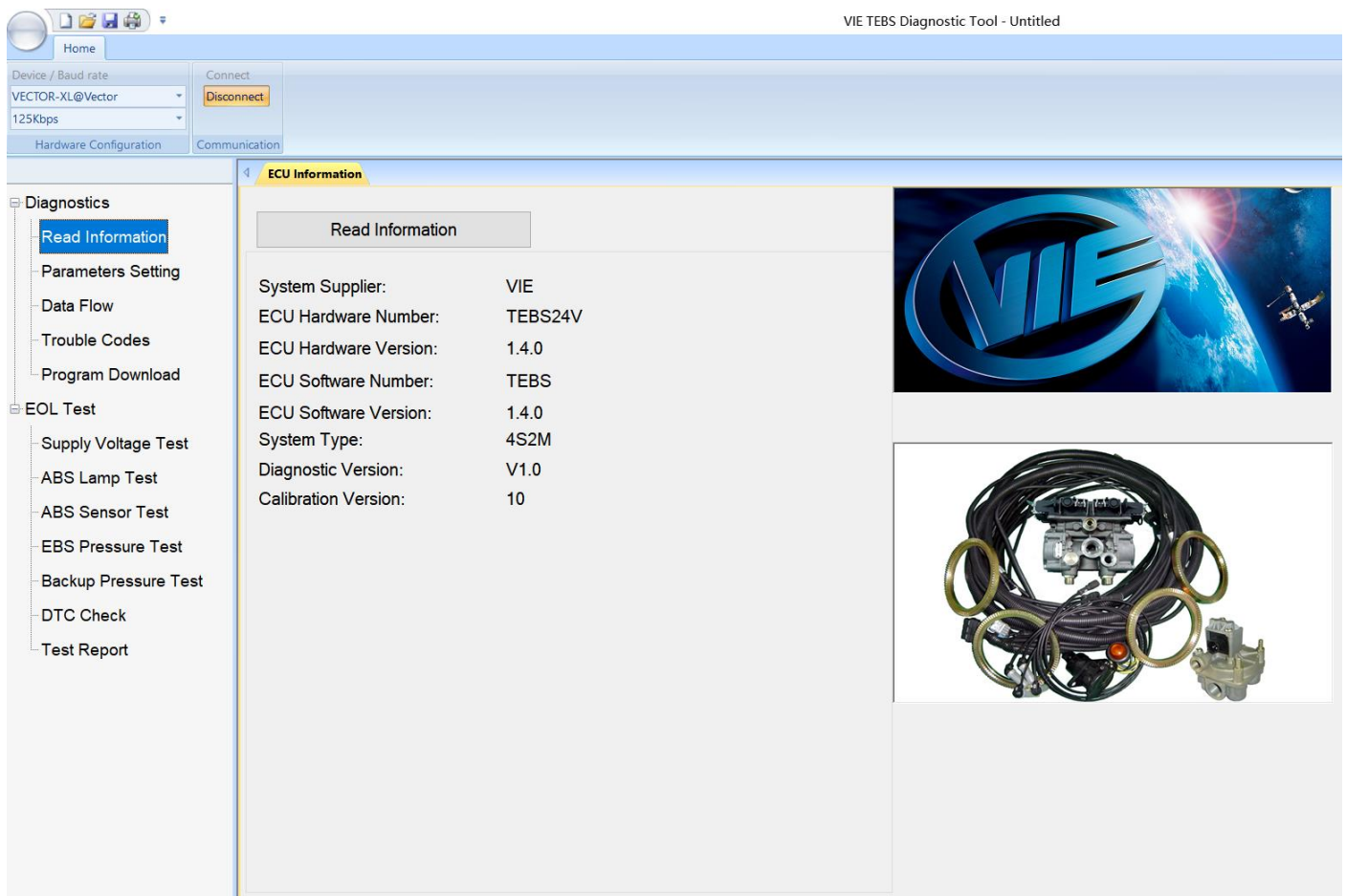
 libmwi18n.dll	 libmwMATLAB_res.dll
 libmwresource_core.dll	 libmx.dll
 libut.dll	 License.ini
 mfc110d.dll	 mfc110ud.dll
 mfcm110d.dll	 mfcm110ud.dll
 msvcp110d.dll	 msvcr110d.dll
 ParameterConfig.xml	 tbb.dll
 tbbmalloc.dll	 TEBS_FailureTable.csv
 TEBS_ParameterConfig_test.xml	 TEBS_ParameterConfig_test_backup.xml
 TEBS_UDS_IOConfig.xml	 TEBS_UDS_IOConfig_backup.xml
 TEBS_EOLConfig.xml	 tinyxmlX86.dll
 vcomp110d.dll	 vccorlib110d.dll
 vcomp110d.dll	 VIECal.config
 VIECalD.exe	 VIECalD.ilk
 VIECalD.pdb	 VScover110.dll
 vxlap.dll	 vxlap.h
 vxlap_NET.dll	 vxlap_NET.xml
 vxlap64.dll	 zlib1.dll

2、 Select device type, baud rate

– I @ VIE” as the device model and 1 25 Kbps as the baud rate. Then click “Connect”.



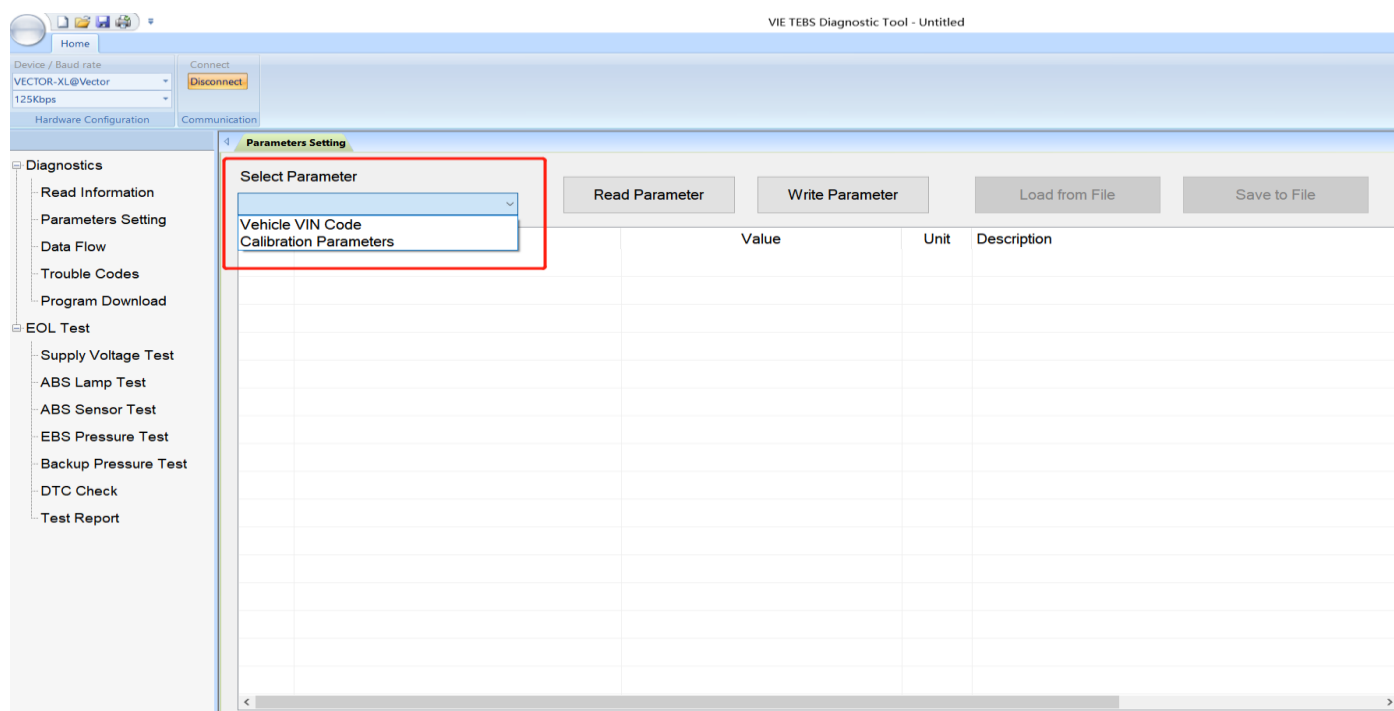
3、 product information



After the device is successfully connected to the ECU, click "Read ECU Information" in the left navigation bar to display the product information page and read the product information. You can also click "Read ECU Information" on the page to obtain product information.

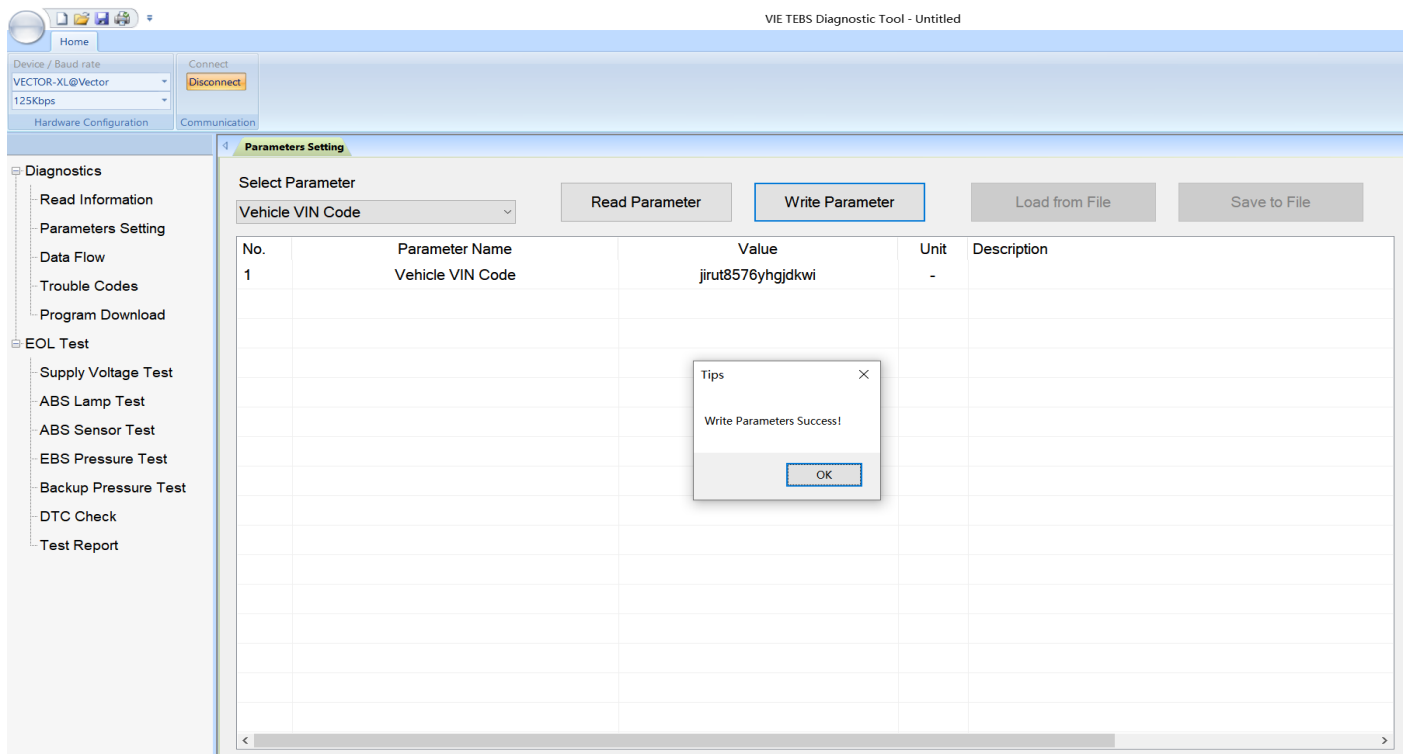
4、 Parameter reading and writing

4.1 Parameter reading



After the device is successfully connected to the ECU, click "Parameter Read and Write" in the left navigation bar to display the parameter read and write page. Click "Select Calibration Parameter Group" to select the item to be read or written. The current version supports "VIN Code Read and Write" and "Vehicle Parameter Read and Write". After selecting the item, the data will be read automatically.

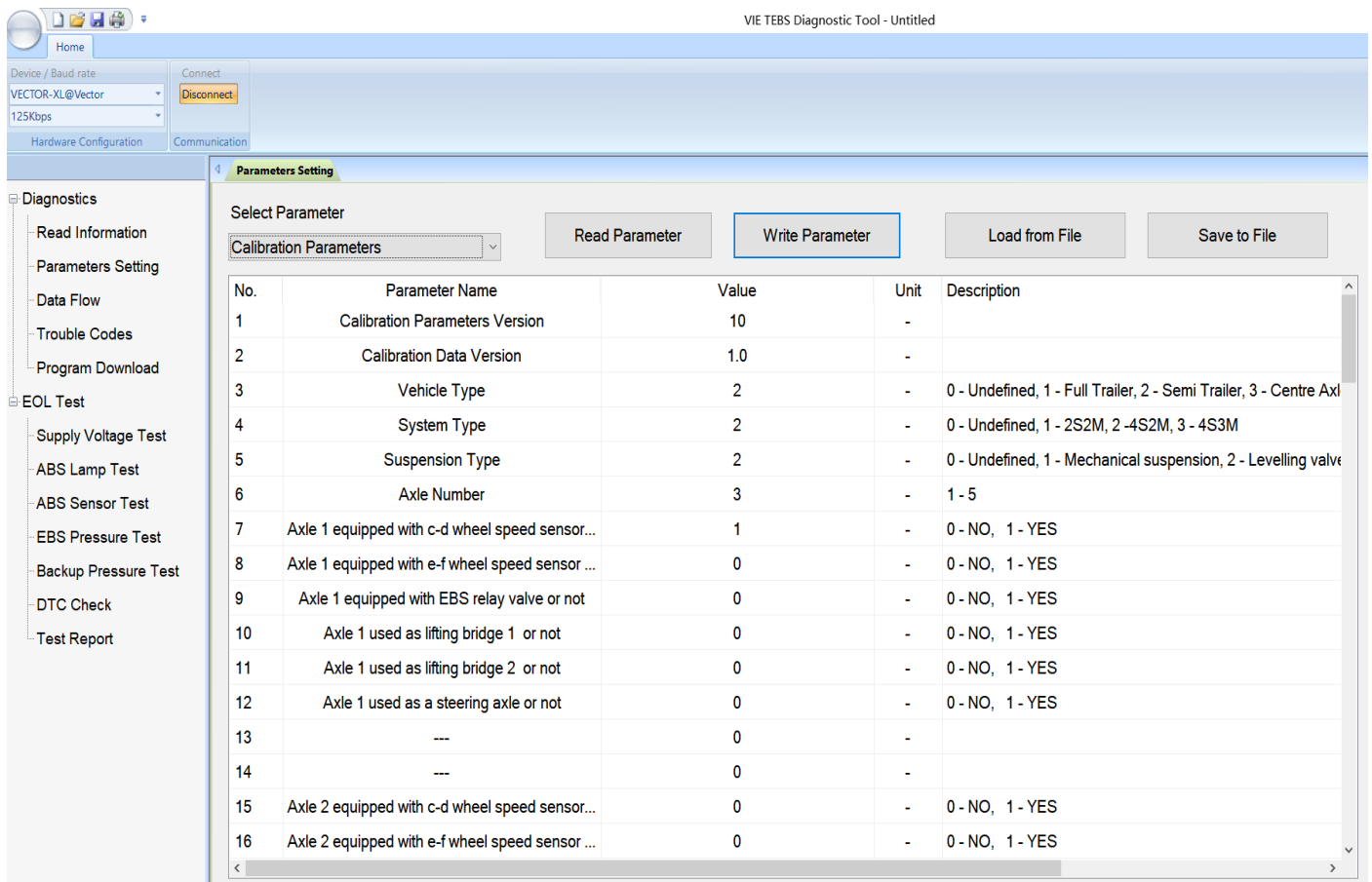
4. 2 Parameter writing



Double-click the value column to modify the current value. After modification, click the mouse in the blank space of the table or press Enter to end the editing. Click "Write" to write the modified data to the ECU. After successful writing, the ECU will automatically restart and re-read the data.

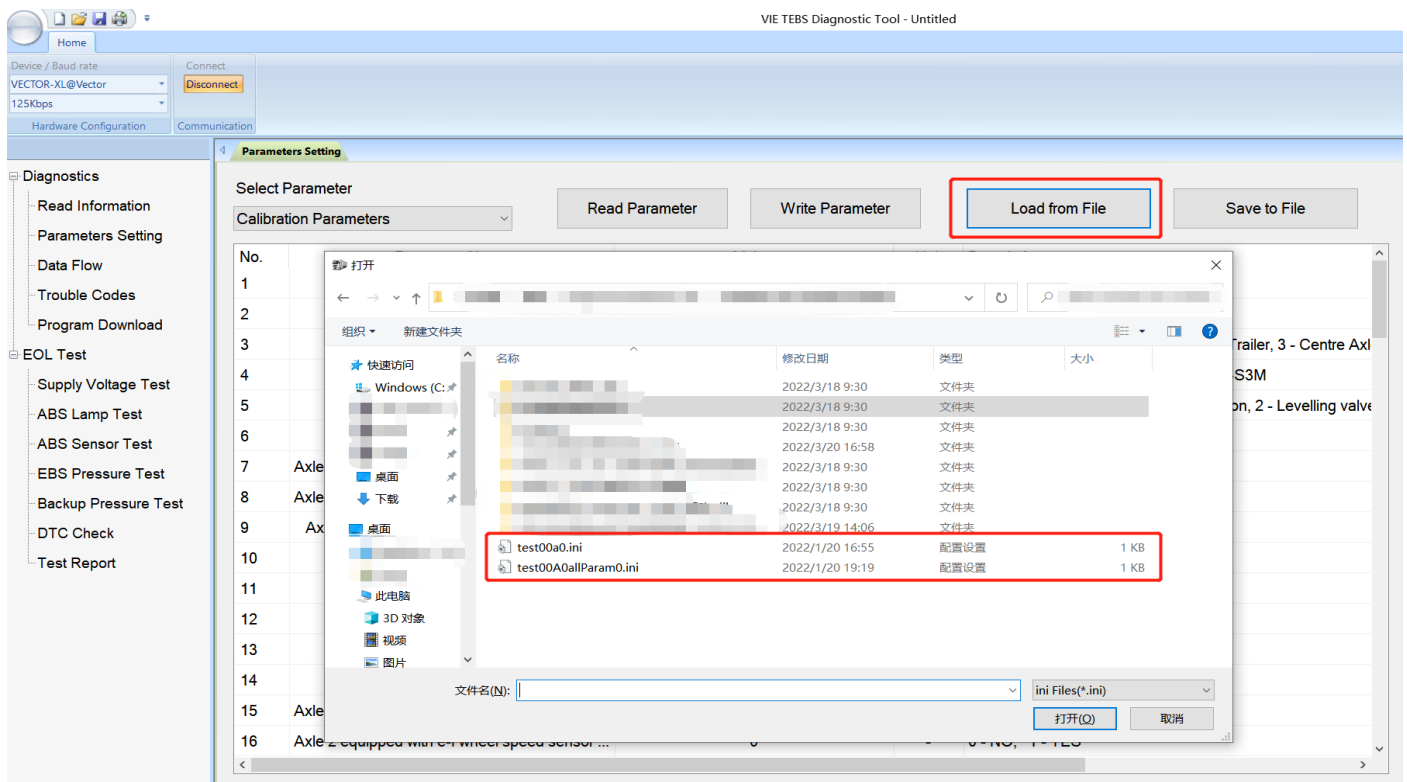
4.3 Vehicle parameter reading and writing (calibration configuration parameters)

4.3.1 Reading and writing calibration configuration parameters



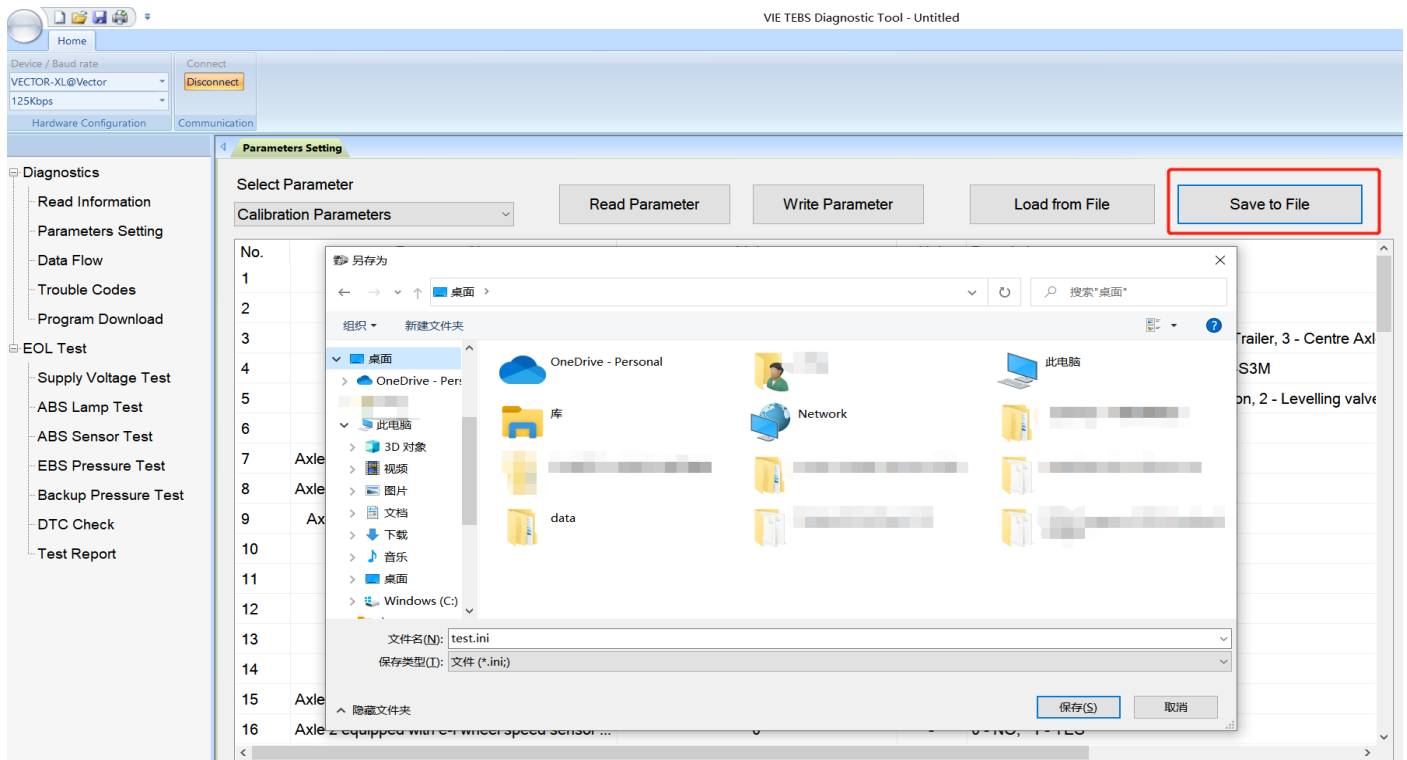
Click the "Calibrate Configuration Parameters" option to read the vehicle parameters currently stored in the ECU. Double-click the value to modify the corresponding parameter. After the modification is completed, click "Write" to write the modified data to the ECU. If the modification is successful, the ECU will prompt success and automatically restart.

4.3.2 Select configuration parameter template



Click "Select calibration configuration parameter template" to load the parameter configuration file template to the current page for modification and write into the ECU.

4.3.3 Save calibration configuration parameter template

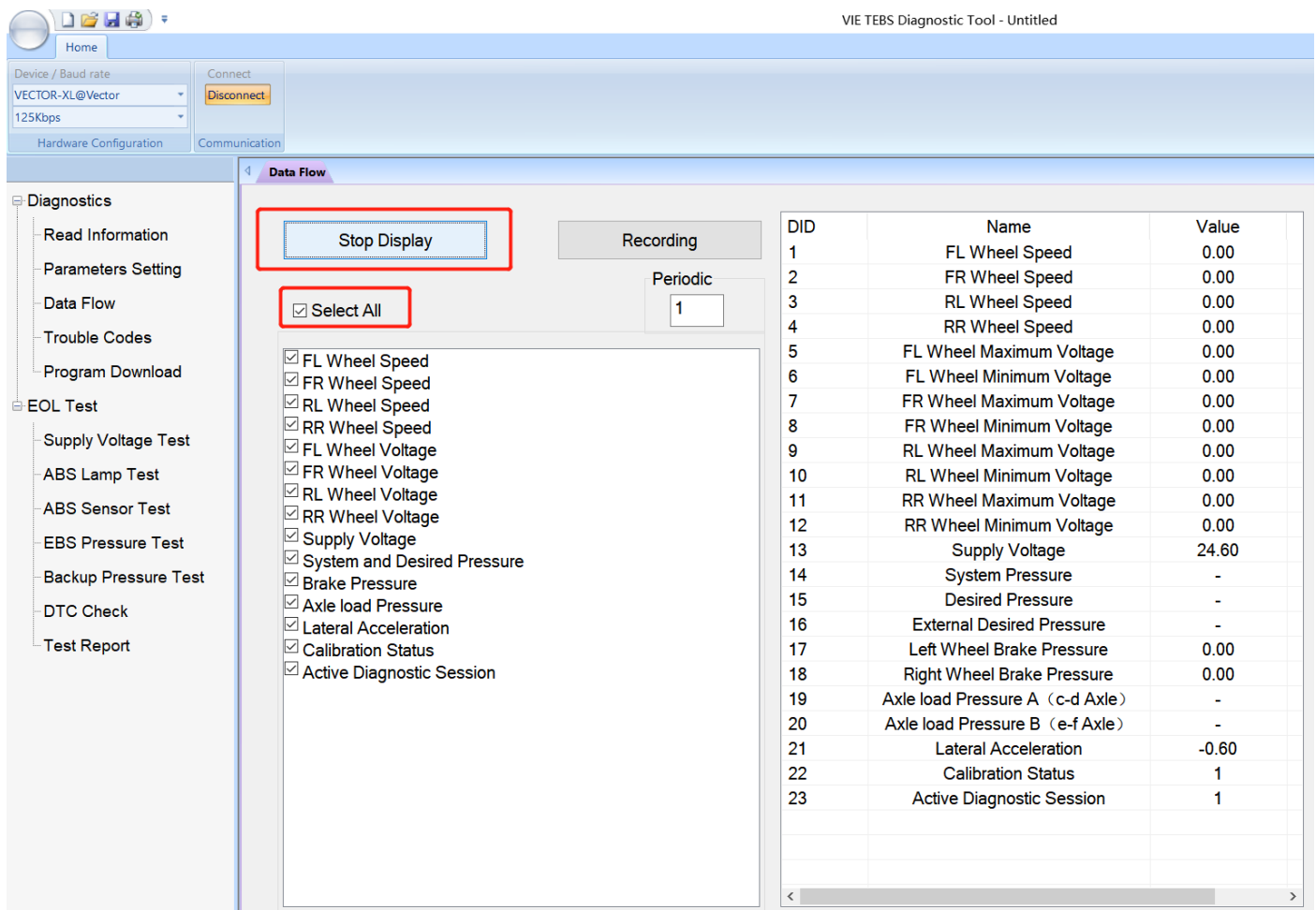


Click "Save calibration configuration parameter template" to save all

calibration configuration parameters on the current page as a file of type
XXX.ini.

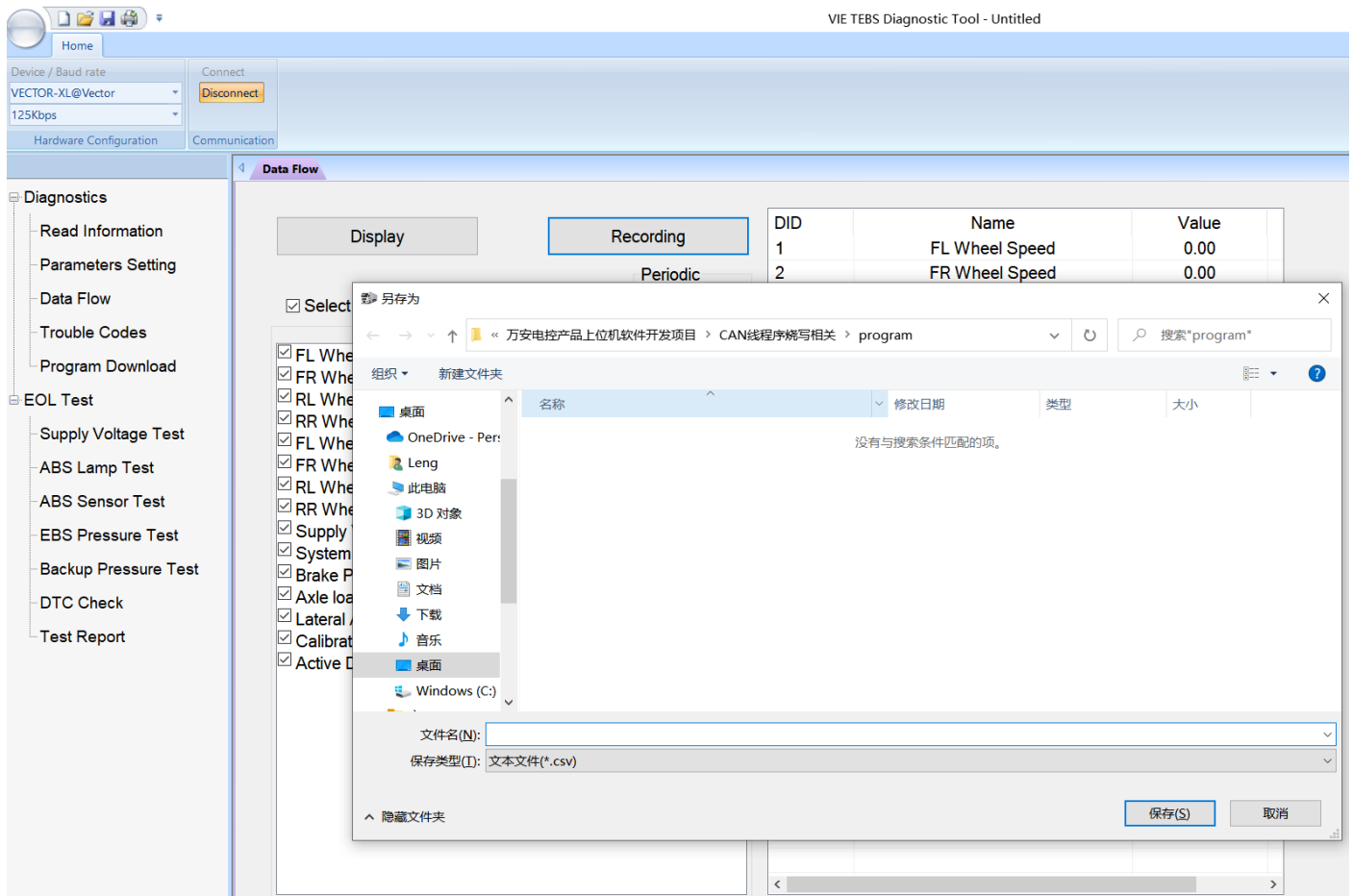
5、 Data flow monitoring

5.1 Display Data Flow



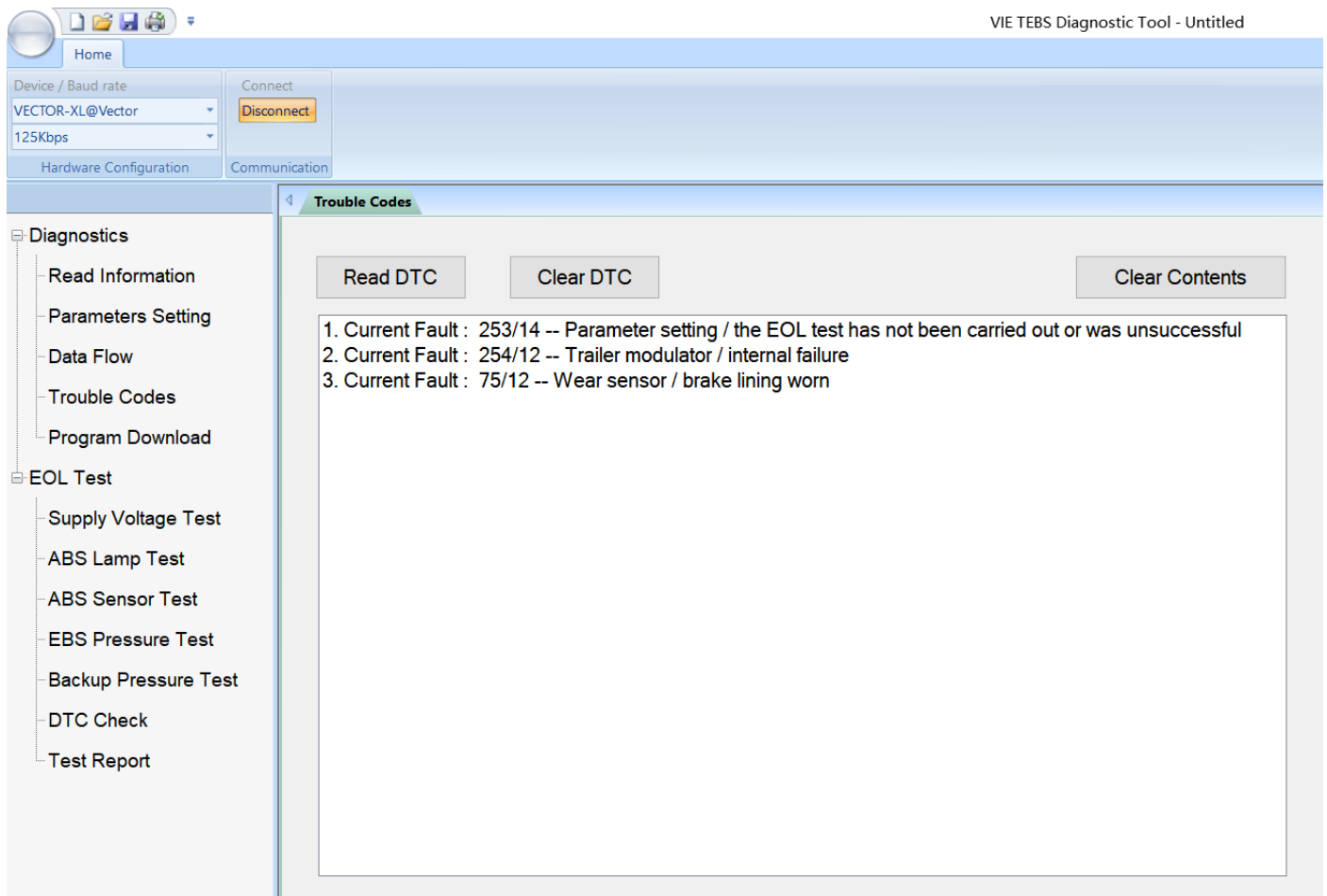
Click "Data Stream" in the left navigation bar to display the data stream interface. You can click "Select All" to display all data, or click on the required data to display. After clicking "Start", the selected data will be displayed in the list on the right. The default update period is 1 second. Click to modify the display period.

5.2 Recording Data Flow



During the data stream reading process, you can click "Start Recording" at any time to save the data, and the data will be saved as an Excel file.

6、 error code



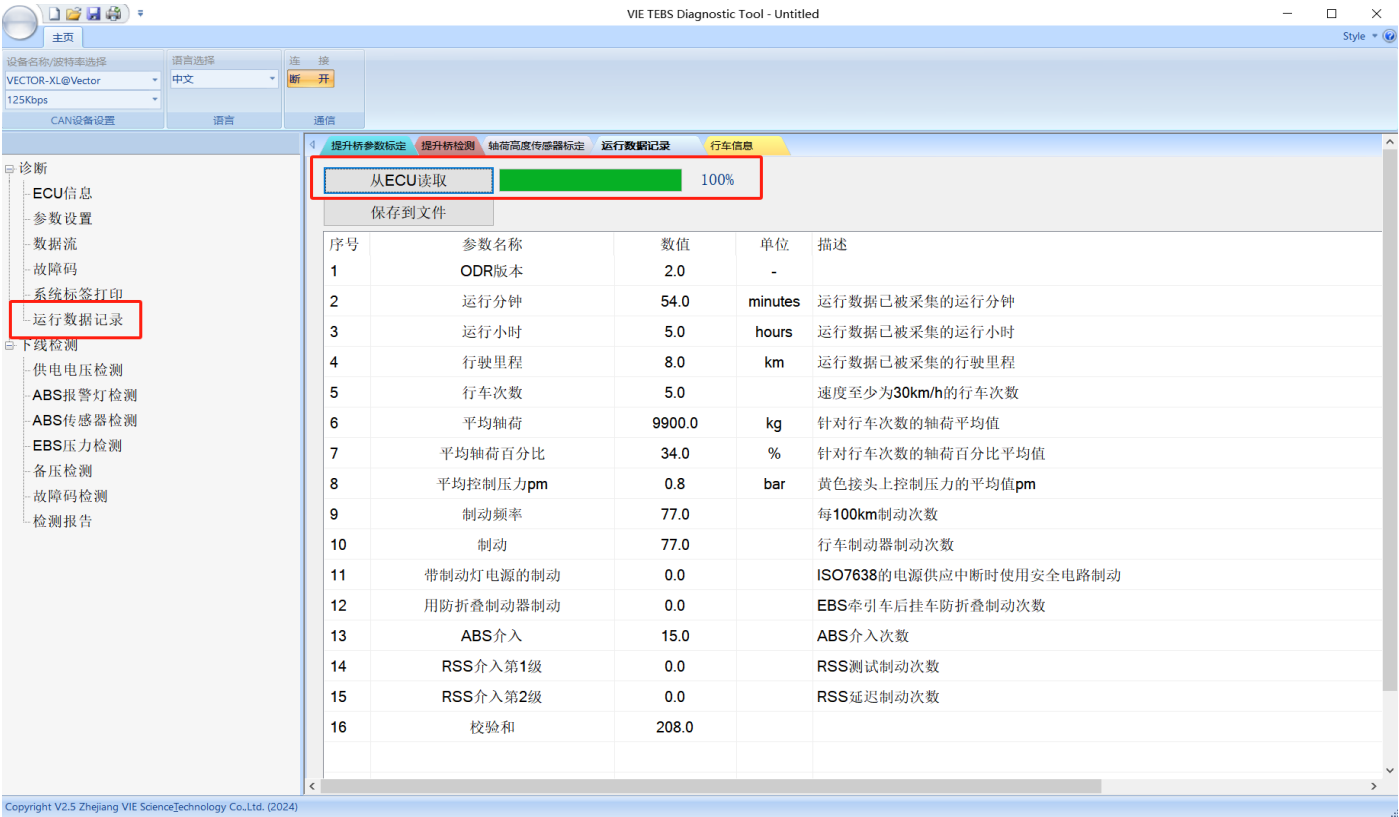
Click "Fault Code" in the left navigation bar to display the fault code interface. Click "Read Fault Code" to display the current fault and historical faults in the list. Click "Clear Fault Code" to clear the historical faults. If there is still a current fault, it will still be displayed.

The screenshot shows the VIE TEBS Diagnostic Tool interface. The left sidebar contains a 'Diagnosis' (诊断) menu with options like ECU information, parameter settings, data stream, fault codes, 'System Label Printing' (highlighted), running data recording, offline detection, power supply voltage detection, ABS warning lamp detection, ABS sensor detection, EBS pressure detection, brake pressure detection, fault code detection, and detection report. The main window has tabs for 'System Label Printing', 'Parameter Setting', 'Parameter Detection', and 'Sensor Calibration'. The 'System Label Printing' tab is active, showing a table of vehicle parameters. The table has columns for 'Serial Number' (序号), 'Parameter Name' (参数名称), 'Value' (数值), and 'Unit' (单位). The parameters listed include MANUFACTURER, TYPE, VIN, and various calibration and configuration parameters.

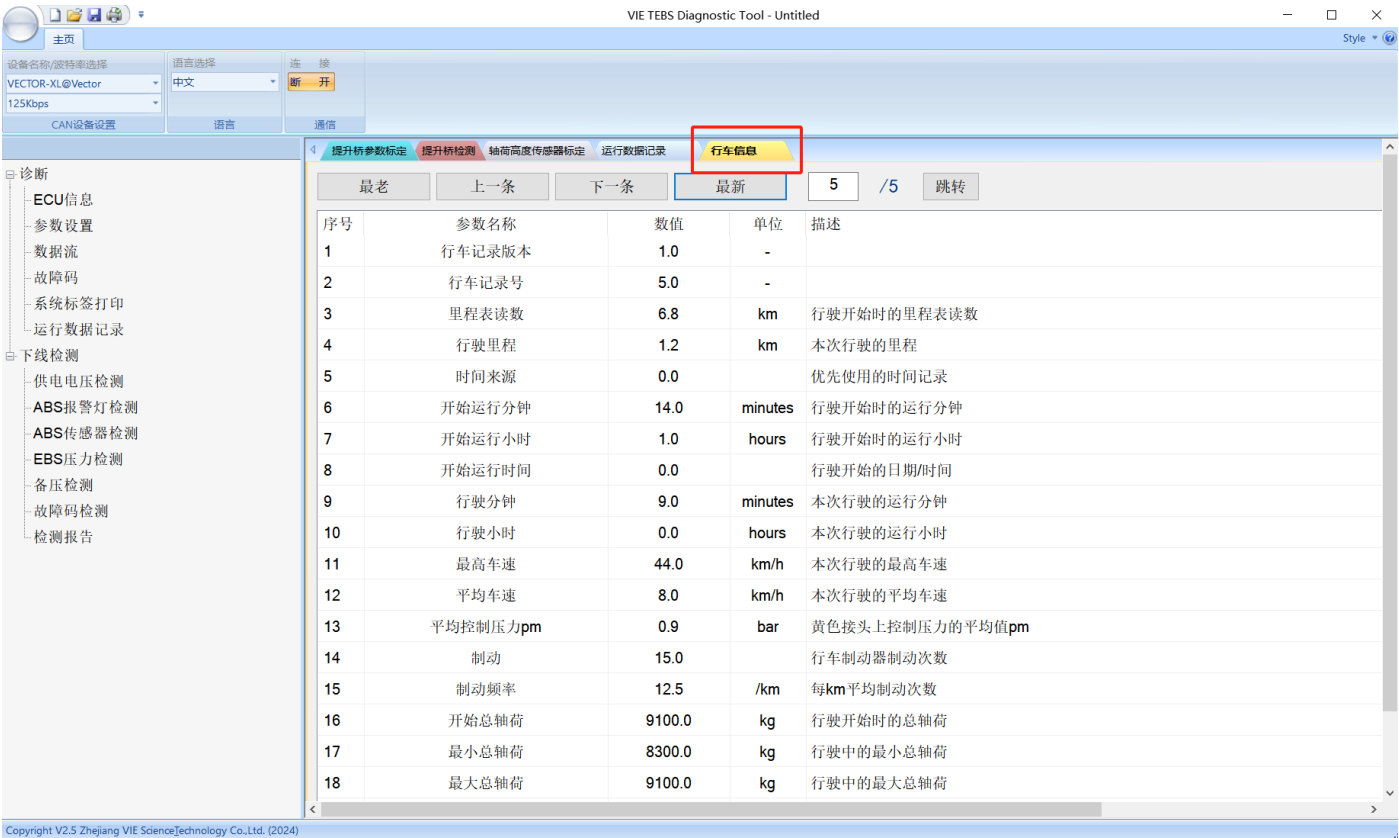
序号	参数名称	数值	单位
1	MANUFACTURER		
2	TYPE		
3	VIN	LTYH9J76LR12345YM	
4	标定配置参数版本	17.0	-
5	标定数据版本	0.0	-
6	车辆类型	2	-
7	系统形式	2	-
8	悬挂形式	2	-
9	桥数量	3	-
10	1桥是否装配cd轮速传感器	1	-
11	1桥是否装配ef轮速传感器	0	-
12	1桥是否装配EBS继动阀	0	-
13	1桥是否作为提升桥1	0	-
14	1桥是否作为提升桥2	0	-
15	1桥是否作为随动桥	0	-
16	---	0	-
17	---	0	-

Click "System Label Printing" in the left navigation bar to display the system label printing interface. Click "Read Parameters" to read the system related parameter information, and then click "Print System Label" to save the system related parameters as a PDF file for viewing.

8、 Operation data recording

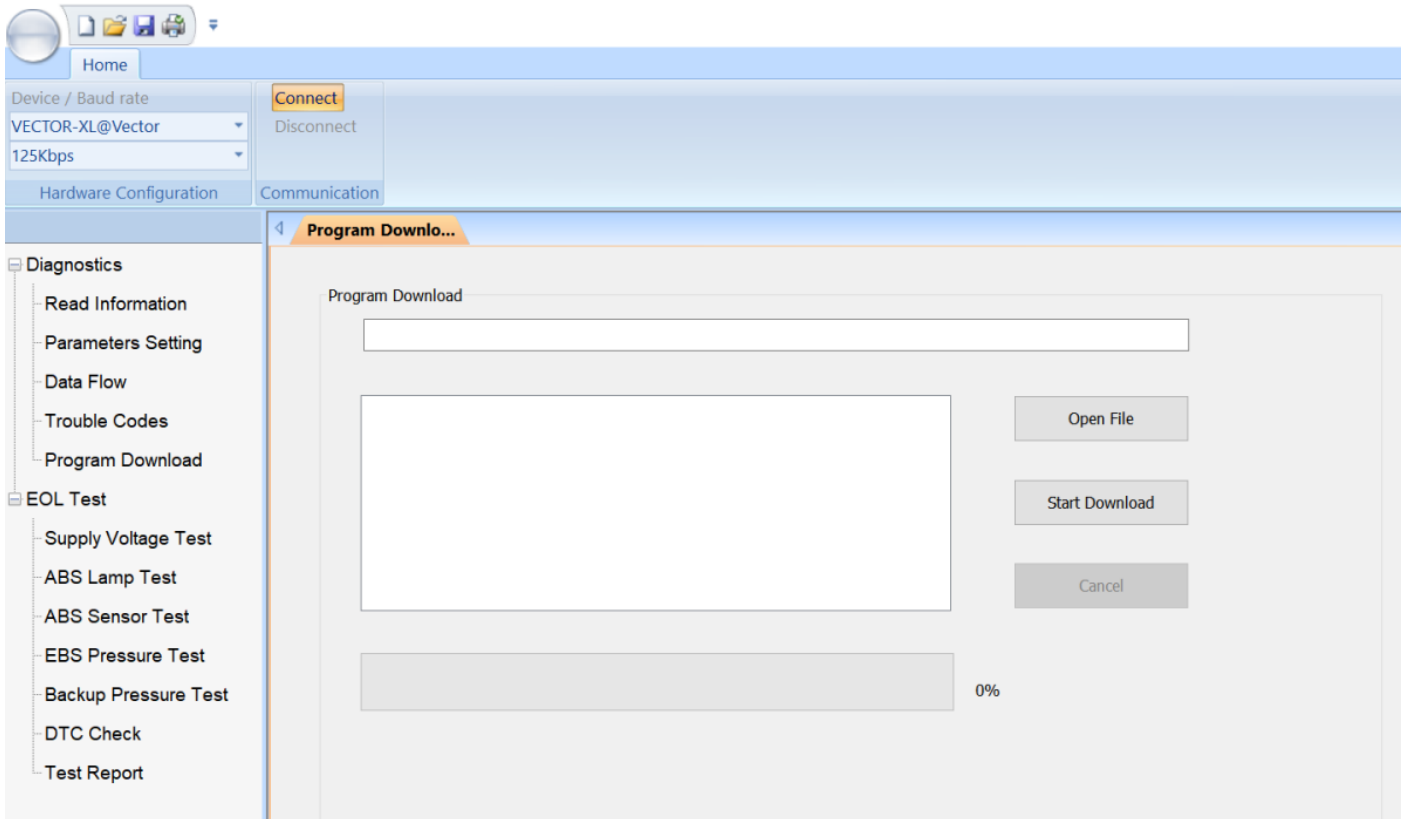


Click "Operation Data Record" in the left navigation bar to display the operation data interface. Click "Read from ECU" to obtain the overall operation data and all driving information.



In the driving information interface, you can view the driving information data of a single time.

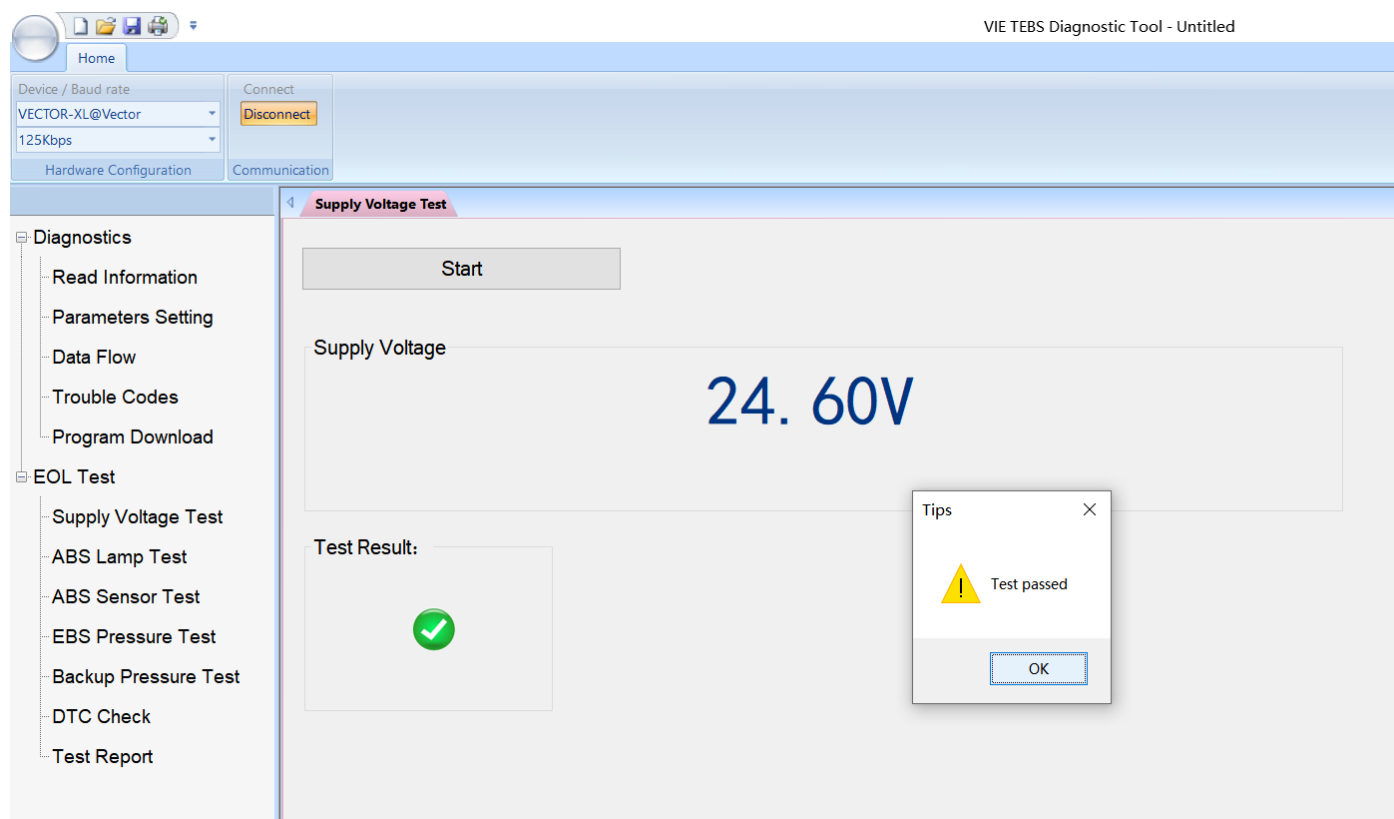
9、 Program Download



Click "Program" in the left navigation bar. Download", the program download interface will be displayed. Click "Open "File" to load the .H86 program file. If the file is parsed successfully, the page will prompt that it is opened successfully. Click "Start Download" , the program starts downloading. During the downloading process, do not switch to other pages. After the download is completed, the "Download Success". Click "Cancel" to cancel the download. **Note:**

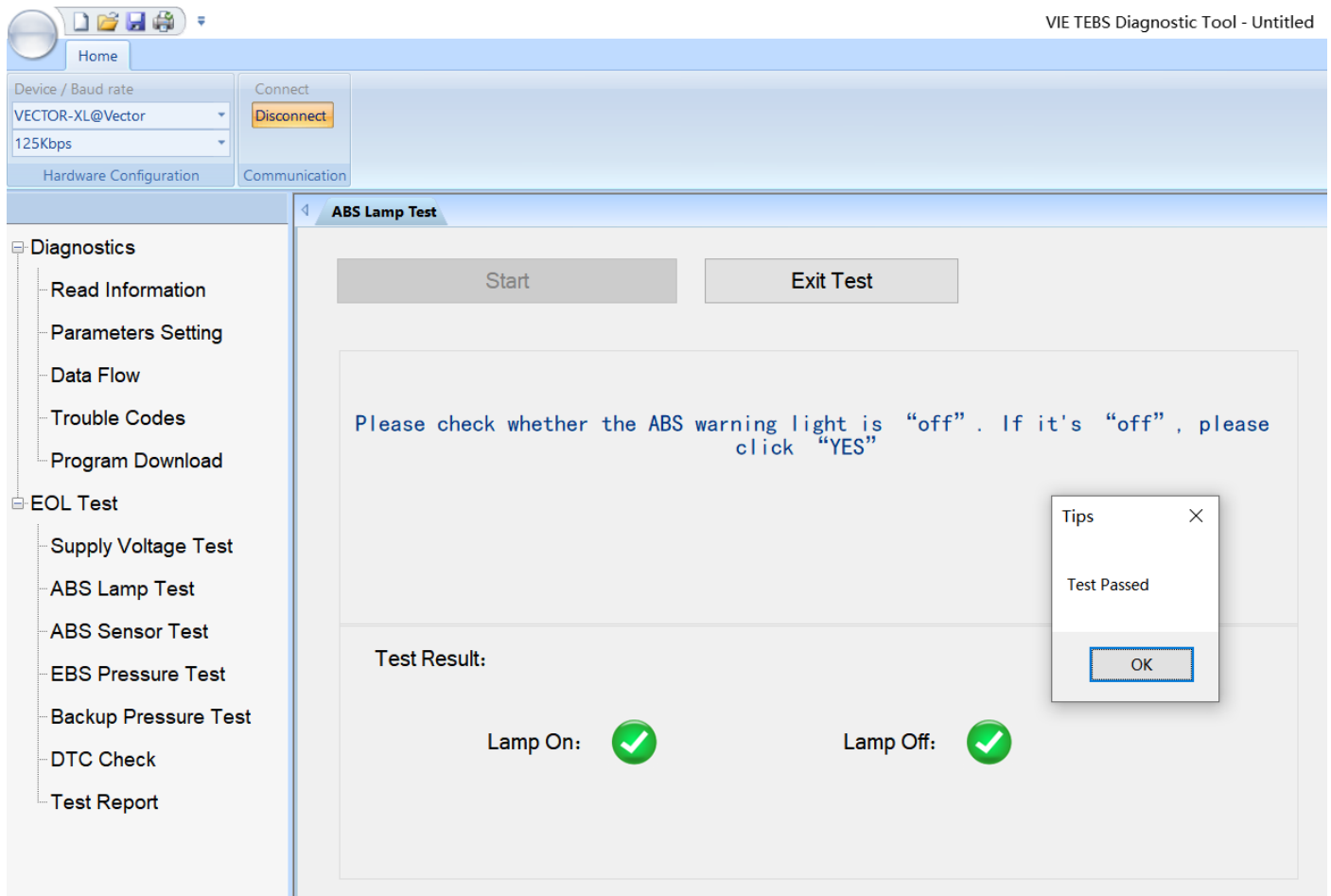
If you cancel the download midway, the controller will have no program.

10. Power supply voltage detection



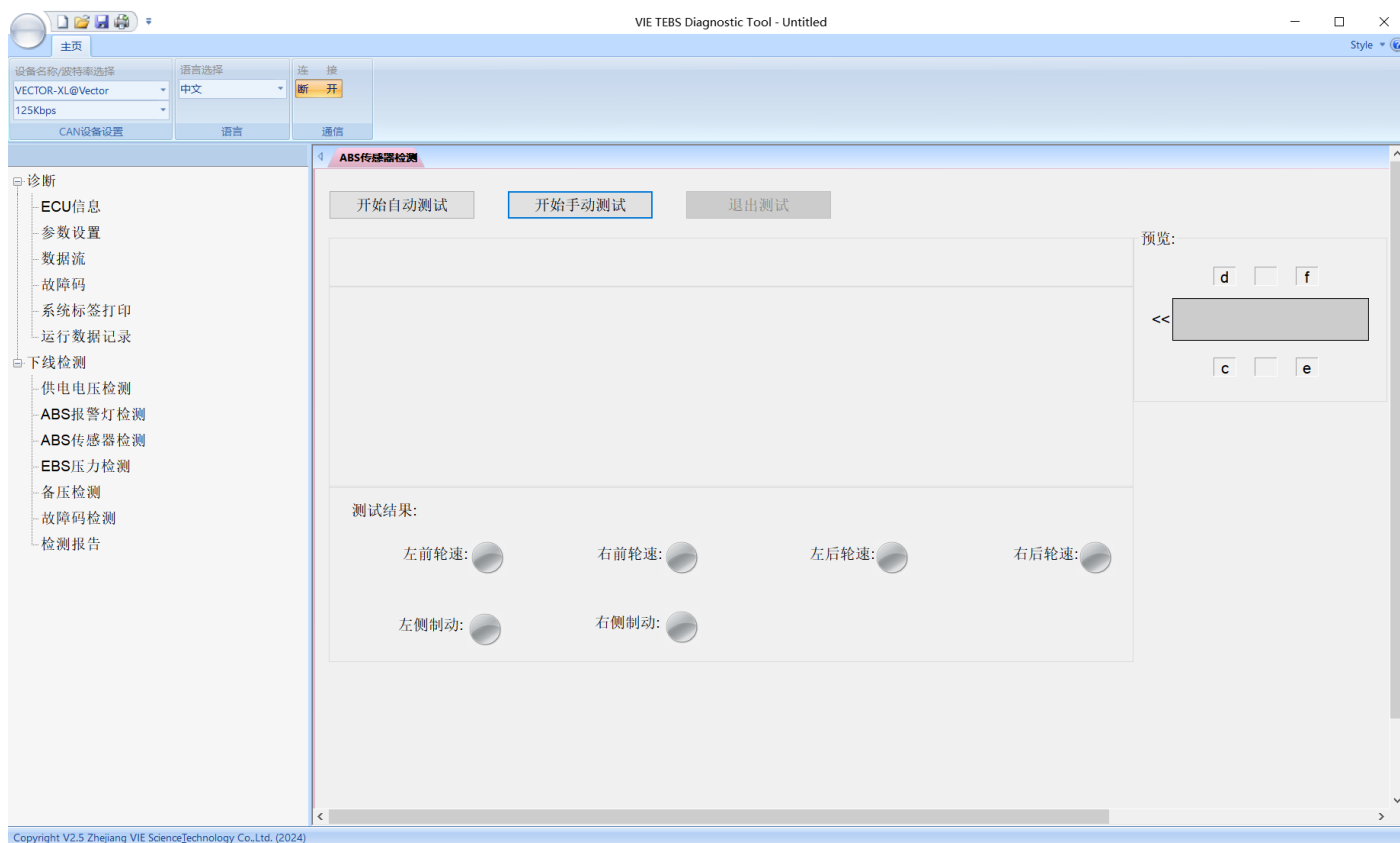
Click "Power Supply Voltage Detection" in the left navigation bar to display the power supply voltage detection interface. Click "Start ECU Voltage Detection" to read the current ECU voltage value and determine whether the voltage is qualified.

11. ABS warning light detection



Click "ABS Warning Light Detection" in the left navigation bar to display the ABS warning light detection interface. Click "Start ABS Light Detection" and the system will first light up the ABS light. Please observe whether the ABS light is on. If it is, click "Yes". If it is not, click "No". After the lighting operation is completed, perform the extinguishing operation and observe whether the ABS light is off. If it is, click "Yes". If it is not, click "No".

12. ABS sensor detection



Before testing the ABS sensor, the axle on which the wheel speed sensor is installed needs to be raised.

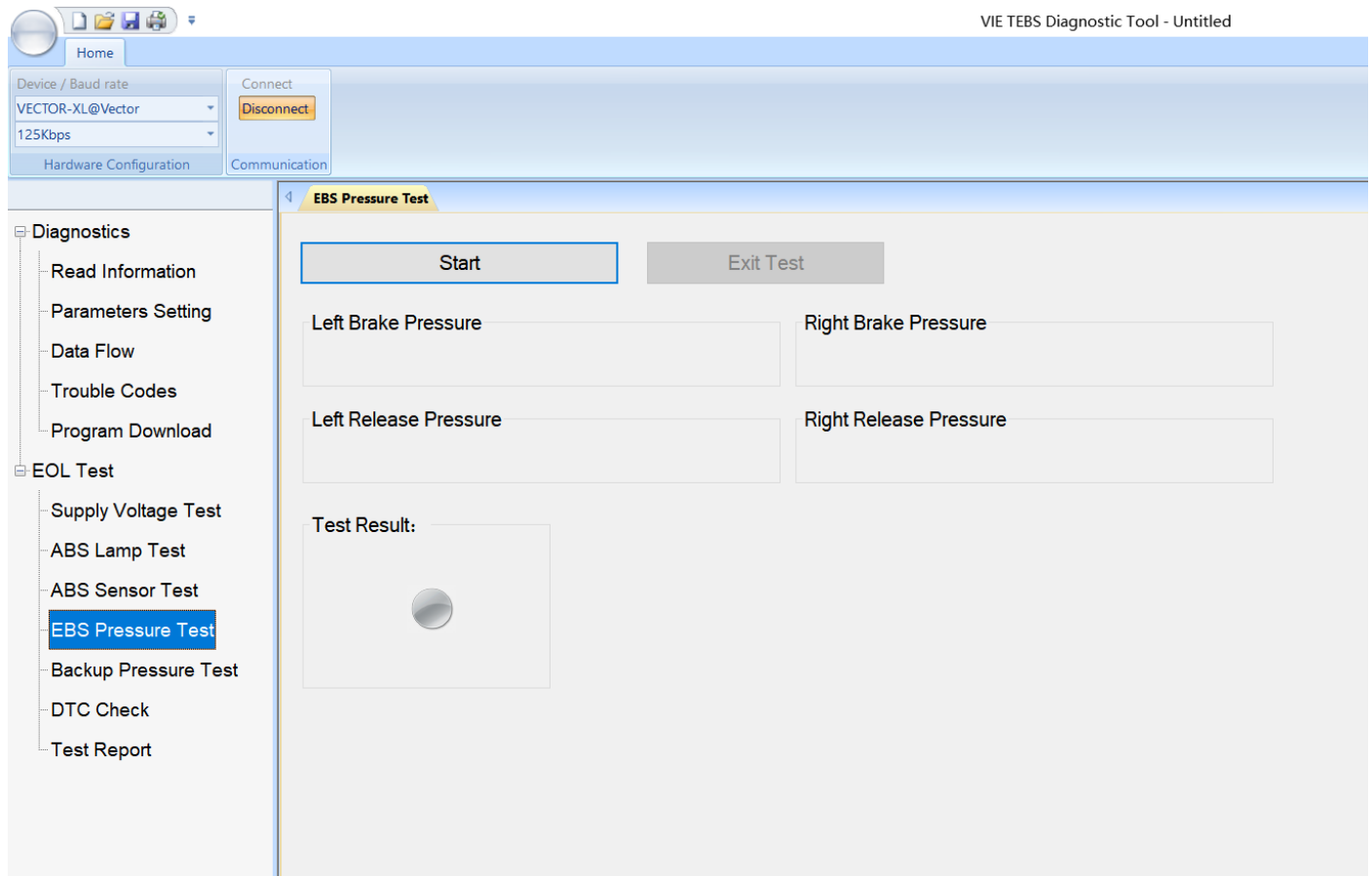
Click "Wheel Speed Sensor and Valve Detection" in the left navigation bar, the system will automatically determine whether the current system form is 4S 2 M or 2S 2 M, and display the ABS bed pick-up detection page.

4S 2 M system supports automatic detection and manual detection. Before the automatic detection starts, you can choose to start the detection clockwise or counterclockwise. After the automatic detection starts, the interface will prompt "Please turn XX wheel". Please turn the corresponding wheels in sequence according to the prompts. During the test, the system will read whether there is a wheel speed. After the continuous detection of the wheel speed reaches the qualified number of times, the wheel speed detection result below will display a green light. The system will automatically apply pressure to the

current wheel. If the wheel can stop, it means that the valve function is also normal, and the detection result of the valve below will display a green light. If there is a problem with the detection, it will be directly judged as unqualified, and it will be prompted to switch to manual detection mode for re-detection. The manual detection mode can display specific problems.

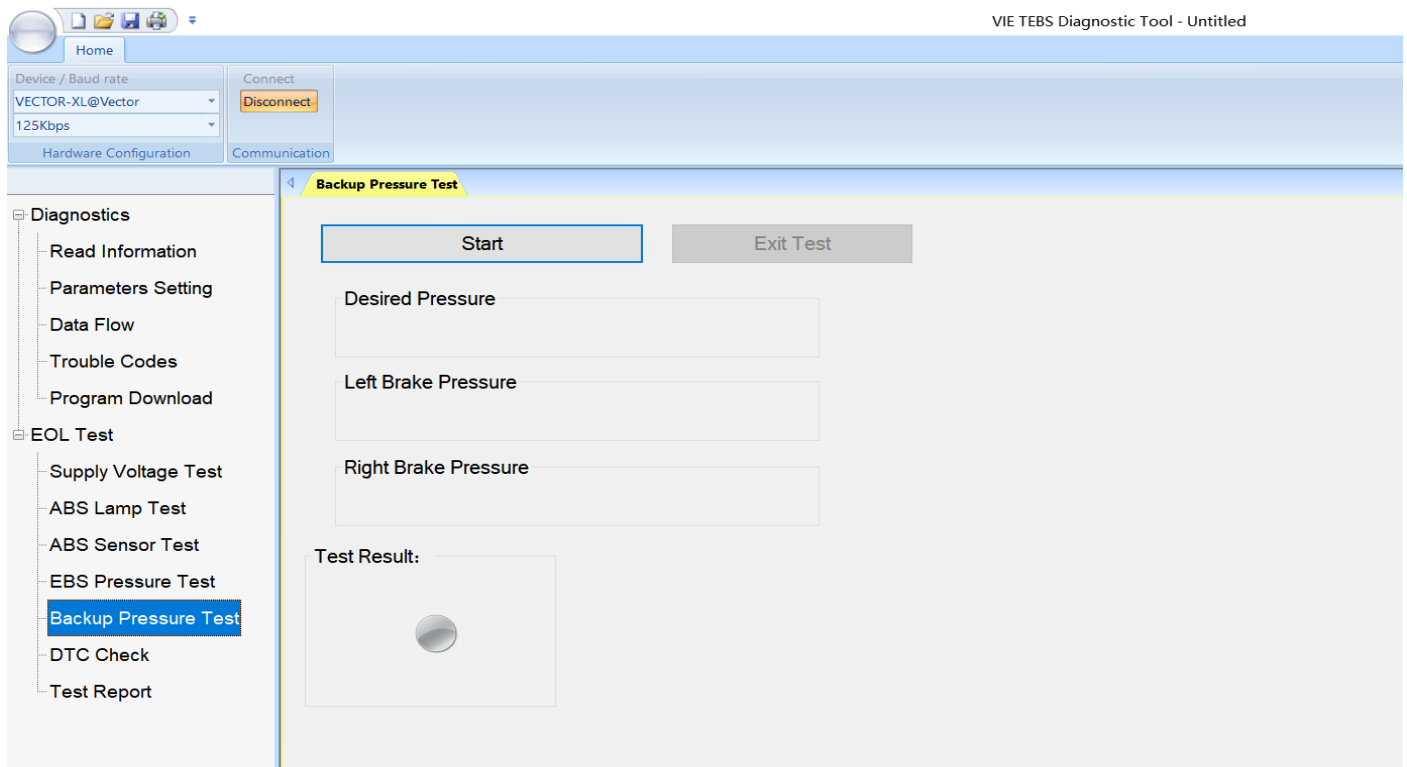
The 2S 2 M system supports automatic detection and manual detection. The 2S 2 M system automatic detection does not support the selection of starting clockwise or counterclockwise. The system starts the detection directly from the left wheel. After the automatic detection starts, the interface will prompt "Please turn XX wheel". Please turn the corresponding wheels in sequence according to the prompts. During the test, the system will read whether there is a wheel speed. After the continuous detection of the wheel speed reaches the qualified number of times, the wheel speed detection result below will display a green light. The system will automatically apply pressure to the current wheel and brake. If the wheel can stop, it means that the valve function is also normal, and the detection result of the valve below will display a green light. If there is a problem with the detection, it will be directly judged as unqualified, and it is recommended to switch to manual detection mode for re-detection. The manual detection mode can display specific problems.

13. EBS pressure detection

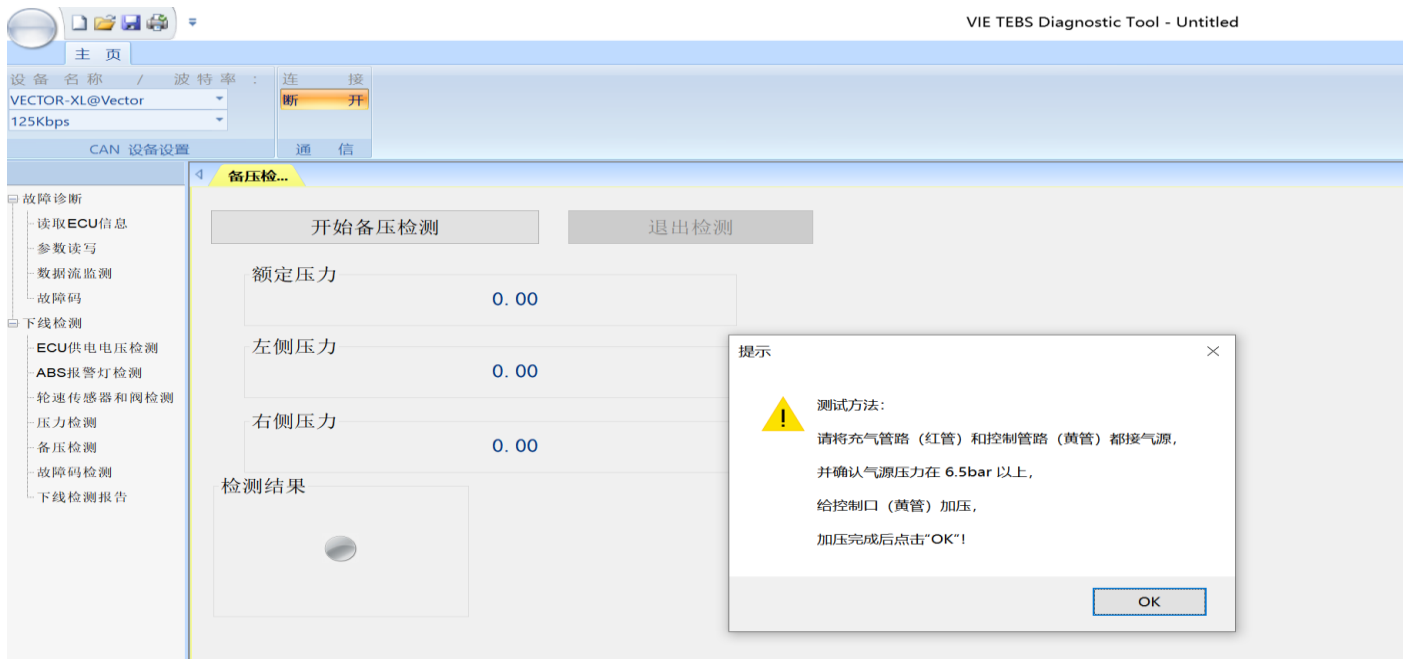


Click "Pressure Detection" in the left navigation bar to display the EBS pressure detection interface. Click "Start Pressure Detection" and the system will send a 5 bar pressure request on the left, a 0 bar pressure request on the left, a 5 bar pressure request on the right, and a 0 bar pressure request on the right in sequence. The system will then read the actual pressure of the left pressure sensor and the actual pressure of the right pressure sensor and display the detection results.

14. Standby pressure detection

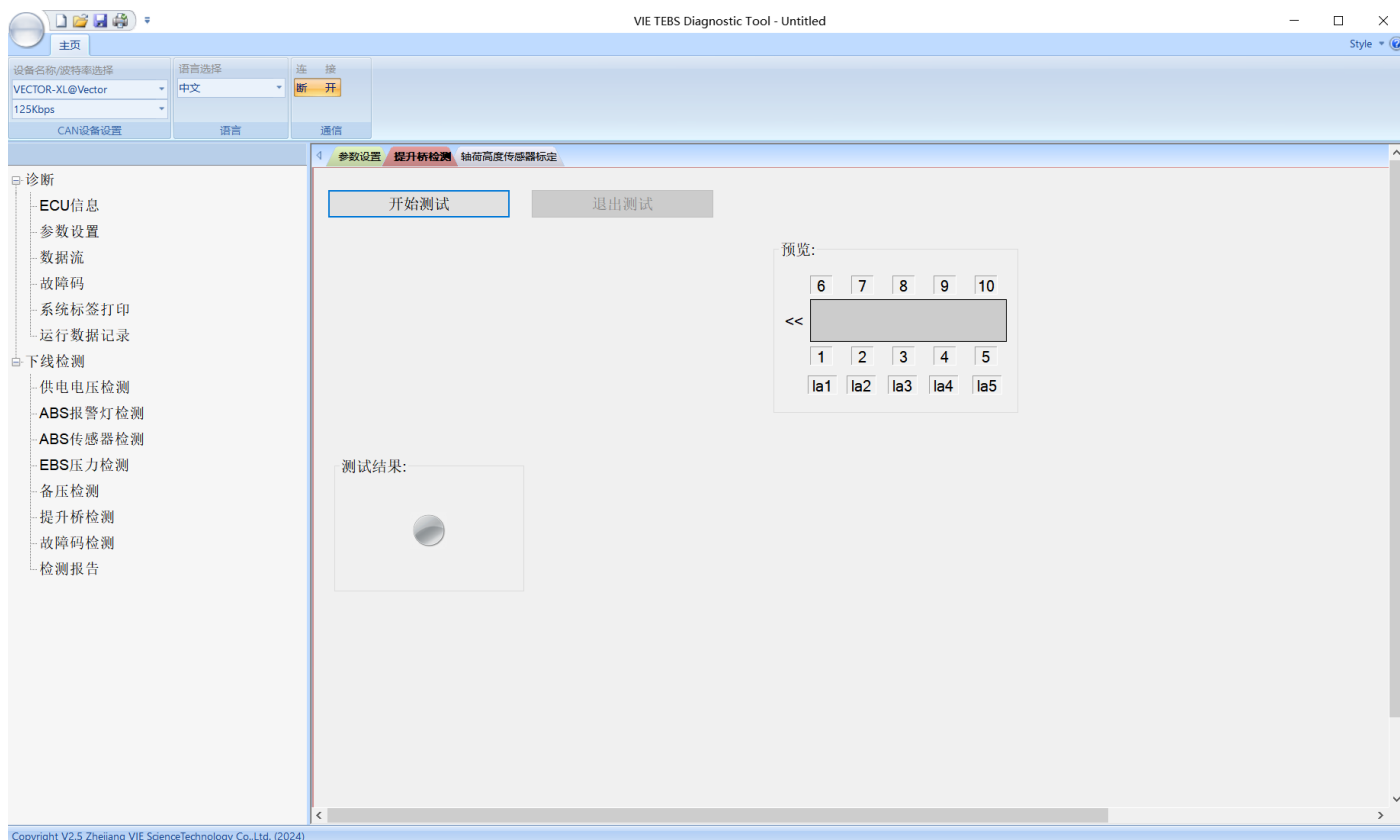


Click "Pressure Test" in the left navigation bar to display the pressure test interface. Click "Start Pressure Test". After the pressure test starts, the system first detects the initial pressure and reads whether the yellow tube and the left and right channels have initial pressure. If the control line (yellow tube) has been connected, the air supply of the yellow tube needs to be kept closed. After the initial pressure test is qualified, it will prompt to open the yellow tube for pressurization.



Please confirm that the yellow tube has been pressurized to more than 5 bar, then click the "OK" button in the pop-up window . The system will then read the rated pressure, left pressure, right pressure, and display the test results.

15. Lifting bridge inspection

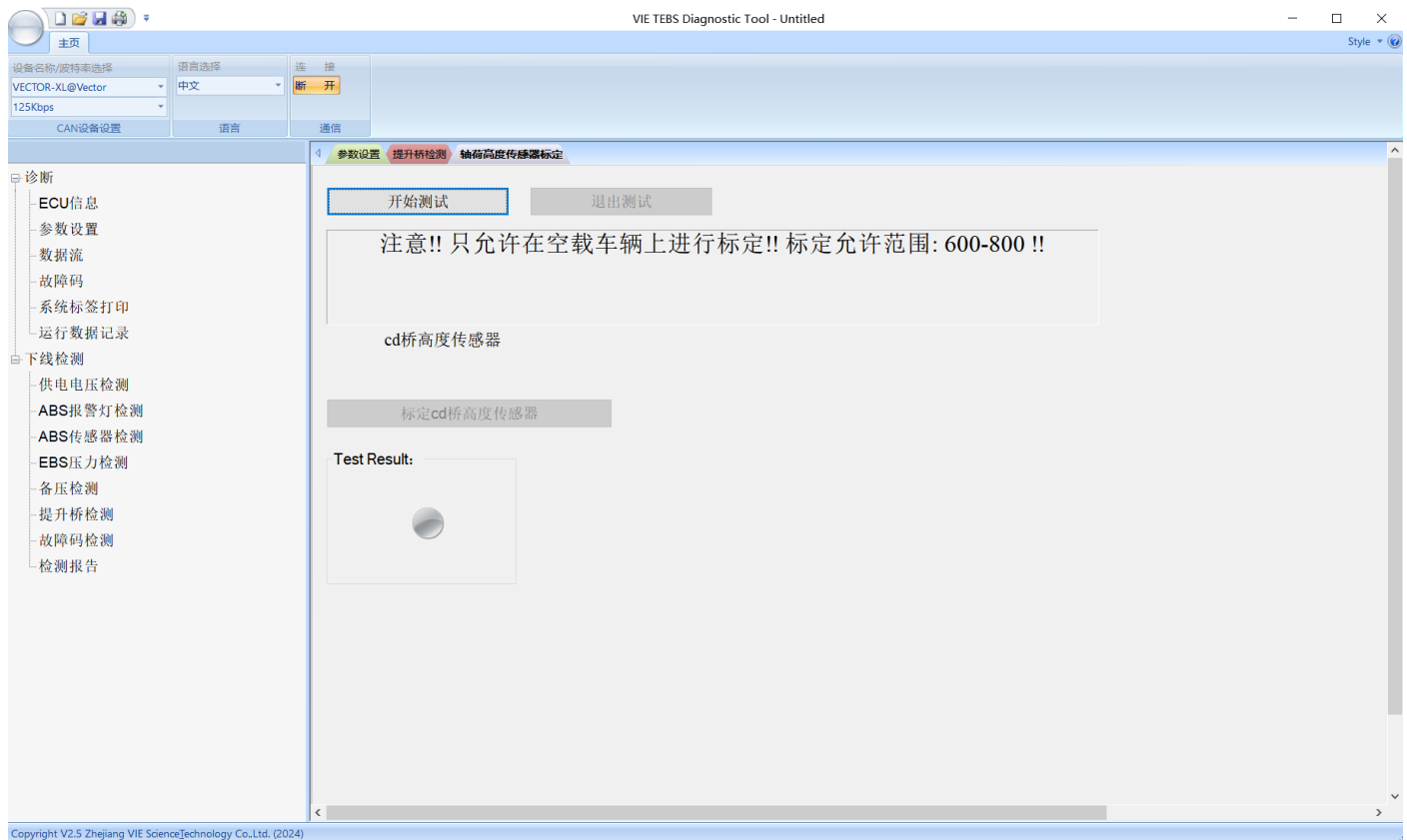


1. This item is displayed when the calibration parameter "Control lifting axle 1" is 1, and is hidden when it is 0.
2. When this item is displayed, the number of lifting axle valves to be tested needs to be determined as 1 or 2 according to the two calibration parameters "Control lifting axle 1" and "Control lifting axle 2". If only the basic parameters set the lifting axle position, but there is no open control in the lifting axle parameters, there is no lifting axle valve and no test is required.
3. The test page displays a schematic diagram of the corresponding number of axes according to the axis configuration of the basic parameters. LA1 and LA2 are displayed on the corresponding axes according to the lifting axle configuration of the basic parameters.
4. After the test starts, first lower all controllable lifting bridges, read the lifting bridge status, and ask workers LA1 and LA2 whether to lower. Then

raise LA1 to read and ask, raise LA2 to read and ask, lower LA2 to read and ask, lower LA1 to read and ask. After the reading status and answer are correct, the test passes and control is returned.

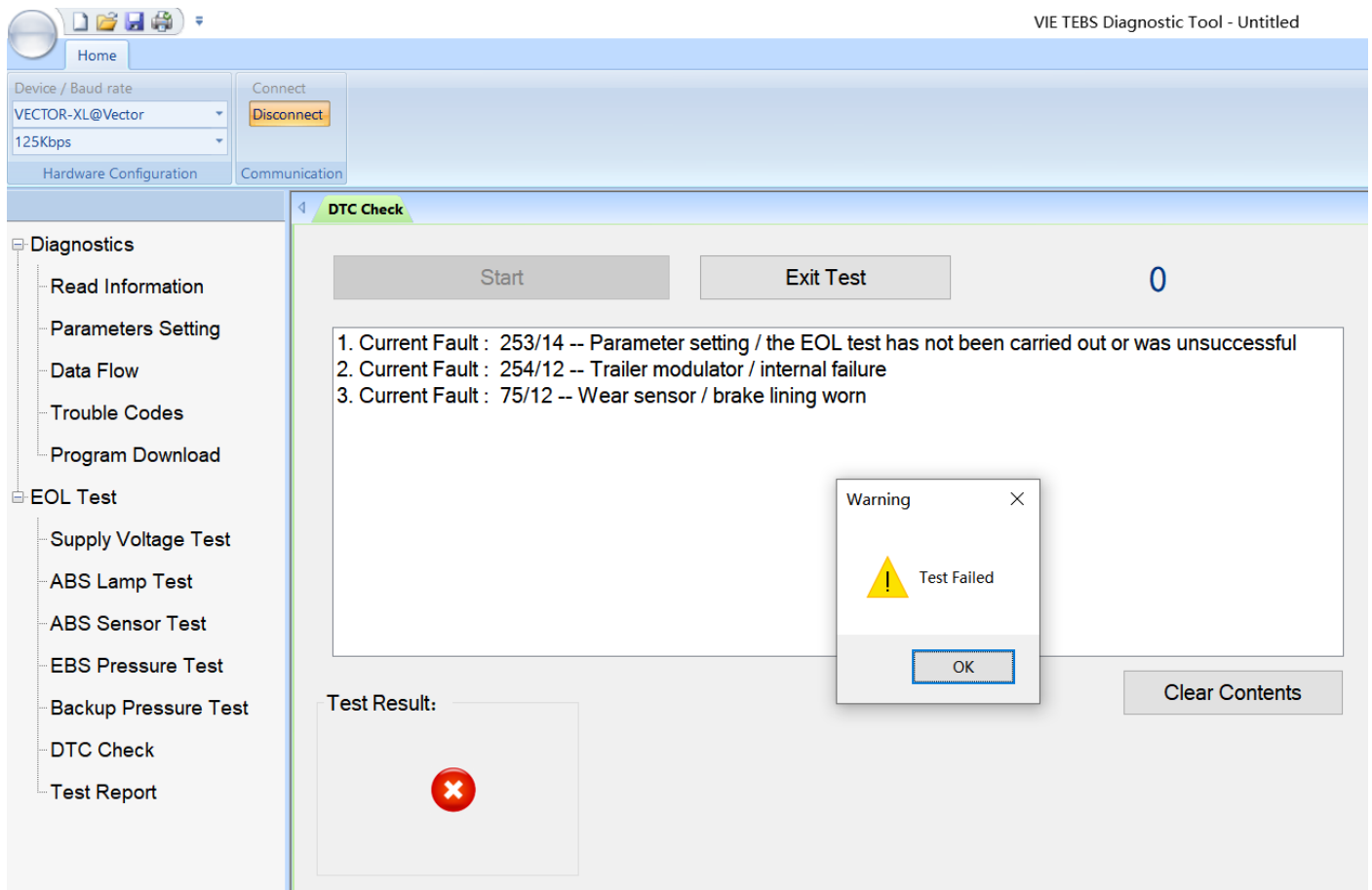
If the calibration only controls LA1, remove the steps of lowering LA2 and raising LA2. There should be a delay of 6 seconds between controlling the lifting axle action and reading the query so that the lifting axle can complete the action.

16. Height sensor calibration



1. When basic calibration parameters → suspension type == mechanical suspension, the off-line detection adds axle load height sensor calibration.
2. Currently only supports calibration of CD bridge height sensor.
3. Currently, calibration is only supported on unloaded vehicles and axle load input is not supported.
4. Calibration allowable range 600–800

17. Fault code detection



Click "Fault Code Detection" in the left navigation bar to display the fault code detection interface. Click "Start Fault Detection" and the system will read the fault code.

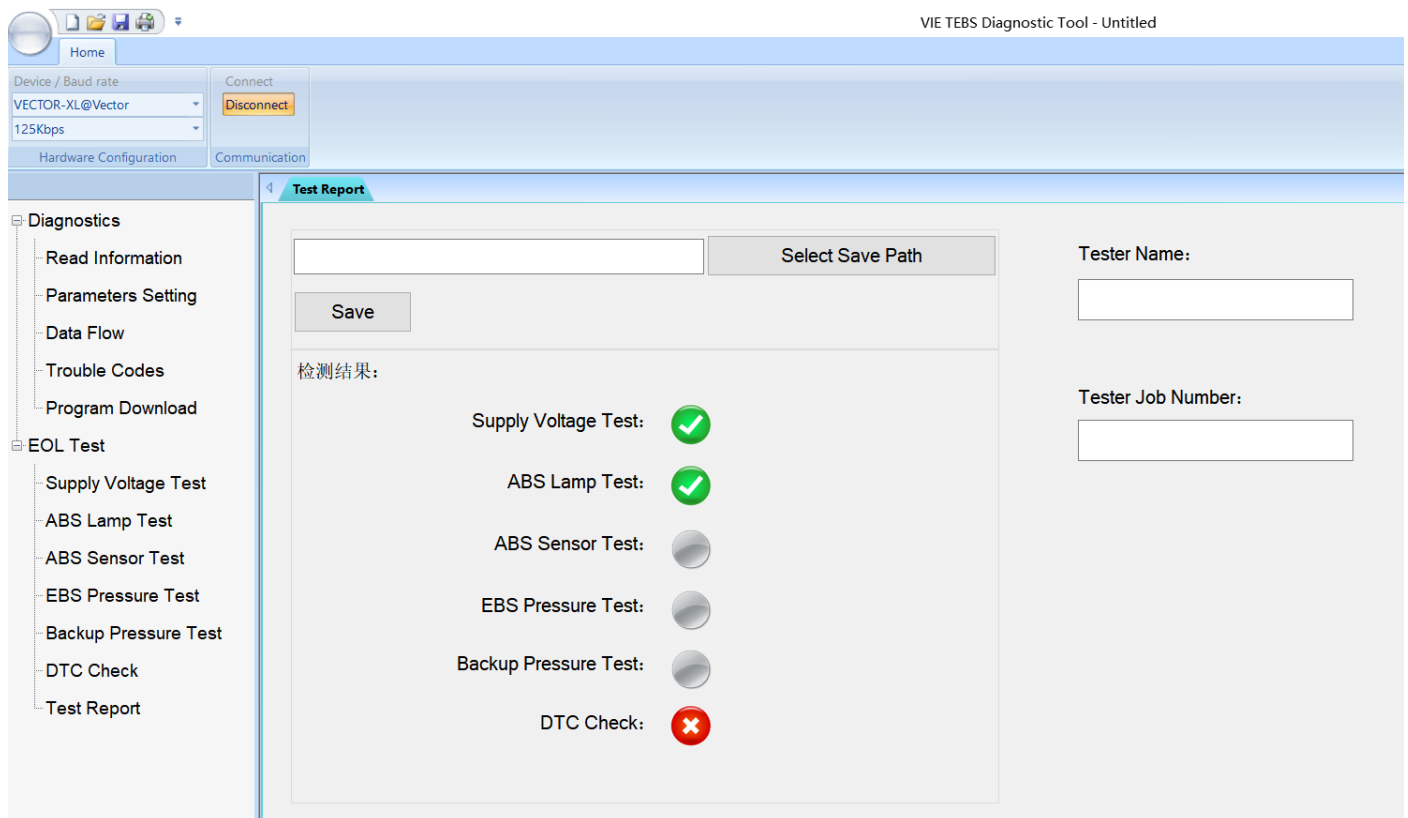
If there are more than two faults, it is directly judged as a fault code detection failure;

If there is one fault but it is not the "offline test failed" fault, it will be directly judged as unqualified;

If there is a fault and the fault code is "offline test not successfully performed", it will determine whether other test items have been completed and qualified. If other tests are not completed, it will prompt to complete other tests before performing fault code detection; if other tests are completed and qualified, the current "offline test not successfully performed" fault will

be cleared, and the fault code detection will be automatically re-performed. If the number of fault codes is 0, the off-line test is completed and the off-line test is passed.

18. EOL test report



Click "Offline Test Report" in the left navigation bar to display the test report saving page. Before saving the test report, you need to select the save path of the test report . **Note: This path currently only supports the combination of Chinese, English and numbers.** After selecting the path, you can fill in the tester's name and work number, and click "Save" to generate the test report.

Appendix 1 : Tips

the software is disconnected or a request prompt with a negative response or other error prompts as shown in the figure below appears during use , you can check whether the connection status has changed to a disconnected state. If it has become a disconnected state , you can click " Connect " to reconnect to the ECU, or you can close the software and reopen it to connect.

