



SAIC GRADE-X



SAIC GRADE-X

Automotive Diagnostic System

USER MANUAL

Version 2.6



Statement

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- This user manual only provides SAIC GRADE-X operating instructions. Bosch will not take any responsibility if this user manual is used to operate on other equipment.
- None SAIC GRADE-X product quality problems: such as user abusing, misusing, unauthorized disassembling, repairing of this equipment, any other operation not following this user manual that leading to this equipment broken will not be in the scope of free maintenance.
- This user manual is for user with professional automotive and service technology.

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SAIC GRADE-X User Manual instructions

- Please read this user manual carefully before using SAIC GRADE-X.
- The current user manual is based on the current features and functions available. Any new added features and functions will be added to the user manual in the future.
- When reading the manual, please pay special attention to the words “Note” and “Warn”. Read them carefully for appropriate operation.

SAIC GRADE-X HARDWARE maintenance

- Avoid shaking or dismantling as it may damage the internal components.
- Do not use hard or sharp objects to touch it; do not use excessive force; do not expose the screen to strong sunlight for a long period.
- Caution: keep it away from water, moisture, high temperature or very low temperature;
- Keep it away from strong magnetic fields.

Operation Instructions

- Keep the scanner away from heat or fumes when using it;
- If the vehicle battery contains acid, Please keep your hands and skin or fire sources away from the battery during test
- Exhaust gas of vehicle contains harmful chemicals, please ensure adequate ventilation.
- Do not touch the cooling system components or exhaust manifolds when engine is running to high temperature;
- Make sure the car is securely parked and the selector is at P or N position to prevent the vehicle from moving when engine starts;
- Make sure the diagnostic link connector is OK before starting the test; otherwise the scanner may be damaged. BOSCH suggests you test the Power/Earth with multi-meter first.
- Do not switch off the power or unplug the connectors during testing, otherwise you may damage the ECU or scanner;

Precautions

- Must be performed according to the above conditions.
- Using SAIC GRADE-X tester, away from heat and moving parts to avoid interference.
When energized electrical components, never disconnect the circuit to prevent the self-inductance, mutual inductance computer and automotive sensors.
- When the electrical work, with non-magnetic objects close to the vehicle control unit with a vehicle control unit may be damaged.
- When dismantling car control unit or electrical components shall be carried out at the ignition switch is turned off after 10 minutes.

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0 SAIC GRADE-X OS Requirement

0.1 GRADE-X not support WinXP any more

GRADE-X will not support WinXP any more because:

- Microsoft will not provide any service and support for WinXP any more
- Diagnostic requirement becomes more and more complexed, GRADE-X need to use latest new technology to meet new diagnostic requirement
- WinXP can't meet the new technical interface but Microsoft will not update WinXP to support this

0.2 GRADE-X supported OS

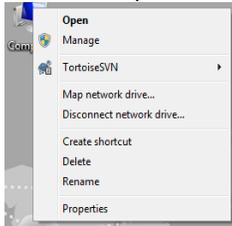
Currently SAIC GRADE-X can run on Win10 and Win7(The performance in Win10 is better than Win7).
The OS supported may change because of Microsoft's strategy.

0.3 How to get OS Version(Take WinXP as an example)

Step 1: Right click "My Computer" on the desktop



Step 2: Choose "Properties"



Step 3: You can get the OS version from the screen

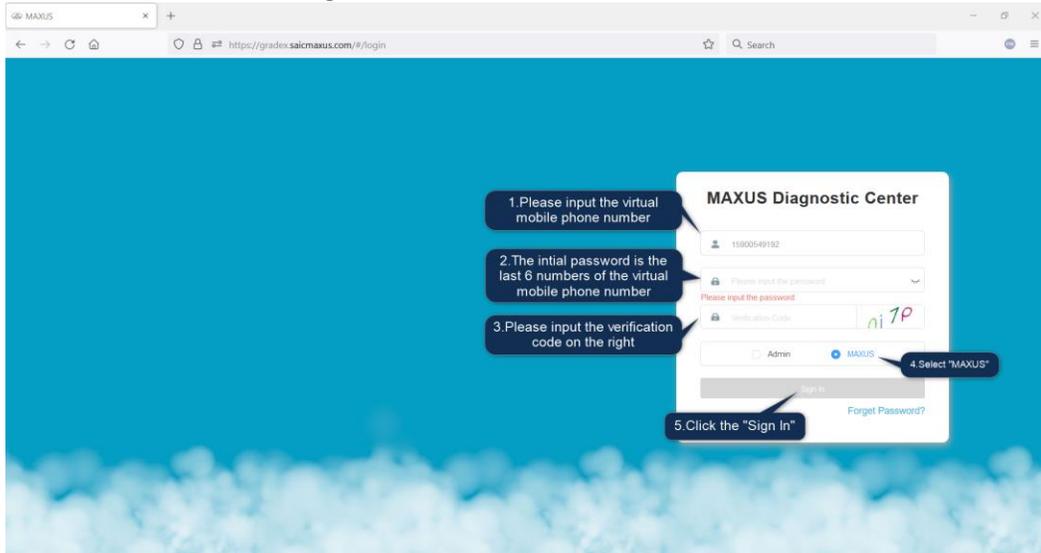
Step 4: You will see the next Screen if your OS is WinXP.



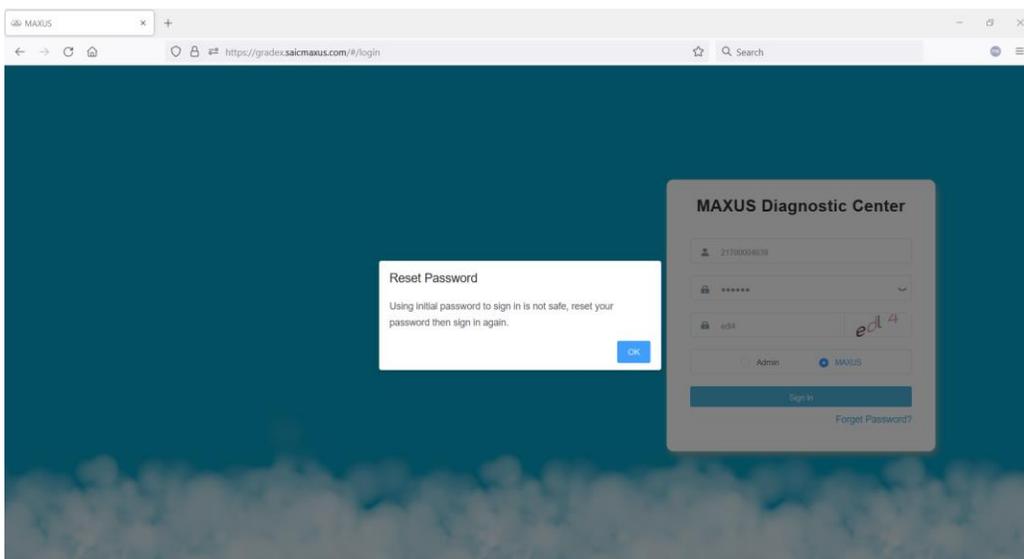
1. Software Download and Installation

Download Steps:

- 1) Please use Firefox, Edge browsers to visit the website <https://gradex.saicmaxus.com/> and log in the backend of the after-sales diagnostic server.



When the user log in the diagnostic backend server with the initial password for the first time, the user will be prompted to reset the password.



Reset password

The screenshot shows a web browser window with the URL <https://gradex.saicmaxus.com/#/login>. The page title is "Reset password". The main content is a "Reset Password" form with the following fields and instructions:

- Field 1: ID (2170004639)
- Field 2: Password (masked with asterisks)
- Field 3: New Password (with a dropdown menu showing "New Password, 8 characters (0-9A-Z!@#%&*~) - min 8 lowercase" and a "Please input" error message)
- Field 4: Confirm Password (with a dropdown menu)
- Field 5: Verification Code (629)
- Buttons: "Reset Password" and "Back to Sign In"

Four callout boxes provide instructions:

1. Please input the new password here. The new password must contain: special characters, numbers, uppercase letters and lowercase letters. New password length must be no less than 8 characters.
2. Please input the new password here again.
3. Please input the verification code on the right.
4. Please click the button "Reset Password".

After filling in the reset password information, click the "OK" button below to take effect.

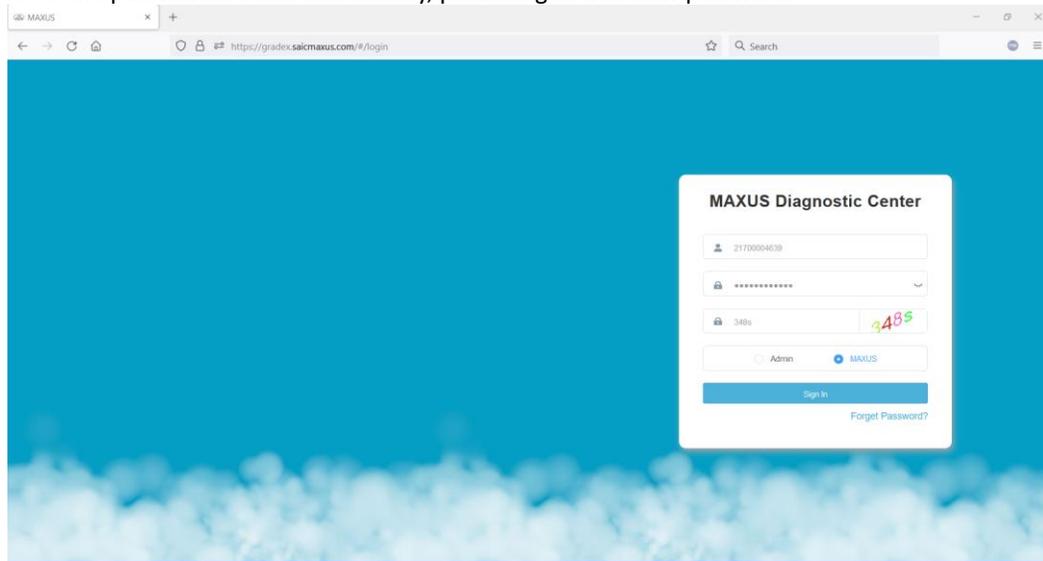
The screenshot shows the same "Reset Password" form as above, but with a "Confirm" dialog box overlaid. The dialog box contains the following text:

Confirm
Are you sure about this operation?

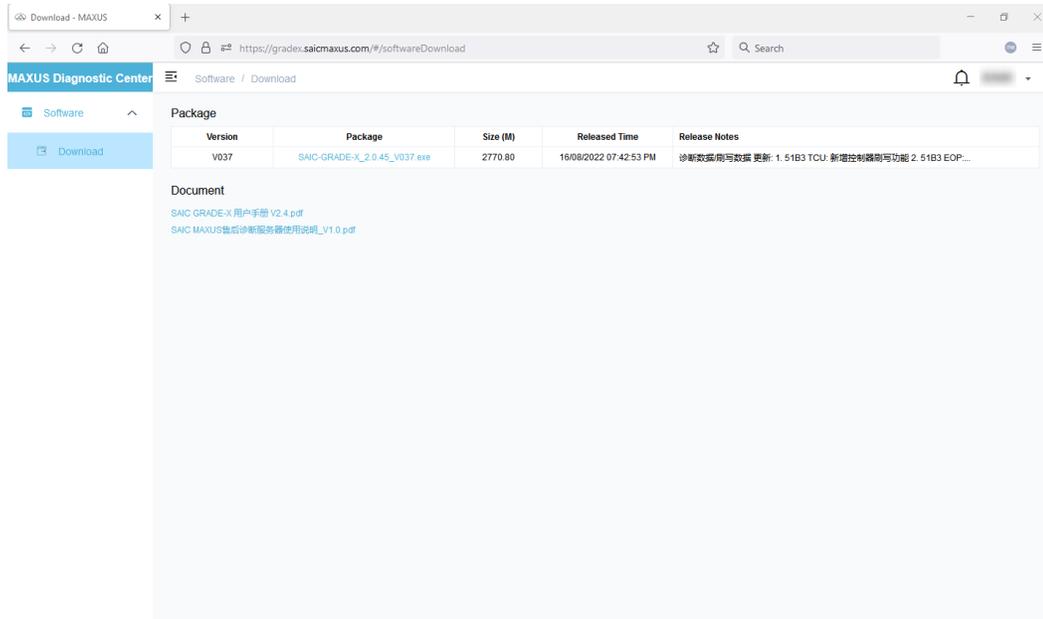
Buttons: "Cancel" and "OK"

The form fields are dimmed in the background. The verification code field now shows "629" and the "Reset Password" button is highlighted in blue.

After the password is reset successfully, please log in with new password



- 2) After the after-sales diagnostic backend logged in successfully, click the “Software” – “Download” button in the left menu bar to download the latest diagnostic software package as required.

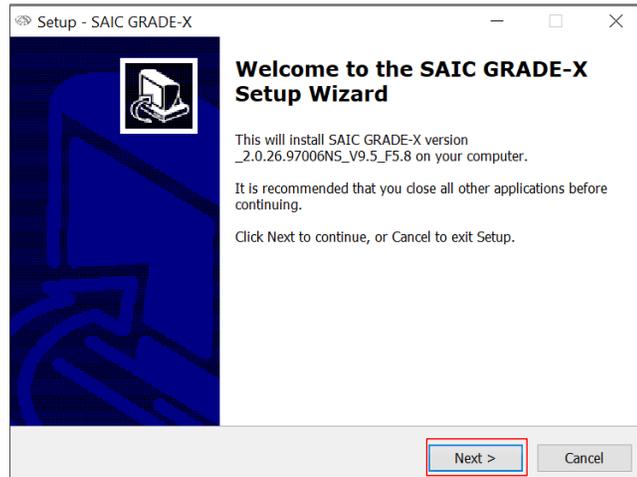


Installation Steps:

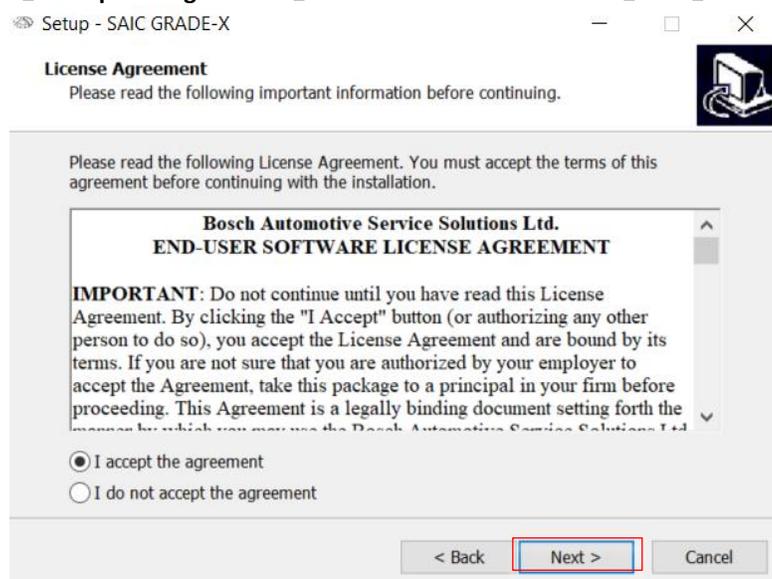
- 1) Get the latest installation package from the following site.

<https://gradex.saicmaxus.com>

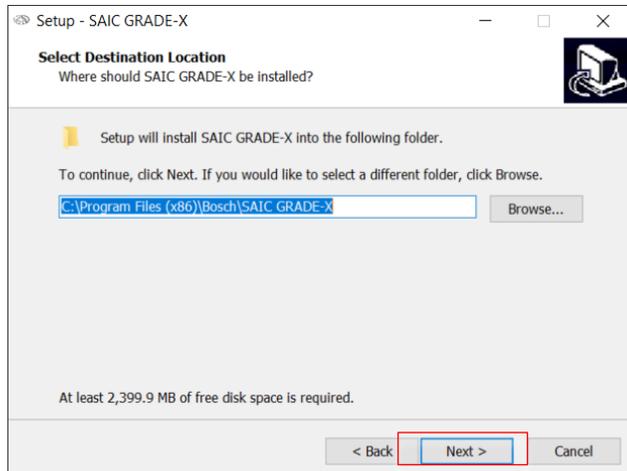
- 2) Double click downloaded SAIC GRADE-X package in the previous step and click **【Next】** . Shown as below:



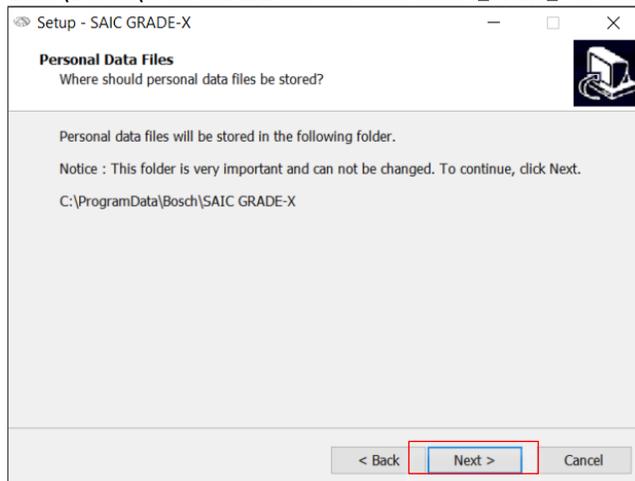
- 3) In SAIC GRADE-X installation page, please read license agreement carefully, and you need to click **【I accept the agreement】** to continue. And then click **【Next】** to continue. Shown as below:



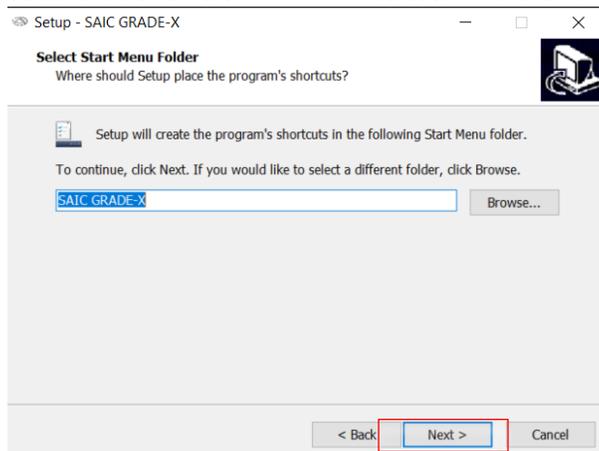
- 4) In the SAIC GRADE-X installation path page, click Browse to choose the path to install SAIC-GRADE-X. Or else the default path will be used. For Win7 the default path is C:\Program Files X86\Bosch\SAIC GRADE-X. And then click **【Next】** to continue. Shown as below:



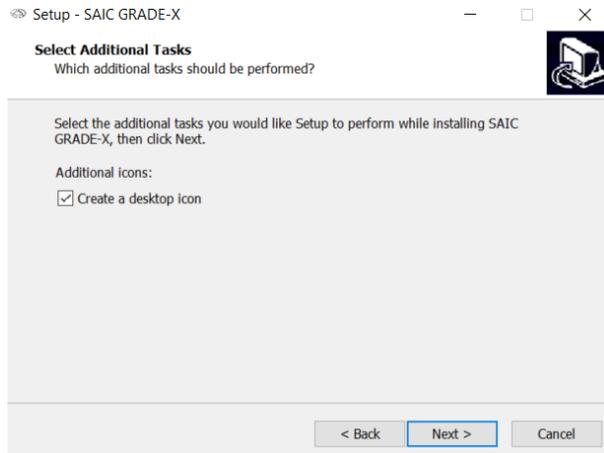
- 5) In the SAIC GRADE-X data path page, click Browse to choose the path to install the data. Or else the data will be installed into the default path. For Win7 the default path is C:\Program Data\Bosch\SAIC GRADE-X. And then click **【Next】** to continue. Shown as below:



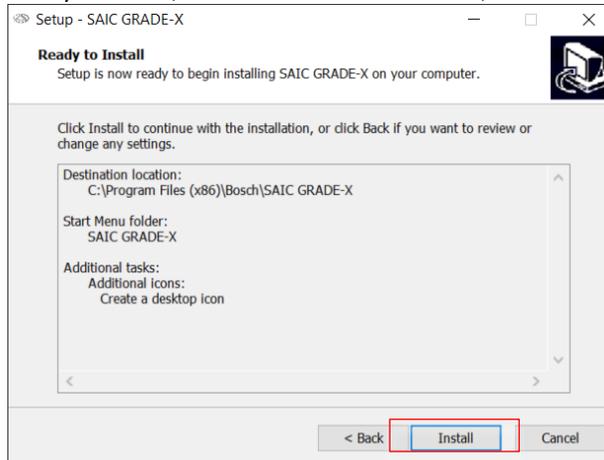
- 6) Choose where to put this in the start menu. You can change the menu name manually. Or else the default value "SAIC GRADE-X" will be used. And then click **【Next】** to continue. Shown as below:



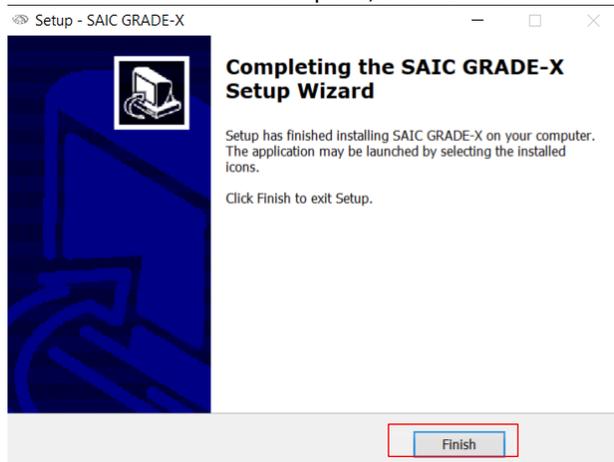
- 7) Select the additional tasks and click **【Next】** to continue, shown as below:



8) Ready to install, click **【Install】** to continue, shown as below:



9) When the installation is complete, click **【Finish】** to exit

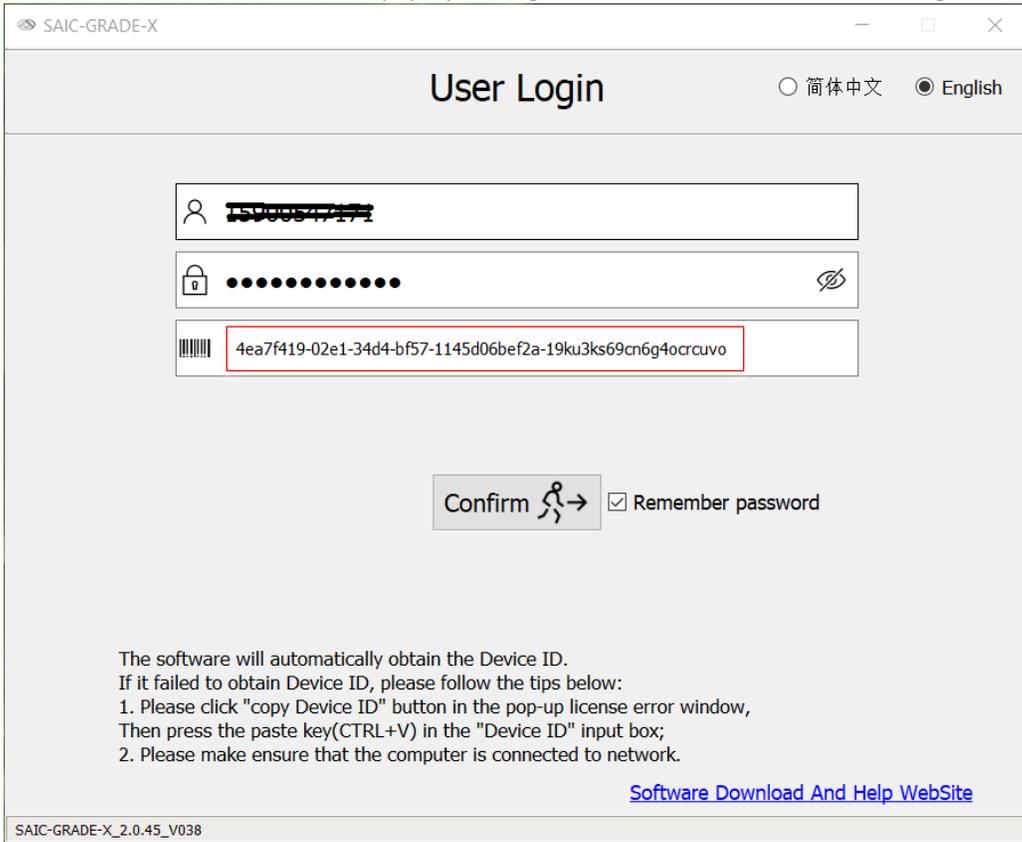


2. Software Activation

Please register SAIC GRADE-X software following the steps below.

- 1) Make sure the computer connected to the Internet network correctly and normally.

- 2) Start SAIC GRADE-X , it will pop-up the login interface. as shown in the below figure.



SAIC-GRADE-X

User Login

○ 简体中文 ● English

15900847171

.....

4ea7f419-02e1-34d4-bf57-1145d06bef2a-19ku3ks69cn6g4ocruvo

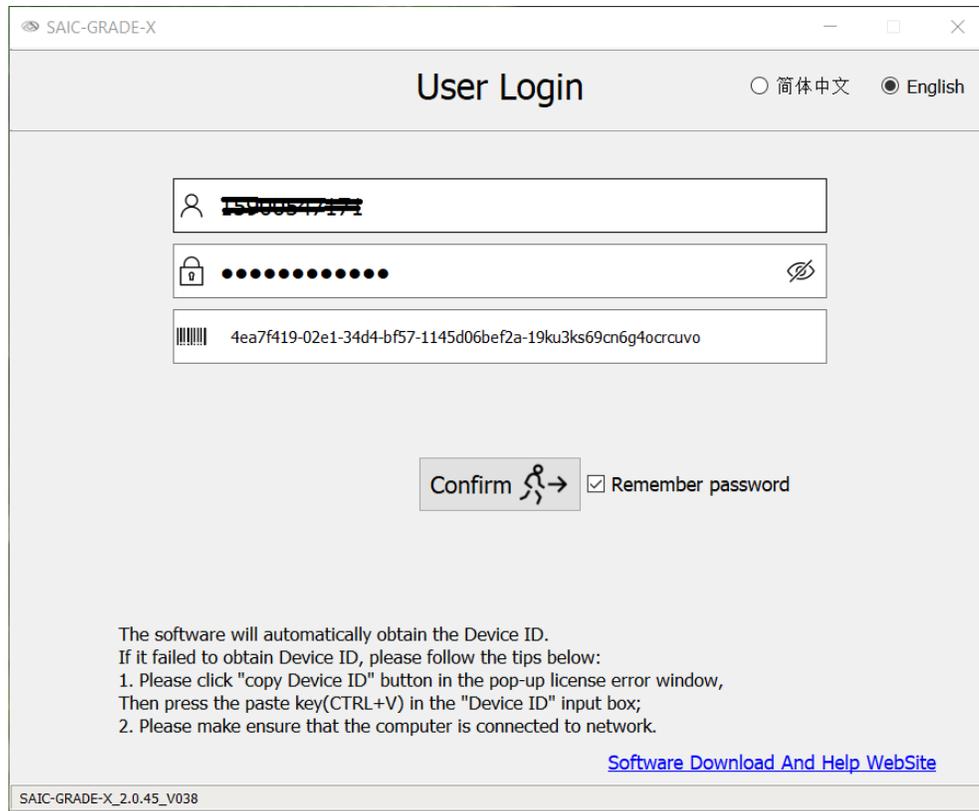
Confirm → Remember password

The software will automatically obtain the Device ID.
If it failed to obtain Device ID, please follow the tips below:
1. Please click "copy Device ID" button in the pop-up license error window,
Then press the paste key(CTRL+V) in the "Device ID" input box;
2. Please make ensure that the computer is connected to network.

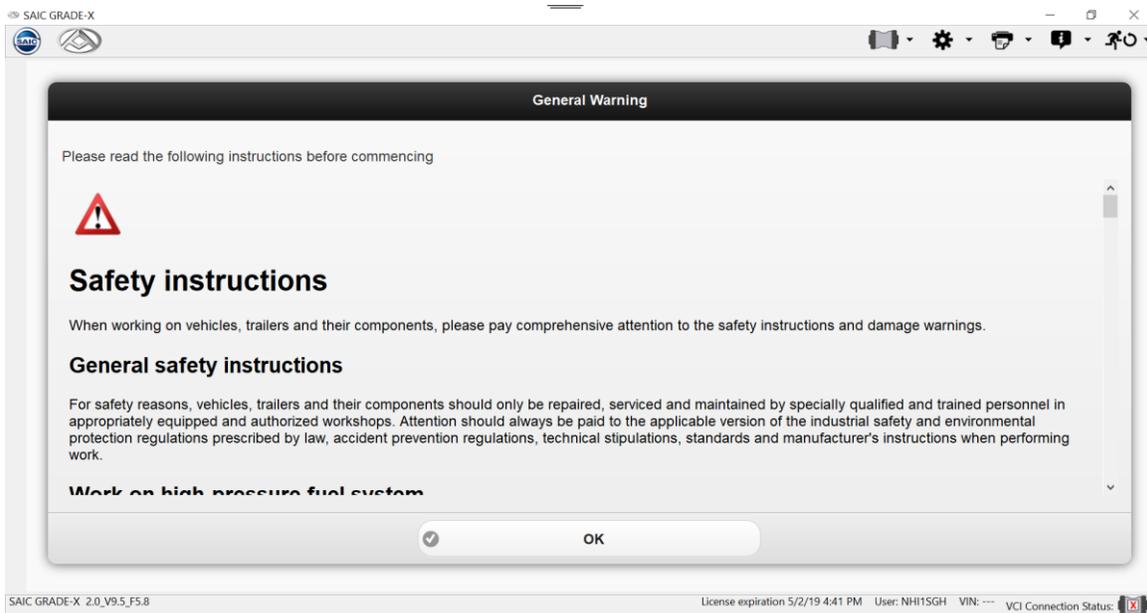
[Software Download And Help WebSite](#)

SAIC-GRADE-X_2.0.45_V038

- 3) After input the correct account and password on the user login interface(the account and password input here are same with account & password information that used in backend server website, Please refer to Chapter 1 Software Download for the acquisition method), click the confirm button. Then the Grade-X software will be started and at same time the hardware information of the diagnostic computer (information in the red box in the below figure) will be uploaded to the backend server for automatic activation.



- 4) After activation successfully, you will see the diagnostic software home page, shown as below



- 5) Network offline scenarios can be supported in Grade-X diagnostic client, the client can be used continuously for up to 7 days;
The diagnostic client will force the user to connect his computer to Internet and log in again if this user disconnects form the network and use this diagnostic computer for more than 7 consecutive days;



No matter whether the diagnostic computer is online or not, the user account and password must be entered every three days before the diagnostic software is used.

Note:

Because different dealers in one general agent share one same username and password, the HW id must be collected from dealers and recorded by general agent manually in order to identify the relationship between HW id with dealer.

After the user changes the computer, the original diagnostic computer will occupy a license. Please properly save the computer hardware information of the original diagnostic computer and provide it to the General Agent or Maxus administrator for invalidation

User information is managed by the MAXUS administrator, if any questions or encounter problems, please contact MAXUS administrator.

Maxus administrator E-mail address: liuxiaoyu@dynawin.net

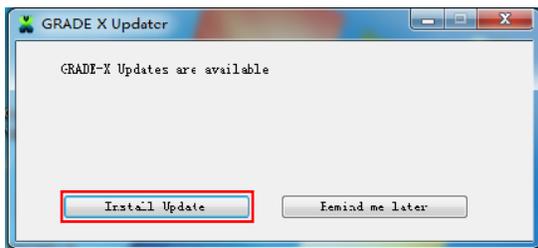
3. Software Upgrade

Note: Software update notice can only be available after SAIC GRADE-X is registered successfully.

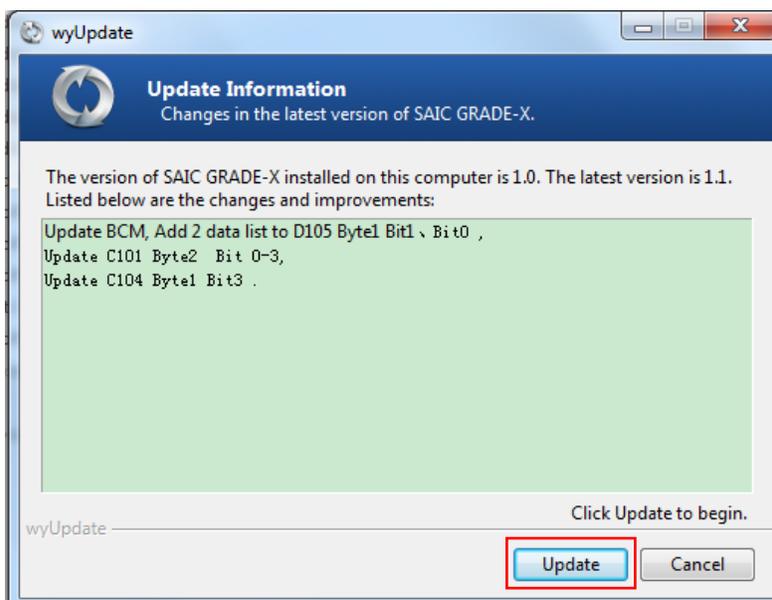
1) When your computer is connected to internet, if your computer is not installed the latest version of the software, you will automatically receive software updates notice, as shown below:



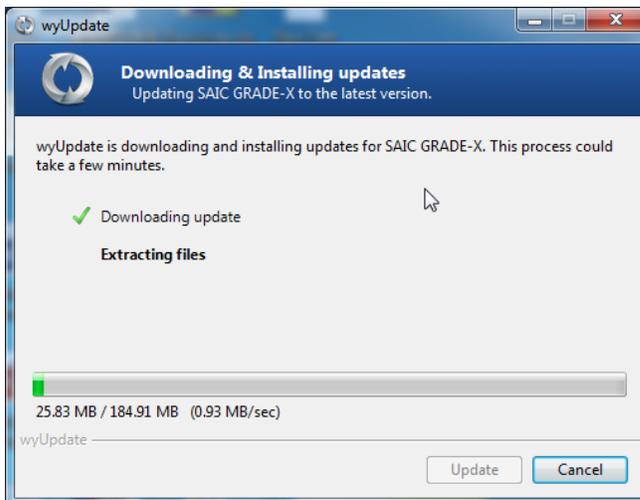
2) Click on the icon then the following page will appear. Click **【Install Update】** to start the upgrade. As shown below:



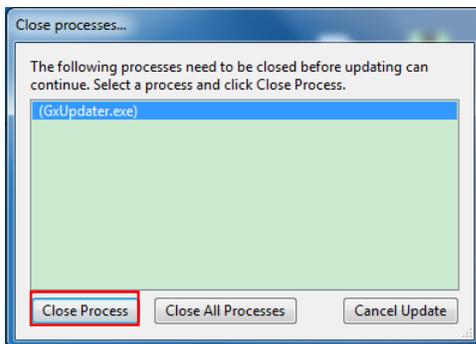
3) SAIC GRADE-X Update information, you will get the upgraded content from this page. And then click **【update】** to get the latest software, as shown below:



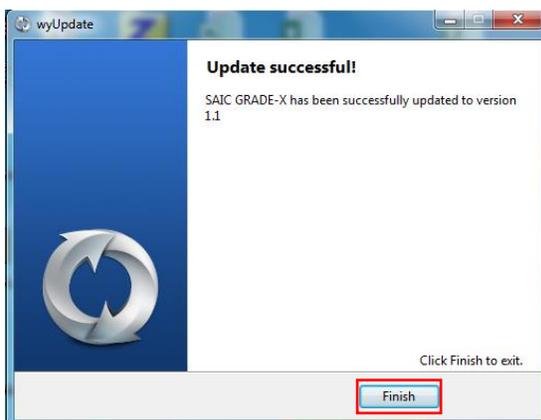
4) Updating, as shown below:



5) If SAIC GRADE-X is running on your computer, you will be asked to close the software and then update, as shown below:



6) When update is complete, click **Finish** to exit, as shown below:



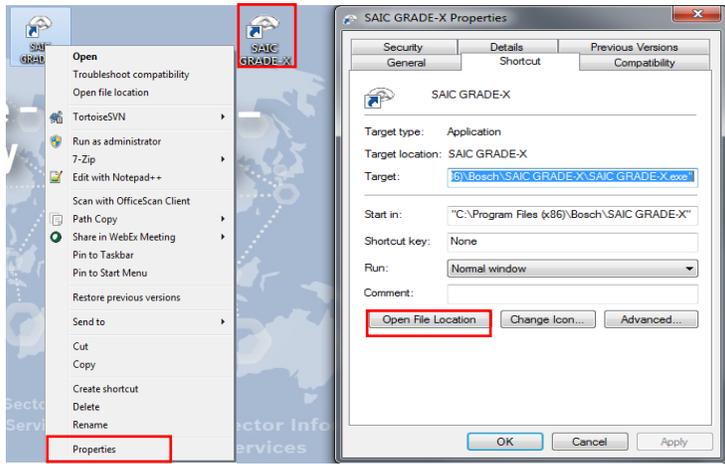
7) Start SAIC GRADE-X Diagnostic and check whether the version of the software has been updated.

8) Manually start update software

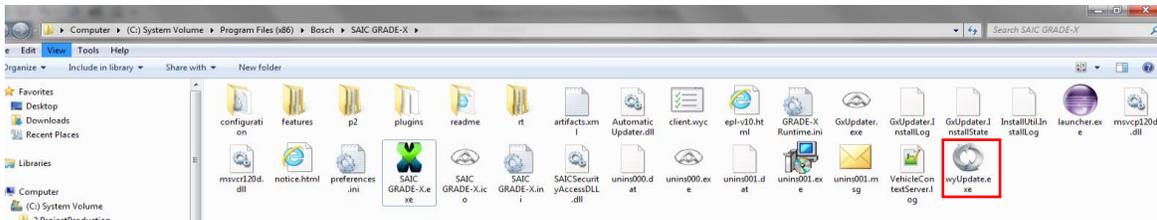
If you have not received update information for a long time, then you can manually open the program,

Steps:

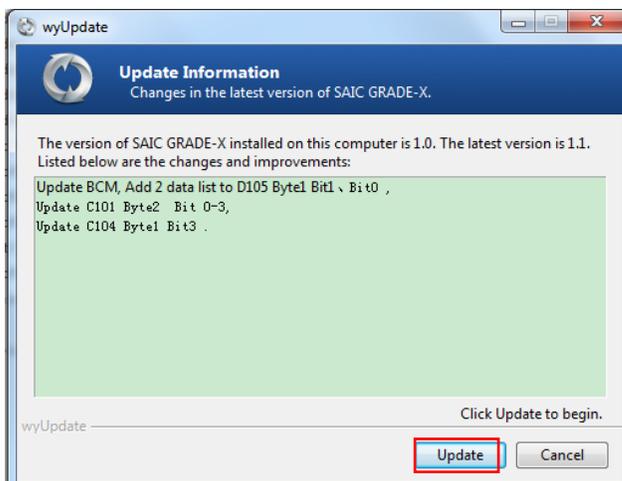
- (1) Open SAIC GRADE-X installation path, you can right-click the SAIC GRADE-X icon on the desktop, click open file location in properties, as shown below:



- (2) start wyUpdate.exe update software, as shown below:



- (3) SAIC GRADE-X Update information, you will get the upgraded content from this page. And then click **update** to get the latest software, as shown below:





4. VCI Connector

- ① Confirm whether the diagnosis seat and shape is good.
- ② Open the PC wireless.
- ③ Select the appropriate connector according to the shape of the vehicle and the diagnostic socket.
- ④ Master test cord to connect the host and tighten.
- ⑤ Diagnostic test line will connect the main connector into the diagnostic socket of the vehicle.
- ⑥ Check whether VCI power indicator is on. If the power indicator light is off, please make sure the car seat is powered or not.
- ⑦ When VCI power indicator is on, VCI connected successfully.

5. UI Description

5.1 Startup interface

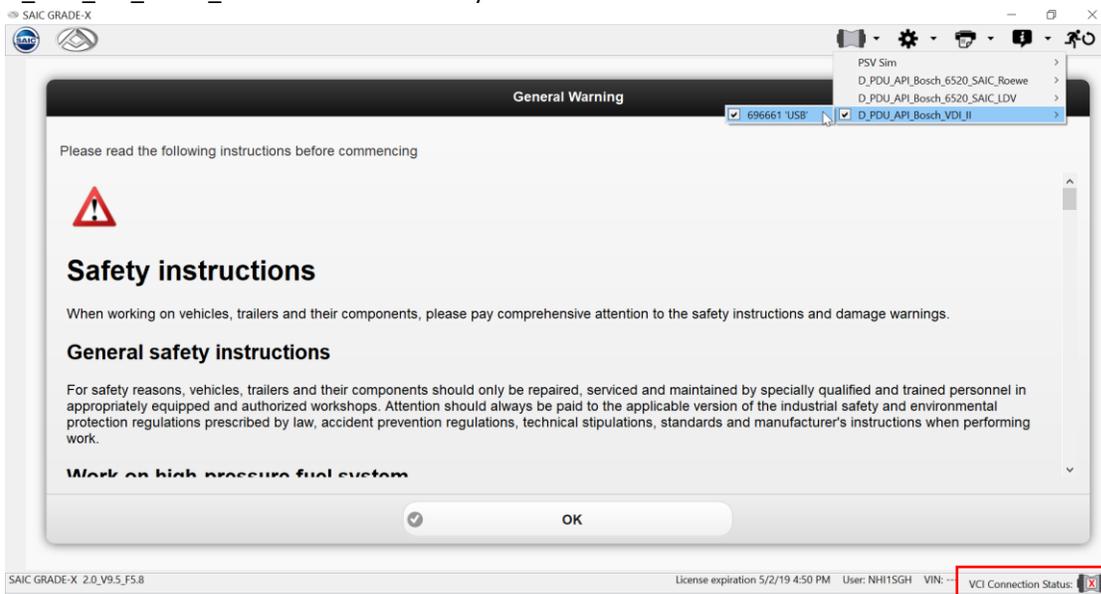
When start SAIC GRADE-X diagnostics software the first page is as below; and also the process bar is added.



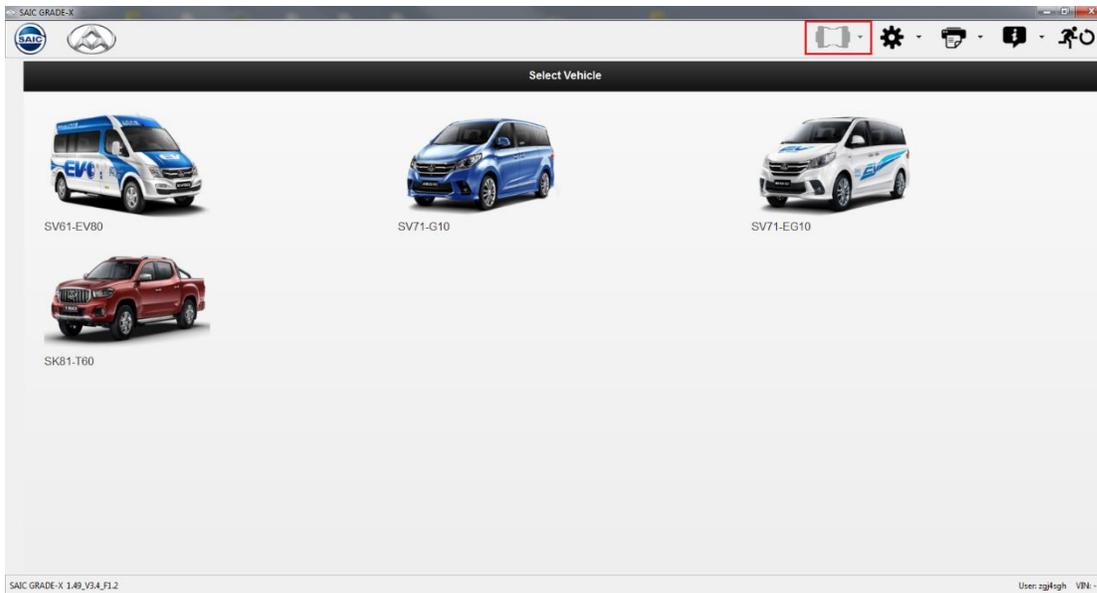
5.2 System Settings

5.2.1 VCI settings

1) User select the appropriate VCI host connection. For SAIC GRADE-X please select D_PDU_API_Bosch_6520-SAIC-LDV currently. VCI Connection status is added.

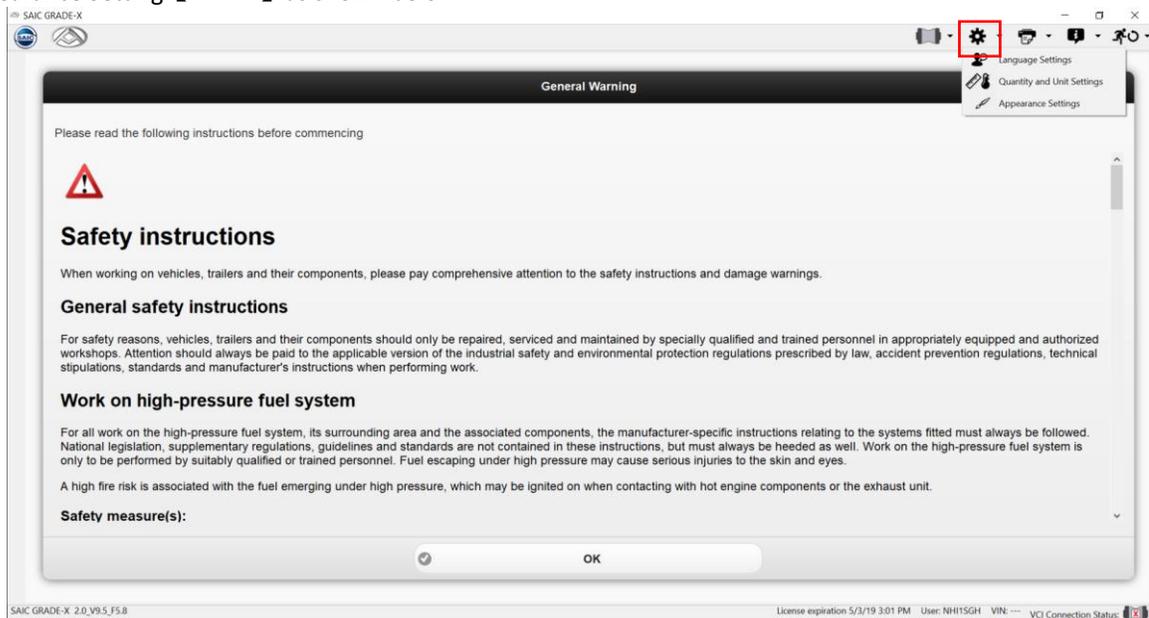


2) If the VCI button is grey, please install VCI Manager or CVDS, as shown below;

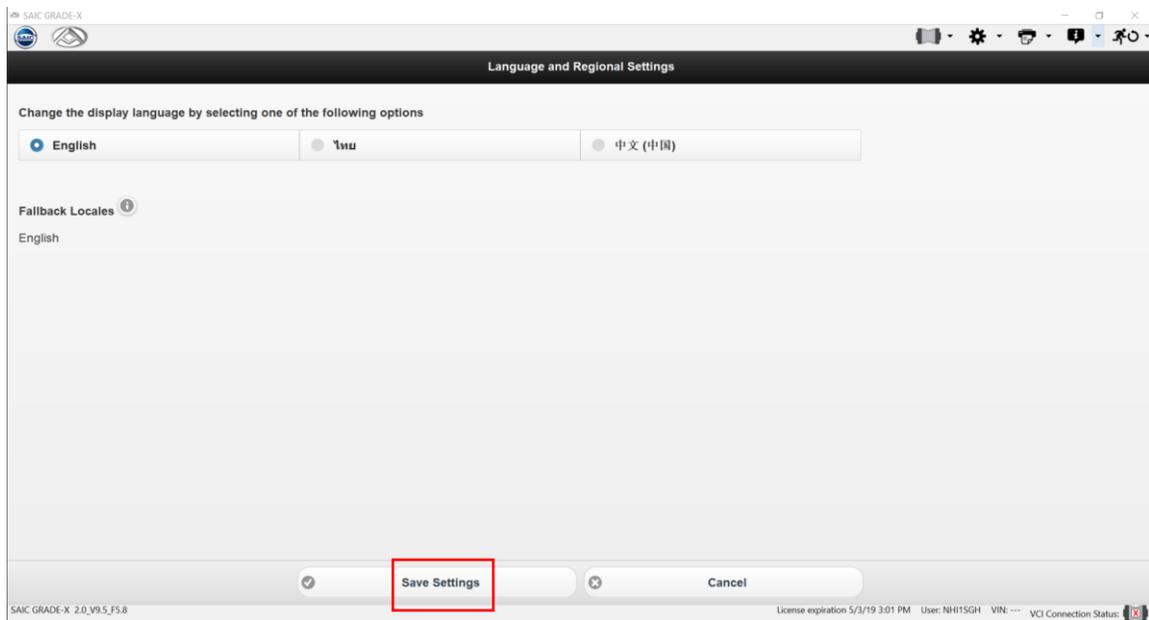


5.2.2 【 Settings

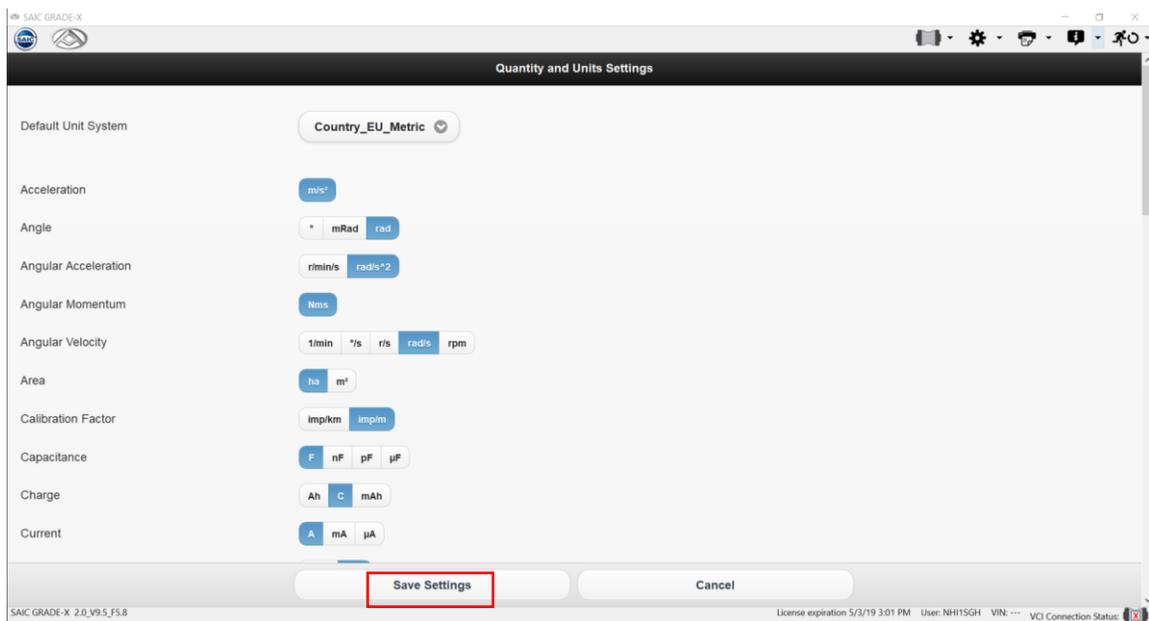
1) Click the Settings button, the user can change the language 【  】 and unit 【  】 and Appearance Setting 【  】 as shown below:



2) Click on the language settings, select the language you want, click 【 **Save Settings** 】 to save the setting, as shown below;

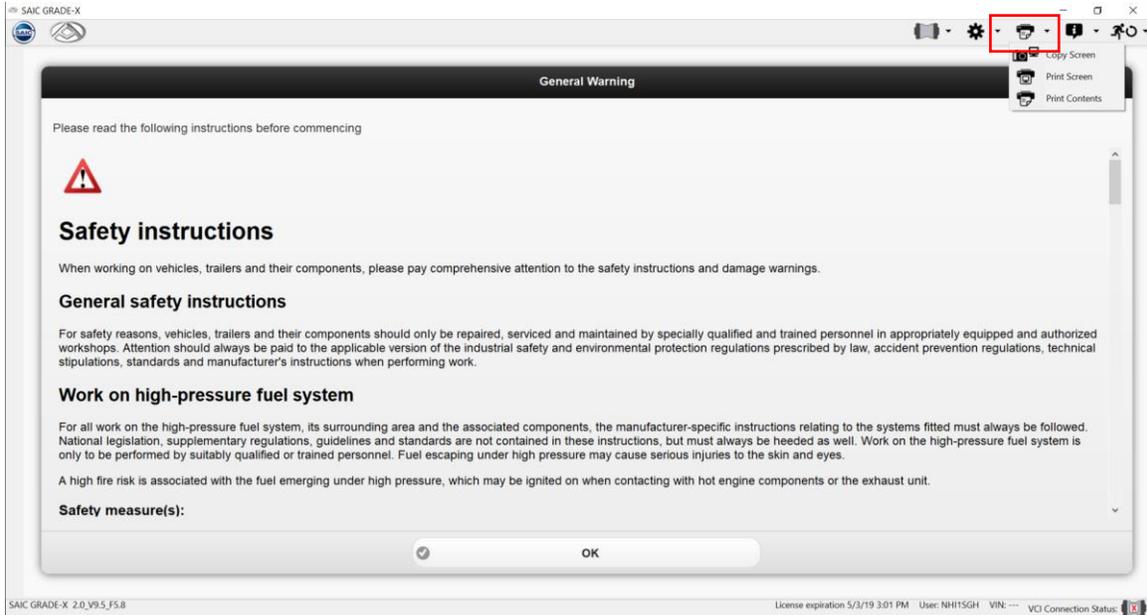


3) Click quantity and unit settings , Select the unit you want, click **Save Settings** to finish.



5.2.3 Print Content

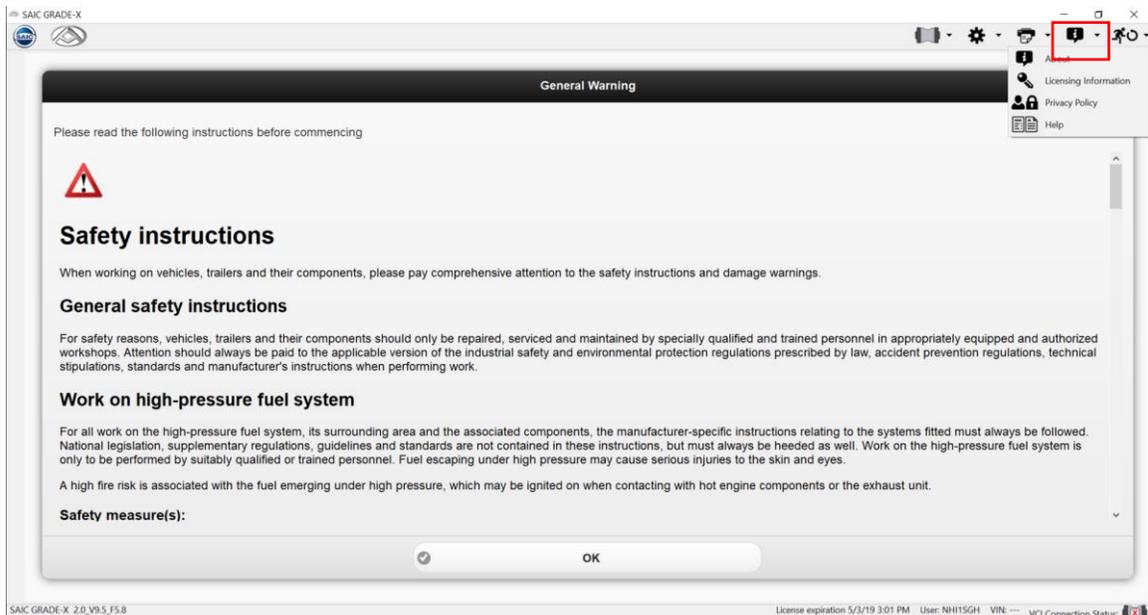
Click to print, you can copy the screen , print screen , print content , as show below:



- Copy screen : You can copy the whole screen to the Clipboard
- Print screen : The screen can be Print directly.
- Print content : print data

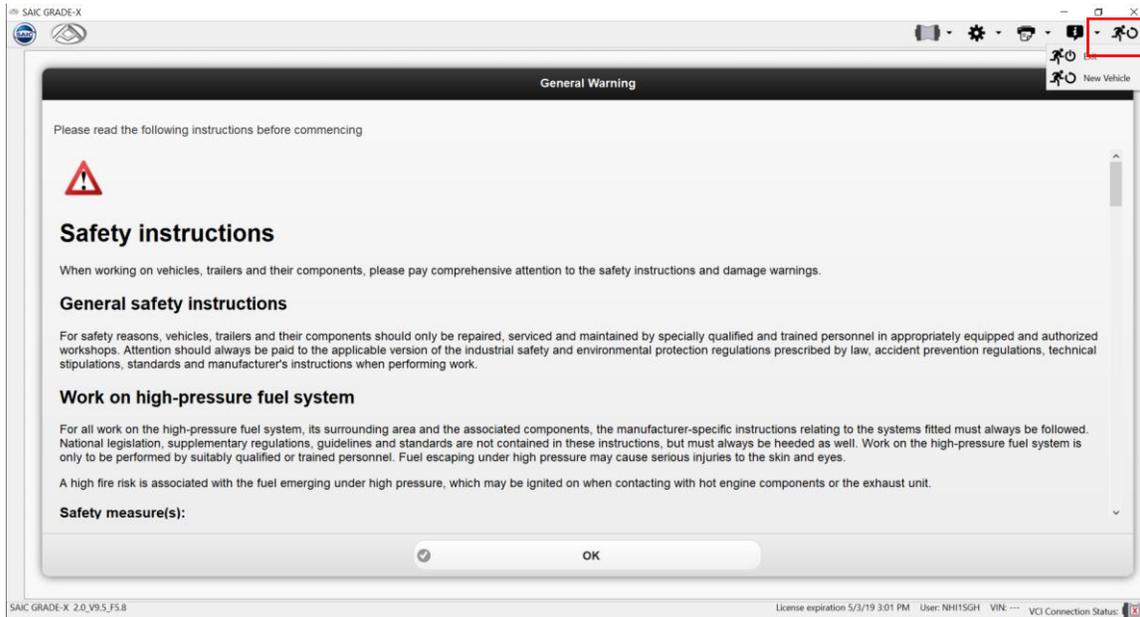
5.2.4 About

Click  about, you could see version , license , privacy policy  and user manual , as shown below:



5.2.5  Exit

You can click  exit the system, you can click  New Vehicle back to main page/exit SAIC GRADE-X  Exit, as shown below:

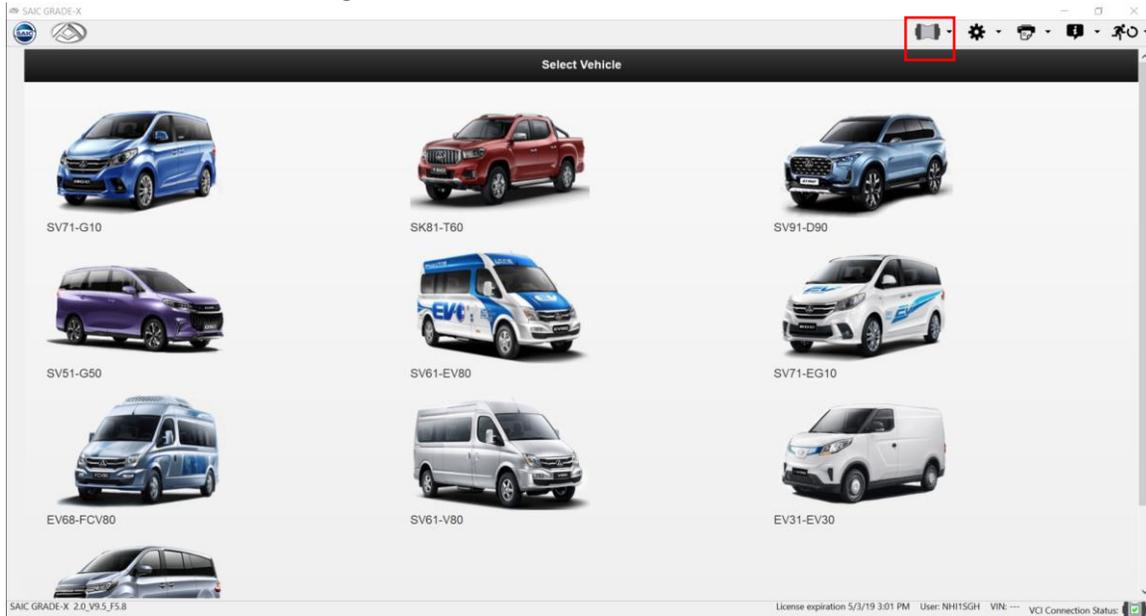


6. Test Steps

NOTE: The test process is based on EG10 as an example. Please refer to this for other vehicles.

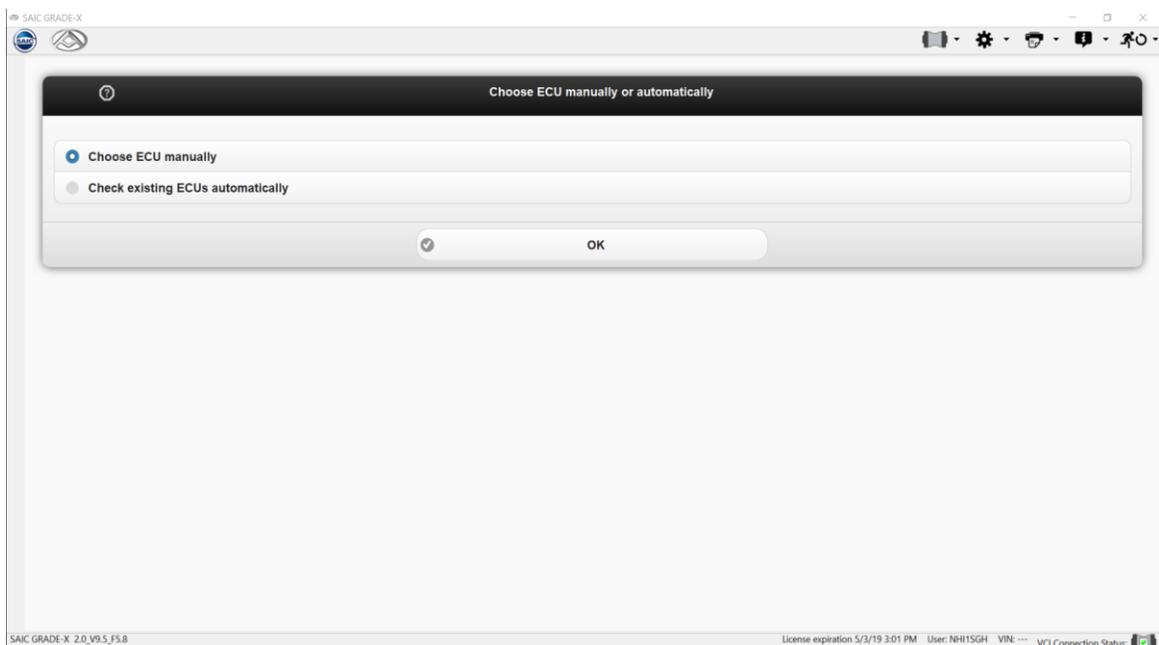
6.1 Vehicle Selection

You can choose the vehicle image to test, as shown below;



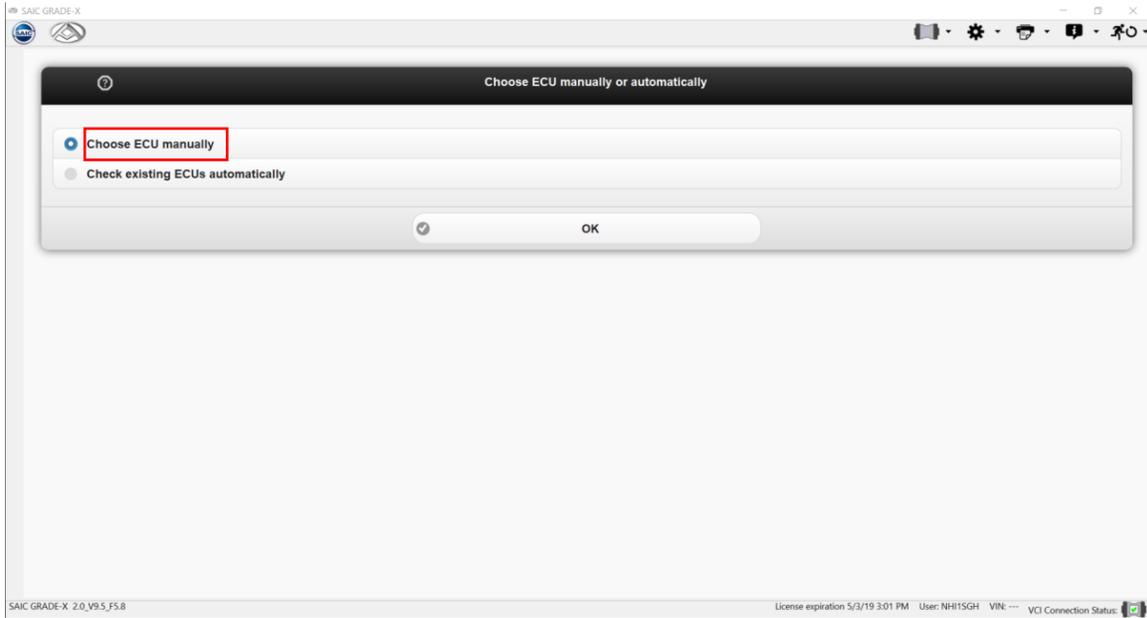
6.2 Choose ECUs manually or check ECUs automatically

You can select to choose ECUs manually or check ECUs automatically. Please choose **【Choose ECU manually】** or **【Check existing ECUs automatically】**, as shown below:

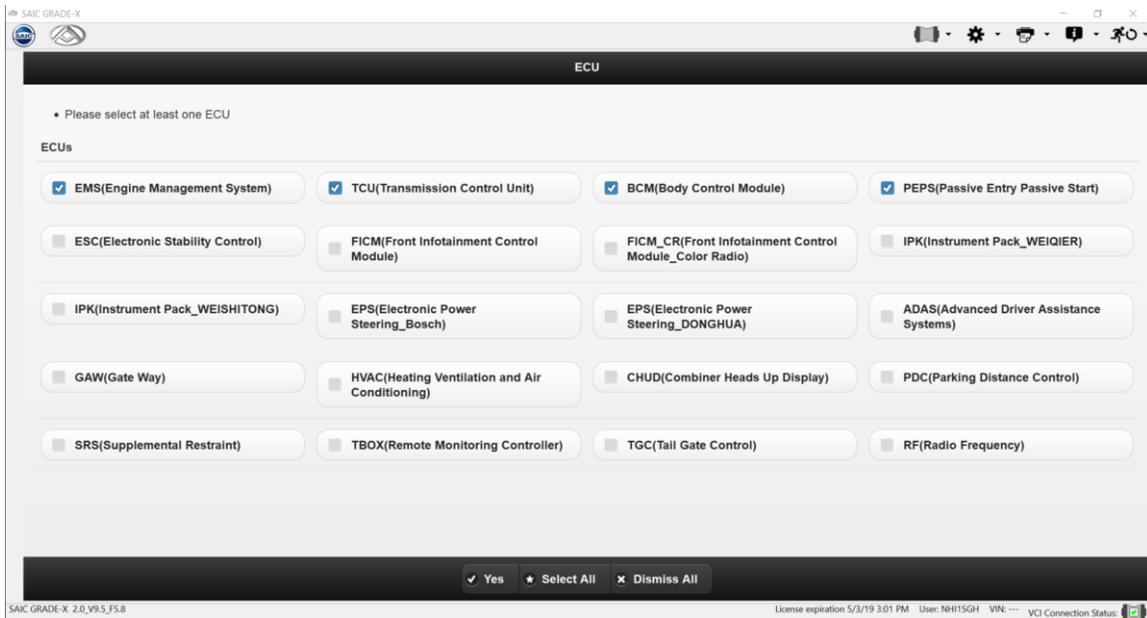


6.2.1 Choose ECU manually

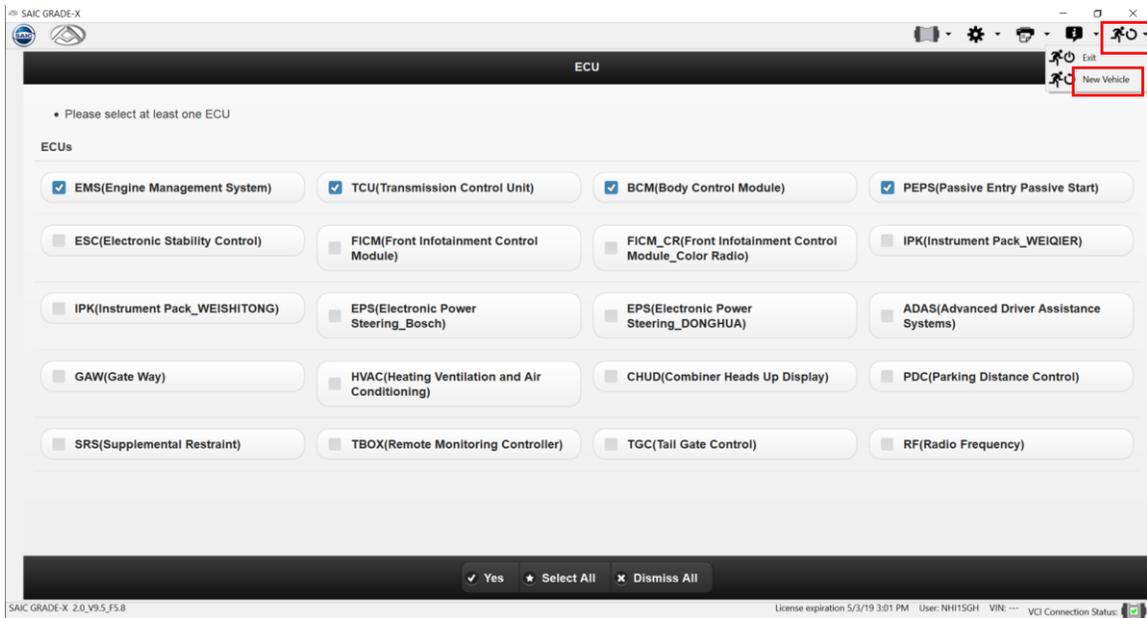
1) Choose **【Choose ECU manually】** click **【OK】**, as shown below:



2) The ECUs selection page will list all the ECUs for the current vehicle. You can choose the ECUs you want to diagnostic or **【Select All】** to diagnostic all ECUs, and then please click **【OK】** to enter diagnose interface, as shown below:

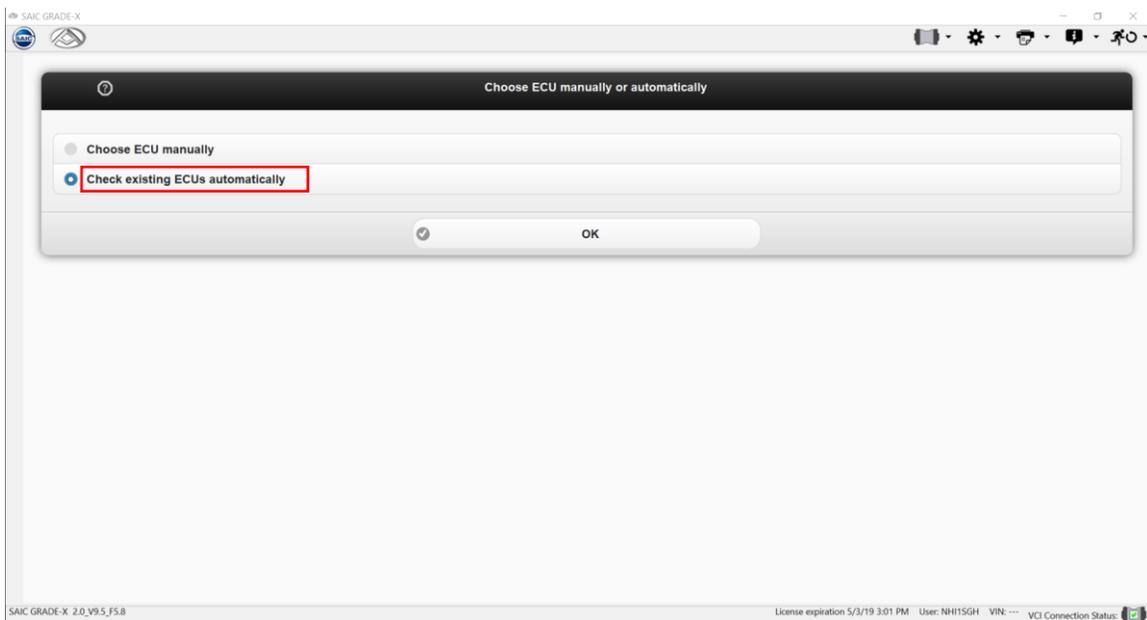


NOTE: After this only the selected ECUs can be diagnostic. You need to click **【 New Vehicle】** to diagnostic other ECUs, as shown below:

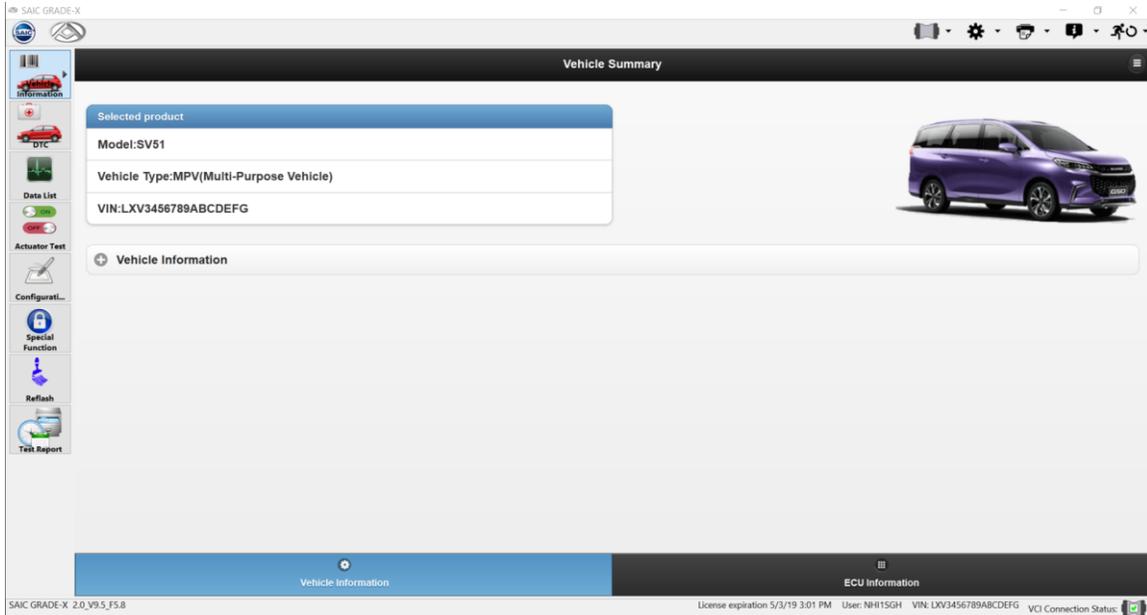


6.2.2 Automatically checks the connected ECU

1) Choose **【Check existing ECUs automatically】** to check the existing ECUs automatically, as shown below:



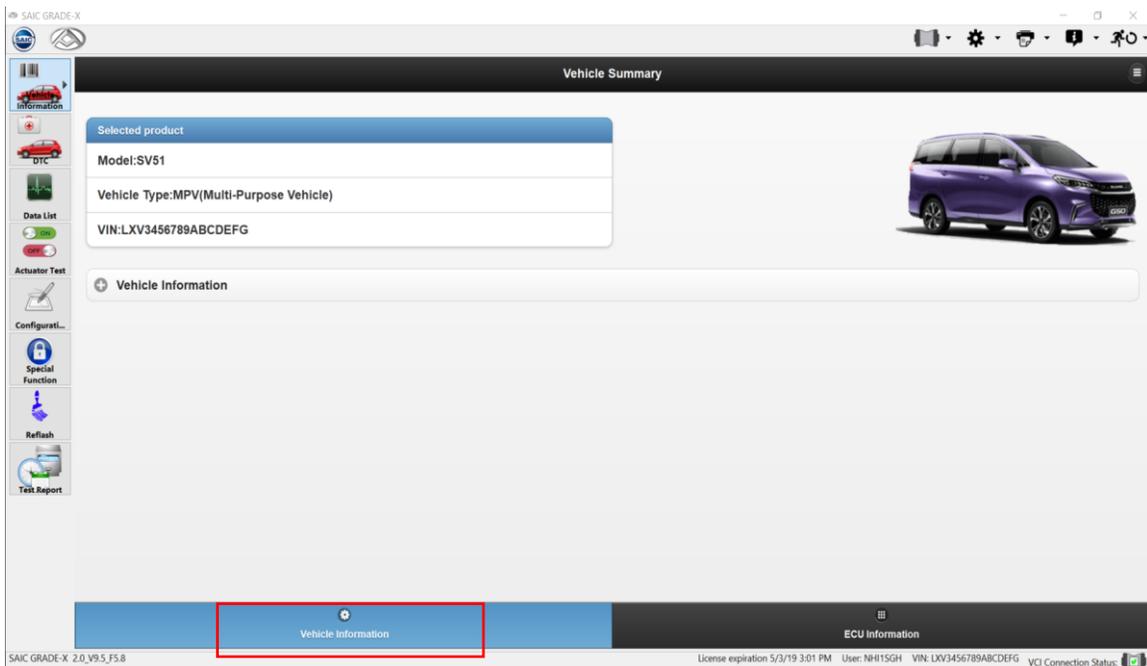
2) The system will go into the main diagnostic page directly after finishing checking existing ECUs, as shown below:



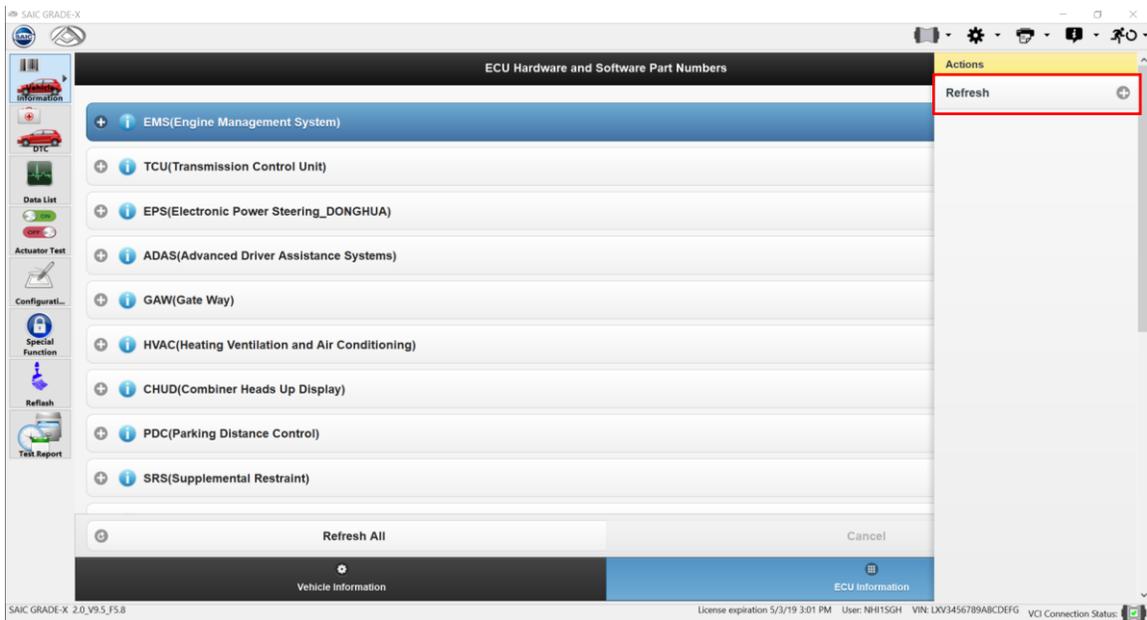
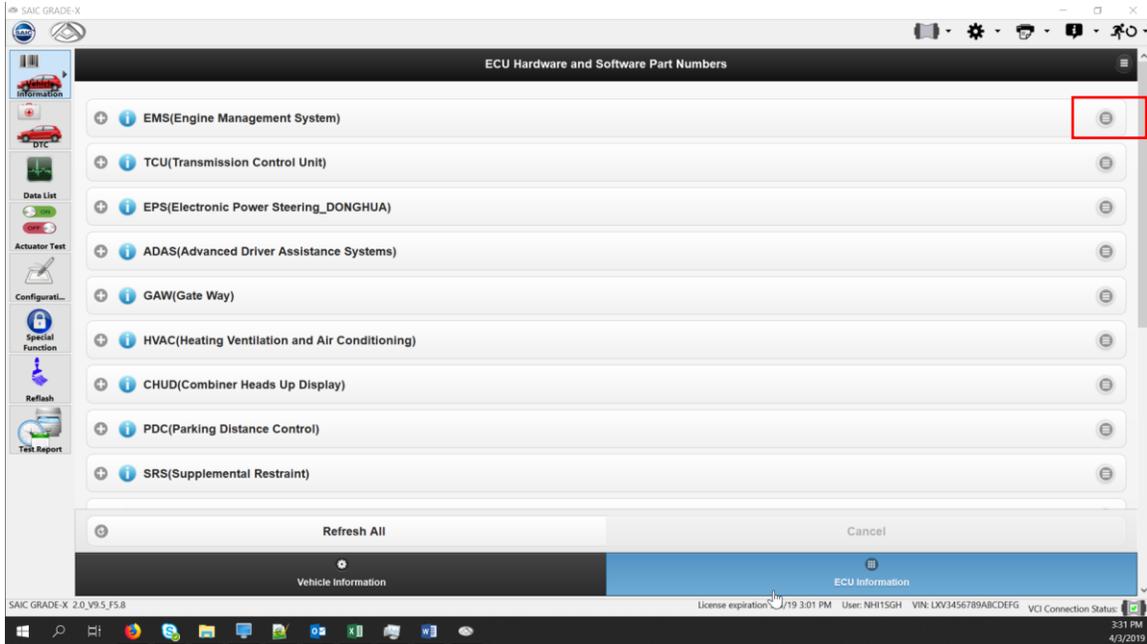
6.3 Vehicle Information

6.3.1 Vehicle Information

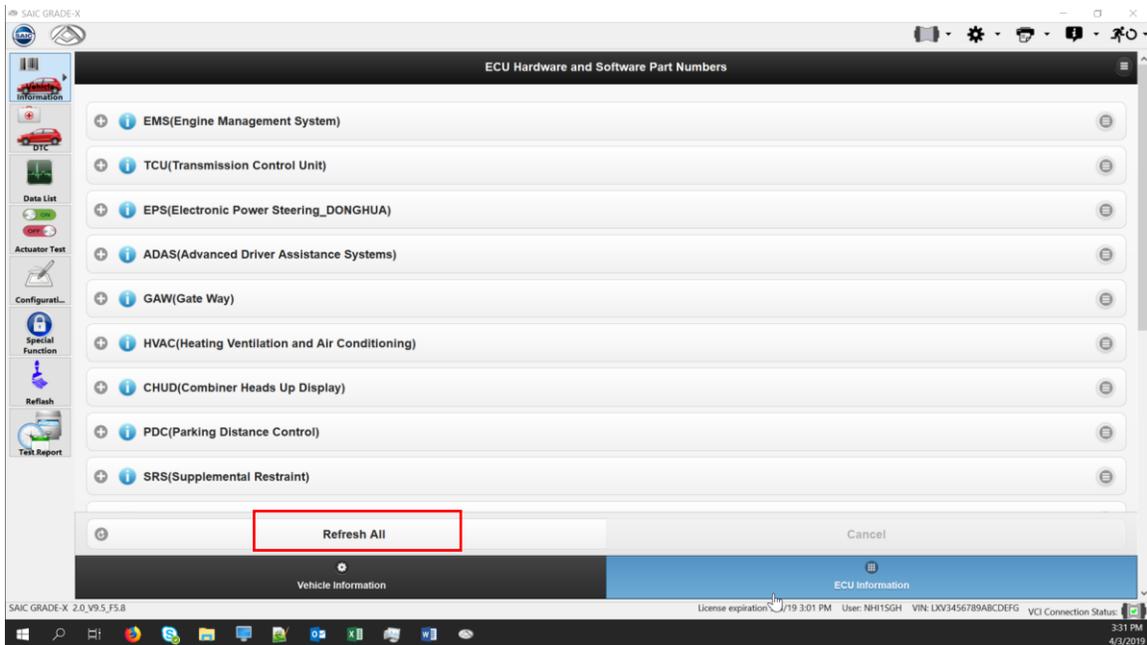
Enter vehicle information page, click **Vehicle Information**, you cloud see two tabs: vehicle Information and ECU Information, as shown below:



- Selected product: You can see the vehicle model, vehicle type, VIN
- Vehicle Information: You can see the year if existing.

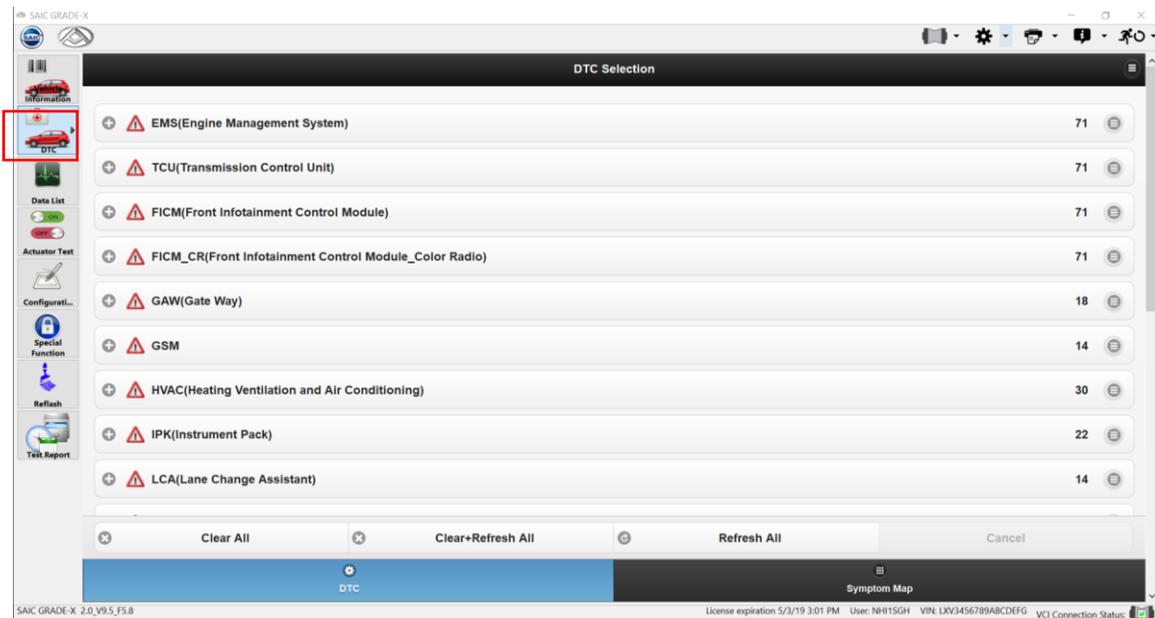


3) Click **Refresh All** to refresh all ECUs information, as shown below:



6.4 DTC

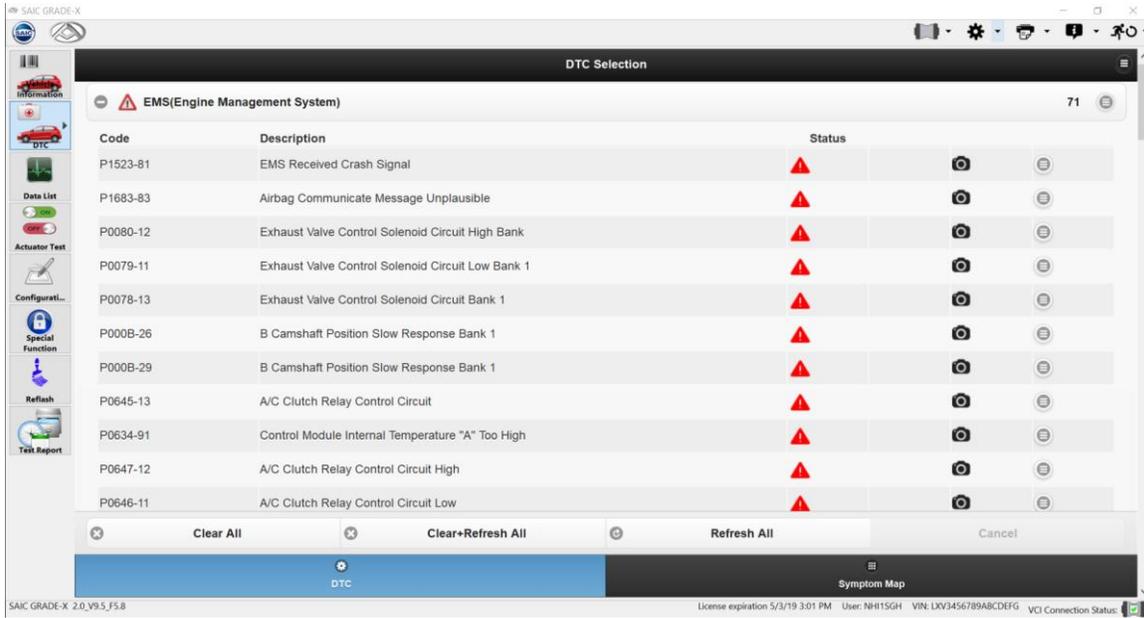
1) Click **DTC** to view DTC of ECU, as shown below:



-  ECU has DTC.
-  read DTC failed or ECU not exists.
-  no DTC.

- **【 19 】** Number of DTC.

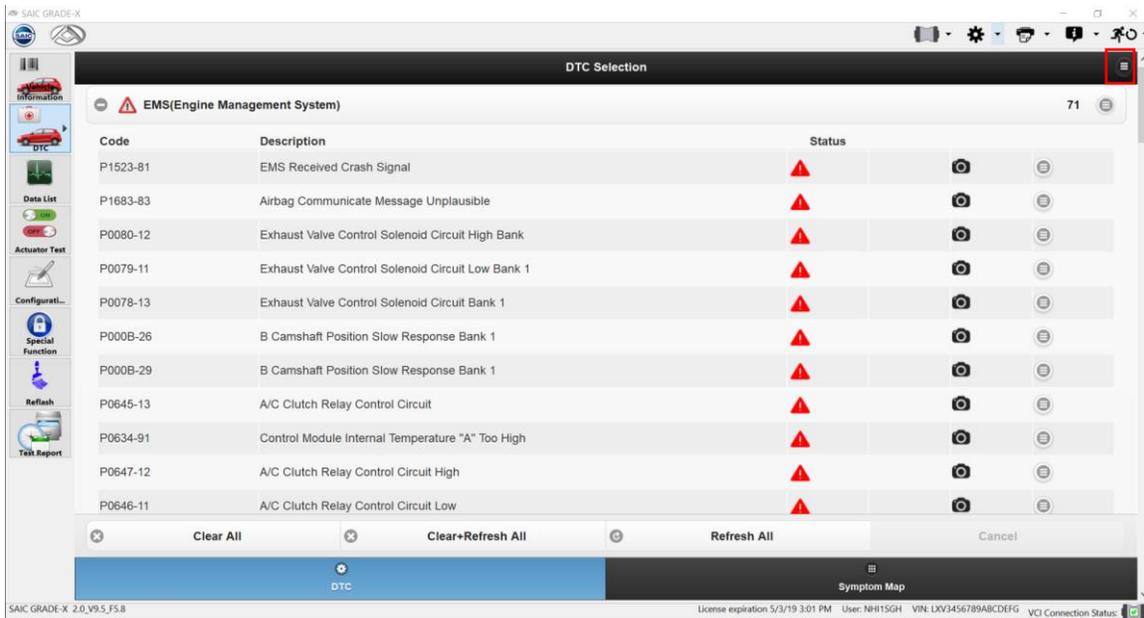
2) Click ECU to view DTC, as shown below:



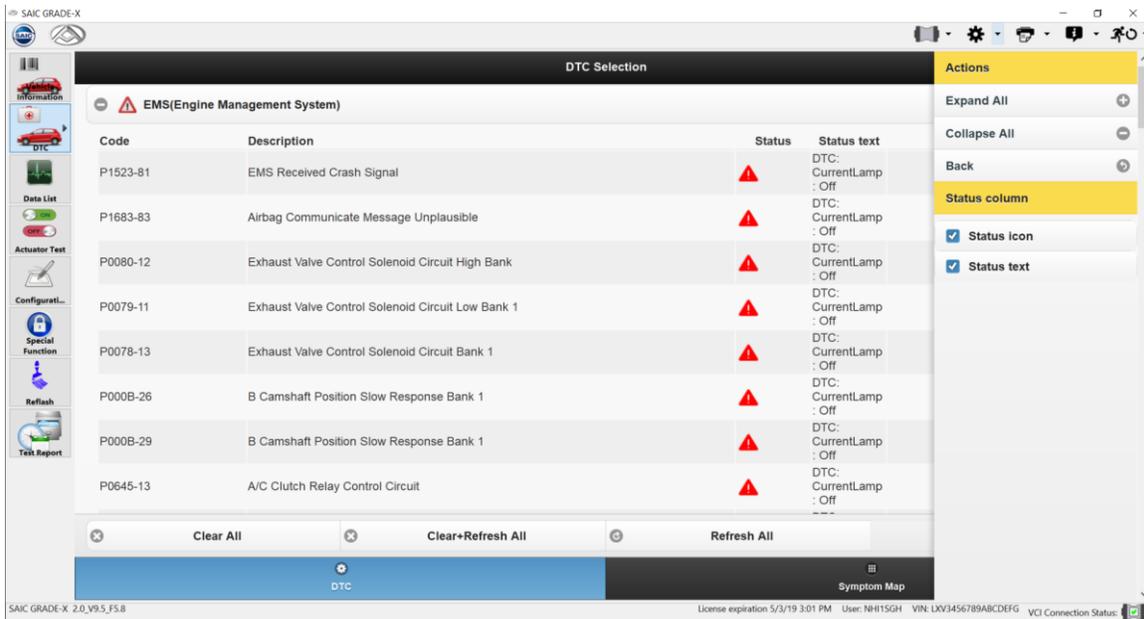
- **【 Status 】**: DTC status
- **【 📷 】**: has freeze frame data or not
- **【 ☰ 】**: to show freeze frame data

3) Choose DTC Status display mode

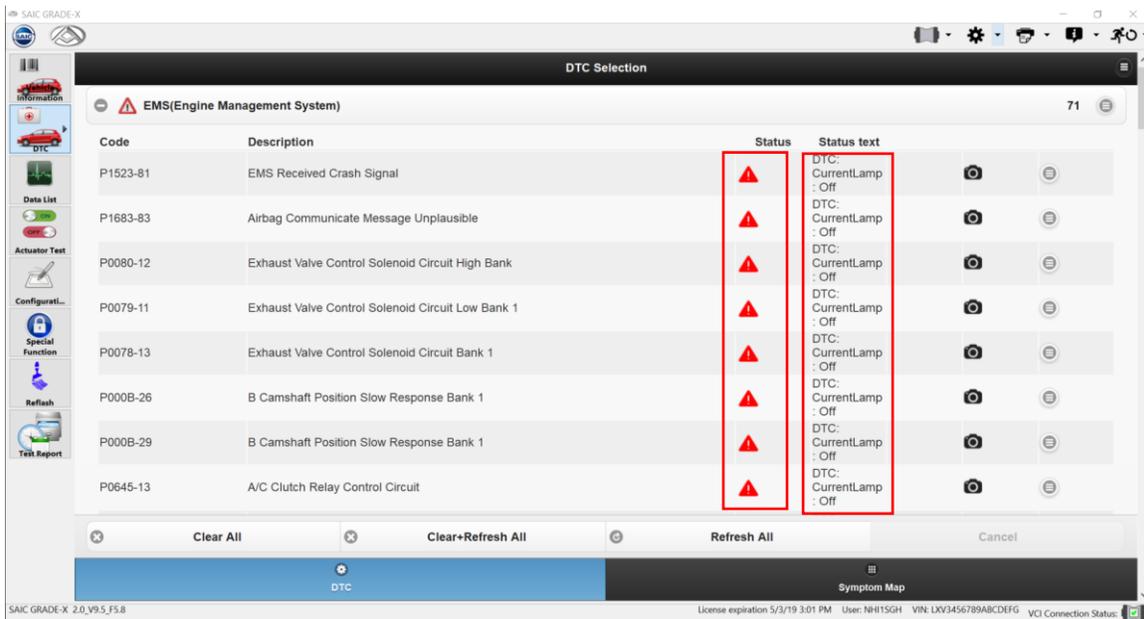
- ① Click **【 ☰ 】** to choose DTC Status display mode, as shown below:



- ② Click "Status Icon"/"Status text", as shown below:



③ DTC status icon and text ,as shown below:



- Current DTC, Lamp on
- History DTC, Lamp on
- Current DTC, Lamp off
- History DTC, Lamp off
- No DTC , Lamp off

NOTE: You can choose to show only status icon, only status text or show both.

4) Freeze Frame Data

① Click left side to show freeze frame data, as shown below:

Code	Description	Status
U3003-16	Circuit voltage below threshold BCM Voltage Low	

② Click **Freeze Frame Data**, as shown below:

Code	Description	Status	Status text
P1523-81	EMS Received Crash Signal		DTC: CurrentLamp : Off
P1683-83	Airbag Communicate Message Unplausible		DTC: CurrentLamp : Off
P0080-12	Exhaust Valve Control Solenoid Circuit High Bank		DTC: CurrentLamp : Off
P0079-11	Exhaust Valve Control Solenoid Circuit Low Bank 1		DTC: CurrentLamp : Off
P0078-13	Exhaust Valve Control Solenoid Circuit Bank 1		DTC: CurrentLamp : Off
P000B-26	B Camshaft Position Slow Response Bank 1		DTC: CurrentLamp : Off
P000B-29	B Camshaft Position Slow Response Bank 1		DTC: CurrentLamp : Off
P0645-13	A/C Clutch Relay Control Circuit		DTC: CurrentLamp : Off

③ Click **Close** to exit, as shown below:

DTC: P1523-81
Description: EMS Received Crash Signal

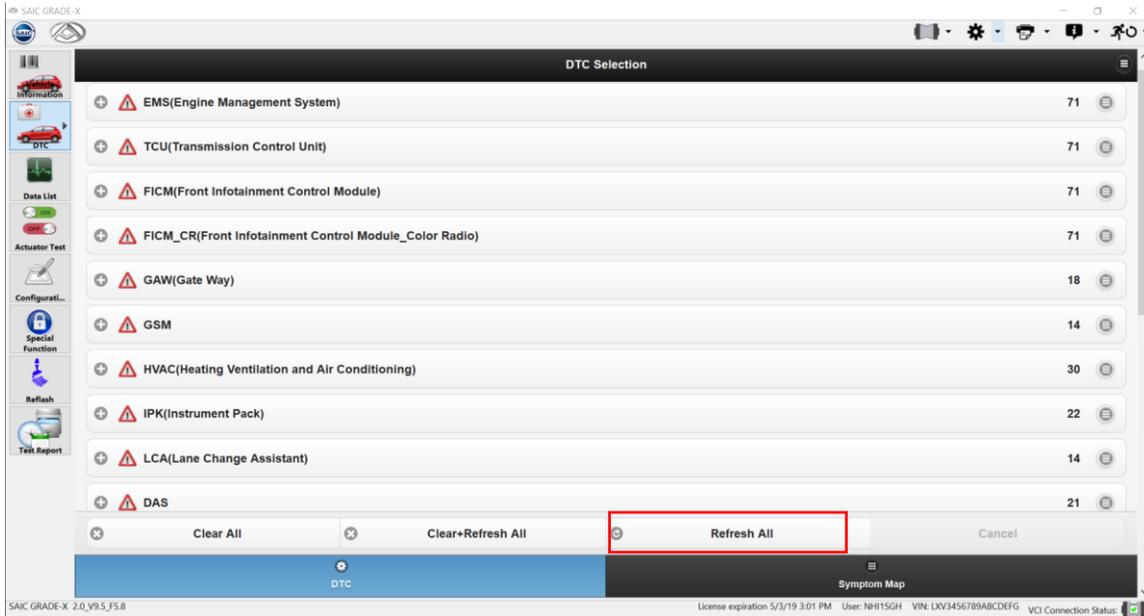
Record 1

Name	Value	Unit
System supply voltage	1.500	V
Global odometer reading	986895.000	km
Global KL.50 status	Off	
Global engine running status	Off	
Global KL.15 status	Off	
Global KL.R status	Off	
System KL.50 status	On	
System engine running status	On	
System KL.15 status	On	
System KL.R status	On	
Coolant temperature	-36.750	°C

5) Re-read DTC

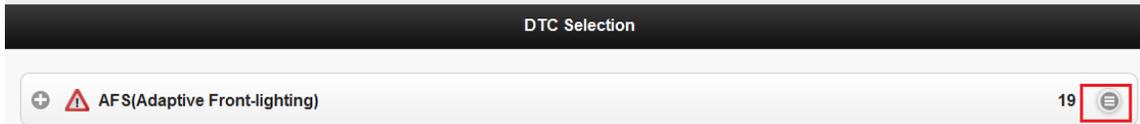
① Re-read DTC for all ECUs

Click **【Refresh All】**, The system will talk to all ECUs to get fault code for all ECUs, as shown below:

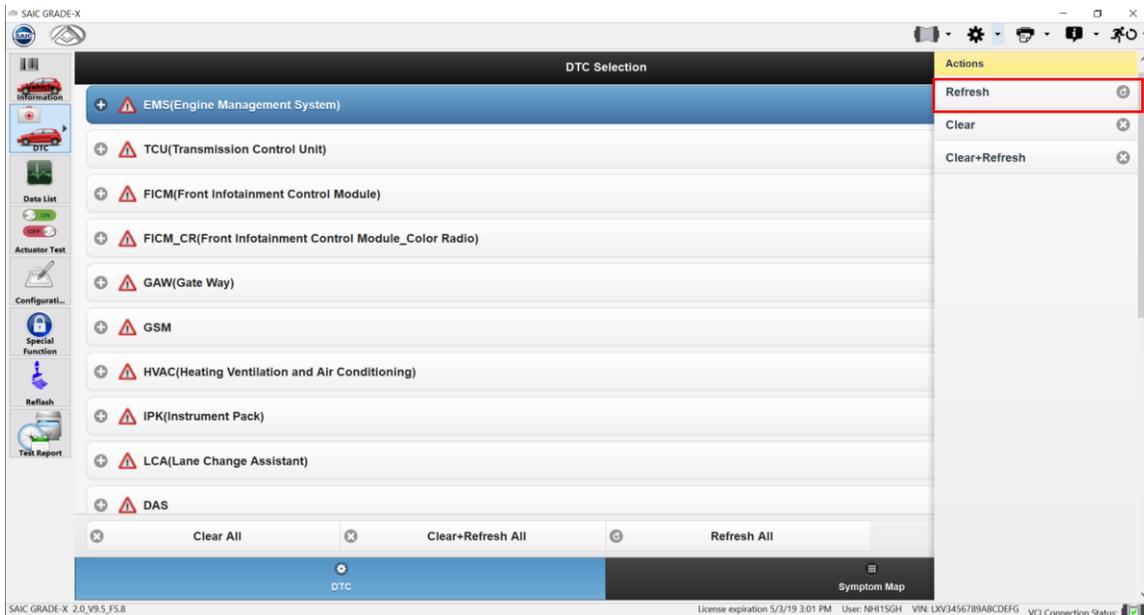


② Re-read DTC for one ECU

- Click **【☰】** of the ECU, and then enter sub menu, as shown below:



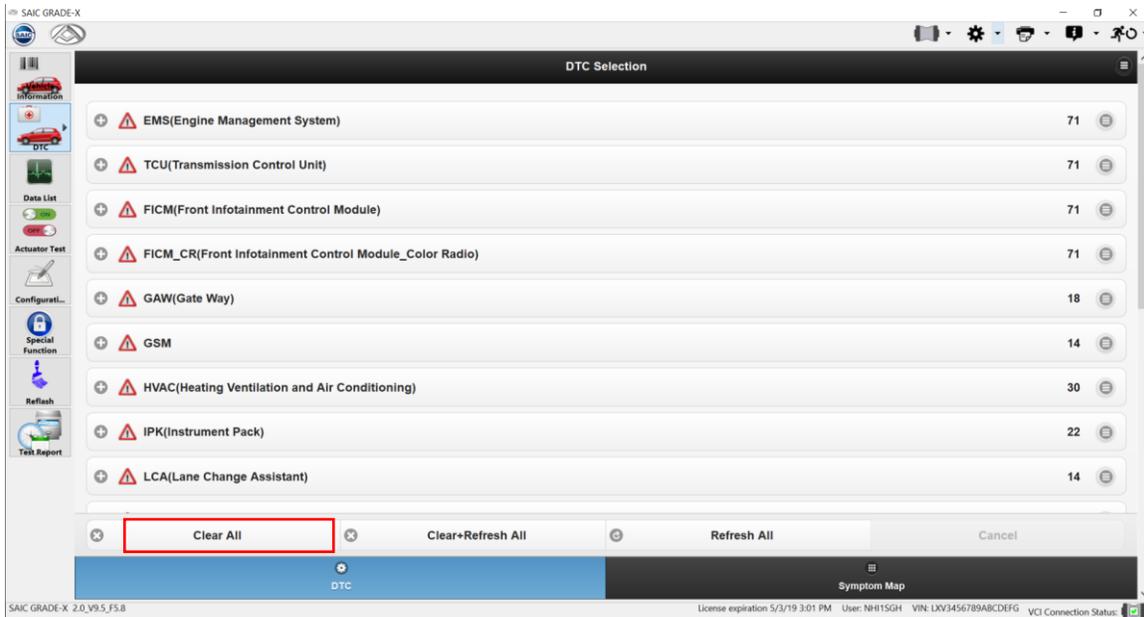
- Click **【Refresh】**, The diagnostic software will re-read, as shown below:



6) Clear DTC

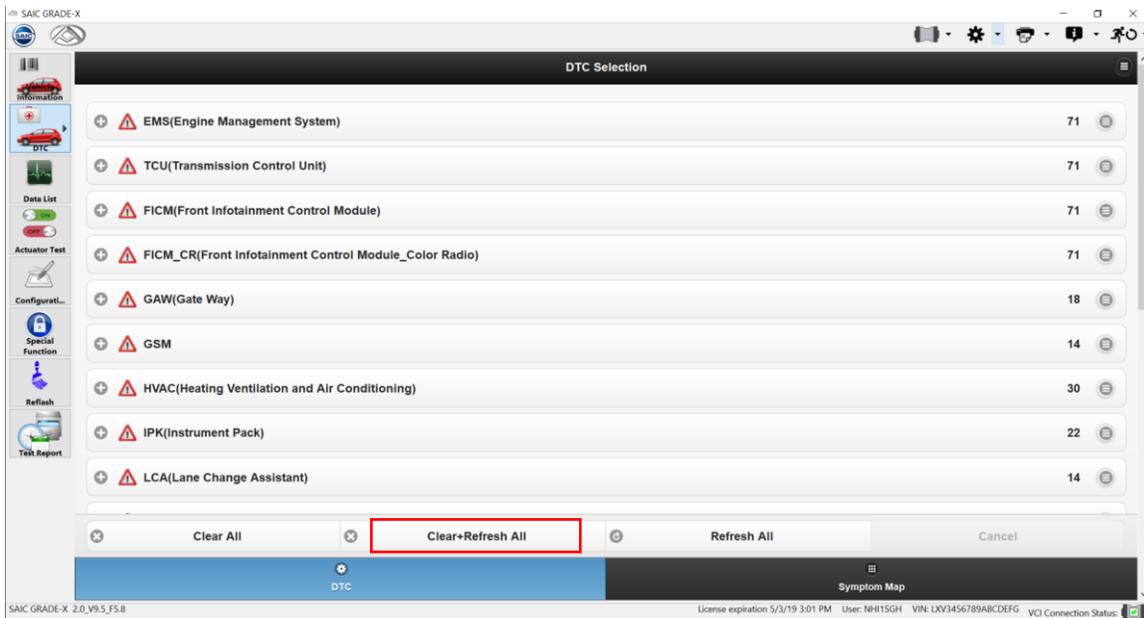
① Clear DTC for all ECUs

Click **【Clear All】**, diagnostic software will talk to all ECUs to clear DTC, as shown below:



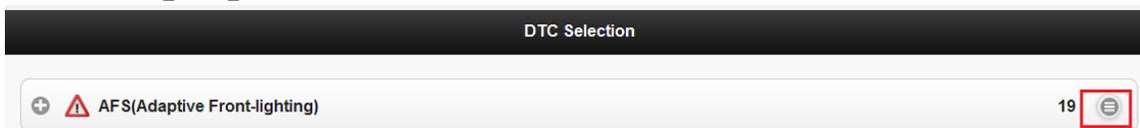
② Clear All DTC and Re-read

Click **【Clear+Refresh All】**, ECU diagnostic software will talk to all ECUs to clear all fault codes and re-read, as shown below:

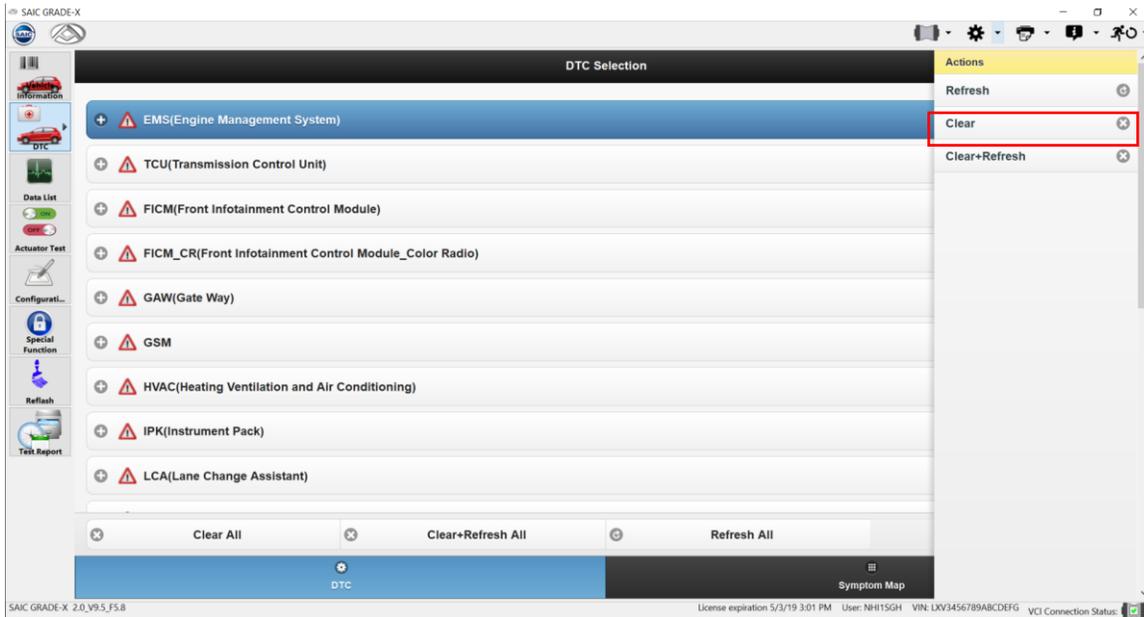


③ Clear DTC for one ECU

- Click **【⊞】**, as shown below:

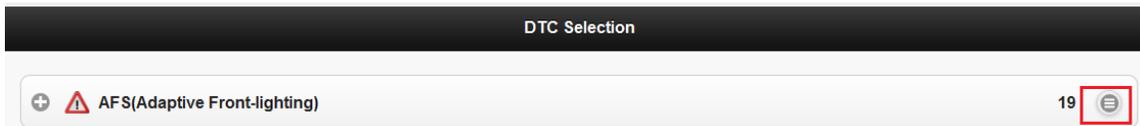


- Click **【Clear】**, to clear DTC of the current ECU, as shown below:

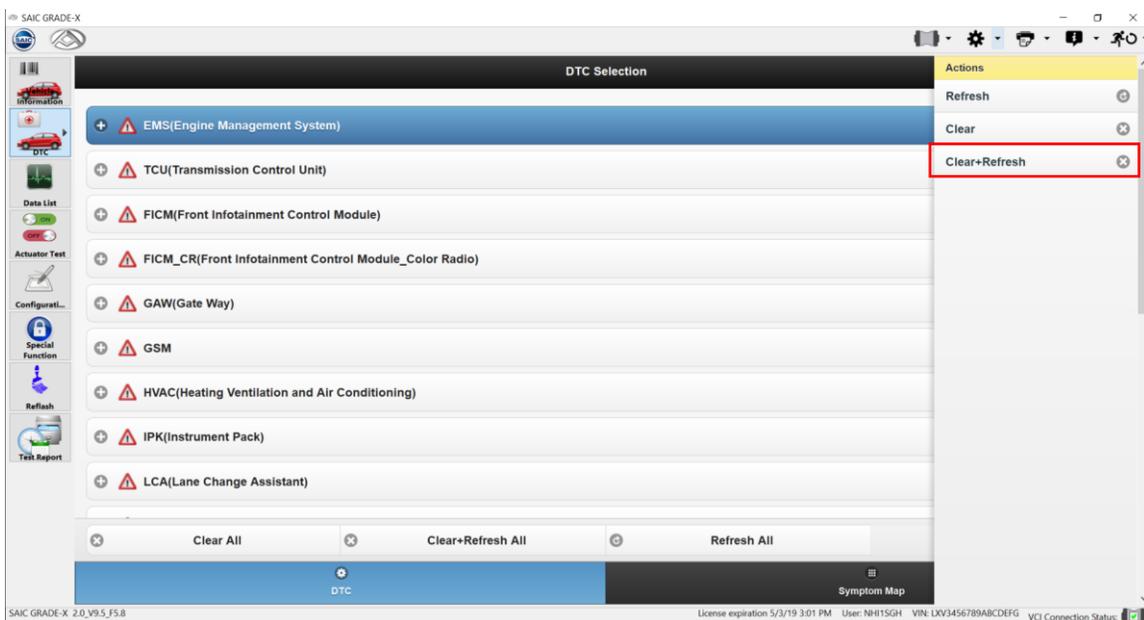


④ Clear DTC and re-read for one ECU

- Click **【☰】**, as shown below:

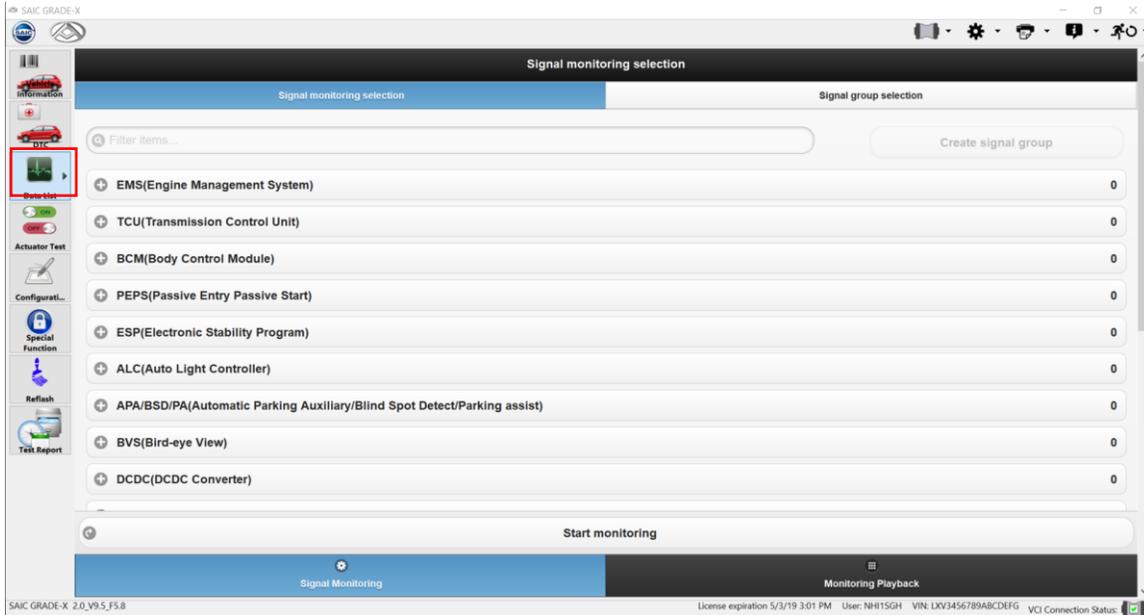


- Click **【Clear+Refresh】**, to clear DTC and re-read of the ECU, as shown below:



6.5 Data List

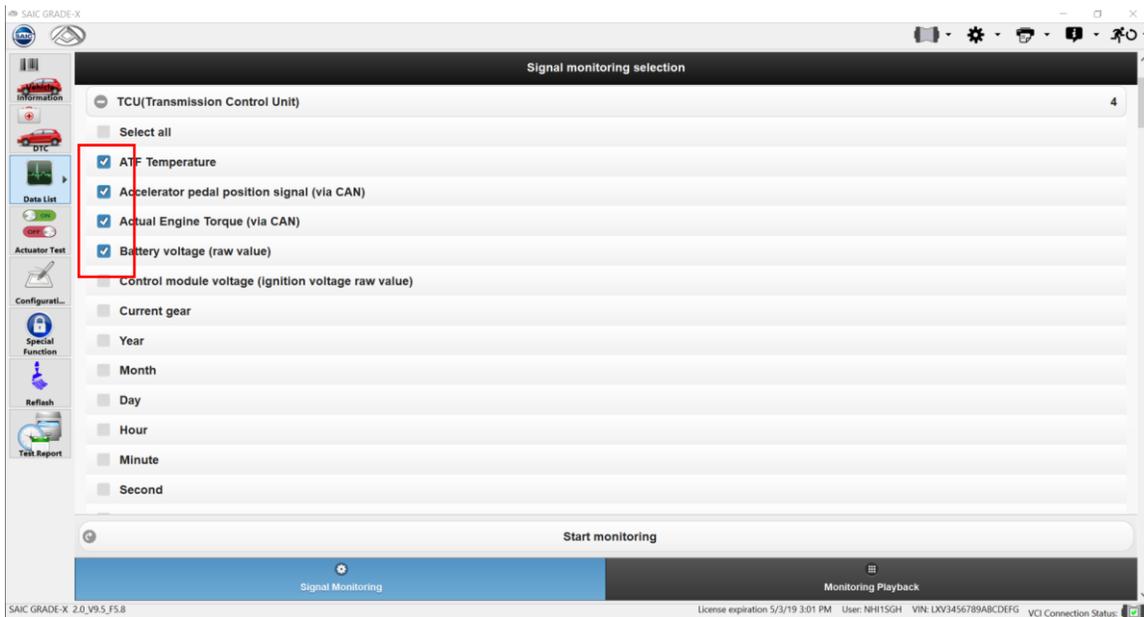
1) Click **Data List** to show all signals of selected ECU, as shown below:



2) Choose Data List

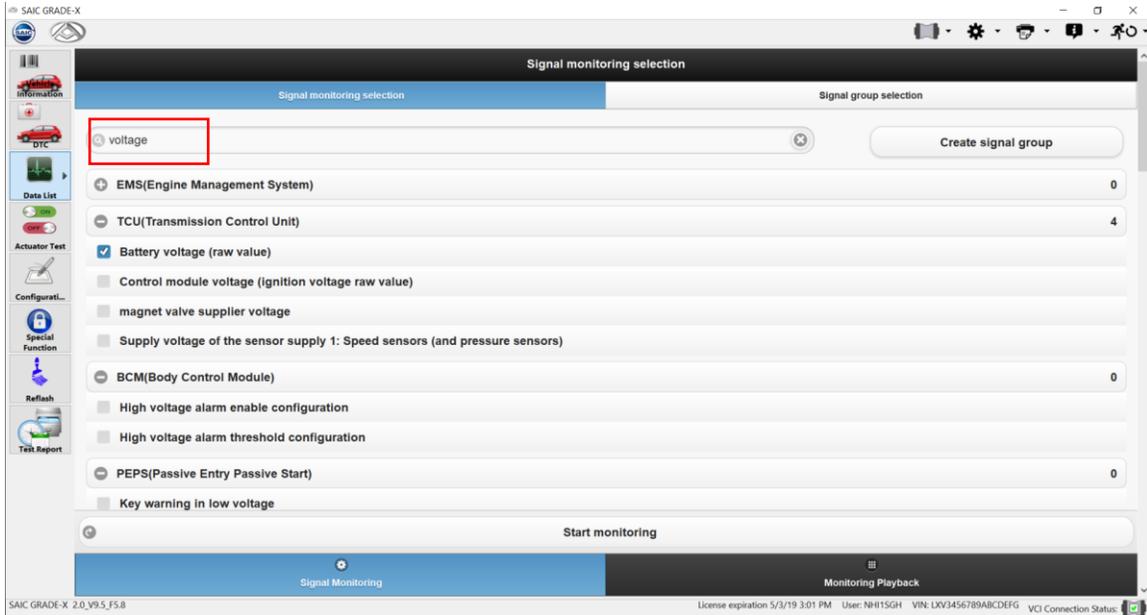
NOTE: You can choose to monitor more than one signals for more than one Ecus.

① Click data list, as shown below:



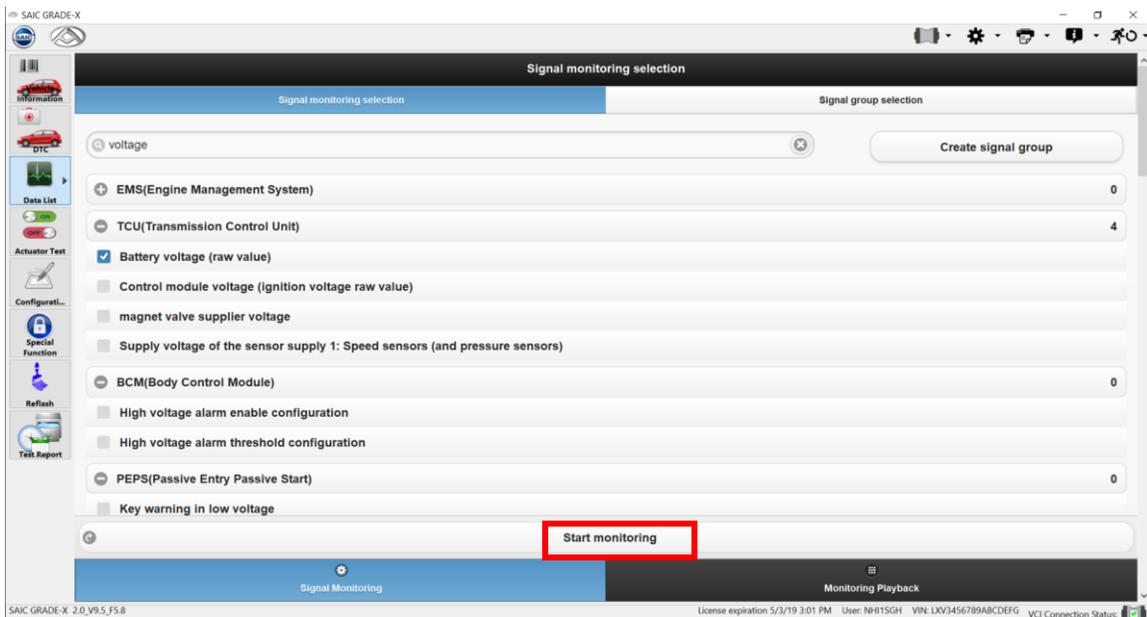
② Search signals

You can search signals by inputting the key words of the signal name, as shown below:



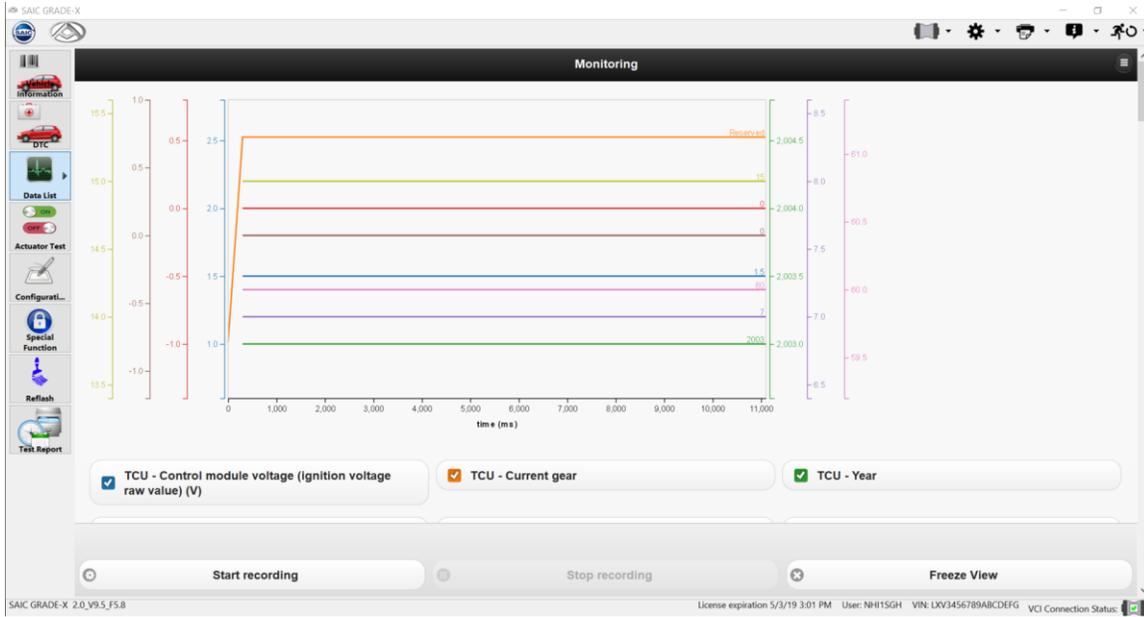
3) Monitor signals

- ① Select items and click **Start monitoring** to show signal list, as shown below:



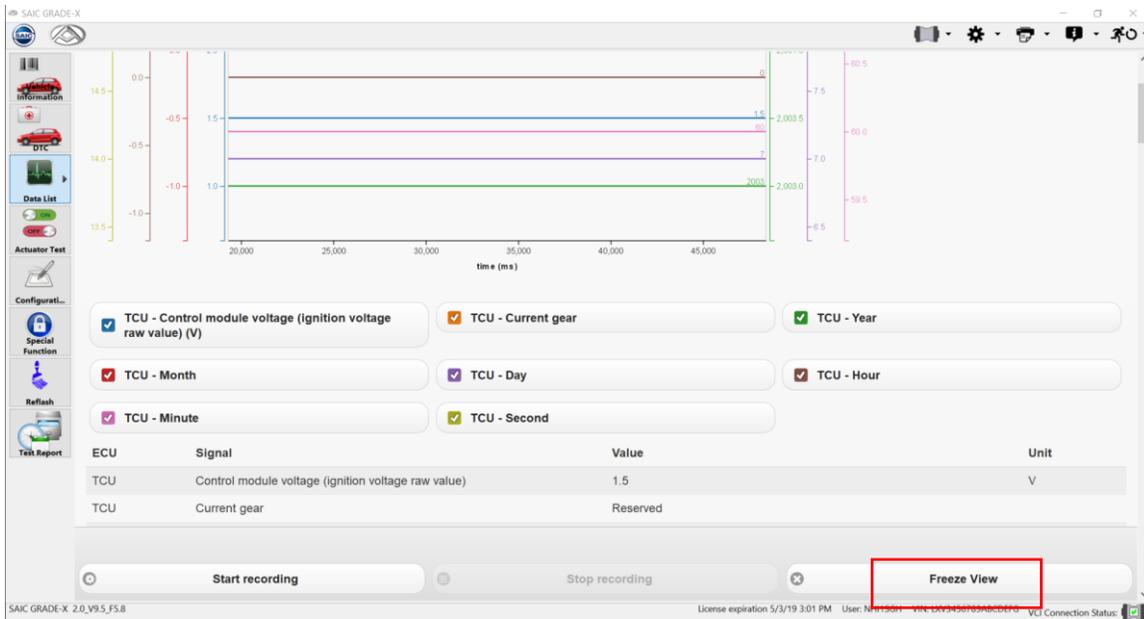
- ② Waveform data flow diagram

Support 8 signals in waveform diagram at the same time, as shown below:



4) Freeze View

- Click **Freeze View** to freeze current signals, as shown below:

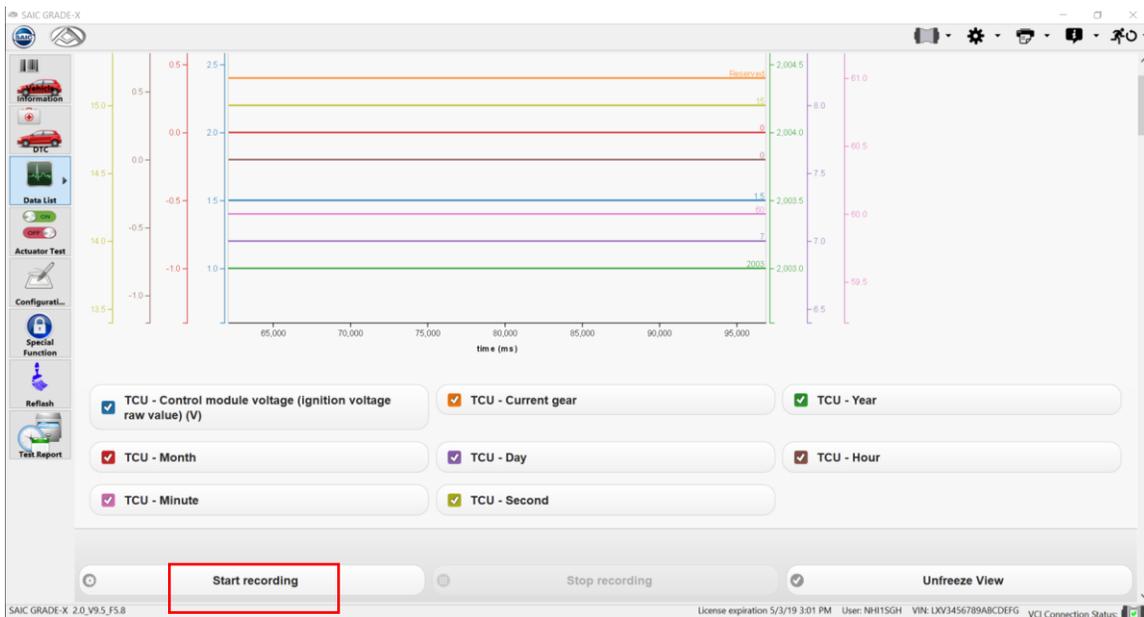


- Click **Unfreeze View** to unfreeze current signals, as shown below:

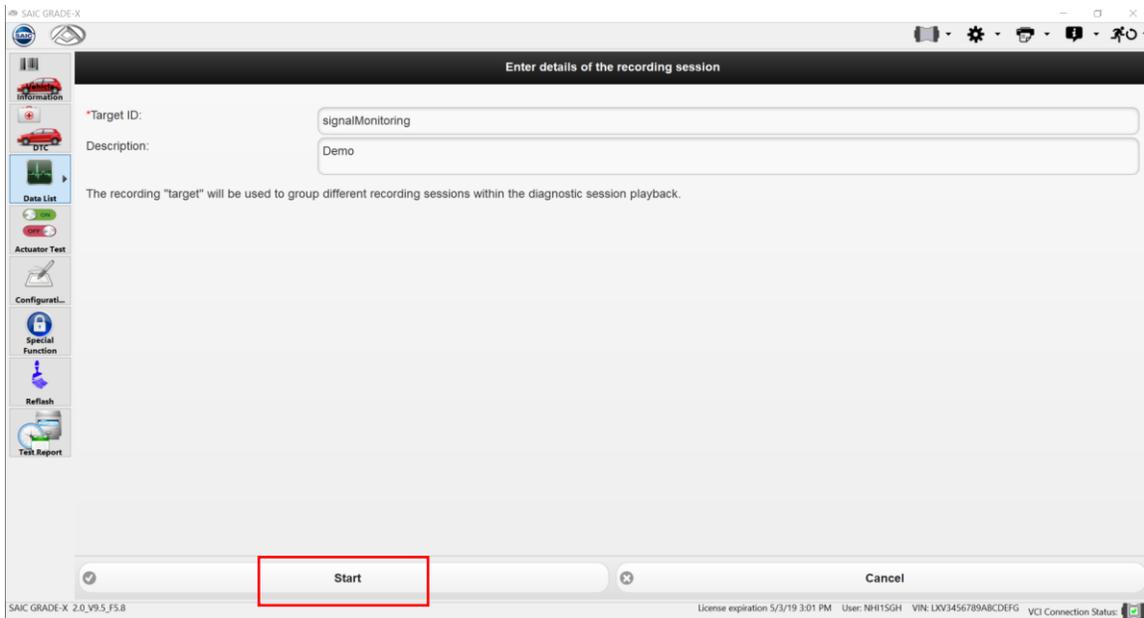


5) Recording signals

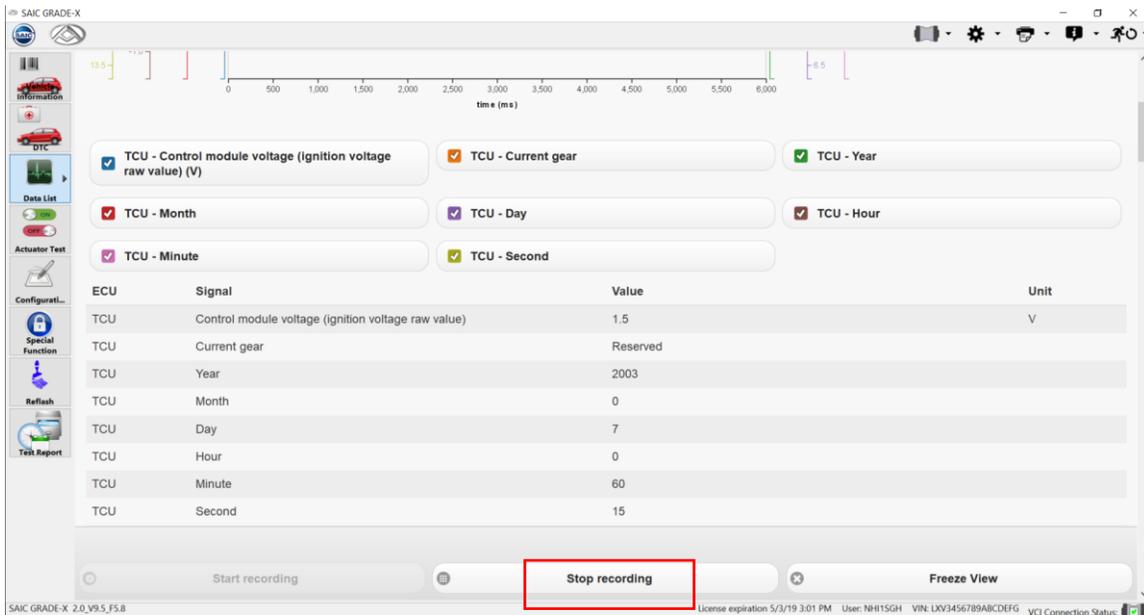
- Click **Start recording**, as shown below:



- Input description and click **Start** to start recording the data, as shown below:

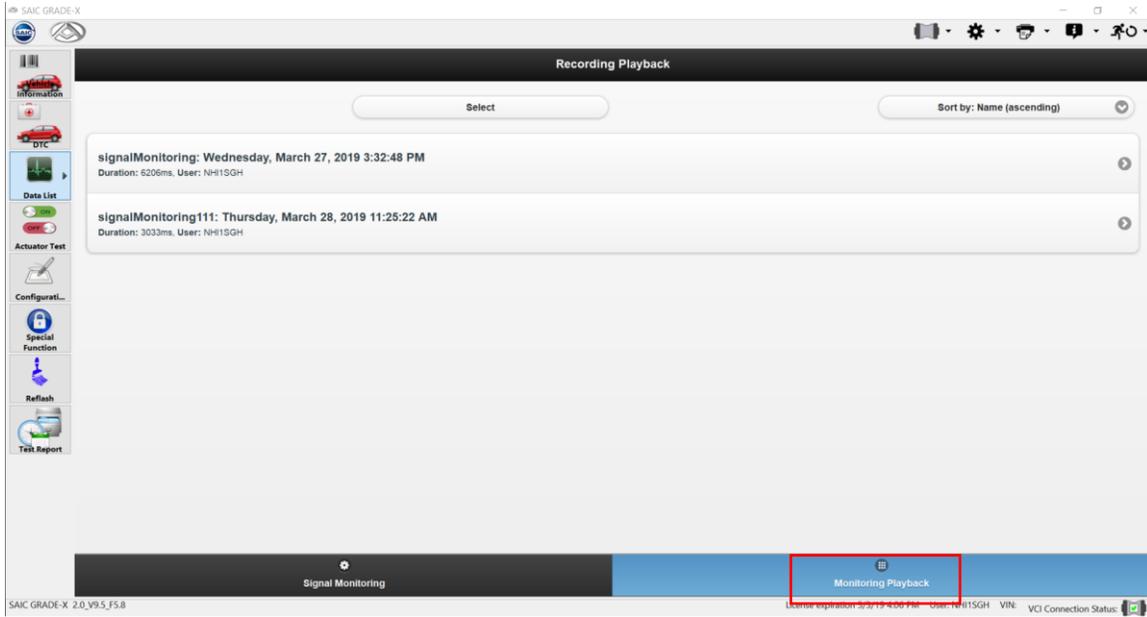


- Click **【Stop recording】** to stop recording, as shown below:

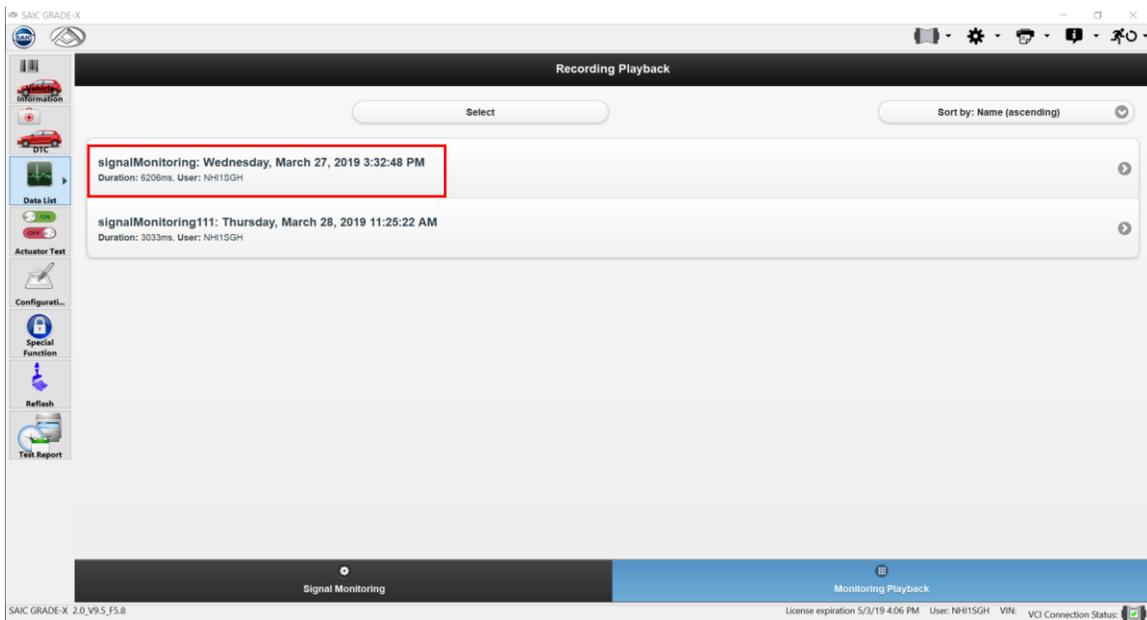


6) Playback

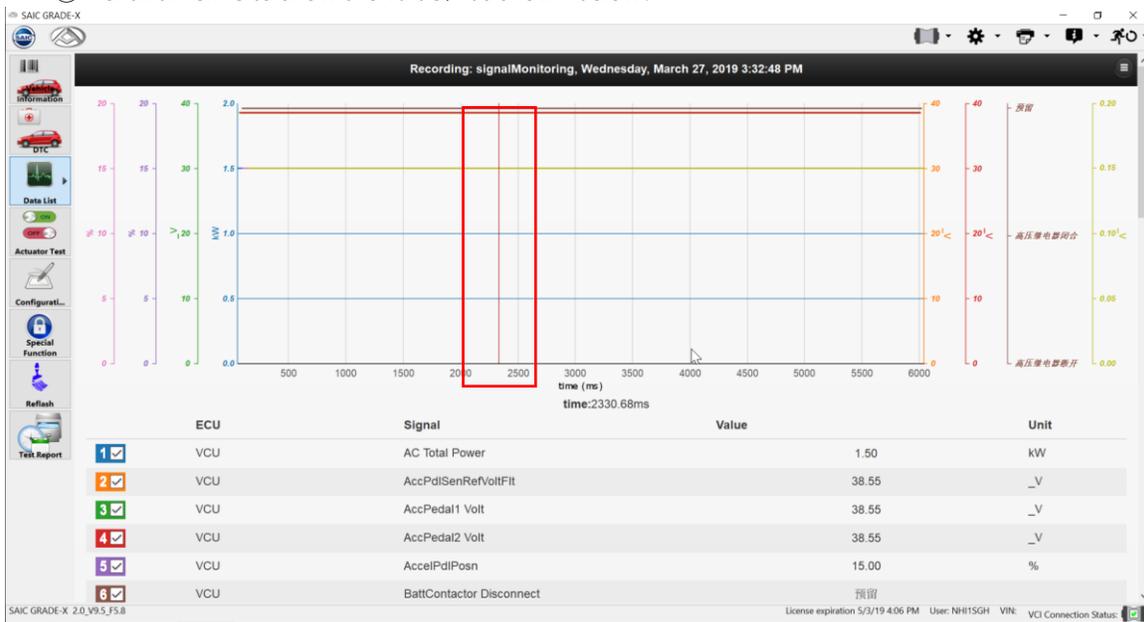
- 1) Click **【Monitoring Playback】** to playback the recorded signals, as shown below:



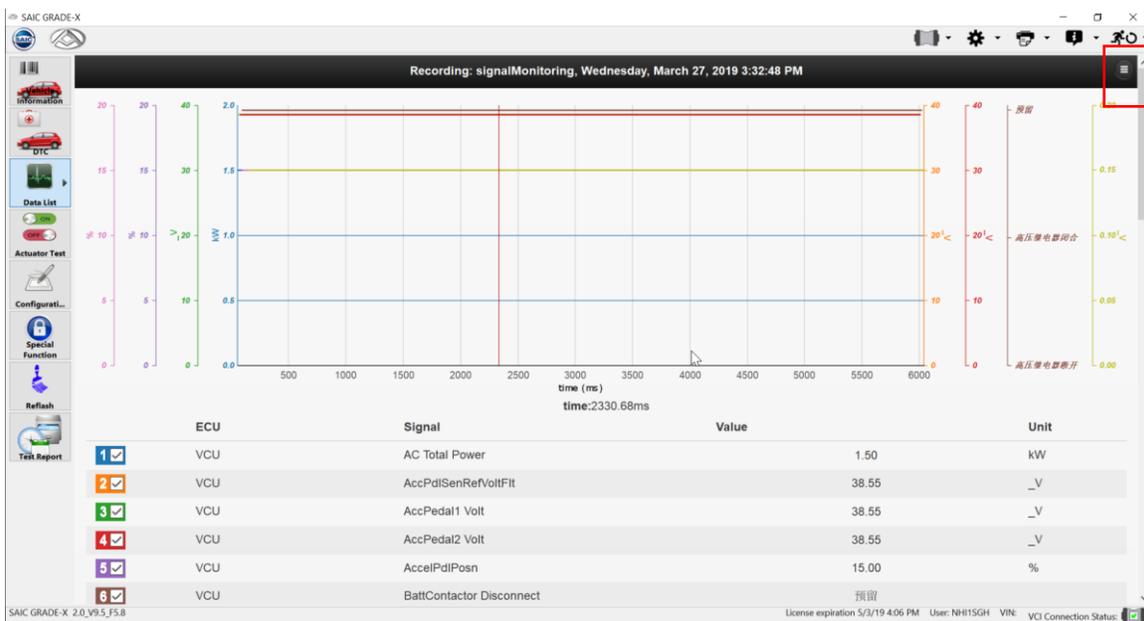
② Choose the record data to playback, as shown below:

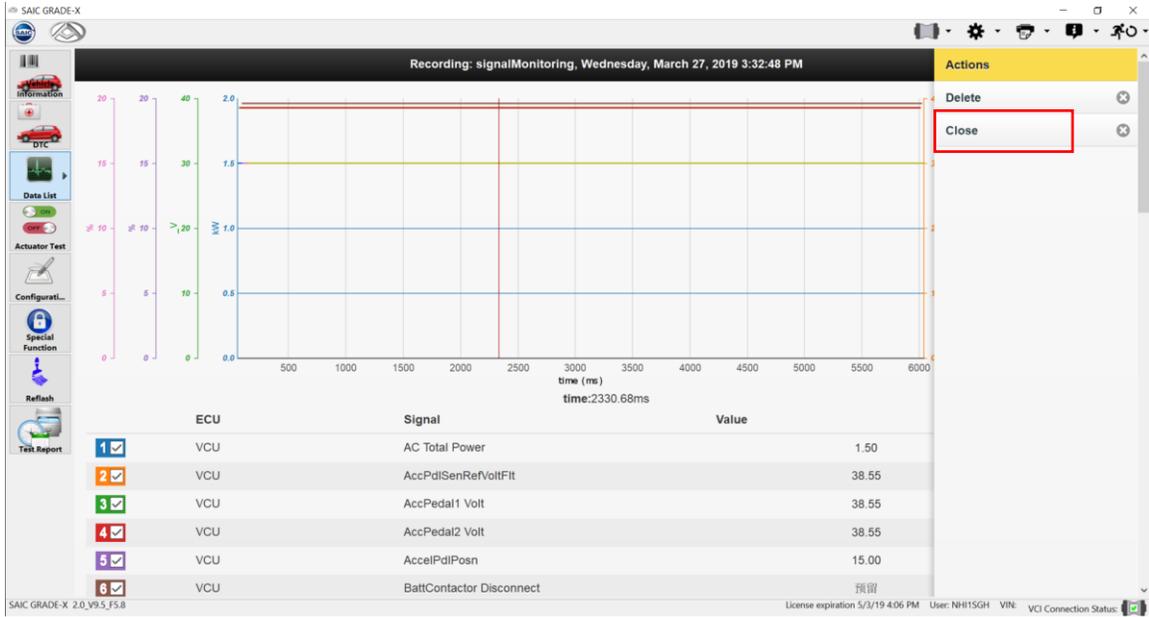


③ Click timeline to show the value, as shown below:



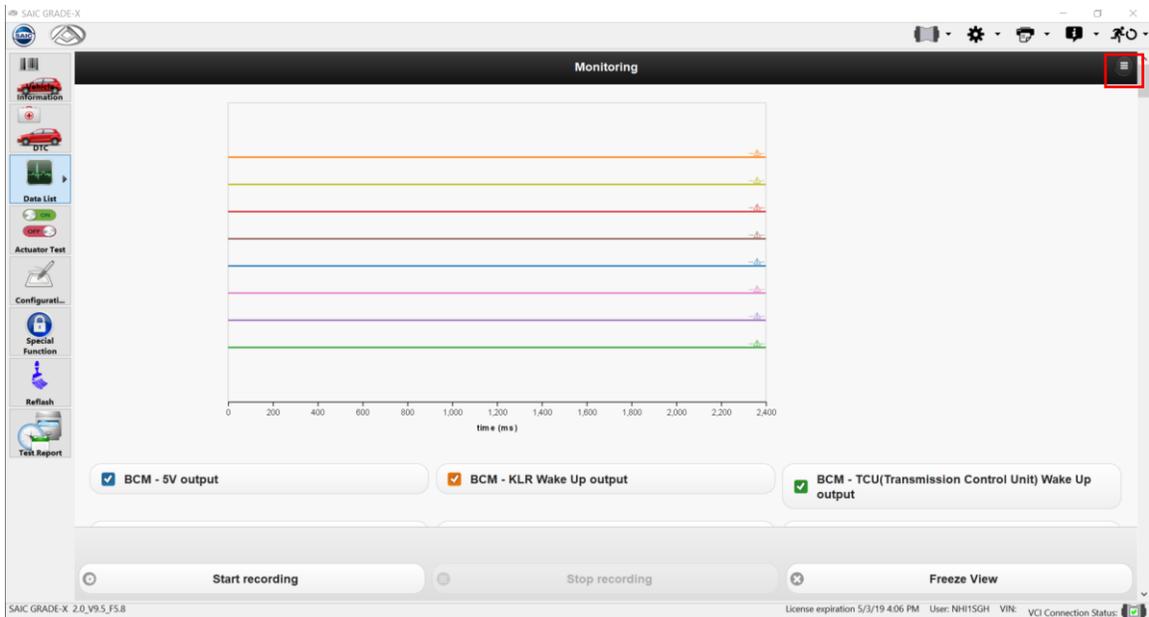
④ Click , choose **Close** to exit, as shown below:

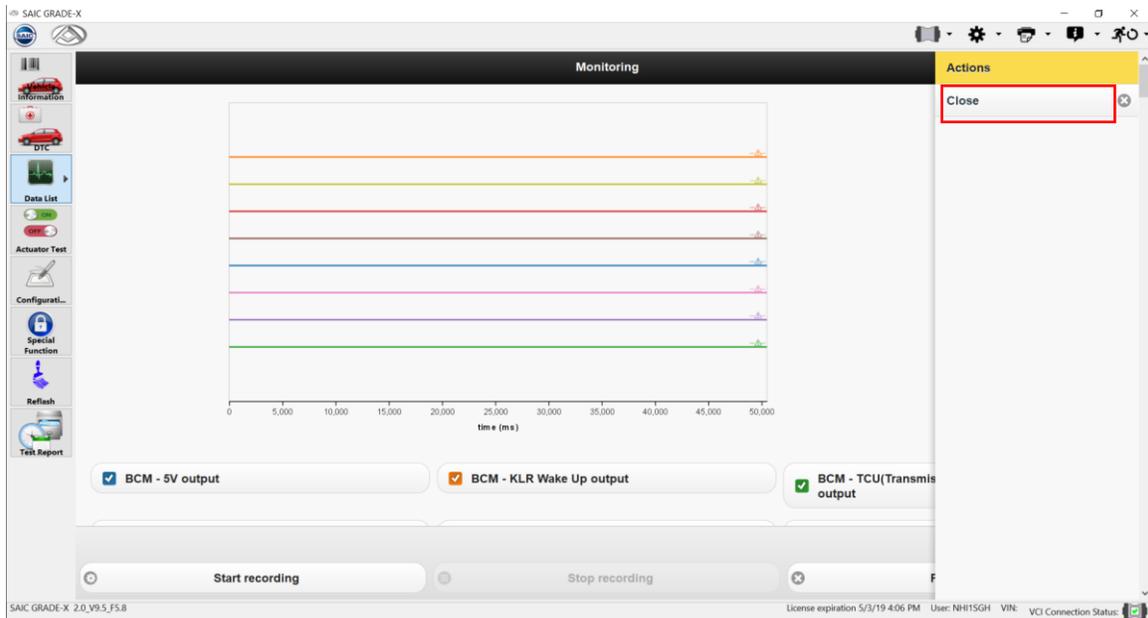




7) Exit

Click , choose **Close** to exit, as shown below:

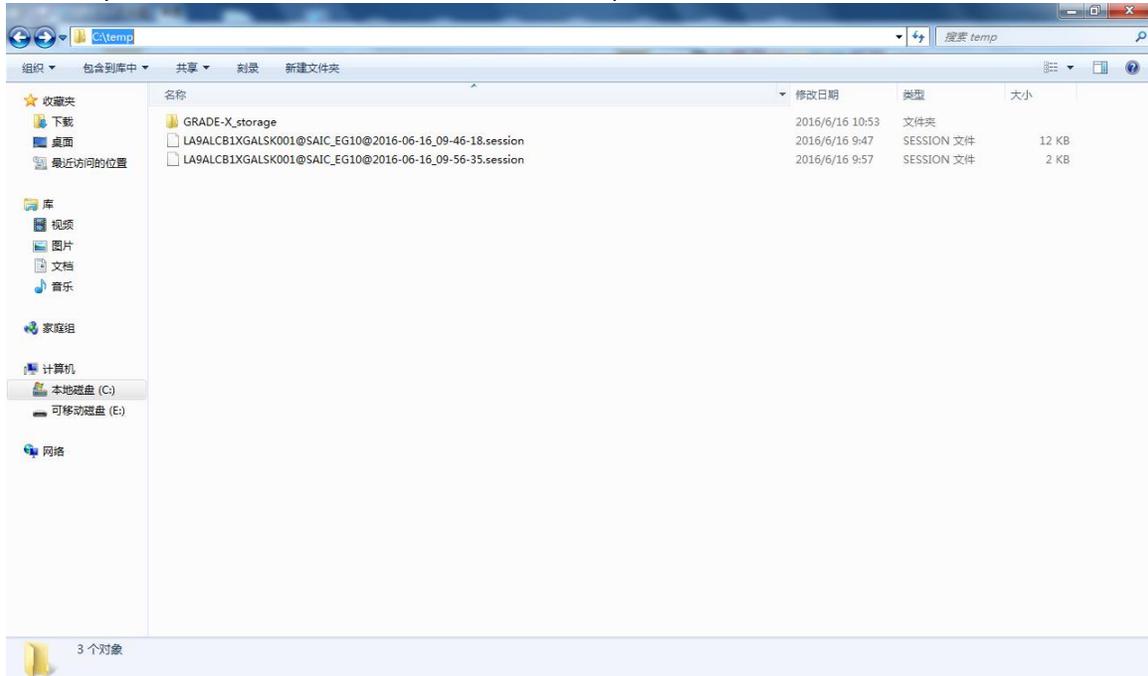




8) Recording data

(1) Data path

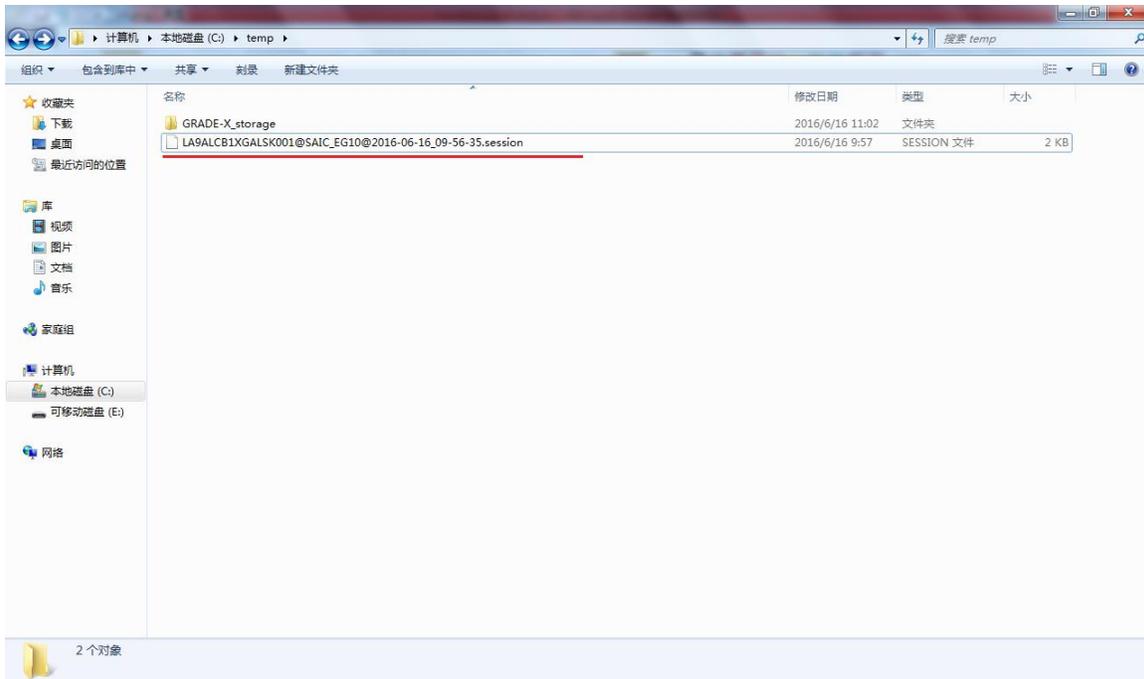
When you have finished recording the data stream and exit the SAIC GRADE-X diagnostic software, you can find record file under the folder C:\temp , as shown below:



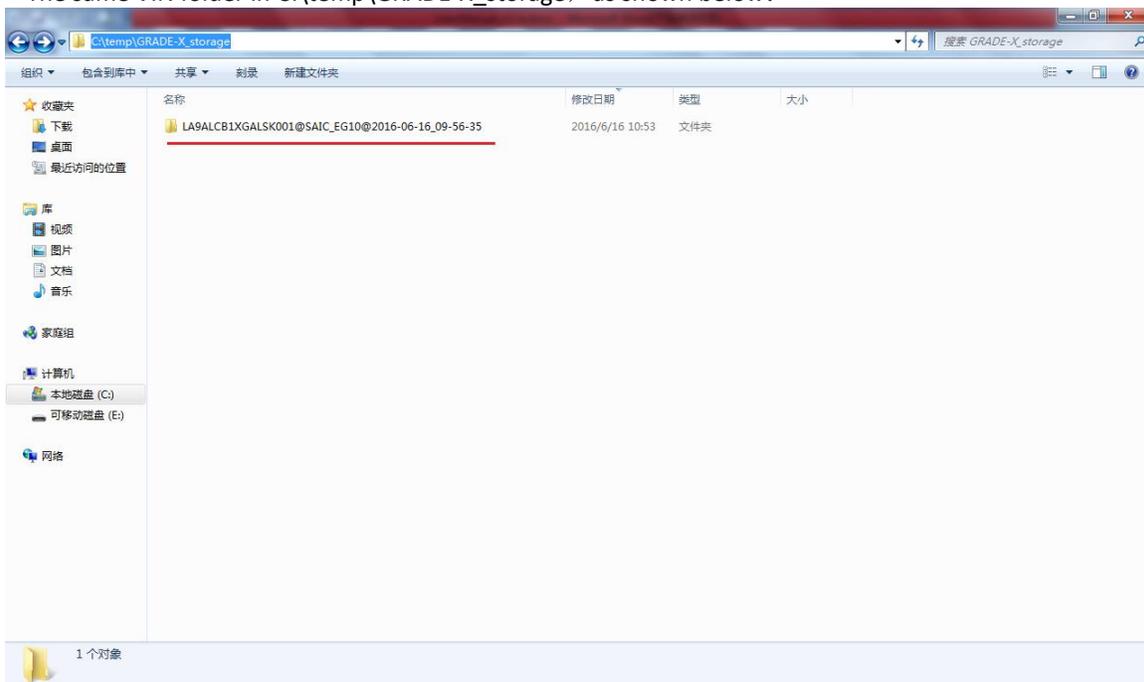
(2) Submit data stream recording file

When you want to provide the file to SAIC, you need to submit the following two files:

- VIN session file in C:\temp , as shown below:



o The same VIN folder in C:\temp\GRADE-X_storage, as shown below:

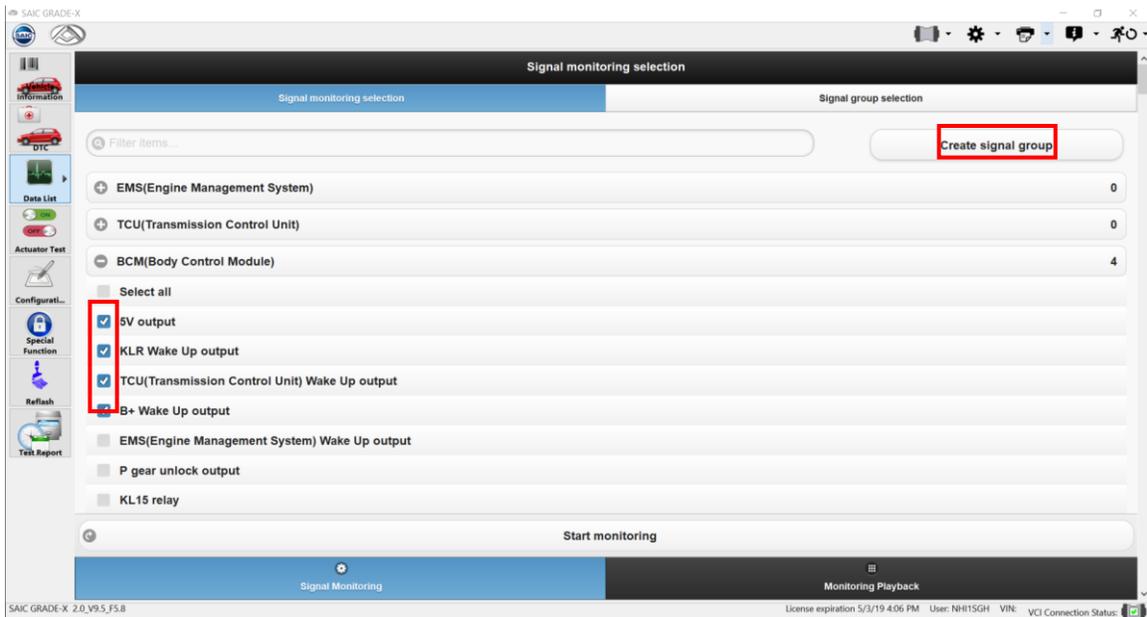


Note: the file names of the above two files must be the same.

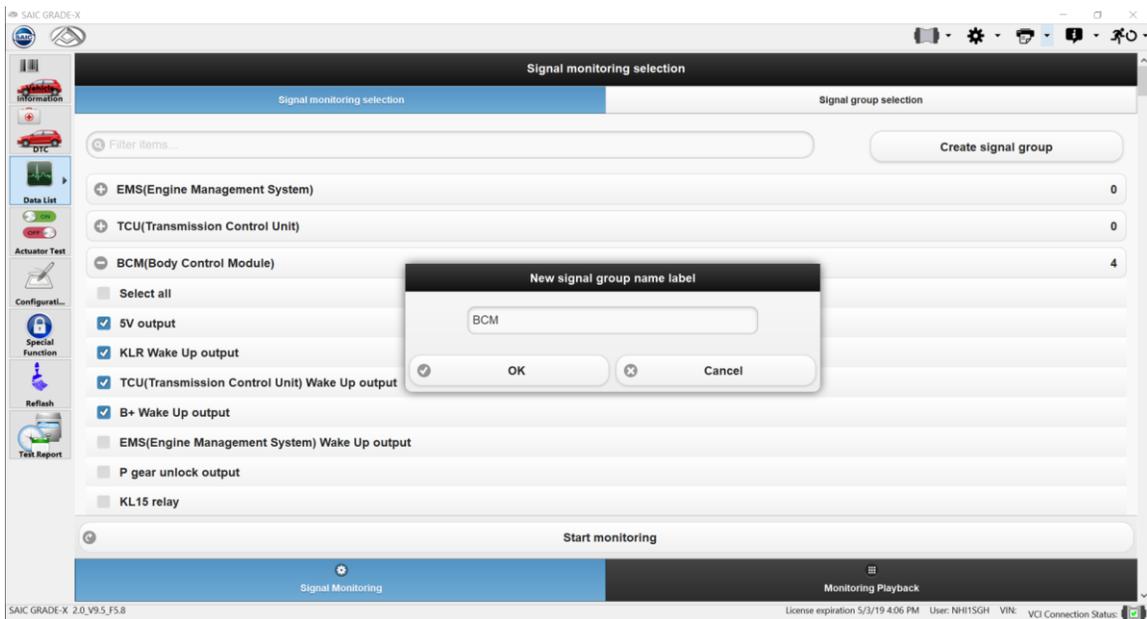
9) Signal group

(1) Create your own signal group

You can choose more than one items for more than one ECUs and then click **【Create group】** to create your own signal group, as shown below:

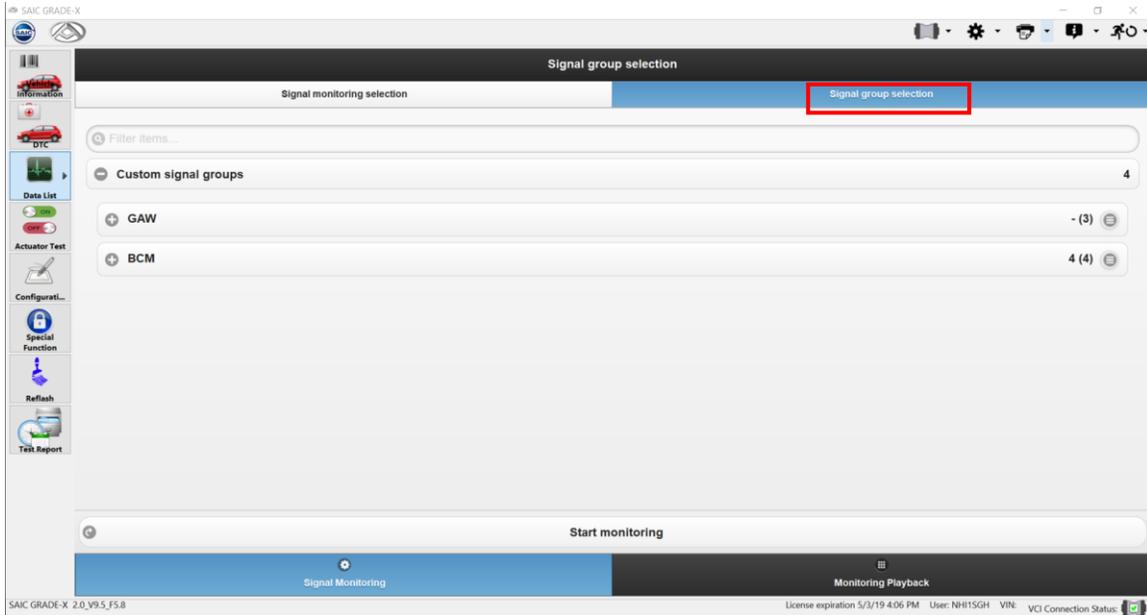


① Input group name,click **【OK】**, as shown below:

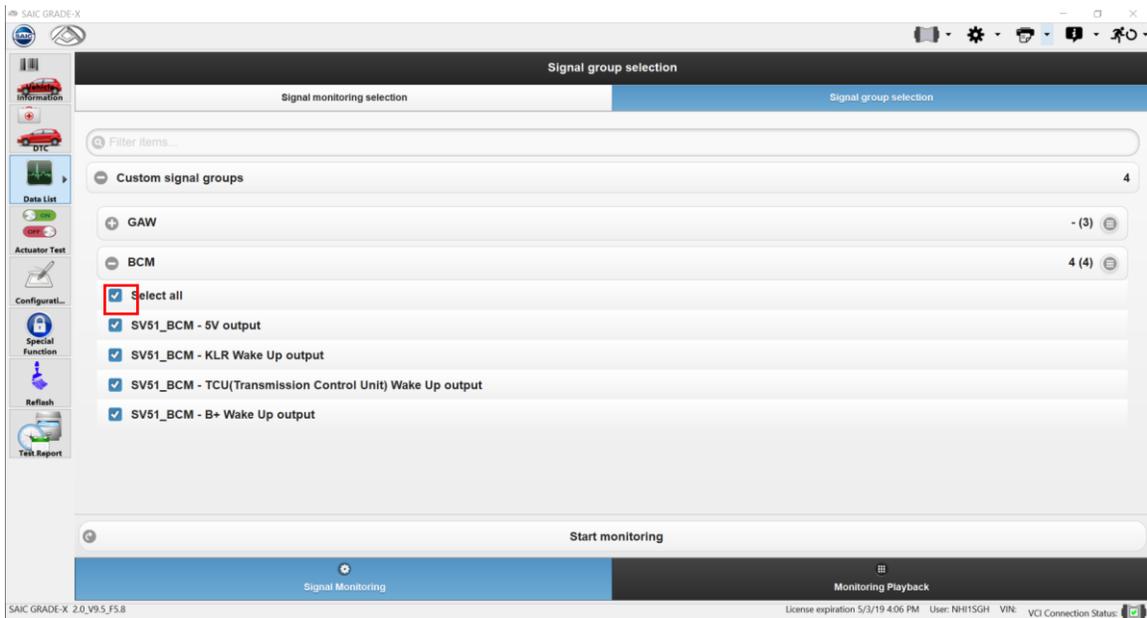


(2) View your own signal groups

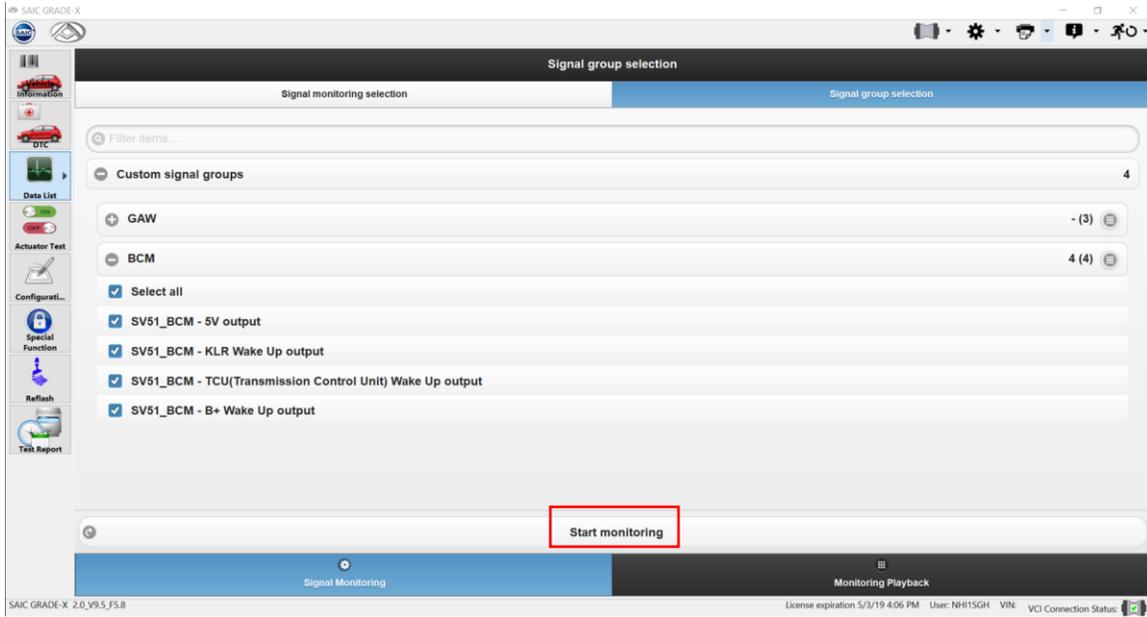
① Click **【Signal group selection】** to view your own signal groups, as shown below:



- ② Select the items you want to monitor or click **【Select all】** to monitor all signals in the current group, as shown below:

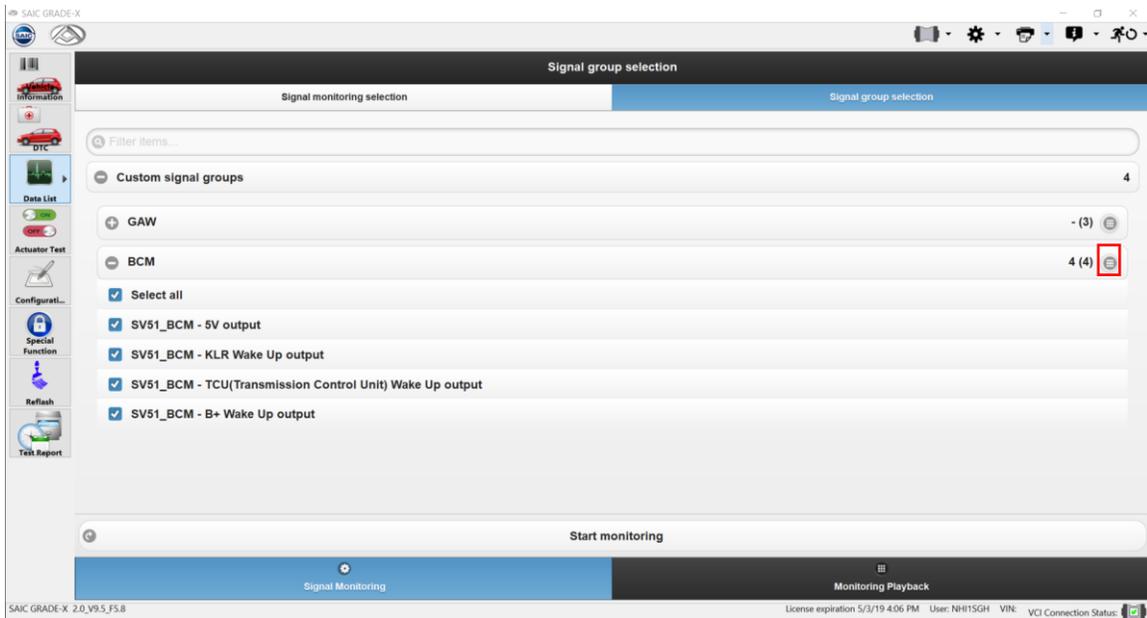


- ③ Click **【Start monitoring】** , as shown below:

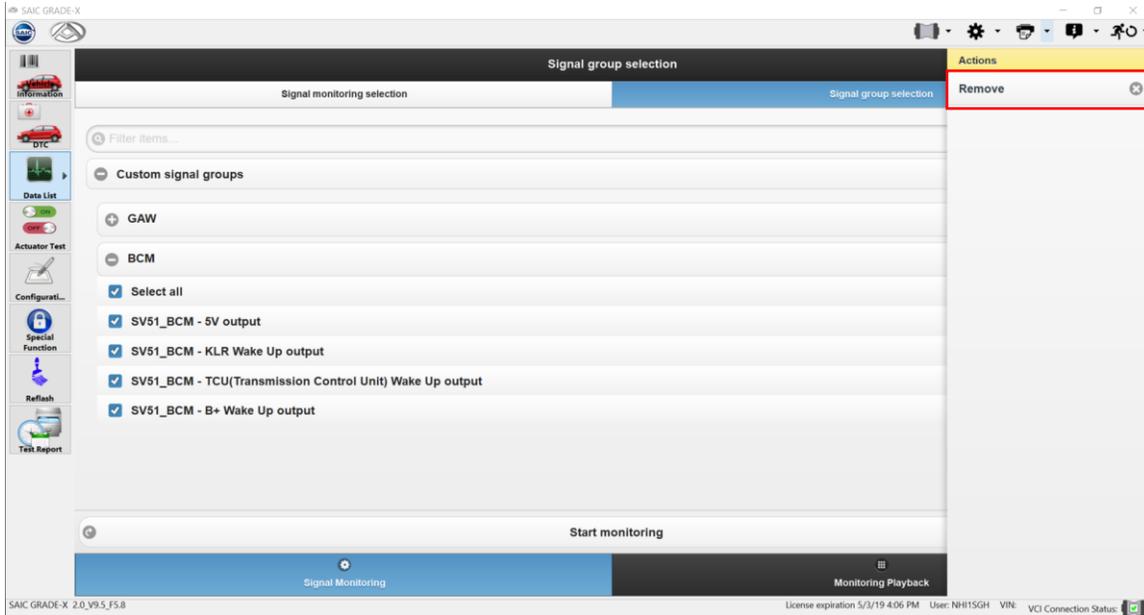


(3) Delete group

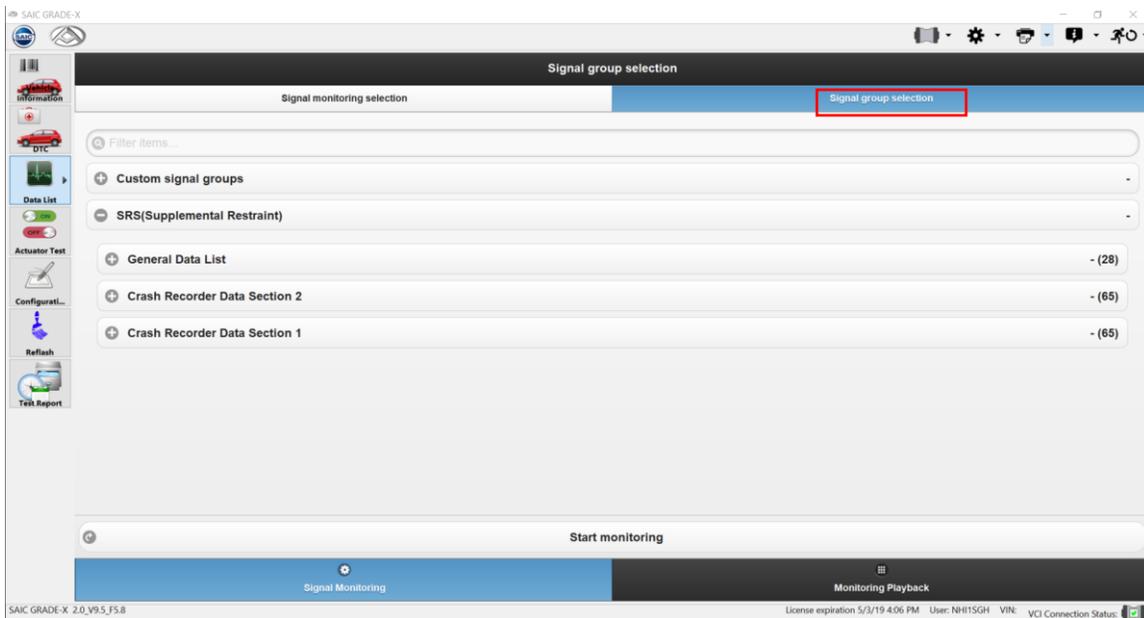
① Click  , as shown below:



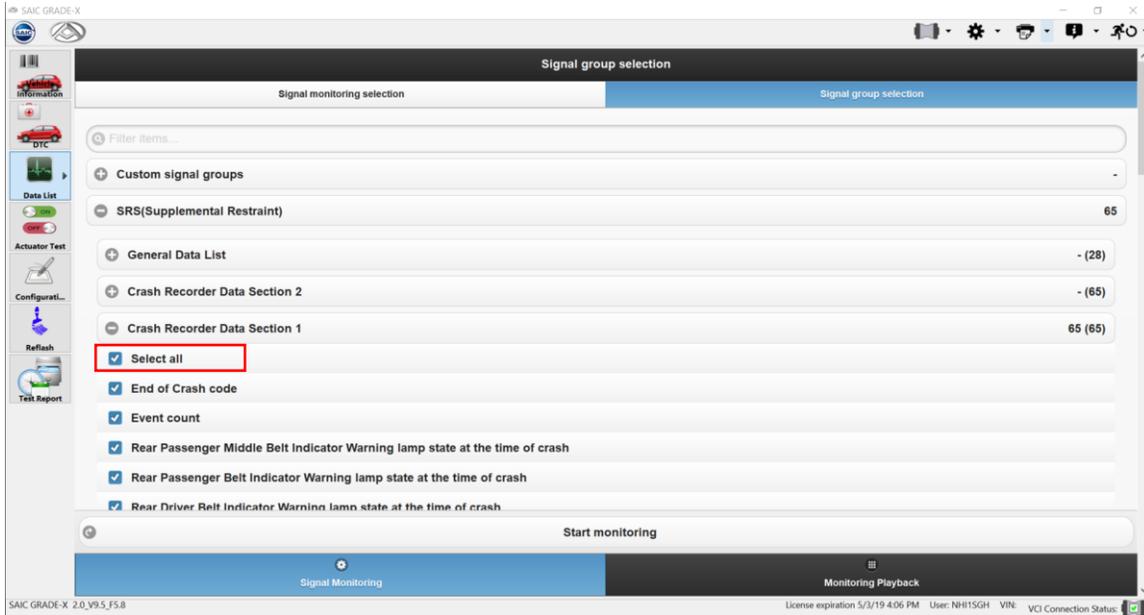
② Click **Remove** to delete the current group, as shown below:



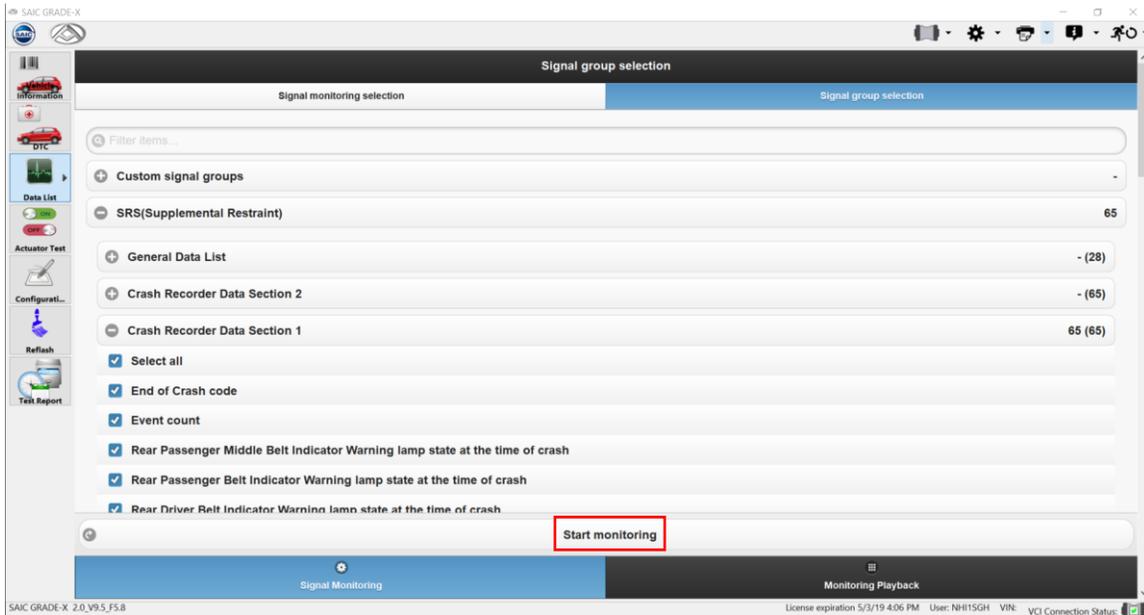
10) Read signals for SV61-EV80 SRS (Supplemental Restraint) crash recorder data section
 (1) Click **【SV61-EV80】** → **【SRS(Supplemental Restraint)】** → **【Data List】** → **【Signal group selection】**, as shown below:



(2) Click crash recorder data section 1, Click to select the data steam or click on the **【Select all】** data flow, as shown below:



(3) Click **【Start monitoring】**, as shown below:



(4) Show crash recorder data, as shown below:

ECU	Signal	Value	Unit
SRS	End of Crash code	0F	
SRS	Event count	15	
SRS	Rear Passenger Middle Belt Indicator Warning lamp state at the time of crash	Lamp Off	
SRS	Rear Passenger Belt Indicator Warning lamp state at the time of crash	Reserved	
SRS	Rear Driver Belt Indicator Warning lamp state at the time of crash	Reserved	
SRS	Passenger Belt Indicator Warning lamp state at the time of crash	Lamp Off	
SRS	Driver Belt Indicator Warning lamp state at the time of crash	Lamp Off	
SRS	PADI Warning lamp state at the time of crash	Reserved	
SRS	Sys Warning lamp state at the time of crash	Reserved	
SRS	Fault Status of Sensors PASFP	Faulty	
SRS	Fault Status of Sensors PASFD	Faulty	
SRS	Fault Status of Sensors Central sensor Chan 2	Faulty	

Start recording Stop recording Freeze View

SAIC GRADE-X 2.0_V9.5_F5.8 License expiration 5/3/19 4:06 PM User: NH15GH VIN: VCI Connection Status: [OK]

6.6 Actuator Test

1) Click **Actuator Test** to show all available tests, as shown below:

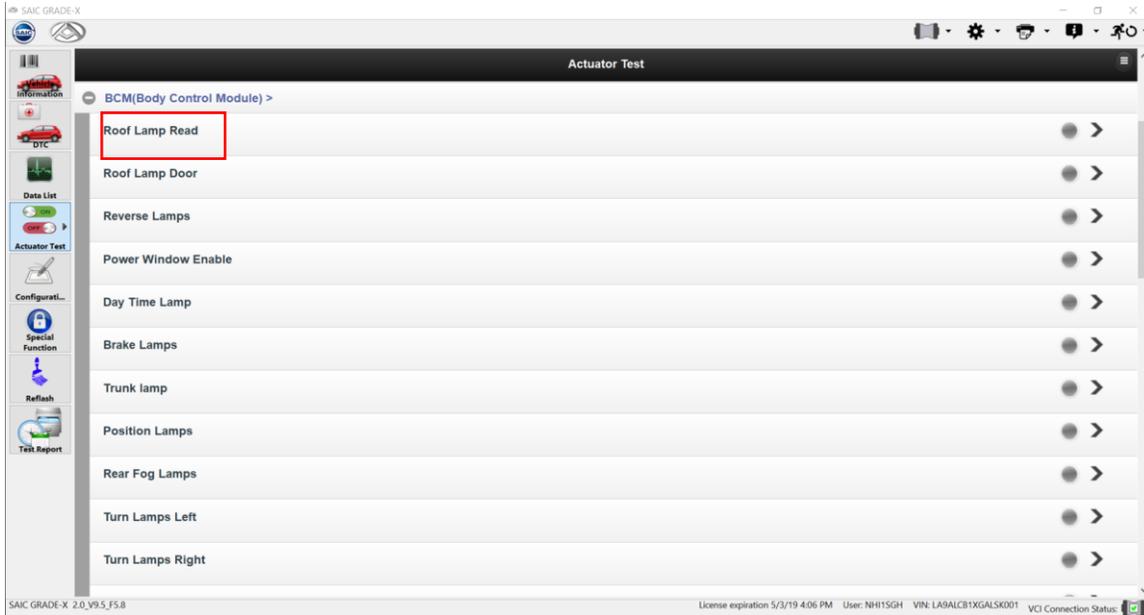
Actuator Test

Filter items...

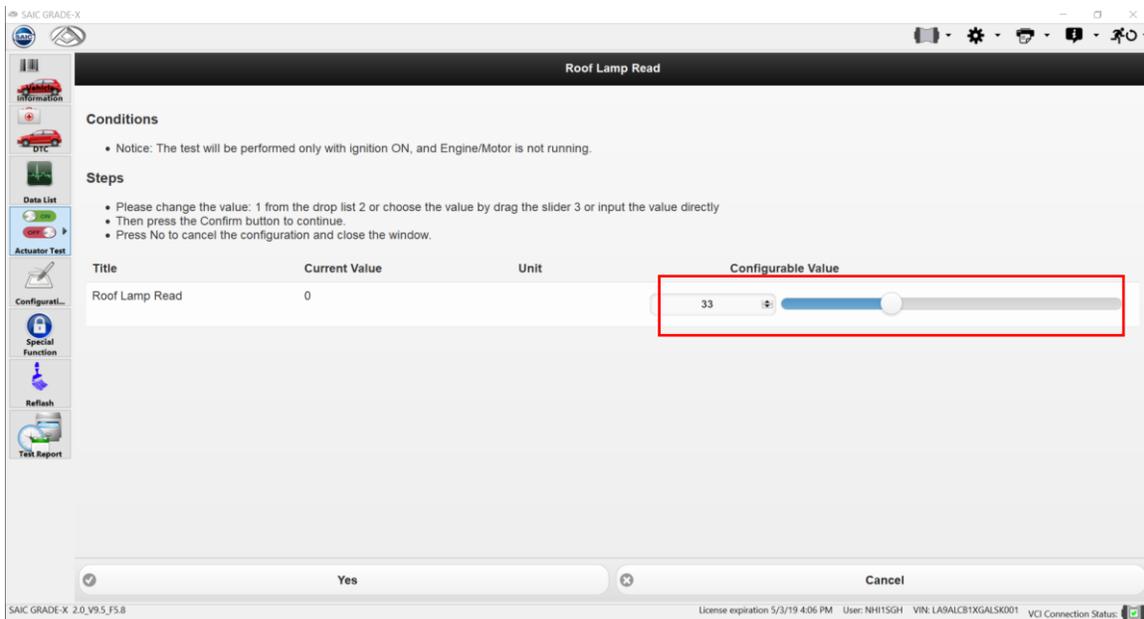
- EMS(Engine Management System) EDC17C81 D19t EU4 >
- EMS(Engine Management System) EDC17C81 D19t EU5 >
- EMS(Engine Management System) MT22 1 4G63 >
- EMS(Engine Management System) MT22 1 4G69 >
- ABS/ESP(Anti-lock Brake / Electronic Stability Program) >
- BCM(Body Control Module) >
- PEPS(Passive Entry Passive Start) >
- IPK(Instrument Pack) >
- SRS(Supplemental Restraint) >
- TPMS(Tire Pressure Monitoring) >
- GAW(Gate Way) >
- AFS(Adaptive Front-lighting) >
- LCA(Lane Change Assistant) >
- EMS(Engine Management System) NLE >
- BCM(Body Control Module) 2018 Plus >

SAIC GRADE-X 2.0_V9.5_F5.8 License expiration 5/3/19 4:06 PM User: NH15GH VIN: LA9A1C81XGALS001 VCI Connection Status: [OK]

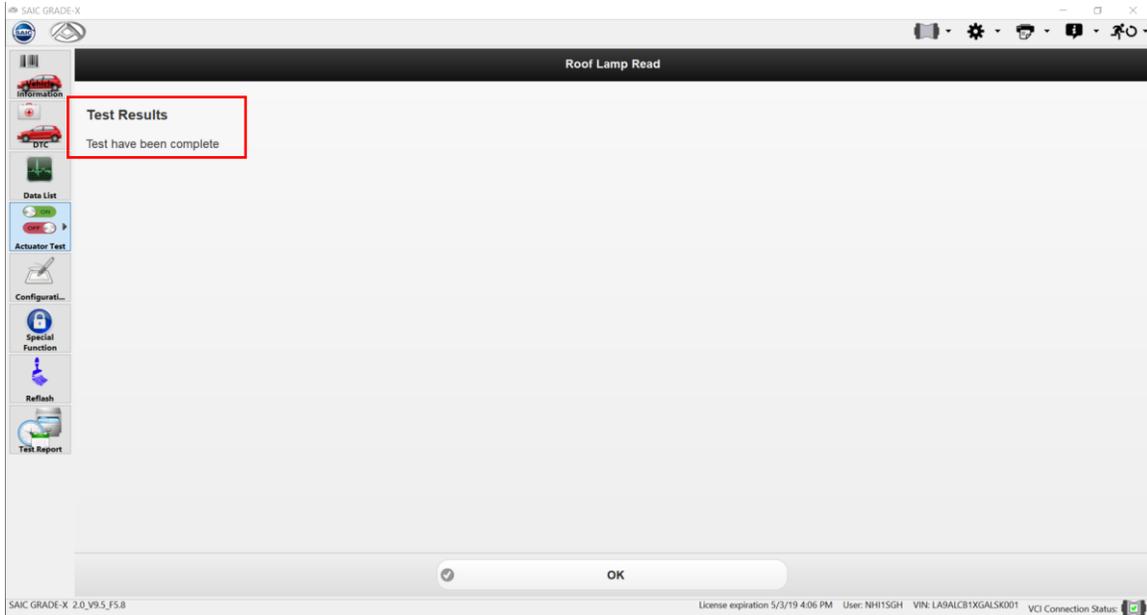
2) Example: Click **Roof Lamp Read**, as shown below:



3) Read conditions and steps and set the value, click **【Yes】** to perform the test, as shown below:



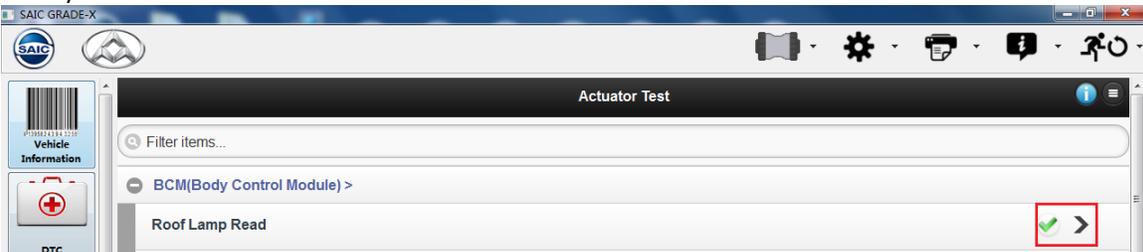
4) View result, click **【OK】** to finish, as shown below:



Note: If the test is executed successful, the system will return to the first page and you can test again; if the test fails, the system will exit the current page.

5) Test feedback

The system will show the test result, as shown below:

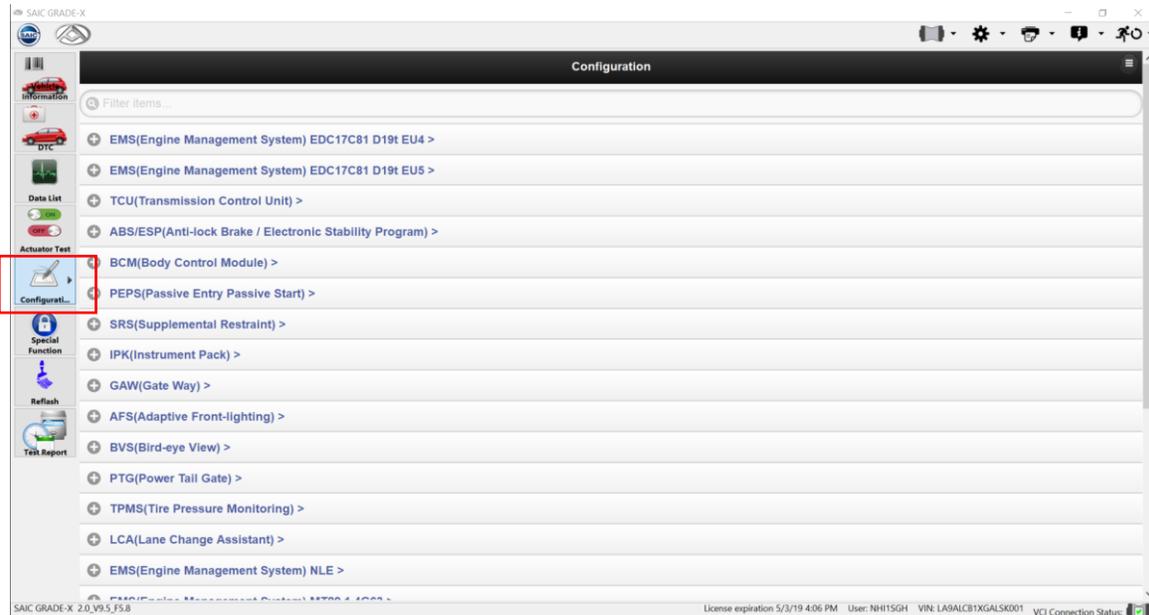


- : Successful
- : Not perform
- : Interrupt or failed

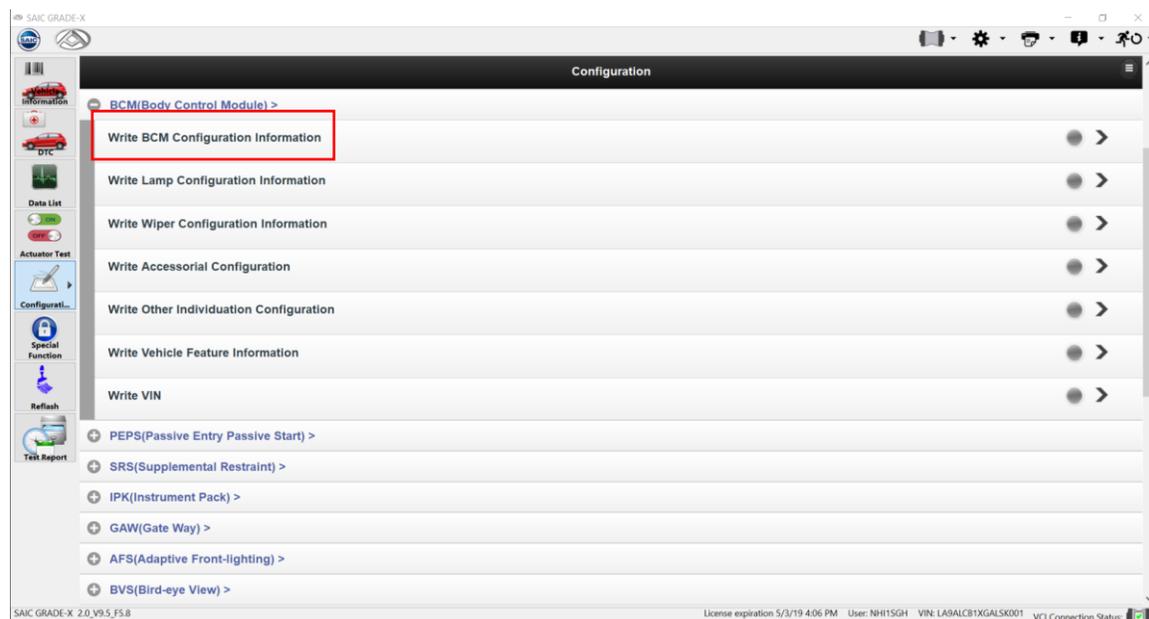
6.7 Configuration

NOTE: ECU configuration function is to modify state, write VIN, maximum number of keys, write installation date configuration. Improper operation will cause unexcepted result. So please follow the safety directions. This function requires secure access.

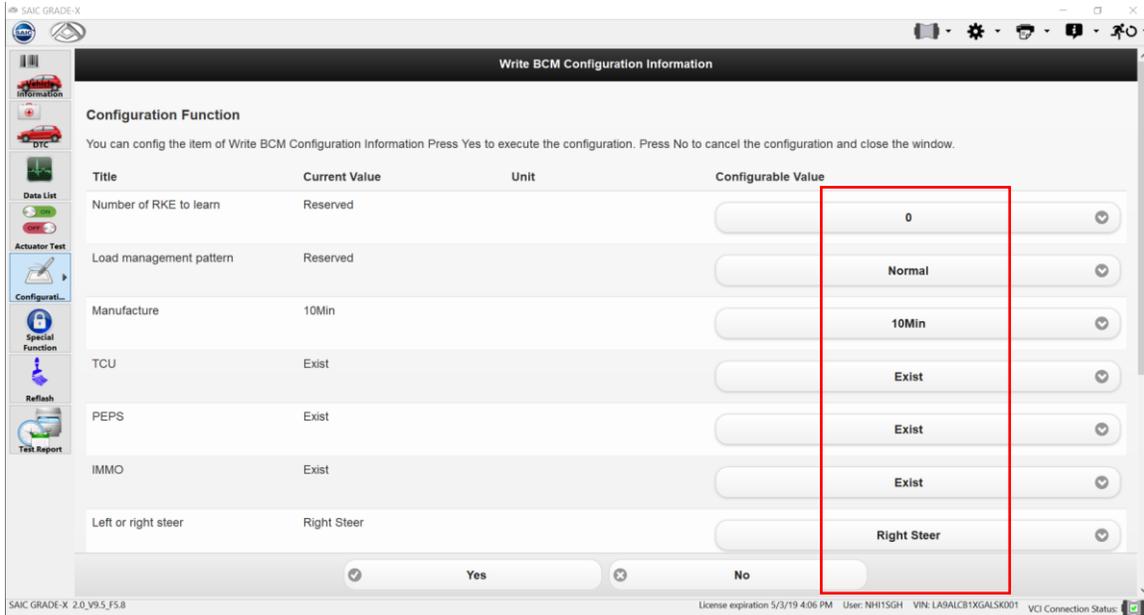
1) Click **Configuration** to show available functions, as shown below:



2) Example: Click Write BCM Configuration Information, as shown below:

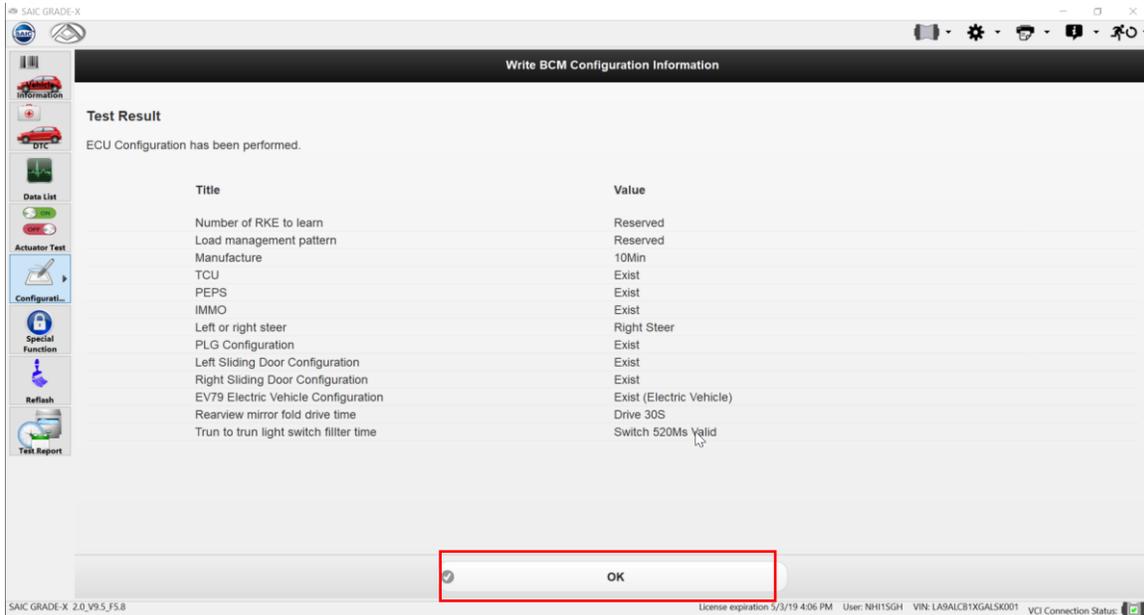


3) Detail as shown below:

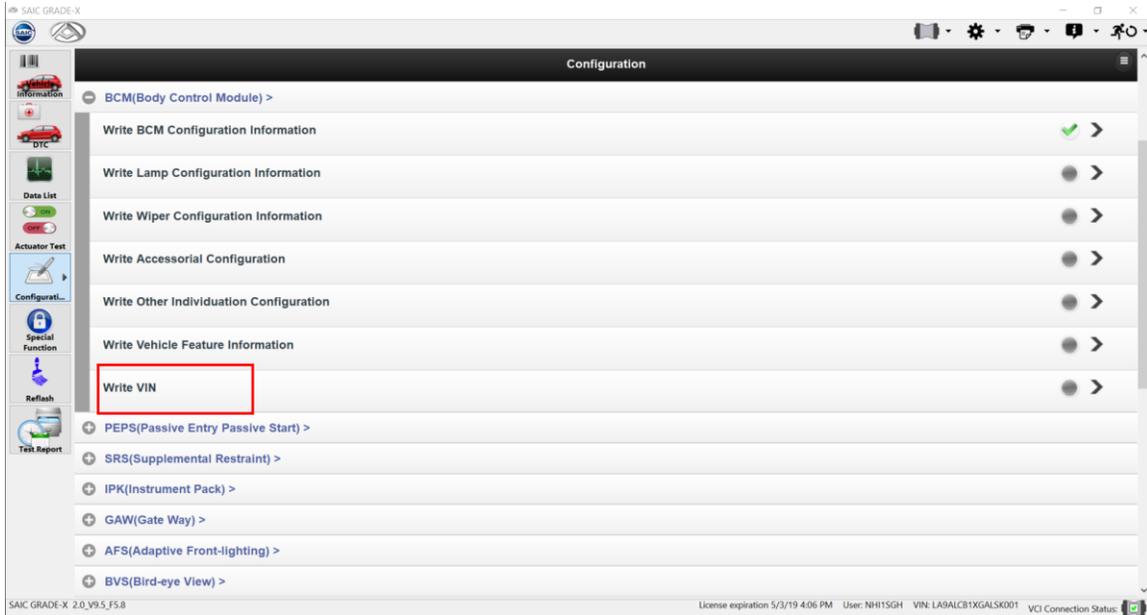


- **【Title】:** Item Name
- **【Current Value】:** Current value from ECU for the current item
- **【Unit】:** Unit for the current item
- **【Configurable Value】:** Allowed values for the current item

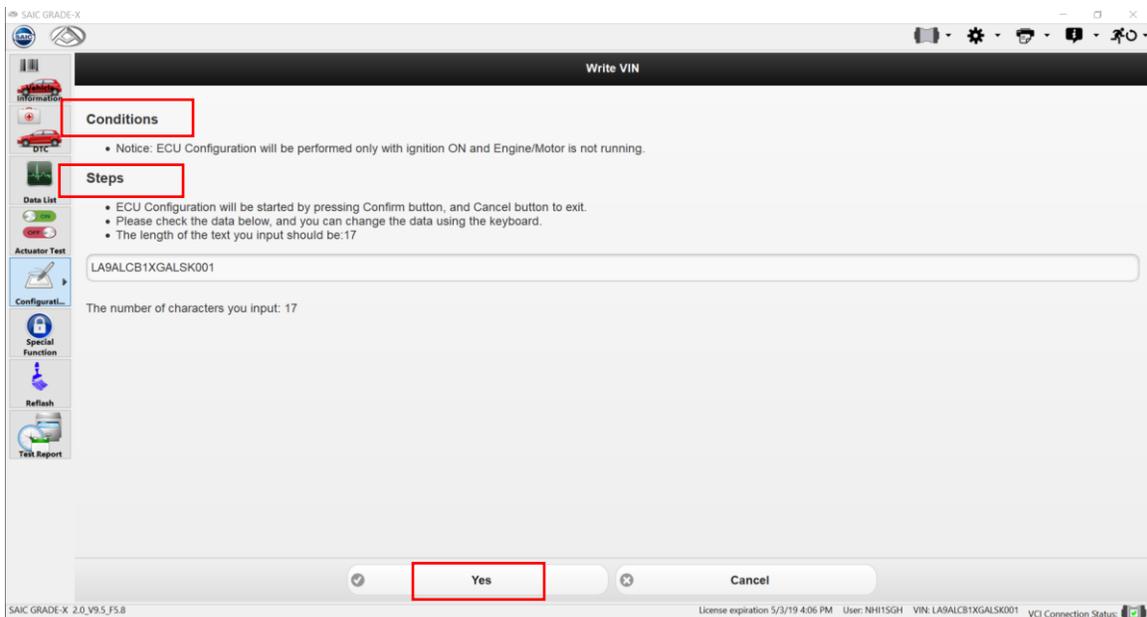
4) Finished, execute result, click **【OK】** to exit, as shown below:



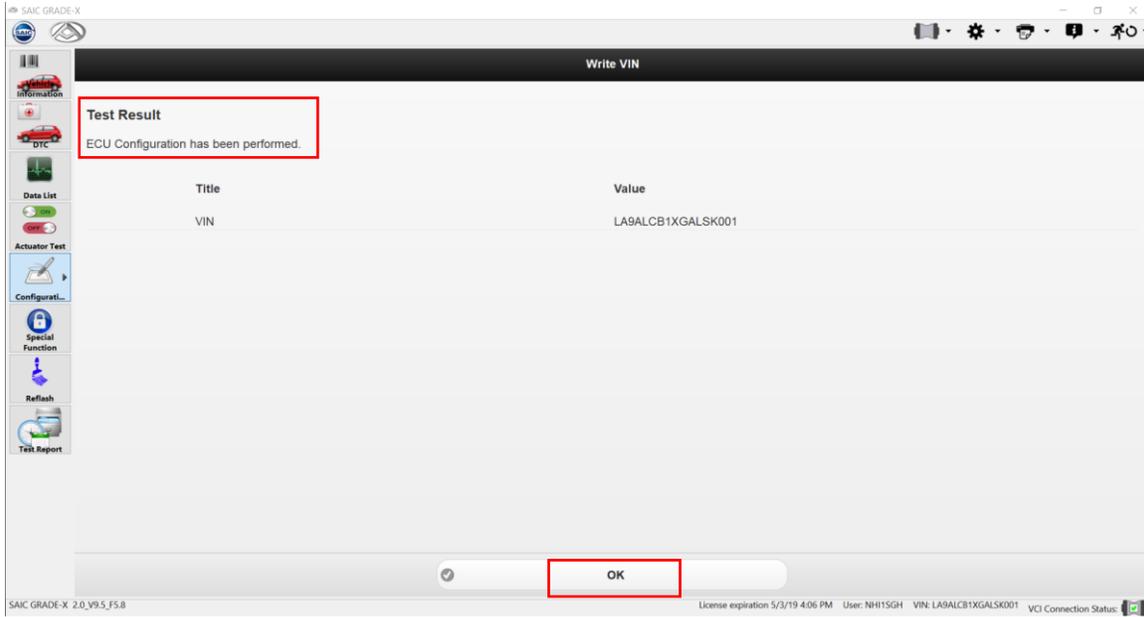
5) Example: Click Write VIN, as shown below:



6) Please kindly read conditions and steps. The default value is read out from ECU. And you can change the data using the keyboard, and Click **【Yes】** to perform, as shown below:

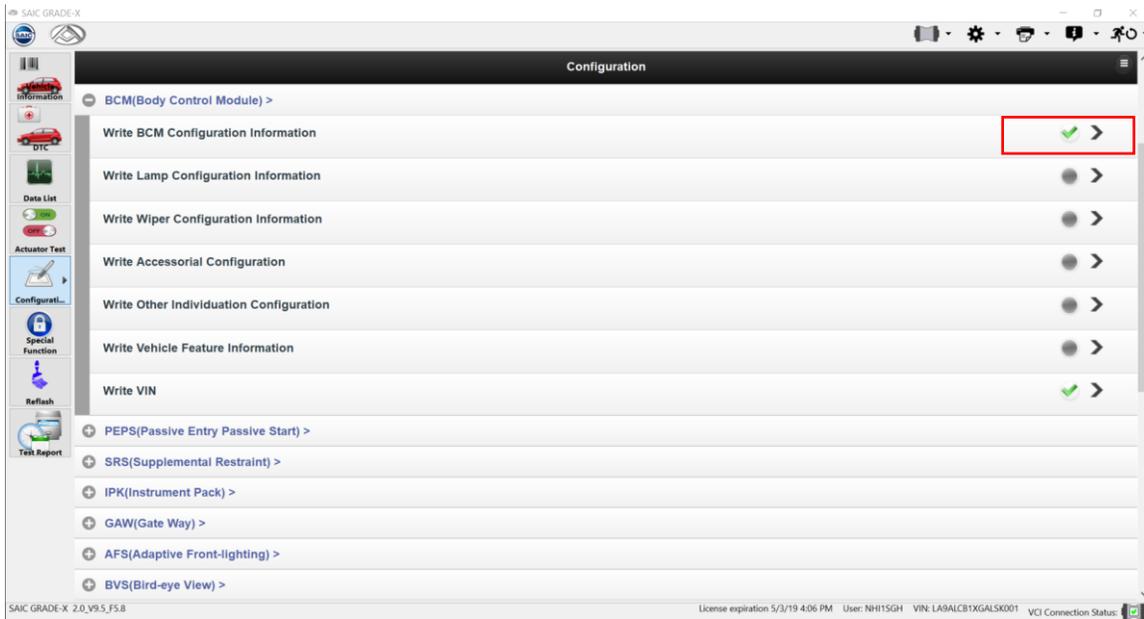


7) Finish and view result, click **【OK】** to exit, as shown below:



8) Test Feedback

The system will show the test result, as shown below:



- : Success
- : Not perform
- : Interrupt or failed

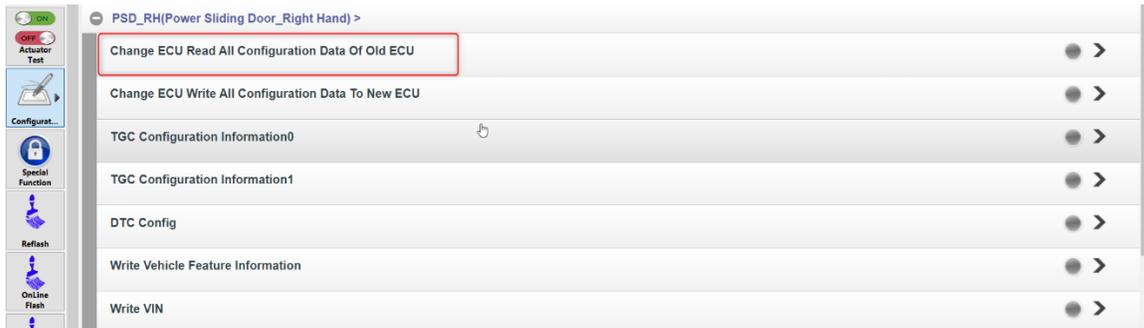
6.7.2 ONE CLICK CONFIGURATION FUNCTION

Note: The one click configuration function is suitable for replacing ECUs in vehicles. First, read all the configuration information of the old ECU on the vehicle (replace all the configuration data of the old ECU), perform the ECU replacement operation, and then execute the one click write function (replace all the configuration data to the new ECU) to write the configuration data of the old ECU into the new ECU. So please follow safety instructions or have qualified personnel perform the operation during execution. This feature requires secure access.

1) Select and click [Configuration], and the interface will display all the configuration items supported by the ECU, as shown in the following figure:



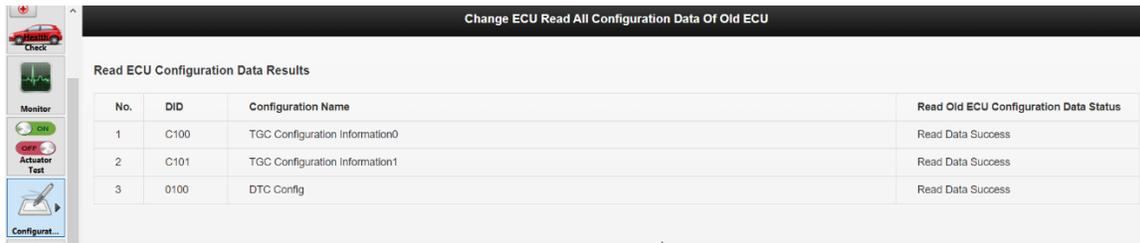
2) 例: For example: select and click on PSD RH (right electric sliding door module) to first read the data of the old ECU. Please click on the **"Change ECU Read All Configuration Data Of Old ECU"** menu, as shown in the following figure:



3) According to the prompts, the interface displays the result of reading the configuration data of the old ECU, as shown in the following figure. Click [OK] to exit.

If the reading status display is unsuccessful, please confirm if the old ECU is intact. If there are individual display reads that fail, the user needs to execute this configuration separately to see if they can read successfully. Re execute the **"Change**

ECU Read All Configuration Data Of Old ECU " menu.



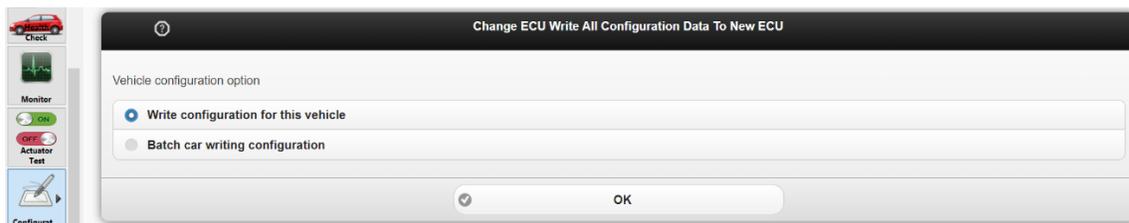
4) After successful reading, remove the old ECU and replace it with a new one. Please ensure that the replaced ECU is of the same model as the old ECU. After the replacement is completed, proceed to the next step.

If the old ECU fails to read the data as a whole, please do not proceed to the next step.

5) Select the "Change ECU Write All Configuration Data To New ECU" menu. Before operating this function, please make sure to complete the operation of reading the old ECU data (steps 1-4 above), as shown in the following figure:

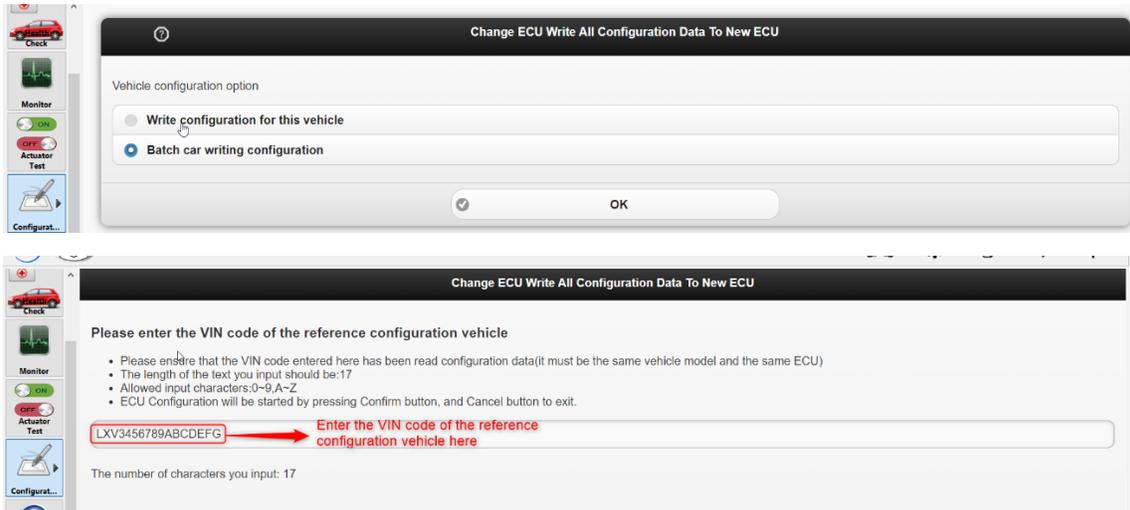


6) After entering the "Change ECU Write All Configuration Data To New ECU" menu, if the ECU operation is only for one vehicle model, please select "Write configuration for this vehicle", as shown in the following figure:

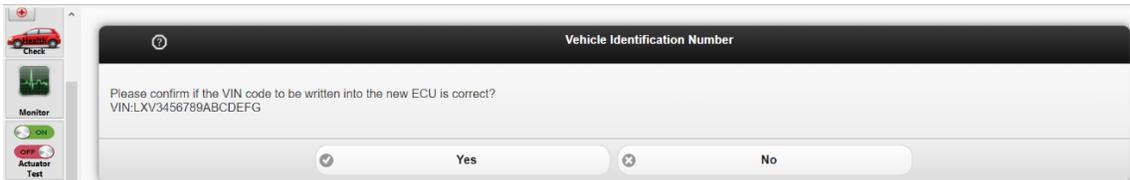


If batch modification is performed on a batch of ECU models, please select "Batch car Writing Configuration". Batch write configuration requires entering the vehicle VIN

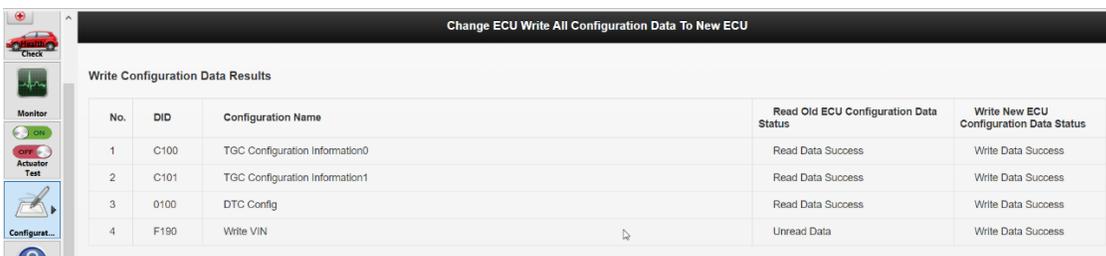
code that needs to be referenced for configuration (please ensure that the referenced VIN code has been successfully read for vehicle configuration), as shown in the following figure:



7) After entering the "Write configuration for this vehicle/Batch car Writing configuration" menu, the configuration will be written and the VIN code will also be written. The user needs to confirm whether the VIN code written to the ECU is correct, as shown in the following figure. If the VIN code is correct, please select the "Yes" button, and the VIN code will be written to the new ECU. If the VIN code is incorrect, please select the "No" button.



8) After clicking the "Yes" or "No" button, the specific result of configuration writing will appear on the interface. Click "OK" to exit,



9) If the old ECU configuration data reading status is successful but the data writing is not successful, please confirm whether the new ECU supports this configuration.

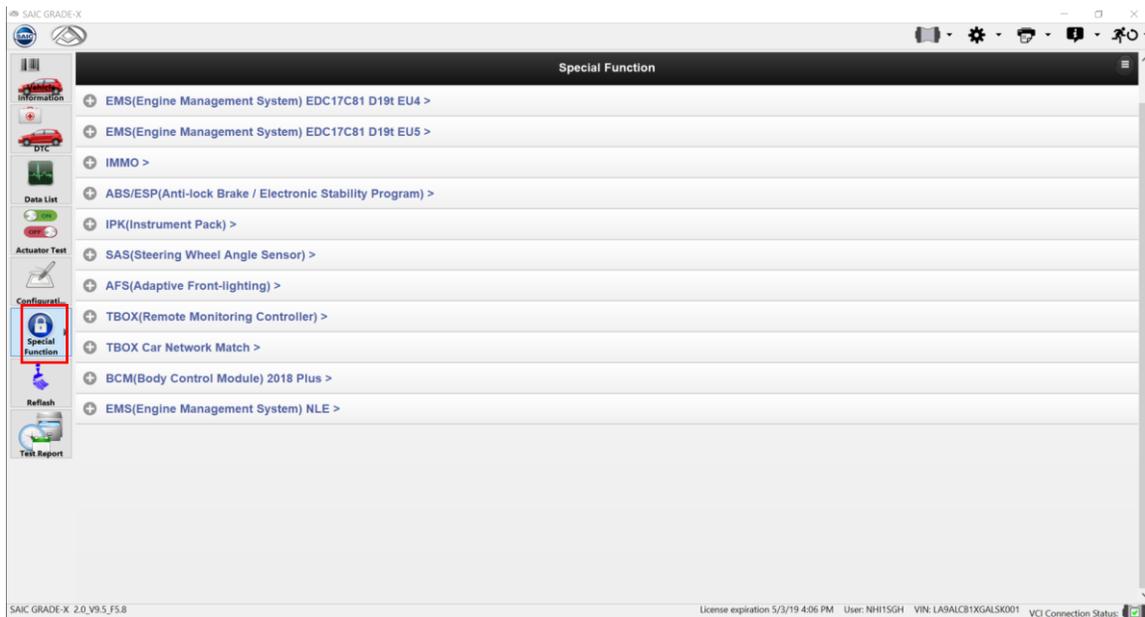
Please perform this configuration separately in the configuration menu and manually select for configuration.

6.8 Special Function

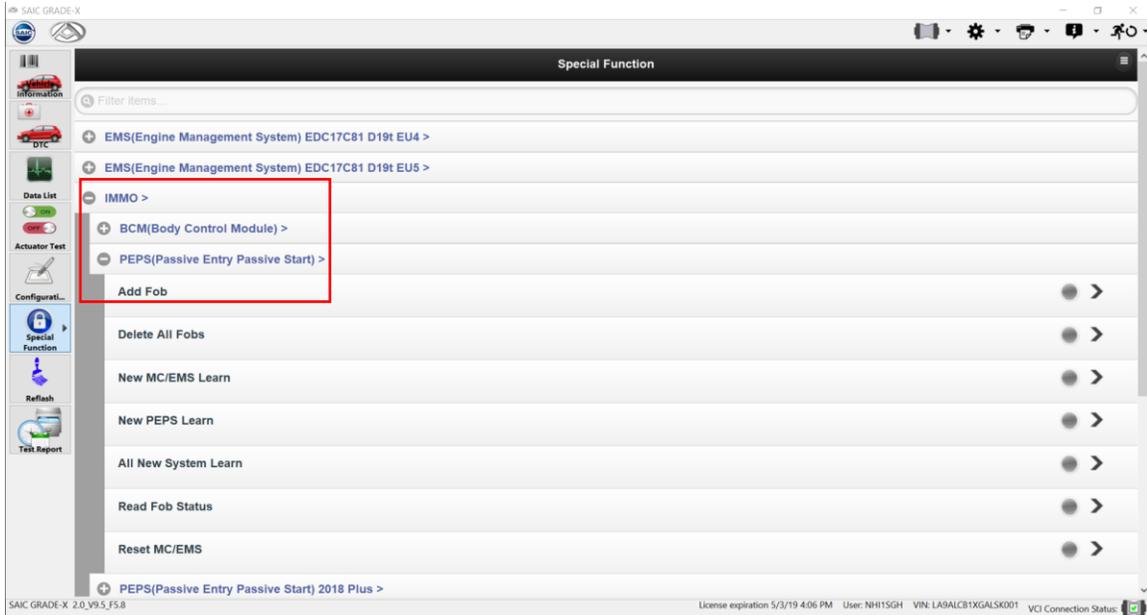
Note: The special function is a complicated configuration process among different ECUs, especially for IMMO, Check and calibration.

The following case is “Add PEPs fob”.

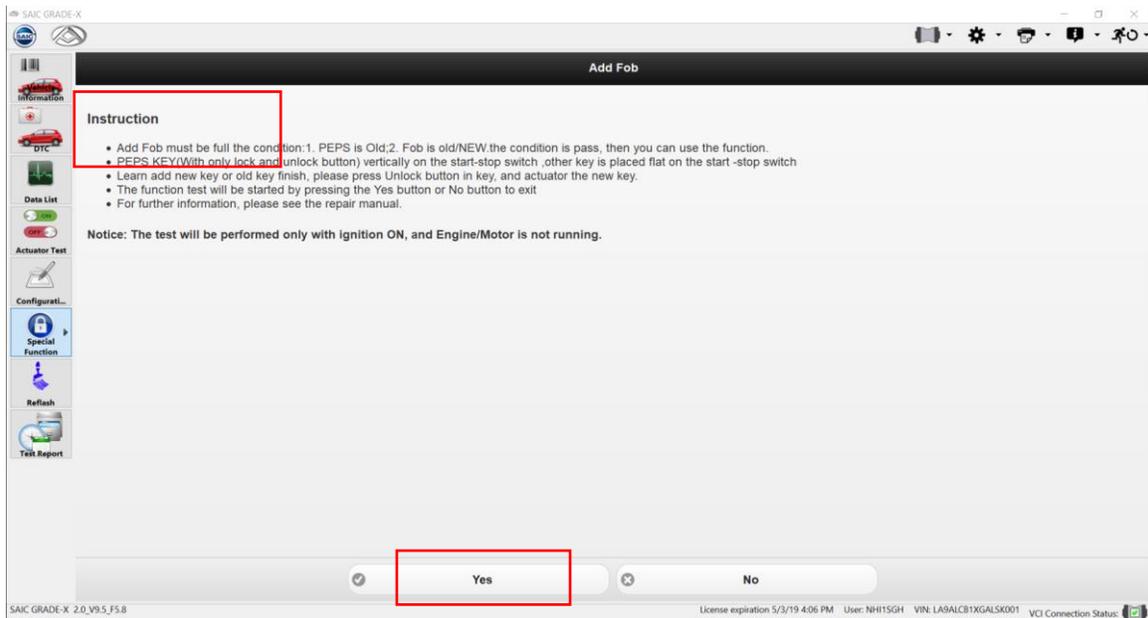
- 1) Click **【Special Function】** to show available items, as shown below:



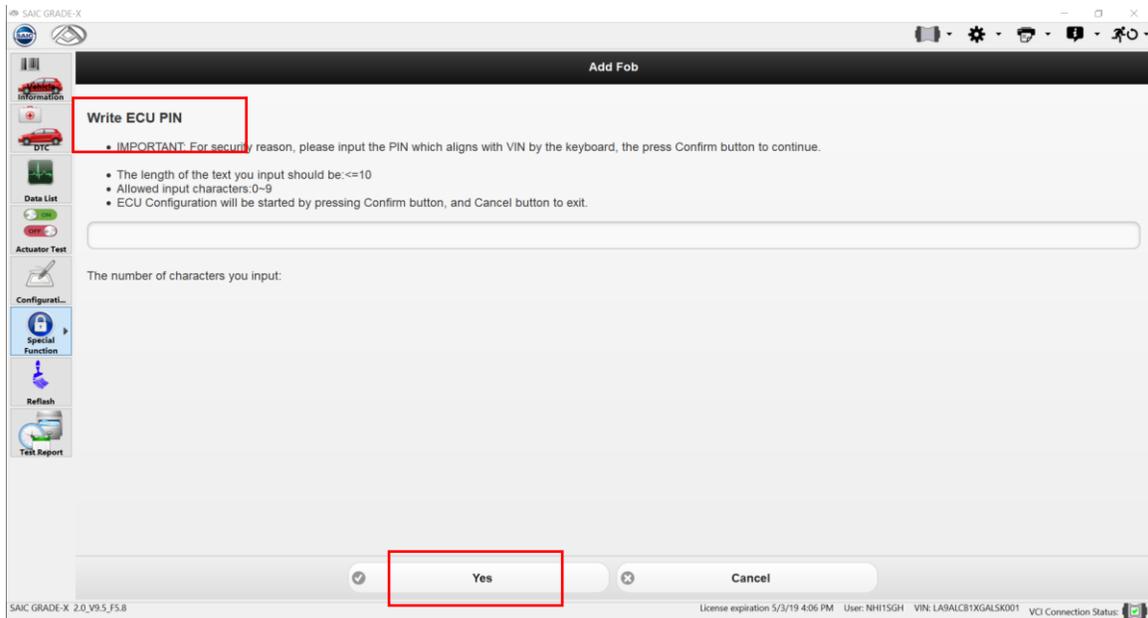
- 2) Click **【IMMO】** → **【PEPS(Passive Entry Passive Start)】** → **【Add Fob】**, as shown below:



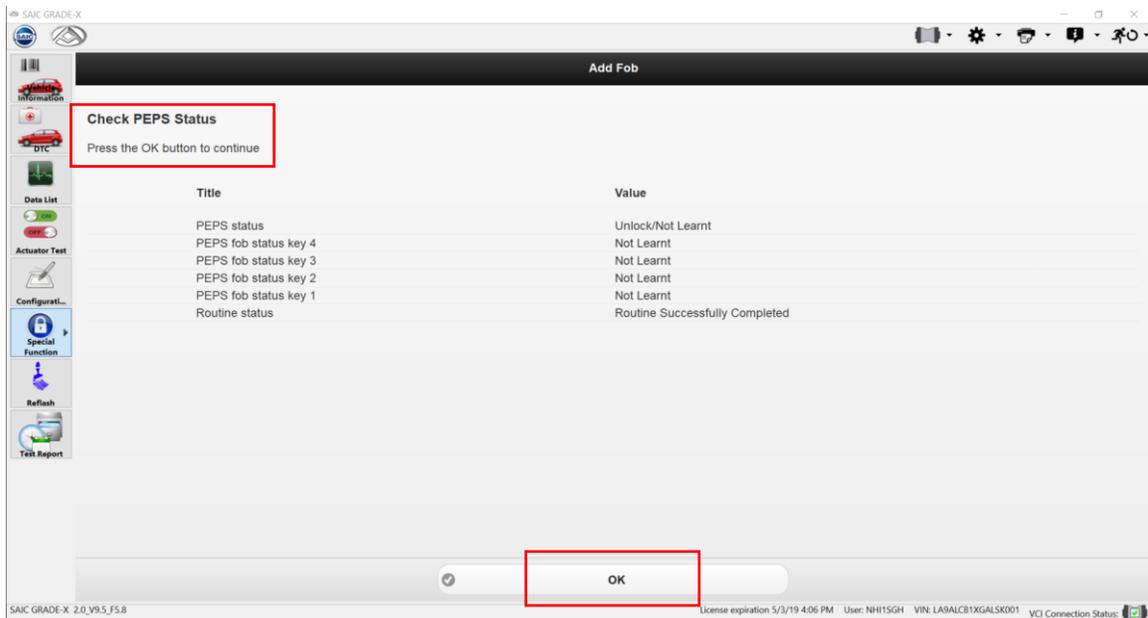
- 3) Please kindly read instruction before start and click **【Yes】** to continue, and **【No】** to exit, as shown below:



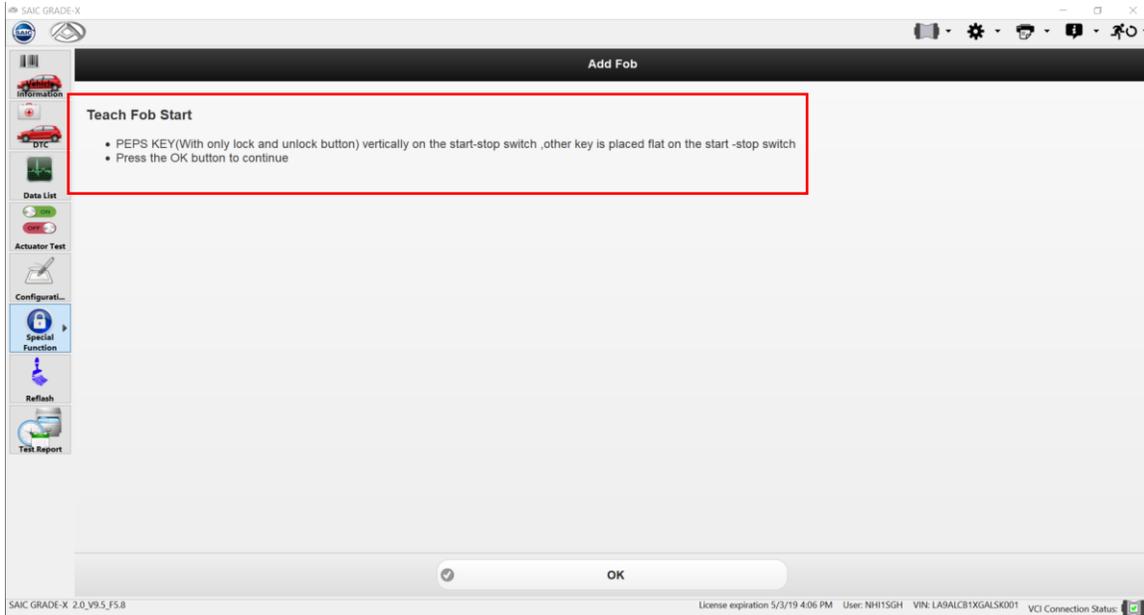
- 4) Enter correct PIN and click **【Yes】** to continue, or **【Cancel】** to exit, as shown below:



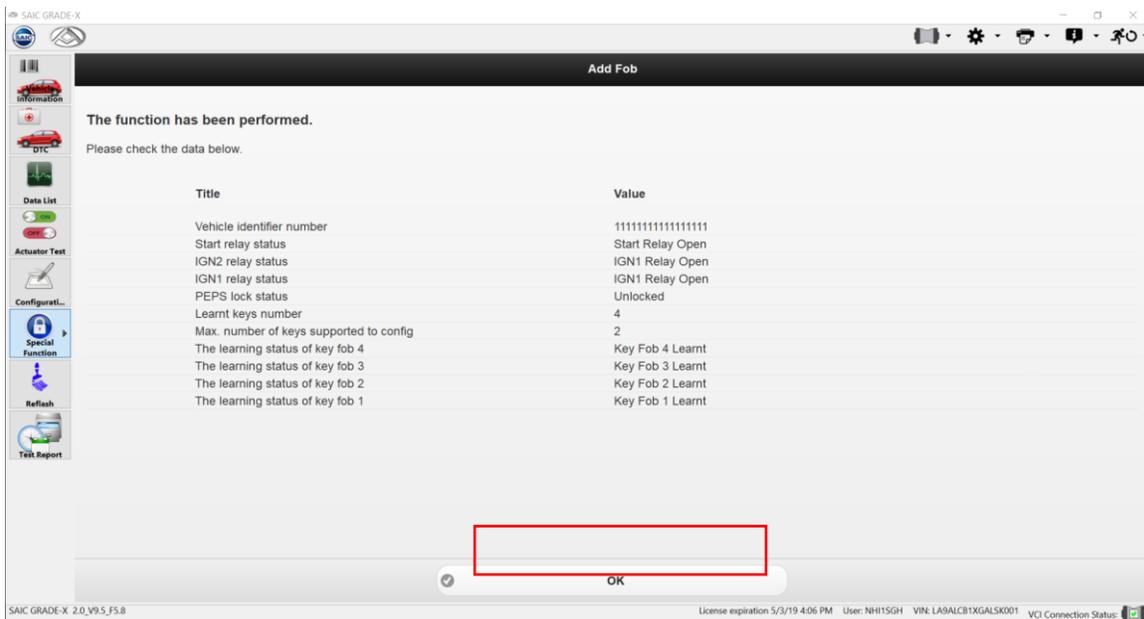
5) PEPS status checking, click **【OK】** to continue, as shown below:



6) Follow the instruction to put key and click **【OK】** to continue, as shown below:

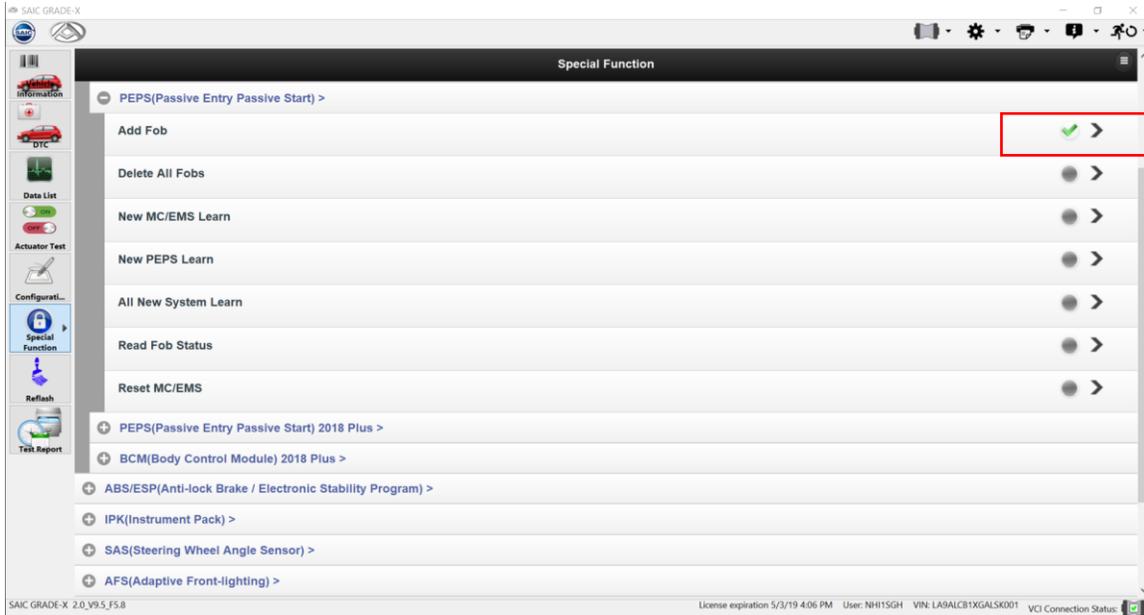


7) Show result and check status, click **【OK】** to exit, as shown below:



8) Test Feedback

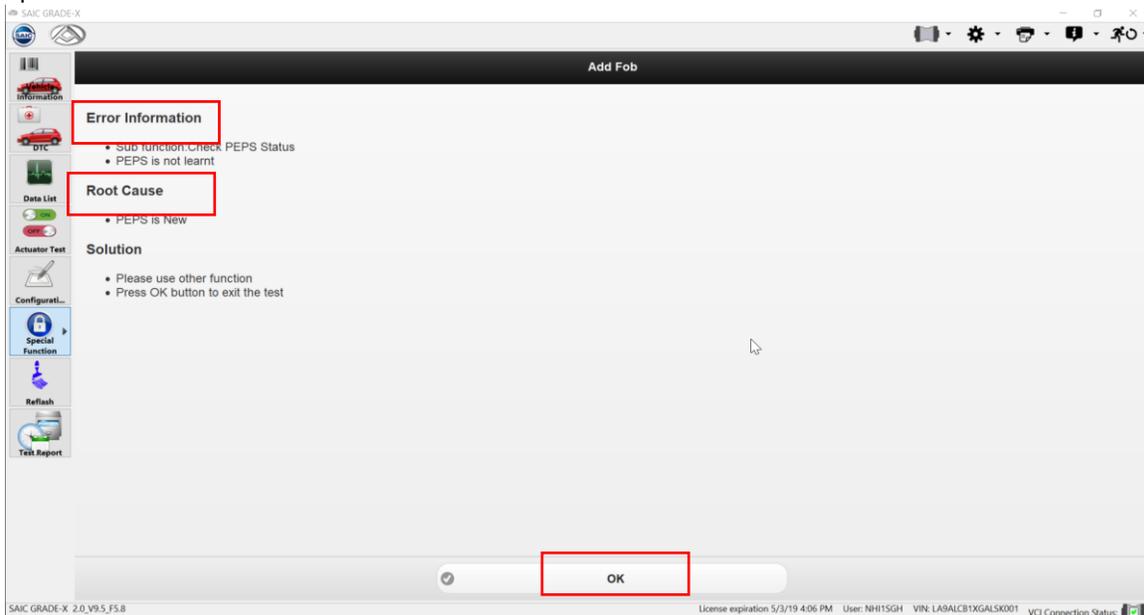
The system will show the test result, as shown below:



- []: Success
- []: Not perform
- []: Interrupt or failed

9) Not match condition

When one of the condition is not satisfied the system will show the causes and suggest another operation, as shown below:

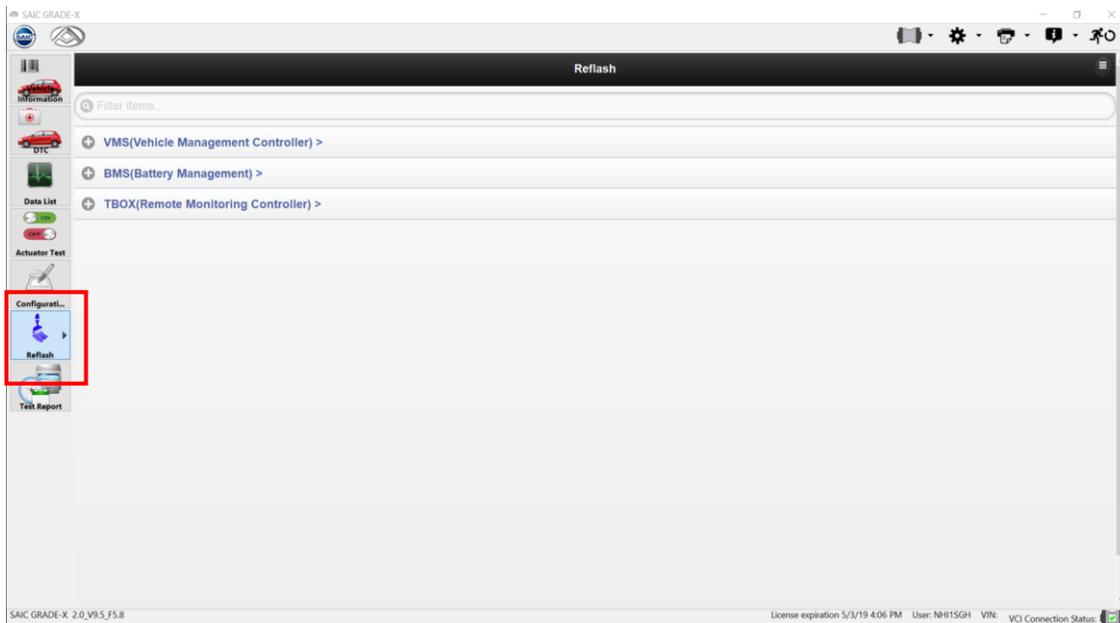


6.9 Reflash

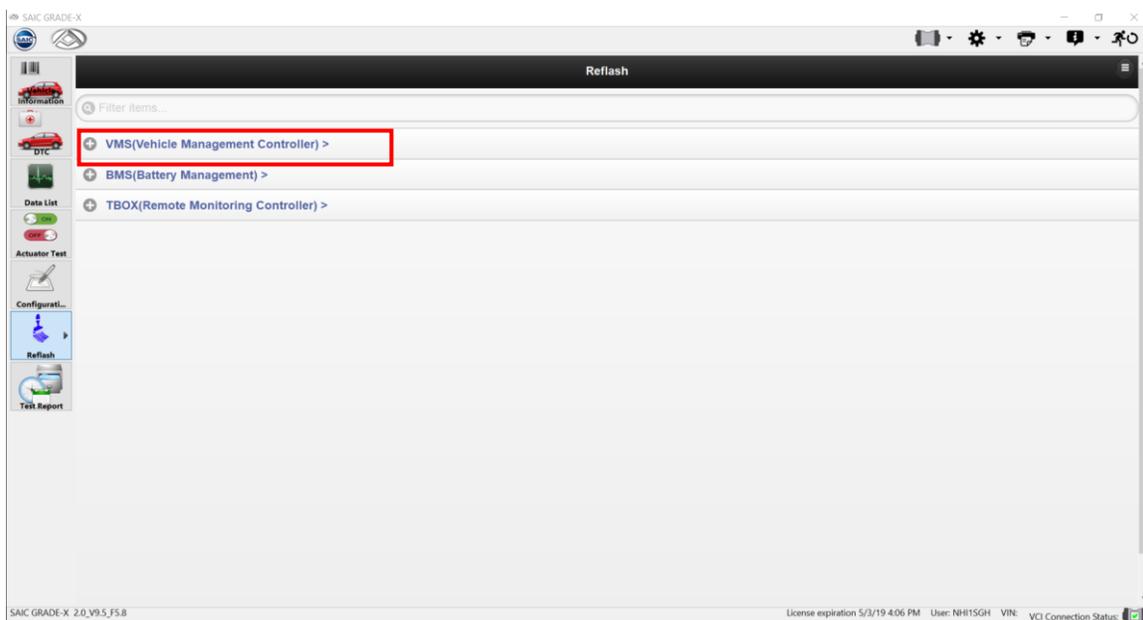
ECU flashing is to rewrite the data into the ECUs.

NOTE: The following ECU flashing process is based on VMS(Vehicle Management Controller) Flashing.

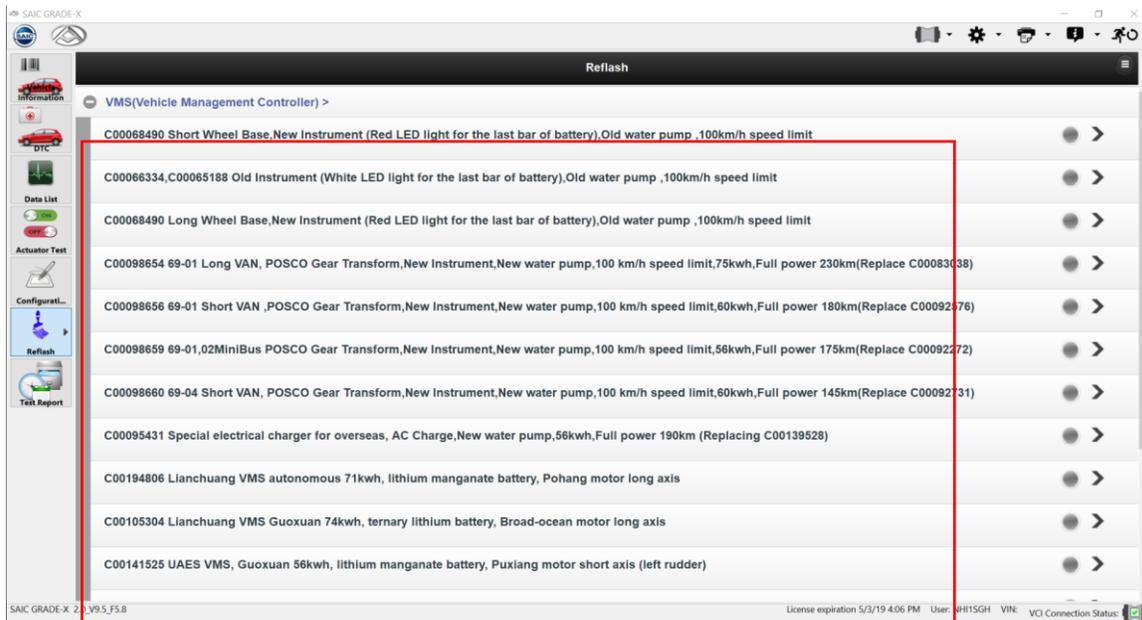
- 1) Click **【Reflash】** to show available flash for ECUs, as shown below:



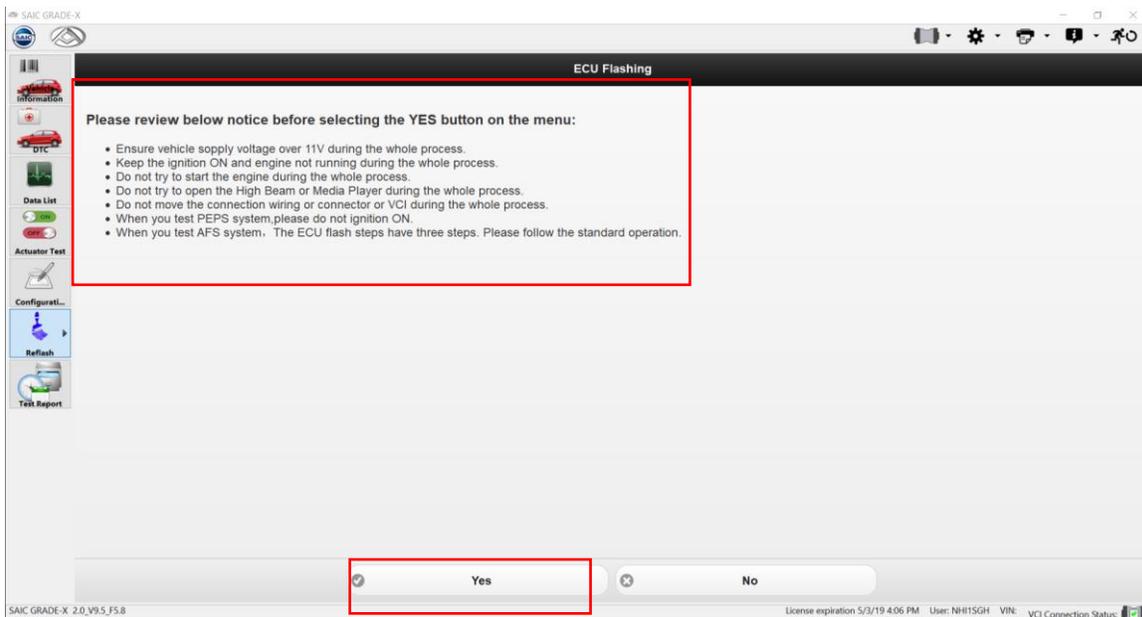
- 2) Click **【VMS(Vehicle Management Controller)】**, as shown below:



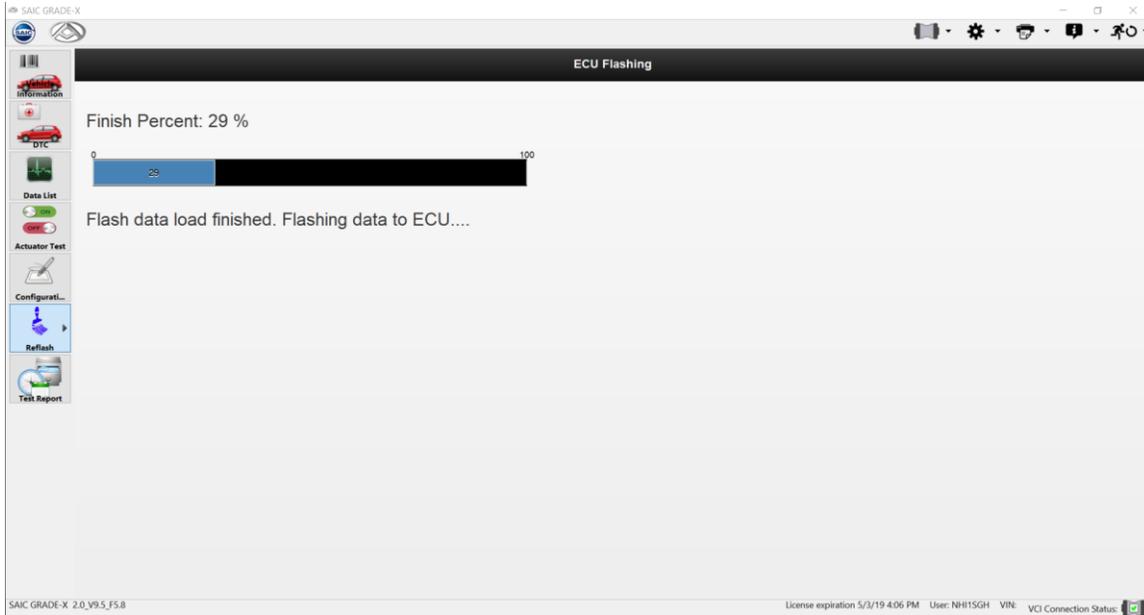
- 3) Click to choose one flash file. Currently there are three flash files can be selected to flash into VMS, as shown below:



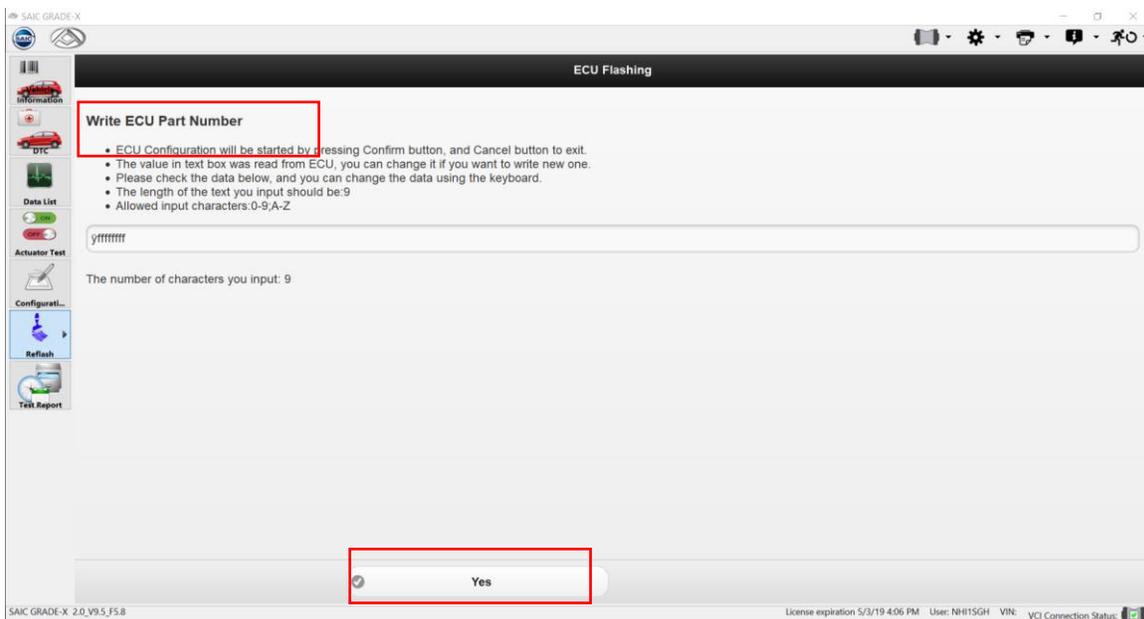
- 4) Please read instruction and make sure all the conditions are satisfied, click **【OK】** to continue, as shown below:



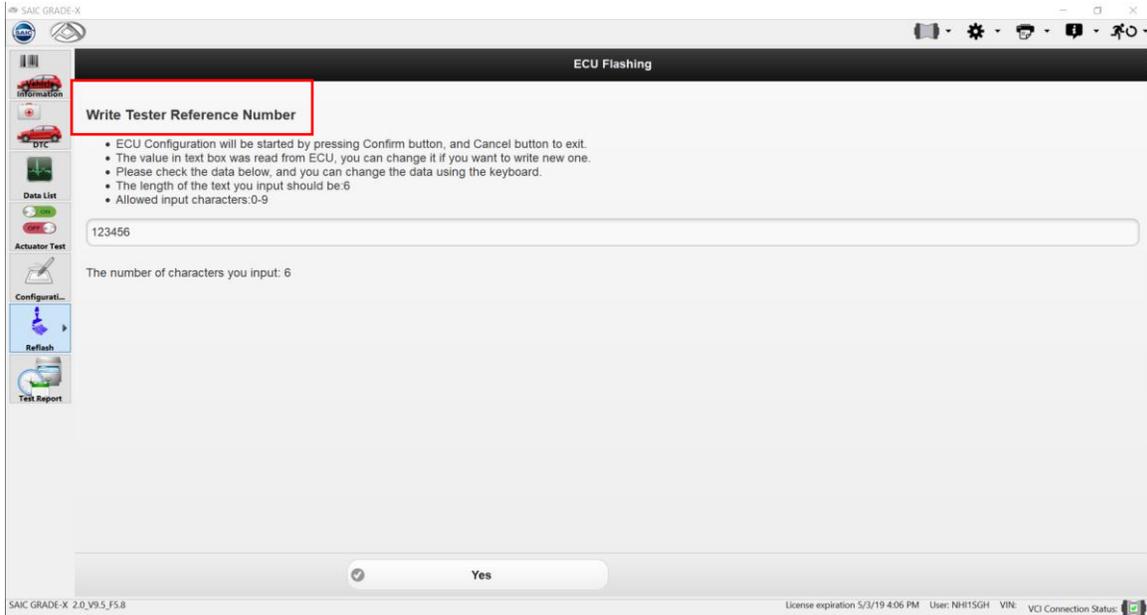
- 5) Start flashing, please wait, as shown below:



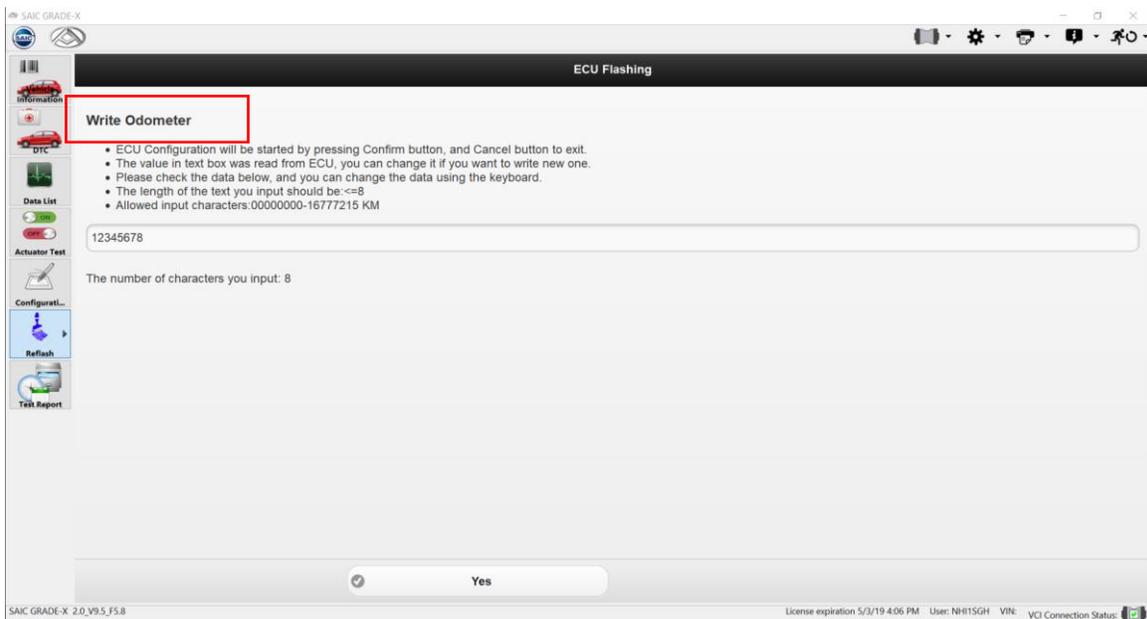
- 6) Input ECU Part Number after flash complete if needed, the default value is current value from ECU, you could re-enter new value, click **【OK】** to next step, as shown below:



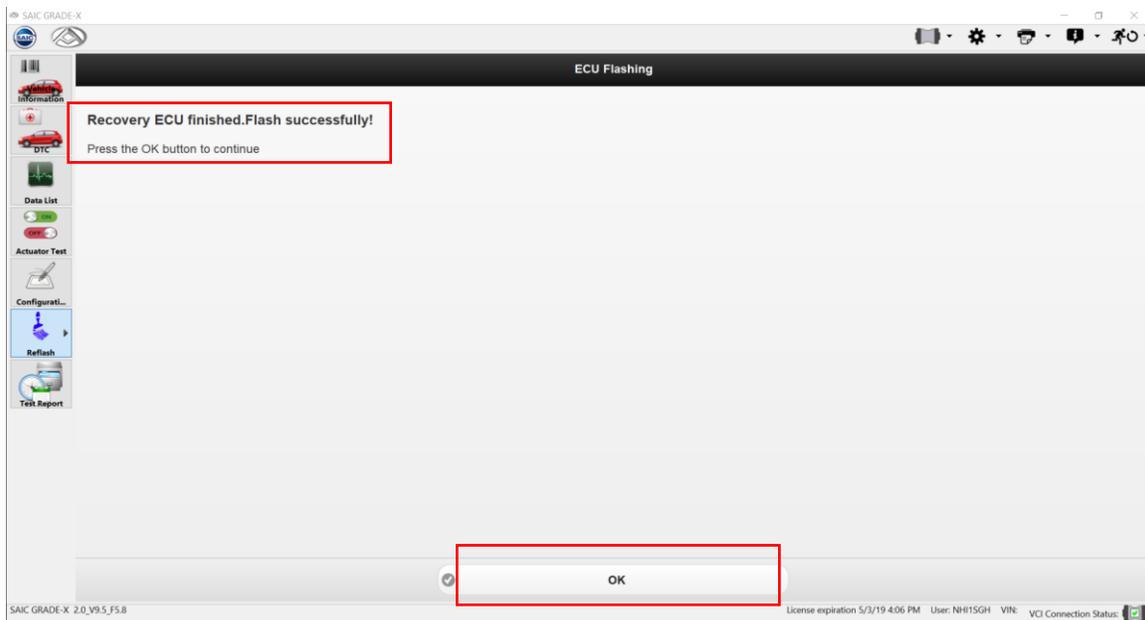
- 7) Input Tester Reference Number, the default value is current value from ECU, you could re-enter new value, click **【OK】** to next step, as shown below:



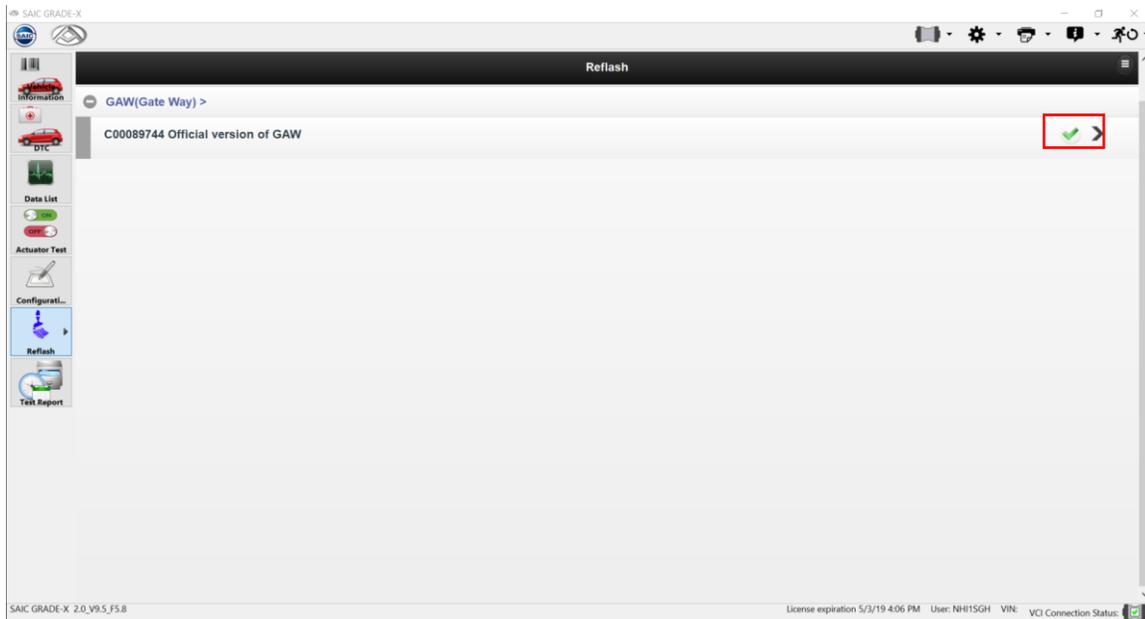
- 8) Input Odometer, the default value is current value from ECU, you could re-enter new value, click **【OK】** to next step, as shown below:



- 9) Flash complete, please check whether ECU works, click **【OK】** to next step, as shown below:



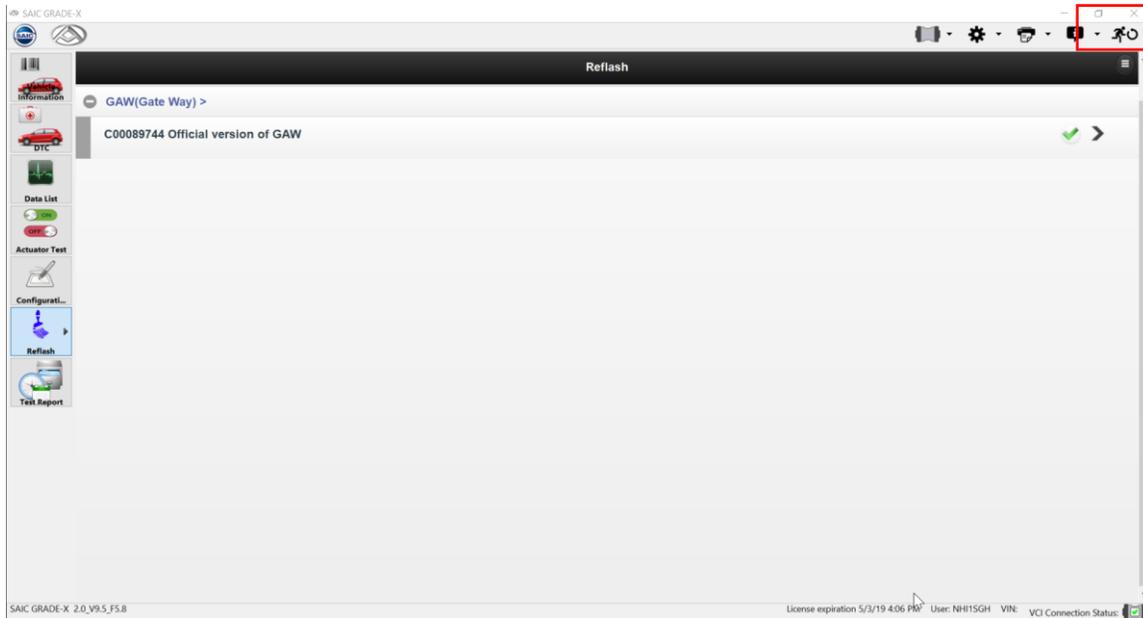
10) Back to the flash file choice page , as shown below:



- []: Successful
- []: Not perform
- []: Interrupt or failed

- : Not flash

11) You could select  **New Vehicle** back to main page, as shown below::



6.10 Test Report

Test Report will summarize all operations and results which user have operated, you could print it, as shown below:



SAIC GRADE-X

Wednesday 3 April 2019 - 17:04:02

Vehicle Summary

Name	Value
VIN	LXV3456789ABCDEFG
Selected product	SAIC_SV73
Year	2039

DTC Selection

ECU	Code	Description	Status
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ECU Hardware and Software Part Numbers

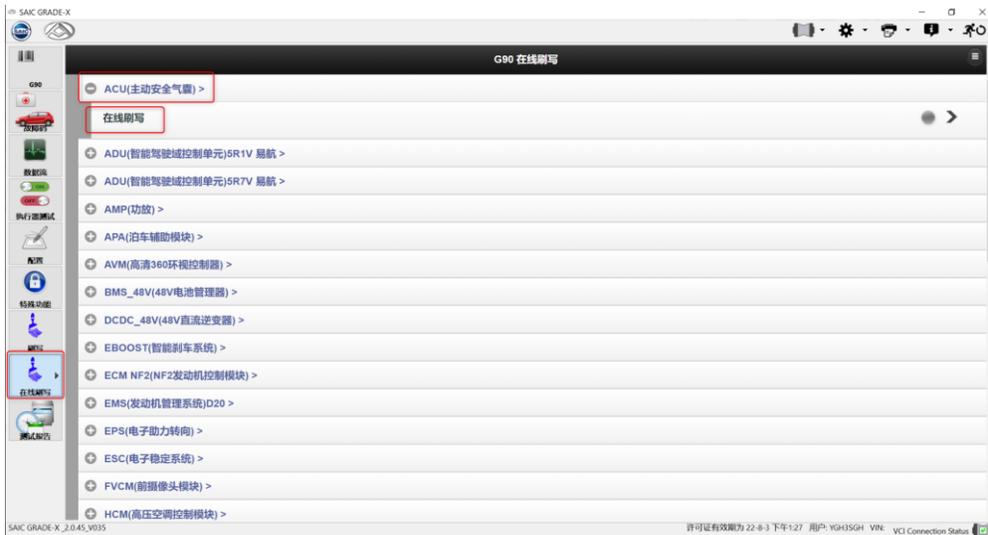
ECU	Name	Value
SV73_FICM_CR	ECU Application Software Number	yfffffff
SV73_FICM_CR	ECU Bootloader Software Reference Number	yyyyyyyyyy
SV73_FICM_CR	ECU Calibration Software Number	yfffffff
SV73_FICM_CR	ECU Hardware Number	yfffffff
SV73_FICM_CR	ECU Manufacture Date 1	121212
SV73_FICM_CR	ECU NET Reference Number	yfffffff
SV73_FICM_CR	ECU Part Number	yfffffff

SAIC GRADE-X 2.0_V9.5_FS.8 License expiration 5/3/19 4:06 PM User: NH15GH VIN: LXV3456789ABCDEFG VCI Connection Status: [2]

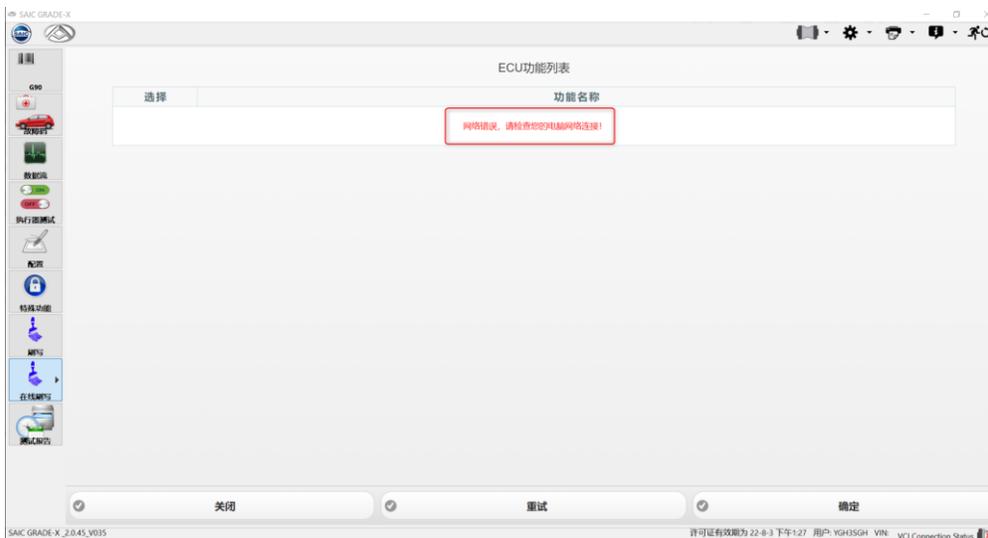
6.11 Online ECU Flash

Note: Only some models of Maxus support the ECU online flash function, the specific models and ECUs that support online flash, please contact the Maxus administrator.

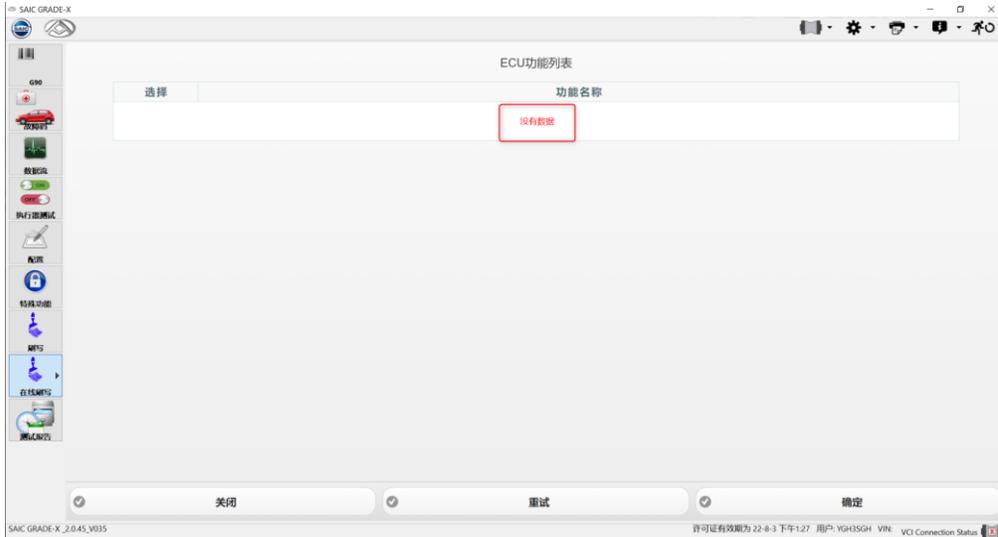
- 1) Click the online flash function button
- 2) Click the ECU
- 3) Click online flash



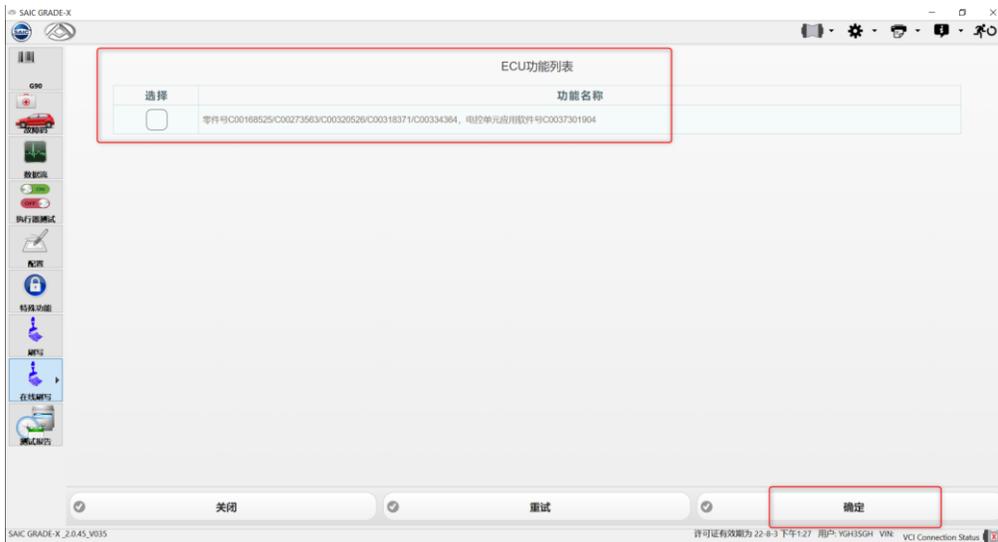
If the computer is not connected to the network, the following message will be displayed. Please connect to the network again.



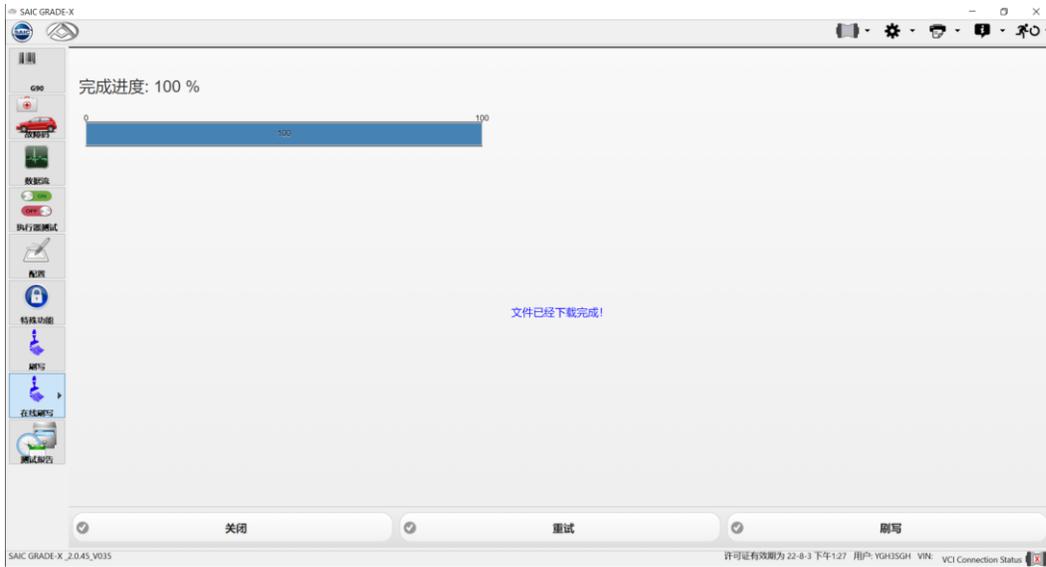
If the ECU does not have flash data, the diagnosis interface will display the following information.



If the ECU has flash data, the interface will display all the flash menu information under the ECU, as shown in the following figure



- 4) Click the "OK" button in the figure above to "next", and click the "Flash" button in the figure below after downloading the flash file.



5) The following figure shows the ECU flash interface

