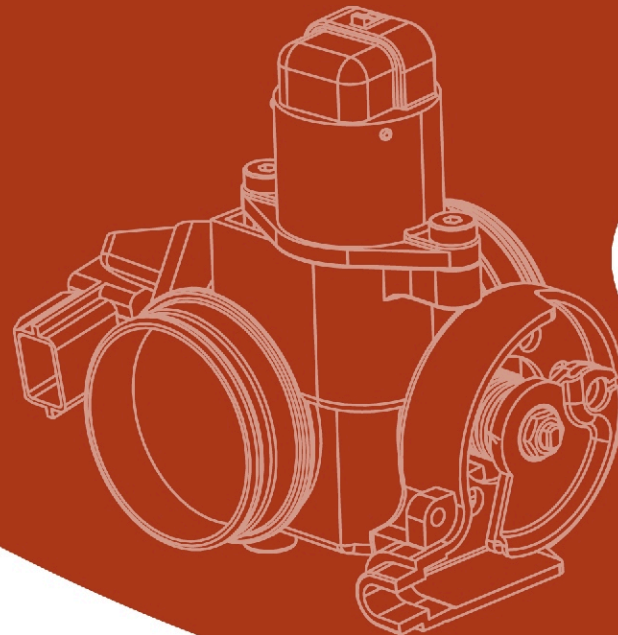


DINLI

NACS DIAGNOSIS



For DINLI electronic fuel injection system



Dinli Metal Industrial Co., Ltd.

118, Industrial 9th Rd, Tali, Taichung, Taiwan, R.O.C.

TEL: +886 4 24917666 FAX: +886 4 24917166

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1. Hardware Coverage

- 1 NACS-DINLI Diagnostic Interface



- 2 2G SD Memory Card



- 3 Carrying Box



- 4 Software CD



- 5 Transfer Cable



- 6 USB Hi-Speed Cable



- 7 Road Test Cable



2. NACS-DINLI Diagnostic Interface

Diagnostic Interface



Ties



USB Hi-Speed Cable
Connection Port



SD Memory Card

Diagnostic Connection Port



Power Supply Port

- ✦ Power Supply Range
 - Input DC Voltage: Max. 11~15V
 - Input DC Current: Min. 800mA

3. Hardware Connection Diagram

Before diagnosis, please connect your NACS-DINLI Diagnostic Interface as below.

- 1. With PC:**
PC → USB Hi-Speed Cable → NACS-DINLI Interface → Transfer Cable → OBD II Diagnostic Cable 16 PIN → Motorcycle/Scooter.




- 2. Hand-Held:**
NACS-DINLI Interface → Transfer Cable → OBD II Diagnostic Cable 16 pin → Motorcycle/Scooter.



4. PC Requirements



Operating system	WINDOWS 2000, XP, Vista (32 bit), WINDOWS 7 (32 bit) is required.
CPU	CPU 1.6 Ghz or higher
RAM	WINDOWS 2000 / XP: 512MB; WINDOWS 7 / Vista: 2G
Hard Disk Space	Free space more than 1GB (on C driver)
Display	Resolution 1024*768
	Please use USB Hi-Speed Cable (Ref. 2.Hardware Coverage ⑥) to connect your PC with NACS-DINLI Diagnostic Interface
Notes	When you use Windows Vista or Windows 7, first you need to close "User Account Control (UAC)", please refer to P.4 No.5.PC Settings.



5. PC Settings

When you use Windows 7, please finish the setting below to run our software successfully.

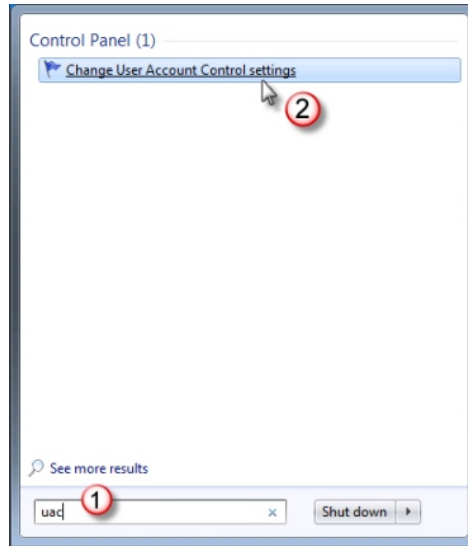
First, you need to disable "User Account Control (UAC)" before installing our software.

- 1.** To user Control Panel to disable UAC in Windows 7, there are several methods to access the User Account Control settings page:

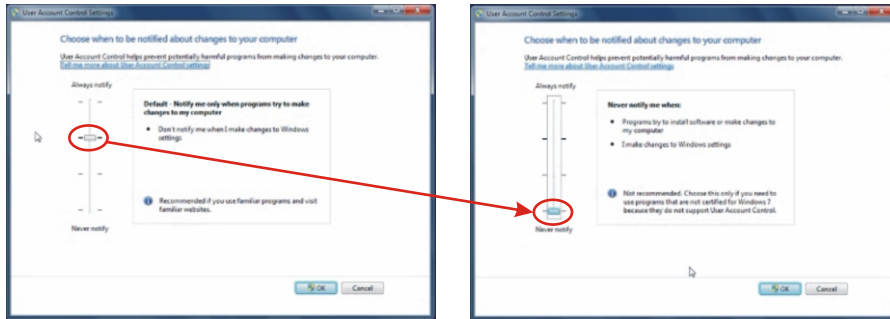
Do one of the following:

- Go to Start Menu  → Control Panel → UserAccounts and Family Safety → User Account.
- Go to Start Menu  → Control Panel → In the search box, type UAC.

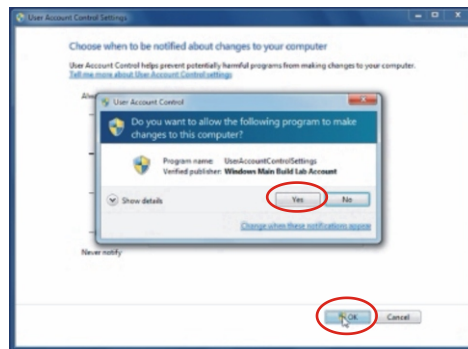
- 2.** Click on "Change User Account Control settings".



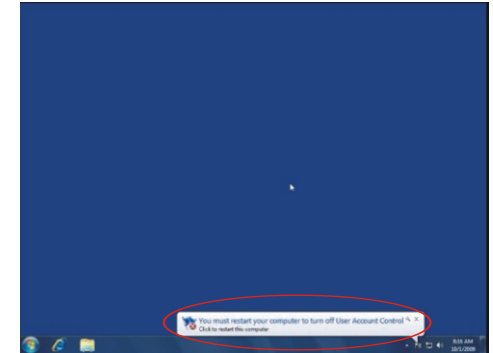
- 3.** Move the slider to the Never notify position.



- 4.** Click "Yes" and "OK" to make the change effective.



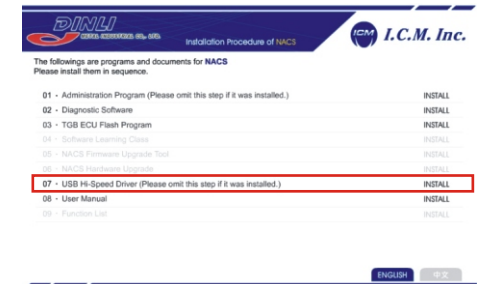
- 5.** Restart the computer is required to turn off User Access Control effectively.



6. USB Hi-Speed Cable Driver Installation

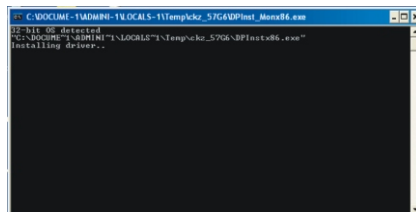
※ The driver is compatible with windows 7 & VISTA & XP & 2000 system

1. Start the computer
2. Insert Diagnostic Software CD to CD-ROM drive. Installation window pops up. Choose "USB Hi-Speed Driver" and click "Installation"

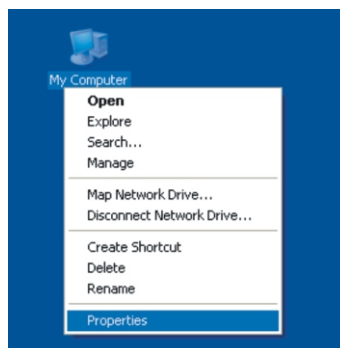


※ If you can't see the window pop up, please execute "NACS_DINLI_setup.exe" from CD-ROM drive to install the program.

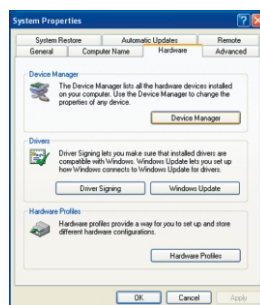
3. It'll automatically install the program. After the DOS frame disappears, it means the installation is done.



4. To confirm the completeness of the installation, please right click "My computer"→"Properties" on the desktop.

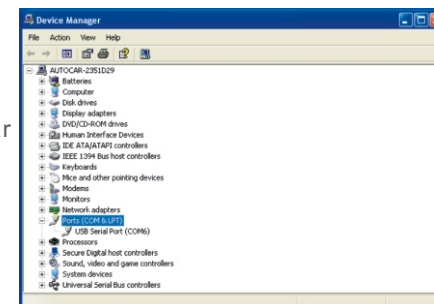


5. Click "Hardware"→"Device Manager"



6. Then click "Ports (COM & LPT)" to unfold items. When USB Hi-Speed Cable is plugged in and pulled out, USB Serial Port will appear variably.

(Note: In order to find out USB Serial Port, USB Hi-Speed Cable is requested to connect with Diagnostic Interface and PC first.)

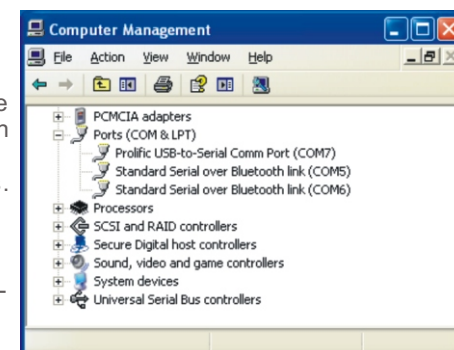


7. USB Hi-Speed Cable Driver Troubleshooting

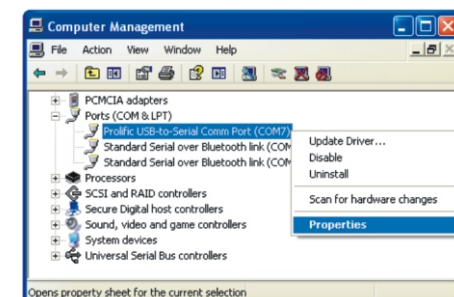
※ The PC with Bluetooth

1. If there is a bluetooth device within your computer and it uses one of ports (COM&LPT), please mind if the COM number of bluetooth is less than the COM number of USB Serial Port. If so, please keep the following steps.

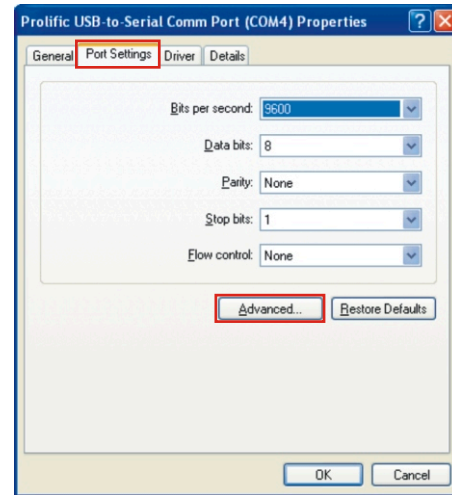
※ As the picture, the COM number (COM6) of bluetooth is less than the COM number (COM7) of Prolific USB-to-Serial Comm Port.



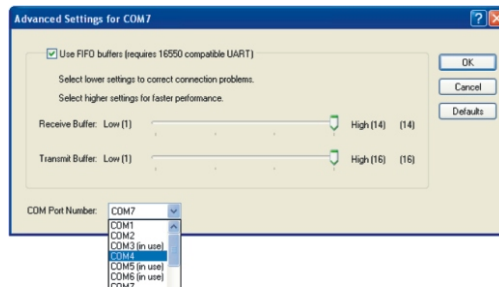
2. Choose "Prolific USB-to-Serial Comm Port (COM7)", and then click "Properties"



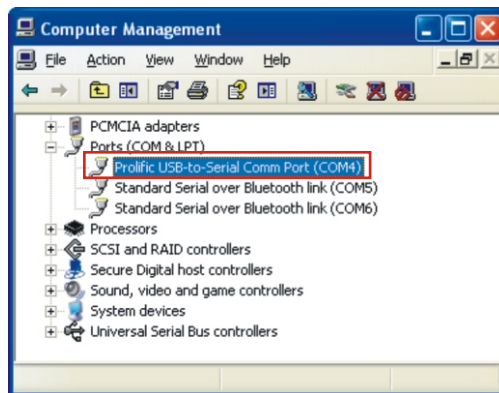
3. Choose "Port Settings", and then click "Advanced"



4. Use the menu of COM Port Number and find out a COM number which is not in use and its number must be less than the COM number (COM6) of bluetooth. For example: COM4. Click "OK"



5. Then, "Prolific USB-to-Serial Comm Port" is changed from COM7 to COM4 as the picture.

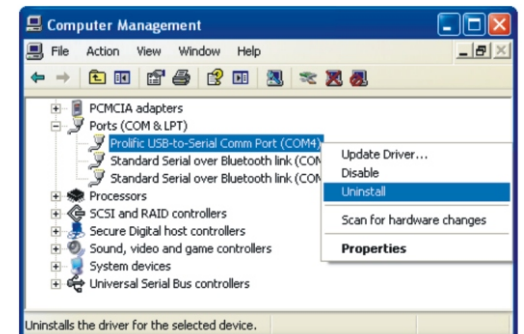


※ Unable to use the USB Hi-Speed Cable Driver after installation

- If you have already followed the steps above to install the driver, it still could not work with USB Hi-Speed Cable. Please click "My Computer" on the desktop→choose "Properties"→" Device Manager".
- Then click "+" sign of "Ports (COM & LPT)" to display all items.
- If it displays "!" sign, it means the cable can't work well.
- Please disconnect the cable and remove the driver (Please follow the steps below to remove it), reboot the computer, and then install the driver again.

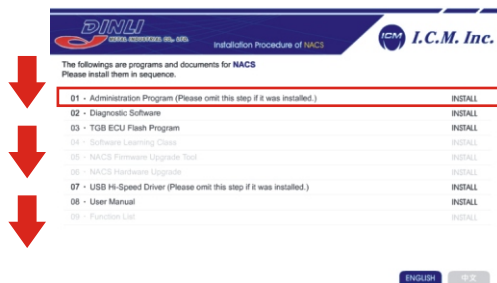
8. USB Hi-Speed Cable Driver Removal

- ※ Please enter Device Manager to find its COM port, and choose "uninstall" to remove the driver.



9. Software Installation

1. Start the computer
2. Insert Diagnostic Software CD to CD-ROM drive.
Installation window should pop up.
Please follow the sequence to install the required programs.

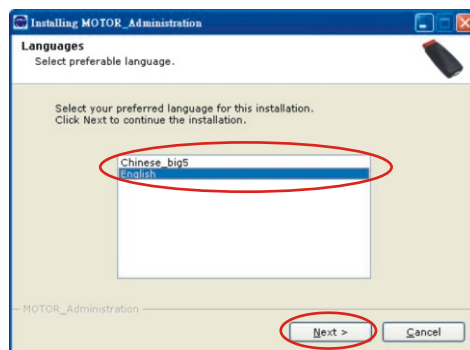


If you can't see the window pop up, please execute "NACS_DINLI_setup.exe" from CD-ROM drive to install

3. Step I. MOTOR_Administration

3-1. Please follow the steps to install, or the software will not work normally.

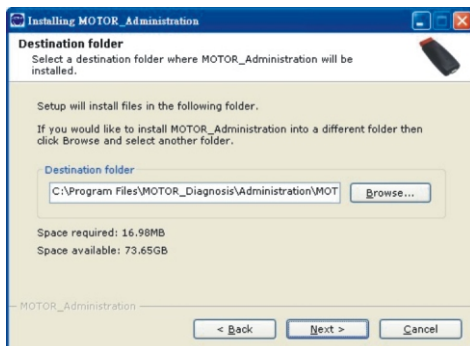
3-2. Choose English, then press "Next"



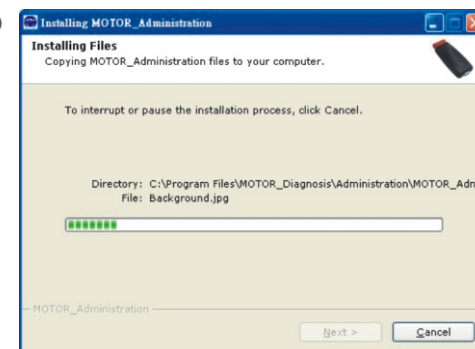
3-3. The default path is "C:\Program Files\MOTOR_Diagnosis\Administration\MOTOR_Administration"

To change its path is NOT ALLOWED.

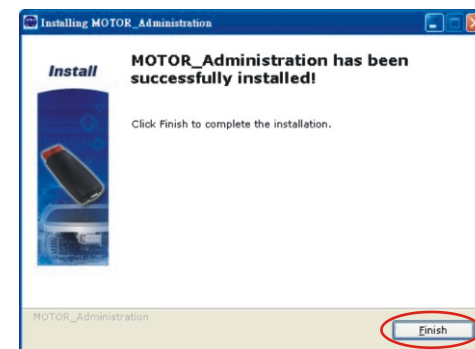
Please click "Next"



3-4. Waiting for few minutes and DO NOT click "Cancel" to avoid any installation mistake



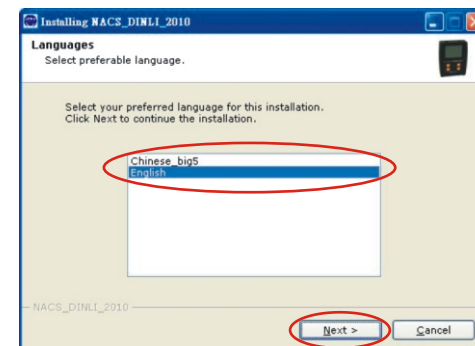
3-5. Click "Finish" to accomplish the process. The installation is completed and reboot is not required.



4. Step II. NACS_DINLI_XXXX

4-1. Please follow the steps to install, or the software will not work normally.

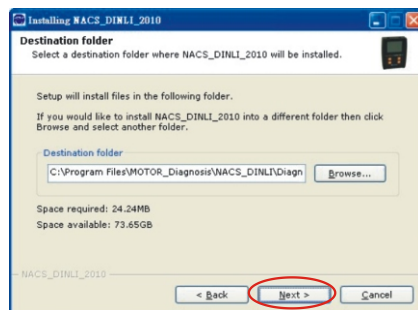
4-2. Choose English, then press "Next"



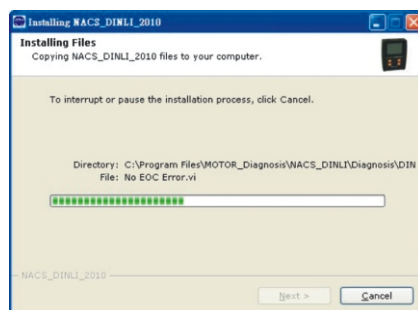
4-2. C:\Program Files\
MOTOR_Diagnosis\
NACS_DINLI\Diagnosis\
DINLI\NACS_DINLI_2010" such as
NACS-DINLI_2010

**To change its path is NOT
ALLOWED.**

Please click "Next"



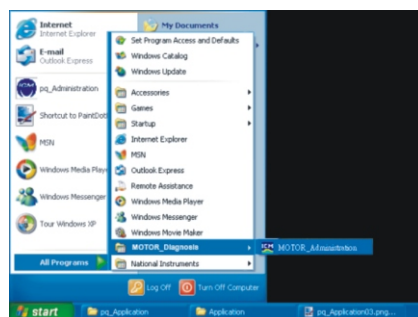
4-3. Waiting for few minutes and DO
NOT click "Cancel" to avoid any
installation mistake



4-4. Click "Finish" to accomplish
the process. The installation
is completed and reboot is
not required.



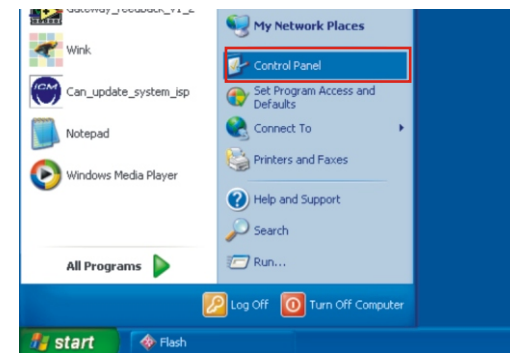
4-5. To start the software, please
follow No.11.1 on page16.



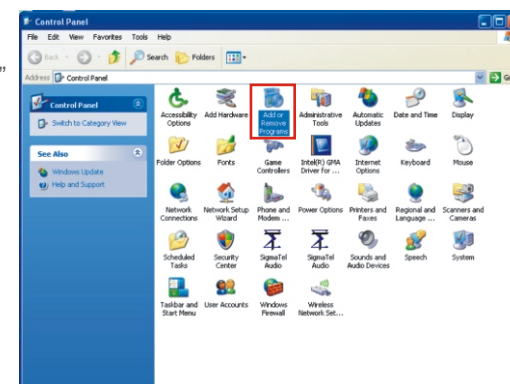
10. Software Removal

If you need to remove the software, please execute the step below.

1. Click "Start Menu" → "All
Programs" → "Control Panel"



2. Enter "Control Panel" →
Click "Add or Remove Programs"



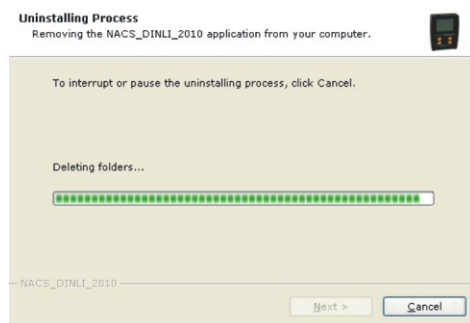
3. Find out "NACS_DILIN_XXXX"
and click "Change/Remove"



- 4.** When “Uninstalling NACS_DINLI_XXXX” window pops up, please click “Next”



- 5.** Waiting for few seconds.

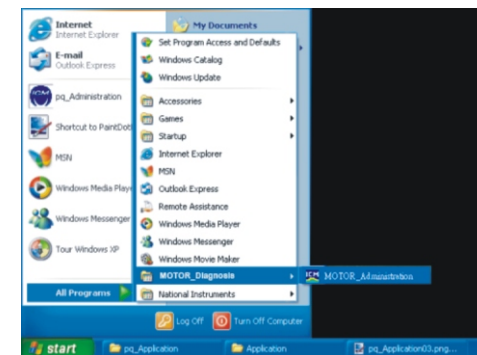


- 6. Confirm**
When it finishes, please check “Add or Remove Programs” in the “Control Panel” again. If the program disappeared, it means the software was removed.



11. Administration Program

- Please connect your NACS-DINLI Diagnostic Interface with your PC and the motorcycle/scooter, and make sure that the power supply light of the interface is on.
- Start NACS_DINLI_XXXX diagnostic software from “Start Menu”→”All Programs” → ”MOTOR_Diagnosis”→”MOTOR_Administration”



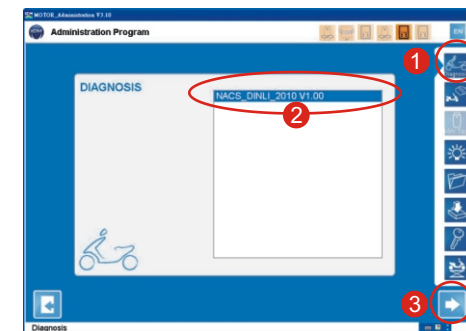
- Please refer to the right-hand side of the software.

Mark Explanation

EN	Language Change	Info	Information: To list the details of your interface
→	Forward/Enter	←	Back
⏏	Exit	🏍️	Diagnosis

1. Diagnosis

Please follow the sequence on this screenshot to click for diagnosis access.



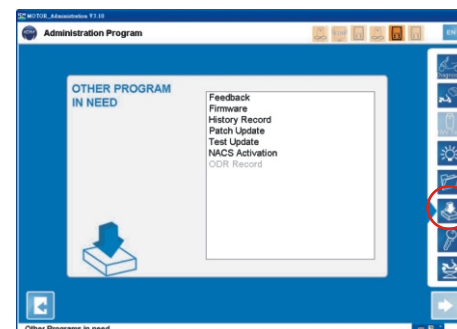
2. Plug Position

Check plug position with pictures.



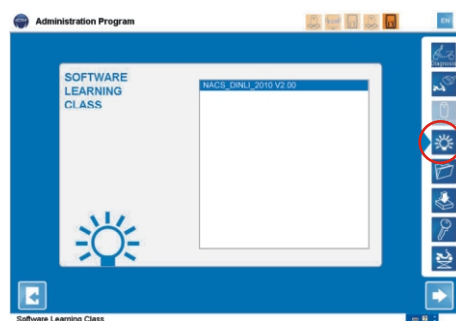
5. History Record

History Record **"New!"**
To record your diagnostic results automatically will avoid any doubts or argument from customers with their Motorcycle/scooter.



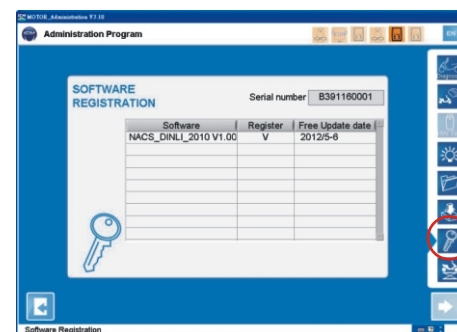
3. Software Learning Class - Shortcut

It allows to study its operation without vehicle connection.



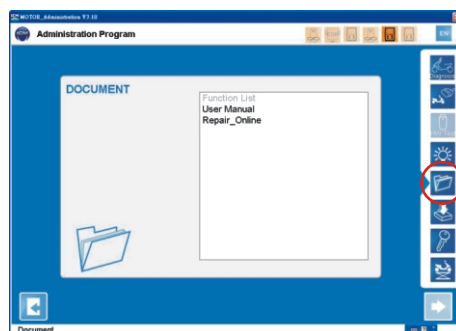
6. Software Registration

To reactivate the licence of your diagnostic software
For example:
Change a new PC or laptop



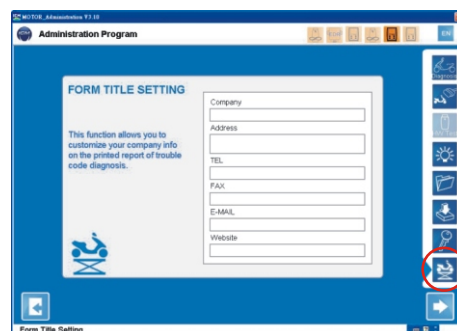
4. Document - Shortcut (Function List and User Manual included)

For Example:
User Manual: Choose "User Manual" and click .



7. Form Title Setting

This function allows you to customize your company info on the printed report of short test.



12. Software Registration

1. Please connect your NACS-DINLI Diagnostic Interface with your PC and the Motorcycle/Scooter, and make sure that the power supply light of the interface is on.


2. Status I: It's for the first time to use NACS-DINLI Diagnostic Software on this PC.

2-1. Start NACS_DINLI_XXXX diagnostic program from the desktop "Start Menu" → "All Programs" → "MOTOR_Diagnosis" → "MOTOR Administration".

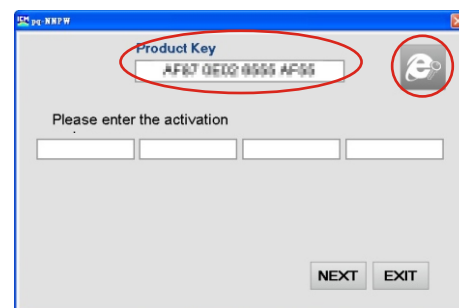
Choose and click



2-2. The Product Key with 16 alphanumeric codes will be displayed automatically (as the picture) and write down this Product Key.

Please click”  “and software Registration Center website will pop out.

Note: All letters must be capital.



- Step 1: Please fill in your Product Key (16 alphanumeric codes) into the website window and click "OK"

Software Registration Center

Step 1: Please fill in your "Product Key"
Step 2: Registration
Step 3: Registration finish



Please fill in your Product Key (16 codes)

- **Step 2. Registration Finish**
This screen will display your Activation Code, the software you purchased, and important notes.

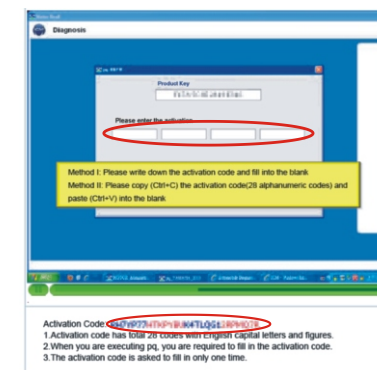
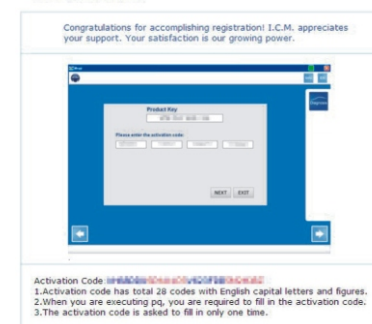
Please fill in this activation code (28 alphanumeric codes) back to NACS DINLI software window and click "NEXT" button.

Note:
All letters must be capital.

Software Registration Center

Step 1: Please fill in your "Product Key"
Step 2: Registration
Step 3: Registration finish

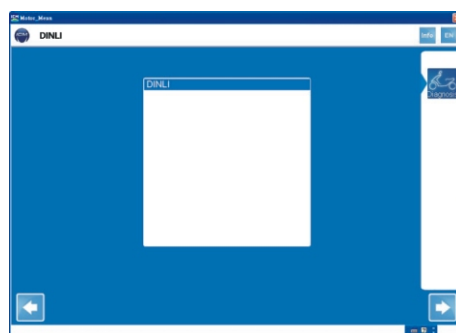
Congratulations for accomplishing registration! I.C.M. appreciates your support. Your satisfaction is our growing power.



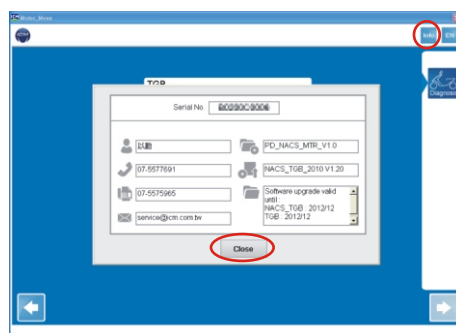
- 2-3.** When the activation code is correct, it will display the software version and valid date of software update. Meanwhile, you are allowed to use the diagnostic functions.



- 2-4.** You will see the car menu.



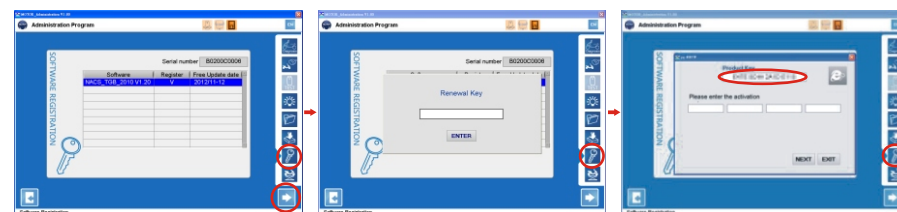
- 2-5.** Click "Info" button on your upper right side, and the detail of your interface will also be listed. Click "Close" to return the car menu.



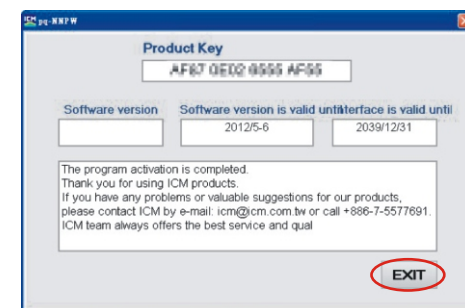
3. Status II: To reactivate your licence of diagnostic software; for example: change new PC or laptop

- 3-1.** Start pq_Administration from the desktop
"Start Menu"→"All Programs"→"MOTOR_Diagnosis"→
"MOTOR_Administration". Choose " " and click " ".

When you execute " ", the window of Renewal Key will pop up. Please input "5577691" and new Product Key (16 alphanumeric codes) will appear. Please follow the procedures of "Software Registration", (on page 19) to finish the registration.



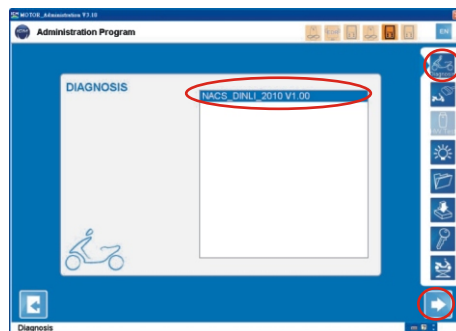
- 3-2.** When the activation code is correct, it will display the software version and valid date of software update. Click "EXIT".



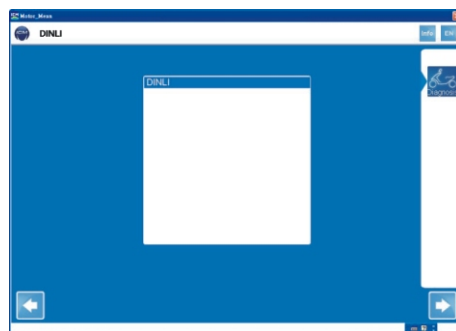
- 3-3.** It will display that the registration is completed. Meanwhile, you are allowed to use the diagnostic functions. Click "OK".



3-4. Choose "DIAGNOSIS" and click 



3-5. You will see the Motorcycle/Scooter menu.



After replacing Computer (Laptop or Desktop):

After installing NACS-DINLI program, you need to connect the interface and the motorcycle/scooter to request the activation code one more time. (The NACS-DINLI program in the original computer will not be activated.)

13. KEIHIN Manual (for handheld device)

1. NACS-DINLI Interface → Transfer Cable → OBD II Diagnostic Cable 16pin → Motorcycle/Scooter

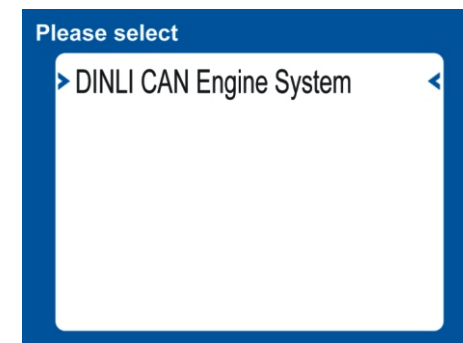


To connect the suitable diagnostic cable when apply to different make.

2. Connect all the connectors properly. When the IG of the motorcycle is on, the system starts to run, entering into boot screen.



3. Press ENTER and the system will identify the vehicle model automatically and display the vehicle info on the screen, as following picture



- 4.** Press ENTER again for more detailed vehicle information. Press ▲▼ button to view all info.

Vehicle Model Data 01/02

Vehicle model
702

Software version
AB

Model Code
15M-01

Calibration data
QE1100

Vehicle Model Data 02/02

Vehicle model year
--

- 5.** Press ENTER to the function menu. Press ▲▼ button to choose one function.

Please select

> Vehicle Info <

Diagnostic Trouble Code

Live Data

Actuator

Special Function

- 6.** Move the cursor to "Vehicle Info" and press ENTER to see the content

Please select

> Vehicle Info <

Diagnostic Trouble Code

Live Data

Actuator

Special Function

- 7.** Vehicle Model Data
Press ▲▼ button to see page 1~2

Vehicle Model Data 01/02

Vehicle model
702

Software version
AB

Model Code
15M-01

Calibration data
QE1100

Vehicle Model Data 02/02

Vehicle model year
--

- 8.** Move the cursor to Diagnostic Trouble Code and press ENTER to see the content

Please select

Vehicle Info

> Diagnostic Trouble Code <

Live Data

Actuator

Special Function

- 9.** The picture as below is the content of Diagnostic Trouble Code
You can see two items "Current" and "History".
"Current" is for the Diagnostic Trouble Code occurred at the time and "History" is for Diagnostic Trouble Code occurred in the past. Move the cursor to "Current" and press ENTER to continue

Please select 01/01

> Current <

History

- 10.** After entering the page, press ▲▼ to view all the Current Trouble Code.

DTC 01/06	
DTC Code	DTC Description
P0121	TPS position sensor adaptation diagnosis (out of range)

- 11.** After viewing the Trouble Code, press ESC to return to the previous page. Then move the cursor to "History" and press ENTER to continue

Please select 01/01	
Current	
History	

- 12.** After entering the page, press ▲▼ to view all the History Trouble Code.

DTC 02/06	
DTC Code	DTC Description
P0231	Electric fuel pump diagnosis (SCG/OL)

- 13.** After viewing the Diagnostic Trouble Code, press ESC to return to the previous page. Then move the cursor to "History" and press ENTER to continue

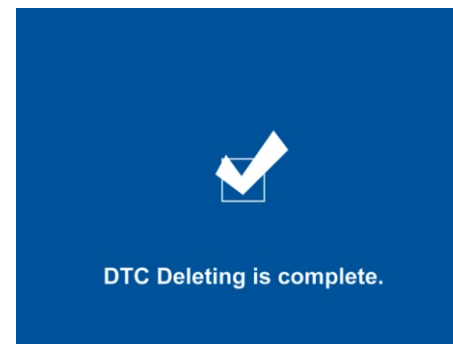
Please select 01/01	
Current	
History	

DTC 02/06	
DTC Code	DTC Description
P0231	Electric fuel pump diagnosis (SCG/OL)

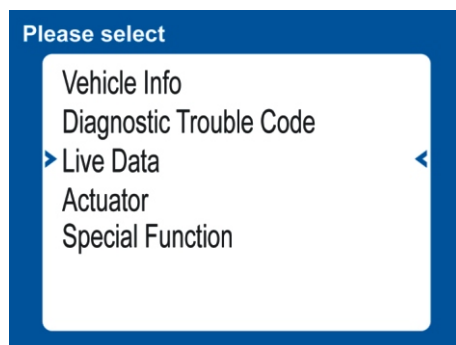
- 14.** Move the cursor to "Erase DTC" item and press ENTER to ERASE all diagnostic trouble code directly.

Please select	
Current	
History	
Erase DTC	

- 15.** When you see the following picture on the screen, the Diagnostic Trouble Code erasure is completed. Press ESC button back to the main menu.



- 16.** Back to the main menu, move the cursor to “Live Data” and press ENTER to view the content.



- 17.** Press ▲▼ button to view all Live Data

①

Live Data 01/04		
Item	Value	Unit
Engine speed	0	rpm
Injection Timing	0.00	ms
Ignition angle	-0.5	deg
Battery volt	12.1	v
Trouble code quantity	8	

②

Live Data 02/04		
Item	Value	Unit
Intake pressure MAP	127.5	kPa
Engine temp	72	°C
Atmospheric pressure	101.0	kPa
Intake air temp	51	°C
Lambda Control volt	4.99	v

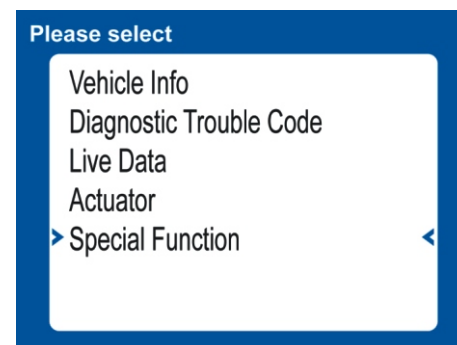
③

Live Data 03/04		
Item	Value	Unit
O2 Sensor Heater	OFF	
Fuel pump	OFF	
ISC motor	OFF	
Secondary air valve	4	
Test connection	OC	

④

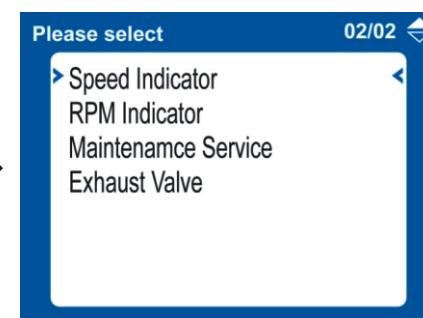
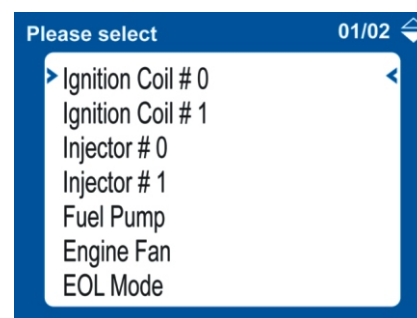
Live Data 04/04		
Item	Value	Unit
District axle operation	CCW	
ISC target	1750	rpm
ISC step counting	137	step
Throttle valve posi	0.0	%
Throttle valve volt	0.00	v

- 18.** Move the cursor to “Special Function” and press ENTER to view the content

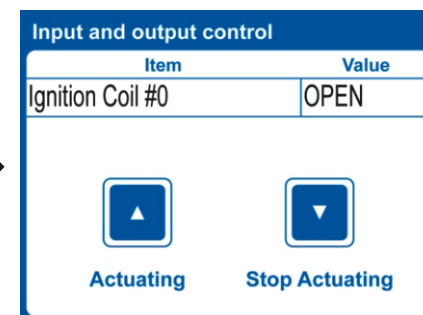
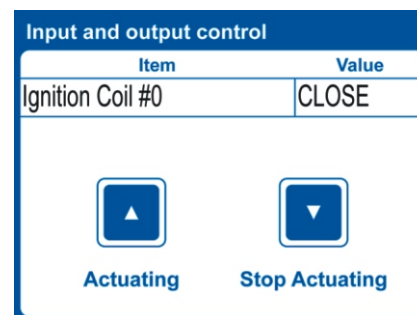


- 19.** When you enter Special Function, you will see “CO Adjustment” item

※ Before adjusting the CO value, please start the engine and remain in idle speed



- 20.** After entering “CO Adjustment”, press ▲ Up / ▼ Down to adjust the CO value; After finishing adjusting, press enter to save and exit.
Adjusting Range : -64% ~ 63.5%





14. Manual (for PC)


- 1.** Before diagnosis, please connect your NACS-DINLI Diagnostic Interface as below.

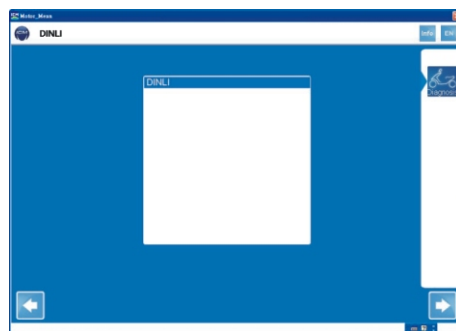


2. Start to diagnose

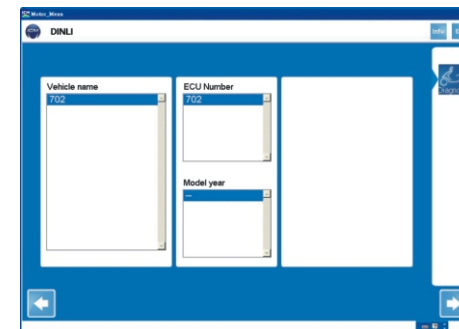
Click  button, select "NACS_DINLI_2010 V1.3", then click  to start vehicle diagnosis




- 3.** The system will identify the vehicle automatically. Item "DINLI" will be shown on the screen, select DINLI and click  for next move.

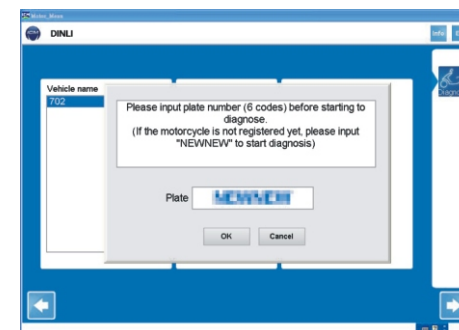



- 4.** The vehicle info will be shown. Click  to continue.

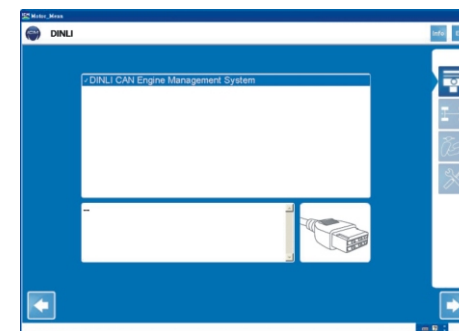


- 5.** A window for entering the plate number pops out. Please enter the plate number to ensure the accuracy of the history data. Or you can click cancel to continue.


History Data: Please refer to the  Function manual.

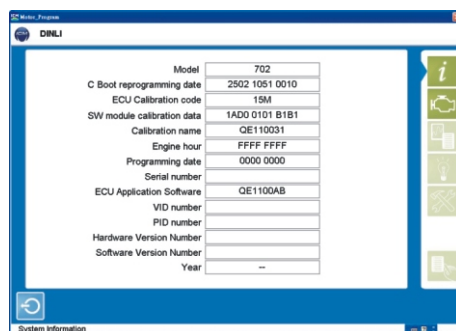


- 6.** The following page is the introduction for ECU and connector. After reading it, click  to continue.

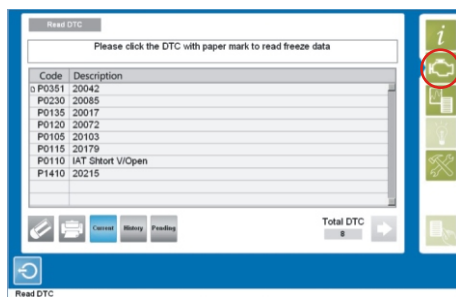



7. There are various green buttons on the right.

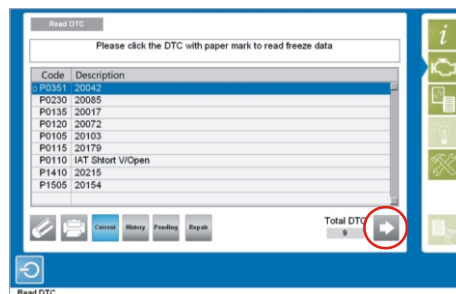
 button is for displaying all the vehicle info.



8. Click  to read the Diagnostic Trouble code




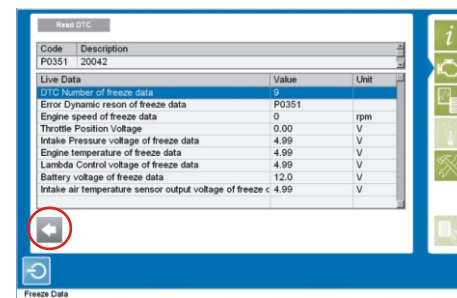
9. If you can see "paper mark" before the Diagnostic Trouble Code, select the Diagnostic Trouble Code and click  to see the freeze data.




10. This is the page of freeze data.

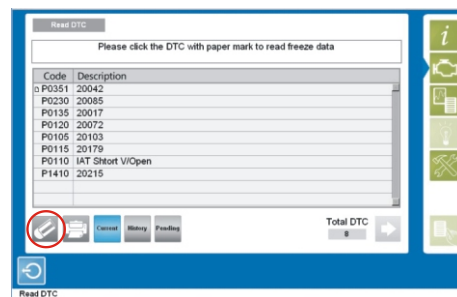
"Freeze Data" is the data recorded when FIRST Diagnostic Trouble Code occurred, and one time only record one Diagnostic Trouble Code freeze data, it's for saving the engine dynamic data for further analysis.

Click  to return to Diagnostic Trouble Code page.

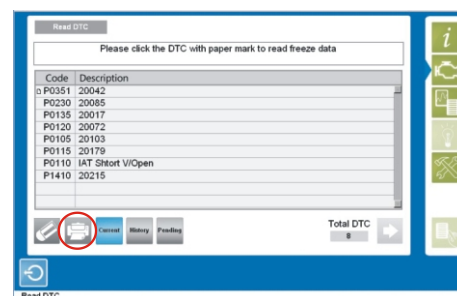


11. To erase the Diagnostic Trouble Code, click  button

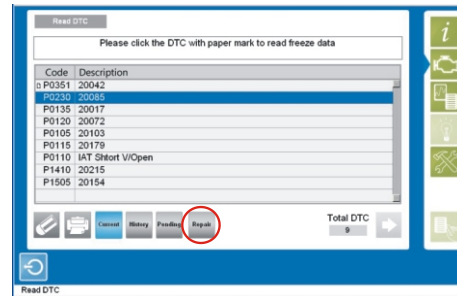
Note: if you click the erase button, all Diagnostic Trouble Code in "Current", "History" and "Pending" area will be erased!



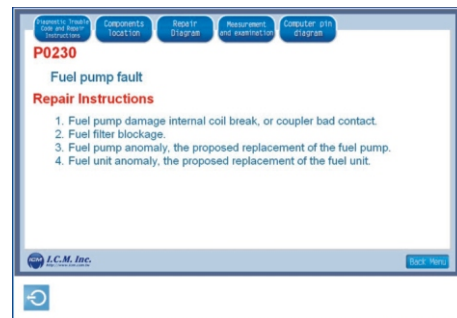
12. The button  circled in red is for printing the Diagnostic Trouble Code on this page



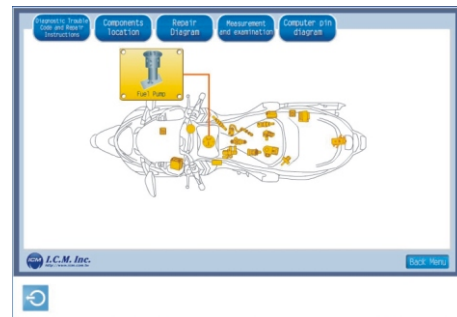
- 13.** If you want to search for the Diagnostic Trouble Code repair manuals, select one trouble code (e.g. P0230) and press **Repair** to enter manuals page.



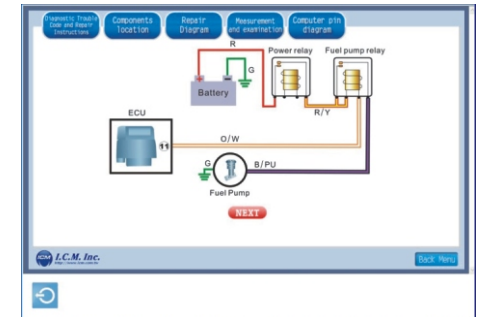
- 14.** Select any Blue function button on the top to read the info you need. This is the "Diagnostic Trouble Code and Repair Instructions" page.



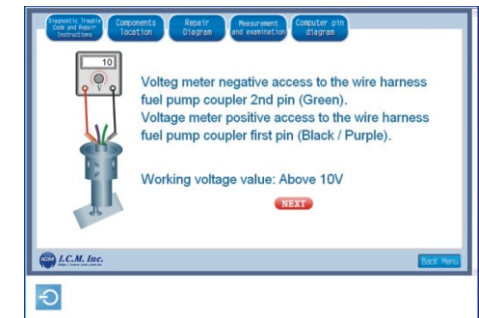
- 15.** This is the "Components location" page.



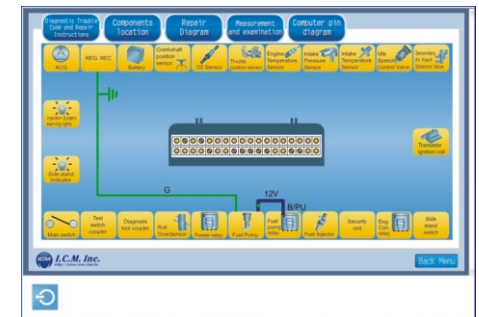
- 16.** This is the "Repair diagram" page.



- 17.** This is the "Measurement and examination" page.

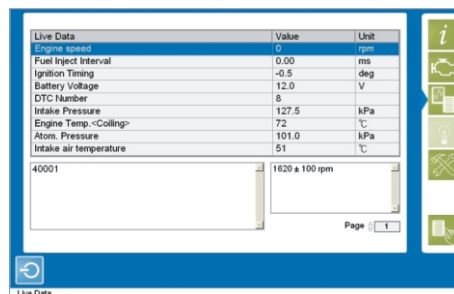



- 18.** This is the "Computer pin diagram" page.

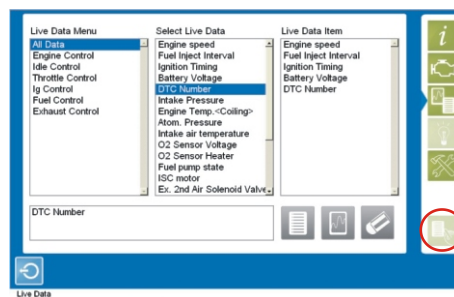


Note: click  button to return to the "Read Diagnostic Trouble Code" page.


- 19.** Click this button  to see the live data often used.

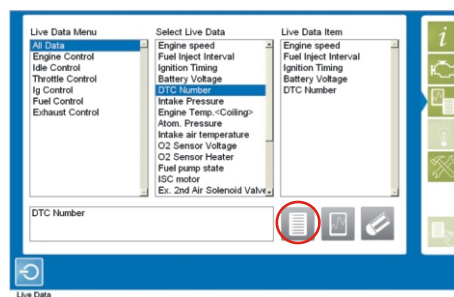



- 20.** If you want to see more detailed and specific live data, click the button  circled in red to see the live data list.





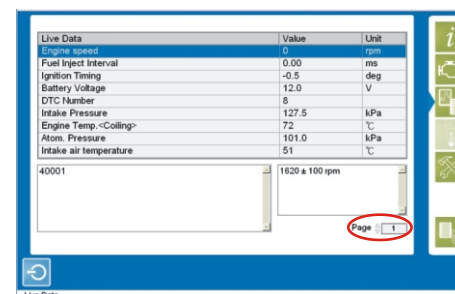
- 21.** First you select one item on “Live Data Menu” and the live data list will be shown on the “Select Live Data”. The items you selected will be shown in the “Live Data item” (You can also select none on “Select Live Data” to see all live data.)


Click  circled in red to see the data you select in list format.

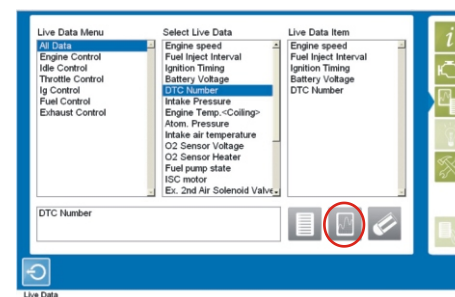


- 22.** This is the page of live data in list format. Click  circled in red on the right bottom to turn to next page.

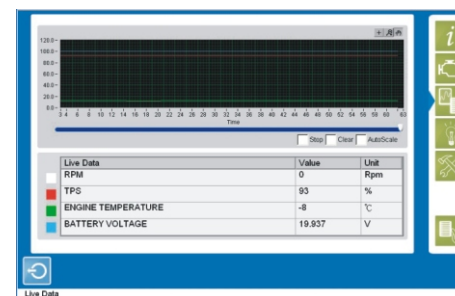
Note: to return to Live data list, please press ; if you press , you will return to the first page of the program.





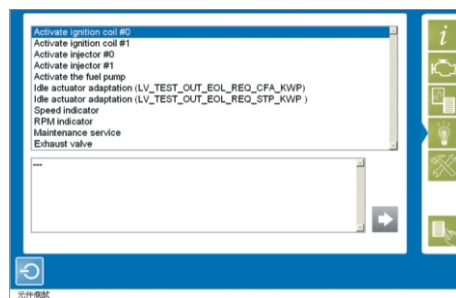
- 23.** Click the button  circled in red to see the live data in graphic. (You can only select 4 live data item at a time with graphic mode.)





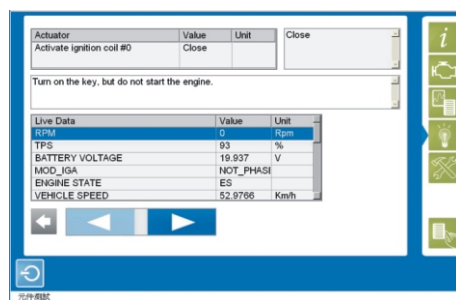
- 24.** Live data in graphic




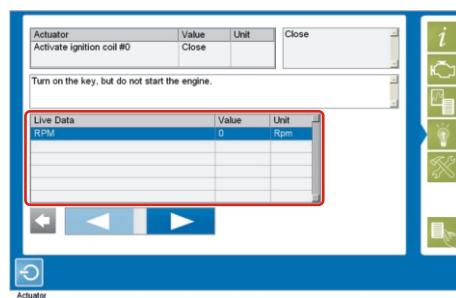
- 25.** Click  button to perform the Activator.
Select the Activating item and click  to continue.





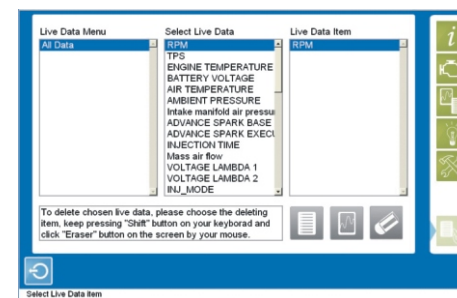
- 26.** This is the Activator page.
Click  or  button to activating / stop activation the test
(To perform the test, IG must be ON and engine stops.)




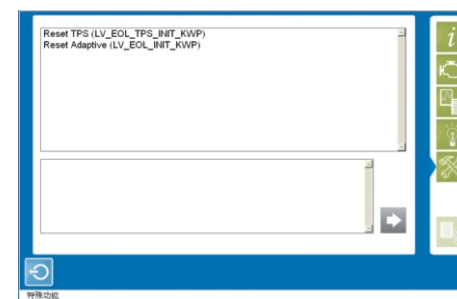
- 27.** You can click  to change the live data you want to see while performing Activator.




- 28.** Click  to the live data page and select any live data item you want.
Then click  to go back directly to the Activator.



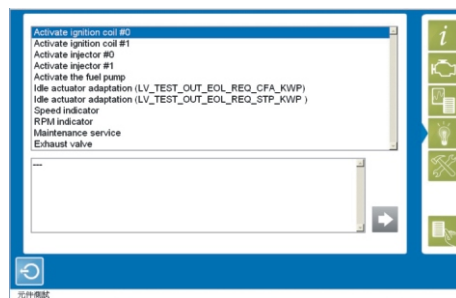
- 29.** This  button is for special function, various from ECU type.



- 30.** History
After finish vehicle diagnosis, the system will automatically record the diagnosis history.
You could return to the main menu and click  button to see the recorded data.



- 31.** To search the recorded data by plate number, if you didn't key in the plate number, you also can check by the date.



- 32.** After enter the recorded data, you will see the same diagnosis program as you did before.

You could check the data you need with the same way of diagnosis.

