COMPANY INTRODUCTION

Beijing **JBT** Auto S&T Co.,Ltd was founded on September 29th, 1999. Our company is located in the ABP (Advanced Business Park) of Fengtai District in Beijing China, which is a specialized area for top 500 enterprises of China.

JBT is advanced, professional and authoritative auto scanner manufacturer. We are a main auto scanner manufacturer in the auto diagnostic field in China.

JBT is executive member of China Auto Maintenance Equipment Industry Association. We are also a member of China Automotive Maintenance and Repair Trade Association.

JBT has been awarded “The High-Tech and New-Tech Enterprise”, “The Software-Strength” and “The Trust-Worthy Enterprise on Contract Implementation”.

JBT has been awarded ISO14001 Certificate, ISO9000 Certificate and CE Certificate.

JBT has been designated as the original OEM auto scanner supplier for FAW Volks Wagen (VW), ZZ NISSAN (NISSAN), SOUWEST (MITSUBISHI), GUANGZHOU HONDA (HONDA), TIANJIN FAW TOYOTA (TOYOTA), SHAC (SSANG YONG), YONGYUAN UFO (RAV4), FAW TRUCK (MEXICO), SHUANGHUAN.

JBT has devoted herself into the research of vehicle self-diagnosis, automatic diagnosis, vehicle electronic control technology and computer information processing technology. The mission of JBT is to bring the latest automotive aftermarket products with high-tech and economical price to the automobile industry.

Safe Operation

Thank you for purchasing the Color Screen automobile diagnostic tools (CS) that is researched by Beijing JBT Auto S&T CO., LTD

For correct operation, read this operation manual thoroughly before use and follow its instructions.

This manual describes the operation of the Color Screen and its functions. To operate it please store this manual in a safe location.

To ensure safe operation, this manual uses the following marks to indicate the items that must be properly observed.

PROHIBITED		The symbols mean the action is prohibited.
WARNING		The symbols mean the action is dangerous.
NOTE/ADVICE		The symbols mean the action is our advices.

1. Safety Precautions

 **PROHIBITED:** To avoid crash accidents when starting engine, set shift selector in N (MT) or P (AT), and strain hand brake before testing.

 **NOTE:** As the battery liquid contains vitriol, take care to avoid directly touch of your skin. Pay special attention not to splash the liquid into your eyes and keep it away from fire.

 **NOTE:** There are various poisonous gases of vehicle emissions, such as hydrocarbon and carbon monoxide etc. To avoid breathing in the gas, park vehicle in a well-ventilated place while testing.

 **NOTE:** While engine running, its temperature must be very high. Don't touch the radiator and the exhaust pipes or any other parts of engine compartment.

 **WARNING:** No fire and smoking while testing vehicles.

 **NOTE:** Key-off while performing the tests. Pay special attention to protect circuits and electronic control elements.

2. Test Precautions

 **WARNING:** Do not connect the scanner and then turn the ignition on while testing. Otherwise, it will produce high instantaneous current and damage the decoder.

 **WARNING:** Do not plug or unplug any sensor and other electronic control units while ignition on. Otherwise the self-inductance of windings, when circuit is open, will produce high instantaneous voltage and damage the sensors or ECU.

 **NOTE:** Pay more attention to avoid damaging ECU or sensors while you repair any other parts near ECU or sensors.

 **NOTE:** Wireless speakers and other magnetic objects cannot be placed near ECU, because magnetic objects will serious interfere or damage the circuits and electronic control elements of the ECU.

 **ADVICE:** While removing and installing ECU or digital meter controlled by ECU, technician should make his wrist short to vehicle

body. Otherwise the static electricity of human body may damage circuits of ECU or other electronic control systems.

 **NOTE:** To avoid damaging ECU and sensors, do not use the test LED or jump wire to test circuit related with ECU unless additional explanations have been given.

 **NOTE:** Except for special instructions of test procedures, the pointer-type or low-resistance multi-meters cannot be used to test ECU circuits and sensors. It will damage the electronic control elements.

 **NOTE:** Pay attention to the changed electronic control elements. The relative resistance of the new one should be measured. It ensures proper repair is performed and the circuit is OK.

 **ADVICE:** Check the circuits and connectors to ensure firmly connected.

 **NOTE:** Ensure the connector pins of ECU are firmly connected. Otherwise the integrated circuits and the electronic control components may be damaged.

3. Operation Precautions

 **NOTE:** The scanner is a computerized system, never shake and hit or place it in humid surroundings.

 **WARNING:** Never connect the decoder before turning ignition on by all means. Otherwise, the self-inductance of windings will produce high instantaneous voltage and damage the decoder.

 **NOTE:** Ensure the Data Link Connector firmly connected to Data Cable Connector of the decoder. If the connection is not good enough, it may not display or display unsteadily.

 **NOTE:** Keep Circumstances：

Temperature： －40℃～＋50℃

Relative Humidity:＜90%

NOTE: Operation Circumstances：

Power Supply：12V（±2V）

Temperature：0~40℃

Relative Humidity：≤80%

1.To diagnose automobile, how to connect auto scanners with automobile

Use: JBT-CS auto scanner main unit, main cable, auto diagnostic connector.

Connecting one side of main cable with auto scanner main unit, connecting another side of main cable with auto diagnostic connector, then connecting auto diagnostic connector with DLC in automobile (diagnostic link connecter)

2. To update auto scanner, how to connect auto scanner with PC

Use: JBT-CS auto scanner main unit, main cable, power cable, PC cable.

Making auto scanner get power from power source, then put anther side of power cable in the main cable. Then make main cable connect with auto scanner main unit.

Making one side of PC cable connect with 9PIN connctor in auto scanner main unit, another side of PC cable connects with PC 9PIN connetor.

3. To print out the diagnostic information from auto scanner, how to connect auto scanner with JBT printer.

Use: JBT-CS auto scanner main unit, JBT printer, printer cable, printer power cable.

JBT printer needs to get power from electrical source firstly, should use printer power cable.

Then connecting printer cable with printer and auto scanner main unit, the adapter of printer cable is 25PIN.

4. To connect auto scanner with projector.

UNIVERSAL PROCEDURE FOR ECU TROUBLE JUGEMENT

AUTO TROUBLE ANALYSIS PROCEDURE

When auto ECU has trouble, or when CHECK, ENGINE, ABS, SRS or other systems trouble indicator lamp lights, we could judge problems and solve with problems according to reading trouble codes stored in ECU by auto scanner.

Auto scanner reads data streams and compares data streams with reference scope in order to judge sensor and electron circuit to work well or not.

Auto scanner tests actuator of auto in order to judge the unit in the auto works well or not.

(1)First step:

Reading trouble code

Using auto scanner to read trouble code of ECU, if auto scanner could read out the trouble code, will go to the second step.

If auto scanner could not read out the trouble code of the ECU, will need to judge problems according to analyze trouble phenomenon.

(2)Second step:

Clearing trouble code

If the trouble codes could be cleared by auto scanner, the auto trouble is happened incidentally. If the trouble codes could not be cleared, should check problems and repair auto according to trouble codes meaning.

(3)Third step:

If the trouble codes could not be cleared, should check electronic circuit of unit in the auto according to trouble codes meaning.

(4)Fourth step:

If the electronic circuit is ok, reading data stream and comparing data stream in order to check sensor work, and doing unit test in order to check unit in auto work.

(5)Fifth step:

Aftering repair, make auto move, then use auto scanner to read trouble again, if auto scanner reads trouble codes, the trouble of auto has not been solved, in this time should not analyze auto problems according to trouble phenomenon. If auto scanner does not read trouble codes, the trouble of auto has been solved, and the trouble indicator lamp should be out.

JBT-CS AUTO SCANNER OPREATION INSTRUCTION

1. Basic Operation Procedure:

(1)First step:

Finding DLC (diagnostic link connector) in the auto, then choose correspondence diagnostic connector from auto scanner packing.

(2)Second step：

Using main cable to connect auto scanner main unit with diagnostic connector, then connects diagnostic connetor with DLC. After connecting well, make auto scanner get power.

(3)Third step:

Open the auto scanner, enter <AUTO DIAGNOSIS> function , choosing the auto system which you want to check with.

(4)Fourth step:

Auto scanner shows the diagnostic results.

(5)Fifth step:

Auto scanner could set format for data stream stored.

Users could adjust the background color and light of auto scanner.

2. Preparation and Notice:

(1) Battery of auto that needs to be diagnosed should be 11V---14V.

(2)Before turn on auto scanner, should turn off all accessories (such as air-condition, radio, lamp and so on).

Supply voltage of cigarette lighter should be 12V

There is no interruption in the circuit between DLC and ECU.

(3)If DLC of auto does not have power, auto scanner could get power from cigarette lighter and battery, operation should:

To get power from cigarette lighter: take off resistor from cigarette lighter; connect the JBT cigarette line with cigarette lighter.

To get power from battery: connect the red clamp to battery positive terminal, and the black one to battery negative terminal.

3. Keypad Description:

(1): ↑ Key:

Move cursor(↑ up) in the function selection menu.

Roll screen up as measuring value blocks display.

Increase the numerical values as inputting data.

Roll the specified text up as browsing through.

Move cursor(↑ up) in table.

(2):

Move cursor (↓ down) in the function selection menu.

Roll screen down as measuring value blocks display.

Decrease the numerical values as inputting data.

Roll the specified text down as browsing through.

Move cursor(↓ down) in table.

(3)←Key:

Move the cursor(← left) as inputting data

Move the cursor (← left) in tables

(4): →Key:

Move the cursor(→ right) as inputting data

Move the cursor (→ right) in tables

Enter the next display

(5)：EXIT Key:

Cancel or interrupt the operation

Return to the previous menu Exit the test as ESC display

(6): OK Key

Enter or perform the current operation

Select the current menu

(NOTE: In the different function menu, the functions of the ↑ ↓ ← →

EXIT and OK key are different, you should be properly observed)

JBT-CS SERIES AUTO SCANNER DESCRIPTION

With the development of auto industry, the Engine ECU, AT, SRS CRUISE CONTROL and many other Electronic Control Units have been applied more and more into the automobile industry.

Therefore, the auto diagnosis and maintenance for ECU could

not be done only with maintenance staff's experiences. Maintenance and Repair should also be done by electronic diagnostic tools and proper maintenance equipments. Auto scanners are the most common electronic diagnostic tool, which are often used to diagnose ECUs of autos by connecting to DLC (Diagnostic Link Connector) through proper adapters to obtain the data information of autos, being able to erase trouble code, do setting and adapting etc.

JBT-CS (Color Screen) Auto scanner Series is the 5th generation intelligent automobile scanner. The series is aiming to develop JBT-CS auto scanners to be the mainstream auto scanners in the world.

JBT-CS auto scanner has been developed on the new platform-BT-DDS system, which enables JBT-CS Series have lots of convenience and powerful functions.

The screen of JBT-CS auto scanner is genuine color LCD screen. The memory of JBT-CS Series is myriad for saving data and info storage, therefore, JBT-CS Series could accommodate amazing datastreams of all kinds of autos without changing cards.

The software could be updated through downloading from

the internet without any limitation. JBT-CS Series is easy to use, having introduction menu for each operational step. The title and format of any datastream can be set as users' like. JBT-CS Series provides abundant datastream reference scopes which are convenient for analyzing cars troubles.

JBT-CS Series can also support printing test results by built-in or optional printers. Or JBT-CS Series can help technicians to review historical tested datastreams. JBT-CS Series has safety protection devices for both hardware and software in order to make auto scanner more stable. There is a video output port, which could be connected to multi-media projector to display the details of the screen onto a larger outside screen.

JBT-CS FOUR CREATIVE INVENTIONS IN THE WORLD

I. SELF-LEARNING & JUDGEMENT:

Self-learning & Judgement function can help learn the standard datastreams of vehicles automatically, whose datastreams can be used in future as standard scopes. With these scopes, JBT-CS Series can

help check whether the datastreams of any same kind of cars are normal or not.

1. Any JBT-CS Series auto scanner can learn the datastreams of cars as soon as connected to DLC of healthy cars. Explanation: When we have the cars that working well, we can record and store the datastreams of the cars and the datastreams can help set the maximum and minimum scope automatically due to the collected data from the healthy cars.

2. Comparing datastreams and analysing

Explanation: When we repair the same kind of other cars, we could use the data stream collected from healthy cars to do the comparison with the datastreams being tested. If the datastreams being tested are beyond the scope, it will display with special colors in order to inform maintenance people that the datastreams are abnormal, technicians can judge what is wrong with the cars by the highlighted items.

3. Rename the datastreams which have been learned.

Explanation: JBT-CS auto scanner supplies positions for users to store the data stream of different cars.

II. Over-Scope Alarm Display

JBT-CS auto scanner supplies the reference scope that common use when cars are idle. When the cars move, if the data stream is beyond the reference scope, it will be displayed with special color in order to help maintenance people judge cars problem.

1. Reference scope analysis.

Explanation: JBT-CS has reference scope that common use when cars are idle. It is convenient for users to compare the data stream being tested in order to judge cars trouble.

2. Warning color display.

Explanation: The reference scope supplied by JBT is the normal scope when the cars are idle. When the data stream being tested is beyond the scope, it will be displayed with special color, meaning the data stream is not normal, maintenance people should check the cars troubles according to the data streams which is displayed with color.

Characteristic:

1. Supplying reference scope for using, comparing data stream to do analysis.

2. Warning color display is in order to find out car trouble easily.

Use:

1. Ignite on auto, make engine run when auto is idle.

2. Connect auto scanner with adapter of cars in order to communicate with ECU

3. Choose data stream function, then choose <JBT data stream>

4. Analyzing car trouble.

III. Data stream Memory and Printing

Characteristics:

Storing data stream as customers' like. Data stream could be printed out by JBT printer.

IV. Personality operation setting

JBT-CS auto scanner is color screen, and the color could be adjusted.

TFTE (Thin Film Transistor Engine)

TFTE improves the light and speed of display, make the color more light.

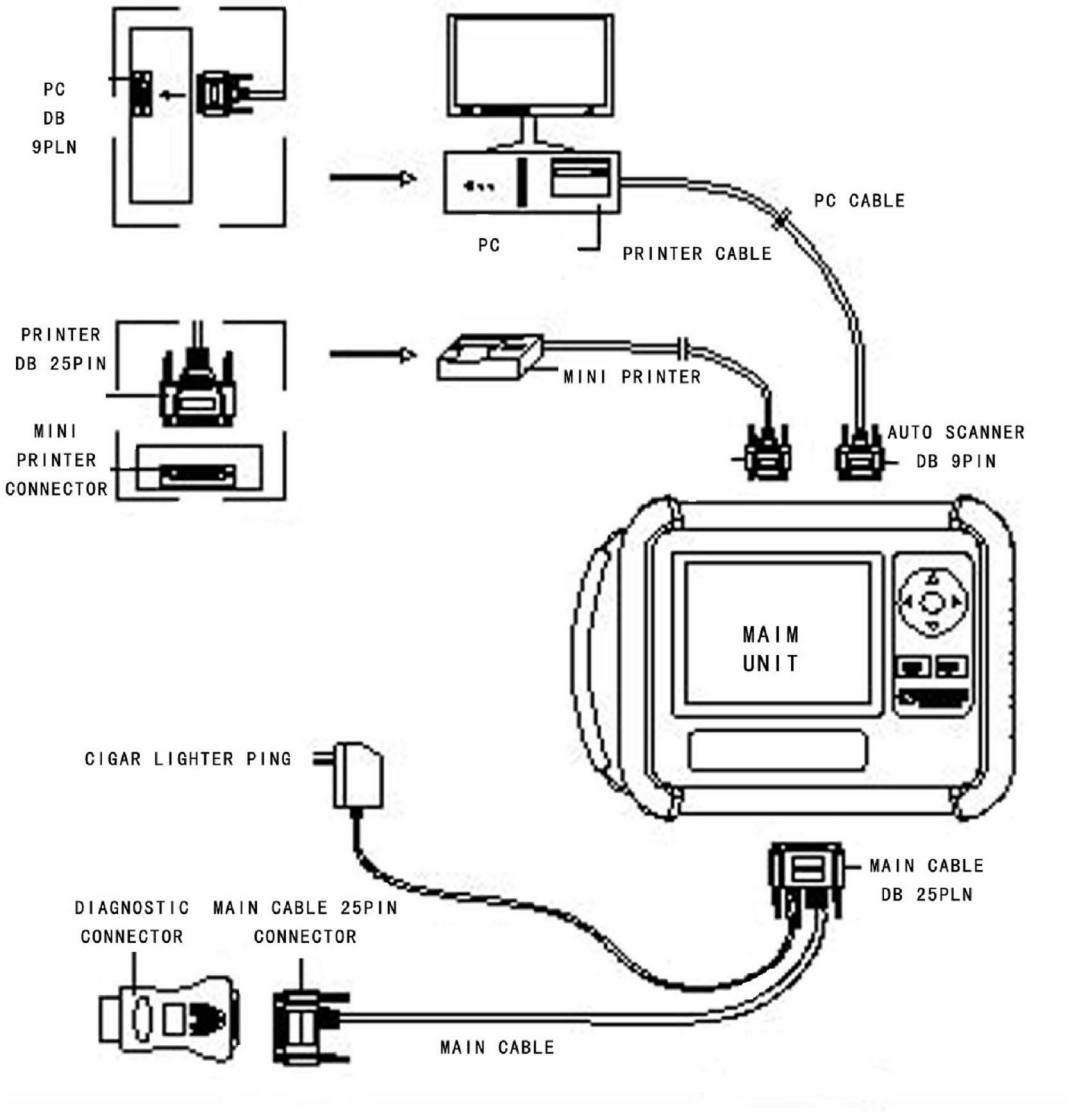
ACE (Acceleration Engine)

ACE makes auto scanner operation efficiently, makes data stream accumulate efficiently, and make auto trouble analysis

efficiently.

CSE (Communication Stability Engine)

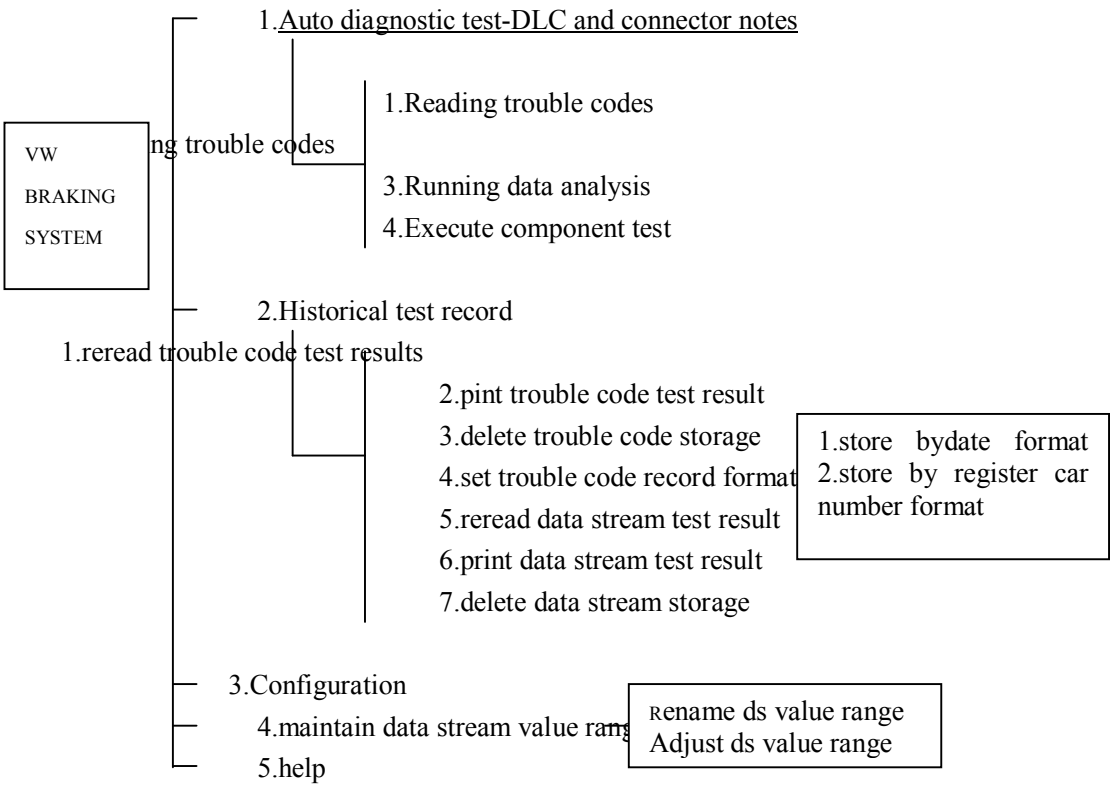
CSE makes systems afford pressure of high electric current, and could judge electric current.



AUTO SCANNER CONNECTION FOR DIAGNOSIS

Procedural Chart of Menu

Menu of Diagnostic Functions—Options' Chart (give an example by VW braking system)



Operational Procedures of Scanning Function

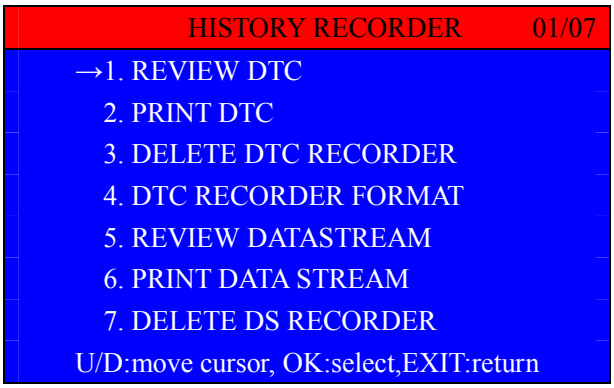
1. Auto Diagnostic Test

Auto diagnostic test is the most important part of the whole test process. This manual lists the part separately. Please refer to auto scanning function introduction and its operational procedures.

Note: the following contents vary by different car types in terms of data streams display ways, and then functions vary.
For example, in order to conform to VW-FAW 's original requirements, VW cars display their data stream by group numbers, therefore the instrument can only execute the following functions.

2. Historical test records:

This function can be realized by connecting to outer printer that store and print trouble codes and data streams.



First Inventiveness: Introduction to "Data streams can be saved and printed out"

This instrument supports the function of saving and printing data and of setting 3 roll memory spaces under each unit. Each memory space can accommodate 500 items of car running data.

Function Description:

Data Stream storage: This instrument can acquire and save any car's practical test results or self-learning data for future trouble shooting or

data print.

Data Stream Print: This instrument enables any portable printer to print out the saved trouble codes and data in time.

Function Features:

1. Storing data streams as customers' like for long-term records. Data streams could be printed out through JBT portable printer.

2.Supplying 3 positions for storing for each car model.

3.Each position could store 500 different items of data streams.

Function Applications:

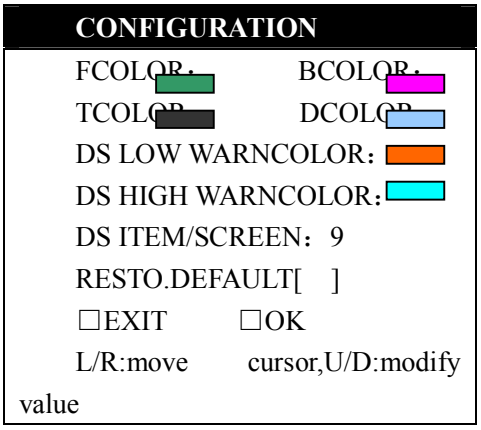
1. This instrument can be connected to car's ECU system and enter the car's system.

2. This instrument can choose data to analyze and read data streams.

3. This instrument can record data and save data streams.

4. This instrument can come back to main interface and help you check the position and content of saved data streams, print out the saved data.

3.Systematic Parameter Setting (The second inventiveness "personal setting")



JBT CS equips color screen, which supports multi-interfaces and colorful options with many different colors. Users can set the configuration with color options by their own wills. Their preferences can be personalized as follows:

1. Foreground color (FCOLOR) setting
2. Backgroud color (TCOLOR) setting
3. Title color (TCOLOR) setting
4. Frame color (DCOLOR) setting
5. Data stream over low/high warning (DS LOW/DS HIGH WARNCOLOR)
6. Data stream (DS ITEM/SCREEN) item/screen
7. Restore factory(RESTO, DEFAULT) setting

Operations: when the selecting frame stays on any item, the current color is this item's selected color, change to different colors by pressing

up/down keys and changing the value numbers. Meanwhile, every press can change color step by step to realize rapid color change. Any other item can also be changed by press left/right keys and item's value can be changed by press up/down keys.

Third Inventiveness: Introduction to Over-range Warning Colors

JBT CS Provides referential ranges at idle speed of cars before they were delivered ex works. In the running process of cars, if any datum was out of provided ranges, this item would be highlighted by special colors in order to help judge where the problem is and what the problem is.

Functions Description:

□ referential data analysis: The CS has already given out the referential ranges at idle speed of any car in order to help users do comparison to analyze car problems.

□ Out of range color warning: Usually the given referential data all conform to the normal ranges at idle speed. When the tested data are out of the ranges, the data would be displayed by special colors. This means the datum is abnormal and repair staff can trace the problem with the help of this information.

Function Features:

□ JBT CS is furnished with normal ranges at idle speed before ex works. These ranges help data comparison and analysis.

□ All out-of-range data would be displayed by warning colors, which make it easier to trace car problems.

Function Applications:

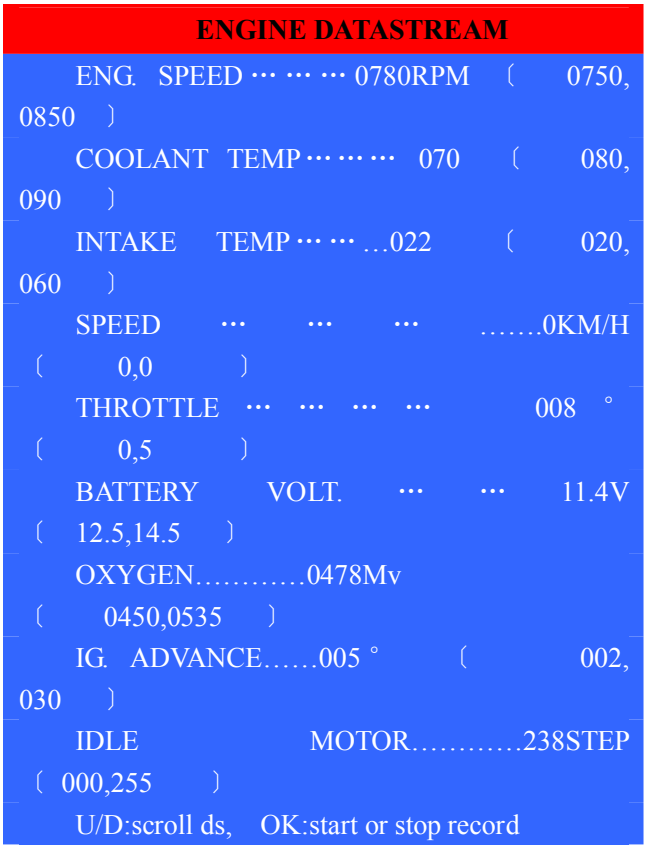
□ Start the car and run the engine at idle speed.

□ Connect JBT CS to the Car's ECU system.

□ Choose the running data analysis.

□ Observe the running data and see to data with special colors.

□ Carry on trouble analysis and focus on where the problem is.

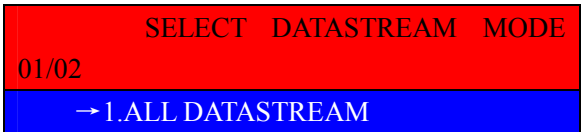


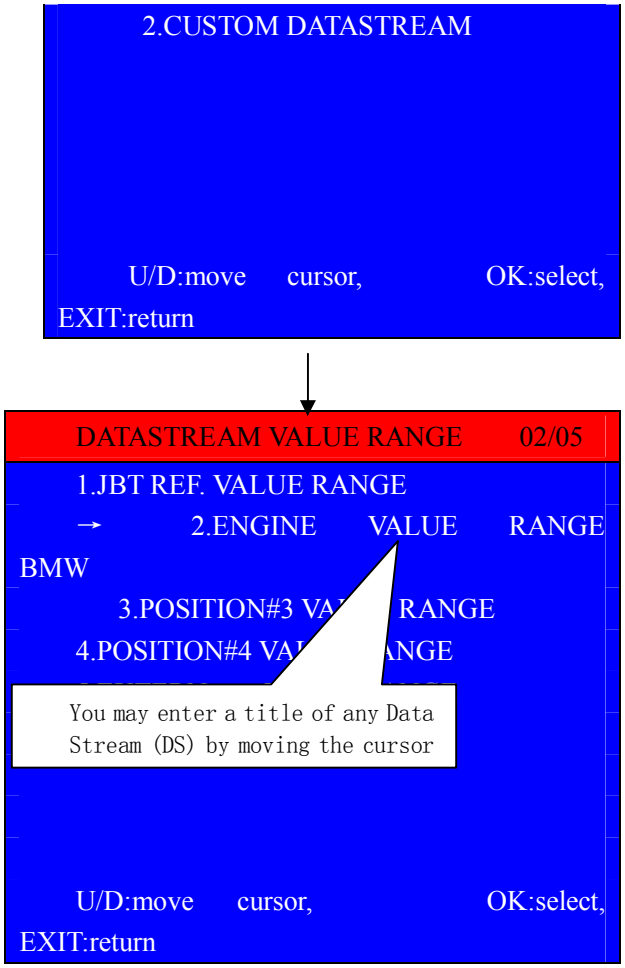
☐ Every screen displays the items of data streams.

☐ Default configuration recovery:

Users can recover the original setting before ex works by choosing RESTO.DEFAULT item.

4.Data Stream Parameters Maintenance





Menu Explanation:

〈1〉 JBT DATA STREAM REFERENTIAL RANGES: the idle speed referential data of any car model provided by JBT before ex works can not be modified on this screen.

〈2〉 POSITION 2—POSITION 4 VALUE RANGE (XX systematic referential data stream range): this function can reserve the saved data through practical records.

Fourth Inventiveness: Introduction to Self-learning and Judging Function

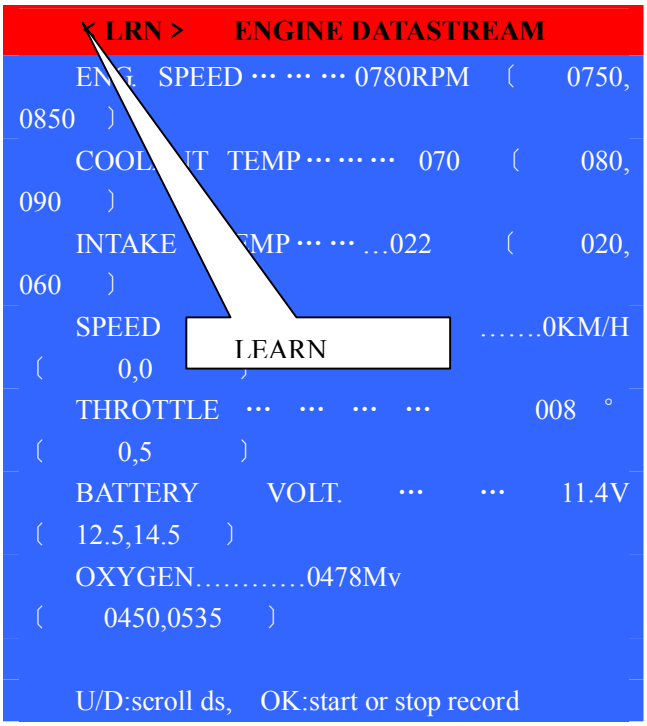
Self-learning and judging function refers to that learning from a car's normal running data under some circumstance, which can be used to judge other cars' data to be right or not. This can help users judge all kinds of cars' running data scientifically, reasonably and correctly. This can also help users improve judgment and repair levels.

For example, MITSUBISHI SERIES cars, we do not know these car models' standard values of data streams at idle speed, but, we can collect this car's systematic data of the engine, gear box, ABS, airbag and so on at idle speed, and input all the data into our car scanner. When we meet this type of car again, we can compare the normal car's data with the tested car's data. If any data is out of the collected normal ranges, the items would be highlighted by special color to help trace the problems.

□**Functions Description:**

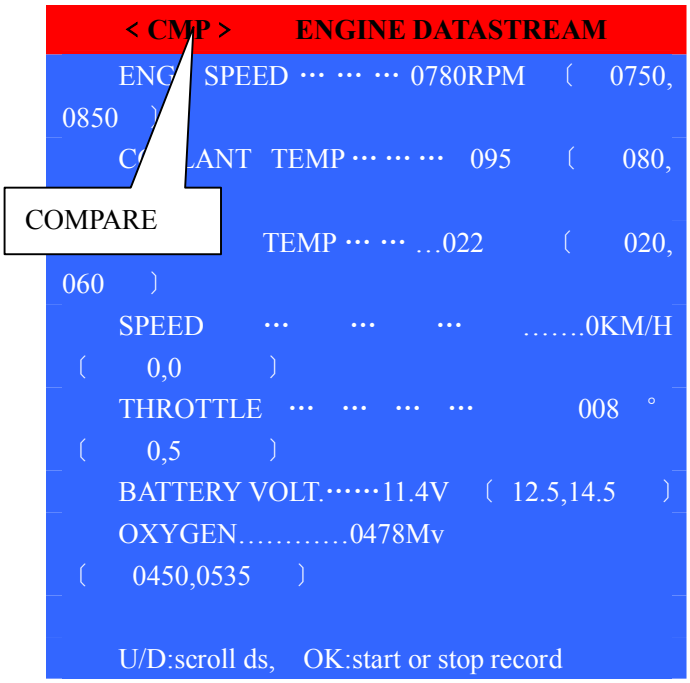
Self-learning of normal cars' data: This function means we can reserve the saved running data of normal cars, this instrument would be able to set maximum and minimum values of the ranges by these saved data.

□ **Analysis of Data**



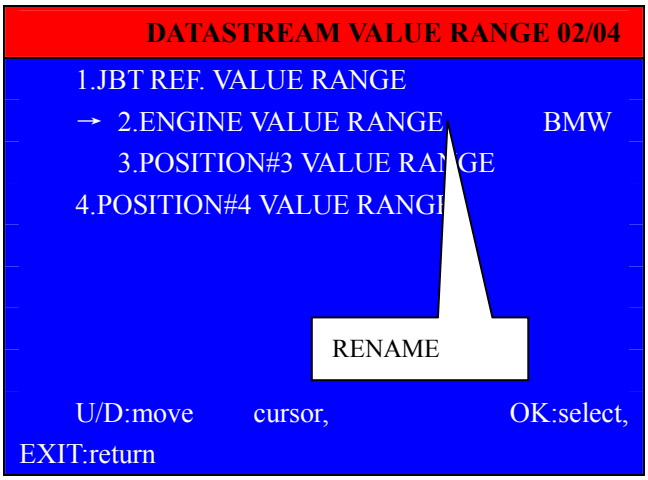
Comparison:

When we meet two cars of the same model, we can compare the tested data with the referential ranges of the data we learned, if the tested data are out of normal ranges of the normal car. The items would be highlighted by special colors to show that these items are abnormal. Technicians can shoot the troubles by the highlighted items.



☐ **Rename the Learned Data:**

This instrument provides each car model 3 positions for self-learned data streams. If the self-learned data are too many and not easy to arrange, we can rename these data by systematic models to help better arrange data and to compare these data with other cars' and better use these data to analyze.



Function Features:

☐ Self-learn cars' referential ranges of data streams.

☐ Do comparison between self-learned data and practical tested data to make troubles obvious.

☐ Self-learning function provides 3 pieces of saving space.

Function Applications:

☐ Connect JBT CS to the Car's ECU system.

☐ Select the function of Datastream.

☐ Select the Operation of LEARN DS VALUE RANGE and come to the LEARN interface.

☐ Position 2 have been saved with learned data.

The data obtained from self-learning normal cars are used to judge the concerned cars' data to be right or not. Abbreviation: Self-learning judgment function (SLJ) is a first-invented function among many excellent auto scanners. In order to fully utilize this function, we suggest:

〈1〉 When you go over the data streams, please do not turn the page until every data stream shows no warning color. This would help the scanner fully acquire every item's maximum and minimum.

〈2〉 Please do not exit until you scroll down to the bottom item.

5.HELP

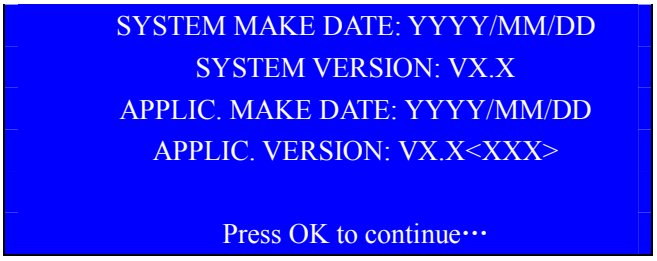
Users can get helps from checking the item of HELP to operate this scanner.

Operational Procedures

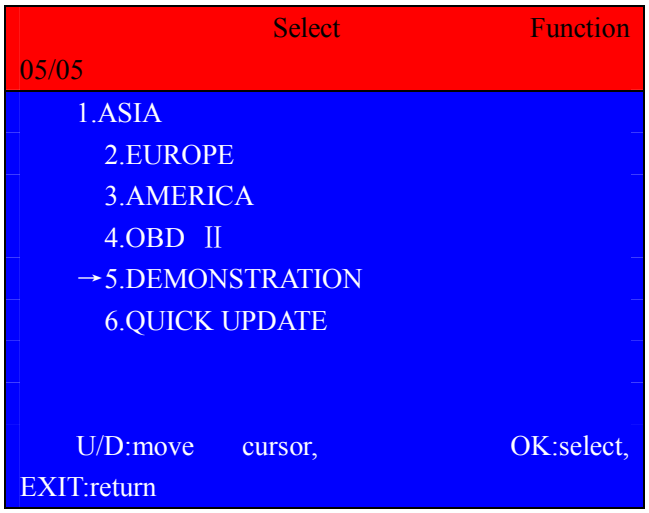
Turning On

1、 Please connect the main cable's 26PIN end to the main unit, and connect the 25PIN end to the car's diagnostic link connector, press the power switch on down the main unit's bottom. If the instrument comes to the welcoming interface, the scanner is working correctly. If there is no indication, please check the concerned car's diagnostic link connector's power supply.

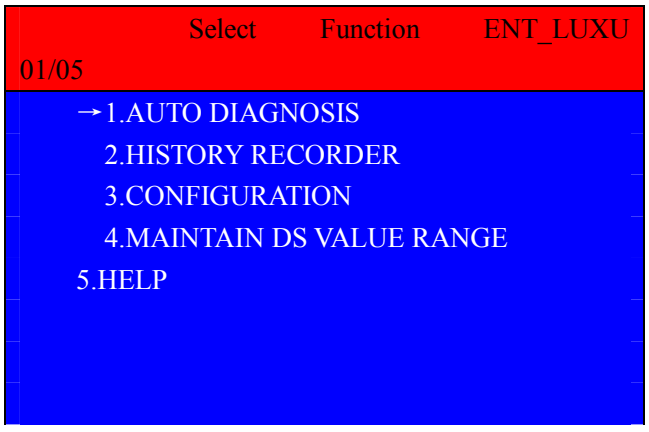
The interface of the instrument which has power supply:



2、Press the “OK” button, then the instrument would come to the testing program. When the following display shows up, it means the connection is successful, then you may come to the next step.



To continue:



Turning Off

Please escape back to the auto scanner's welcoming interface, press the power switch off down the main unit's bottom. And separate the connection between diagnostic connector and ECU's DLC, then switch your car key back to the 0 position.

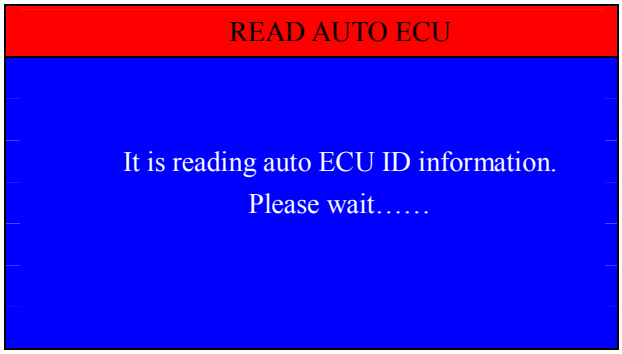
Introduction to Testing Functions of Auto Diagnosis and Operations

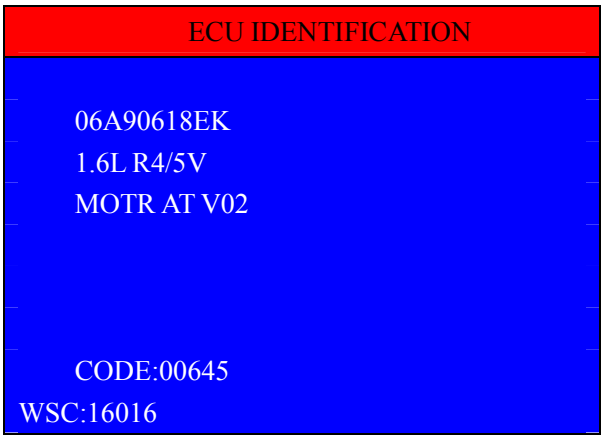
Note: This section's content is about the basic functions of Auto Scanners. Different cars would have different special functions. Therefore, your testing program has or not the following functions would depend on the concerned car model supports it or not. We would not focus on this point hereby.

CONTROL COMPUTER TYPES (Some special functions of computer-controlled systems have the same functions)

This function can read the recognition information of auto computers, please remember this piece of information and it will help to buy or exchange the computers.

Press〔↓〕〔↑〕keys to move the "→"cursor to choose 〔control computer types〕,press〔OK〕key to display on the screen:





The above forms only show the VOLKSWAGEN engines'control computer types. The other car models and control unit would be different.

Notes to the above forms:

Control Computer Types: 06A90618EK

Engine Exhaust:1.6L

Engine Structure: 4 cylinders 5 valves

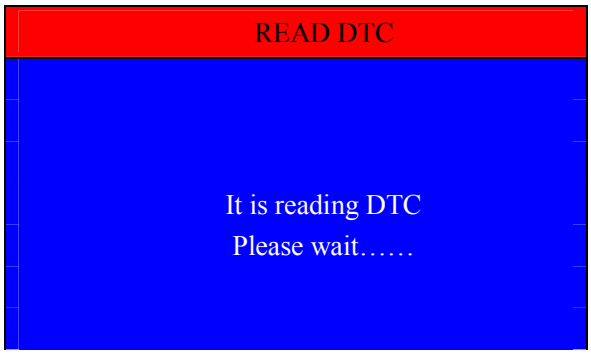
Fuel Injection System: Multi Fuel Injection (MFI)

Control Computer Software Version Number: V02

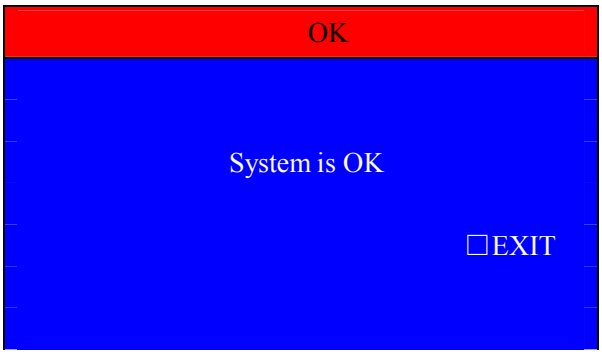
Code: 00645　　Service Provider Code: 16016

Reading Diagnostic Trouble Code(DTC)

Press〔↓〕〔↑〕keys to move the "→"cursor to choose 〔READ DTC〕,press〔OK〕key to display on the screen:



a) If the system is normal, then the screen would display:

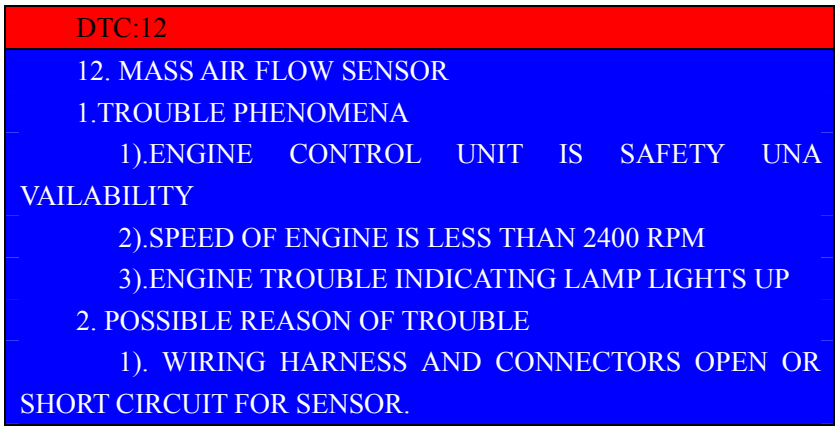


b) If there is DTC, the screen would display DTCTAB:

ENGINE DTCTAB　　01/04

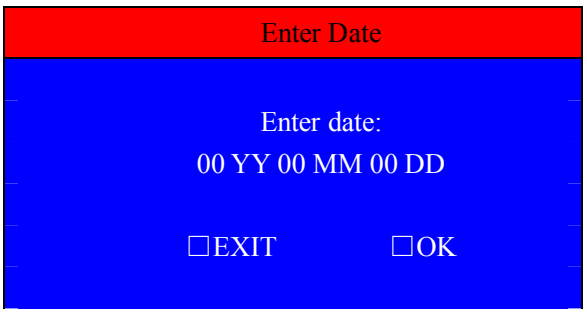
• 00530	01076	03604	01533

Press〔↓〕〔↑〕〔←〕〔→〕to move the cursor, choose the DTC we need to check, press〔OK〕key to display the implication of the DTC on the screen:

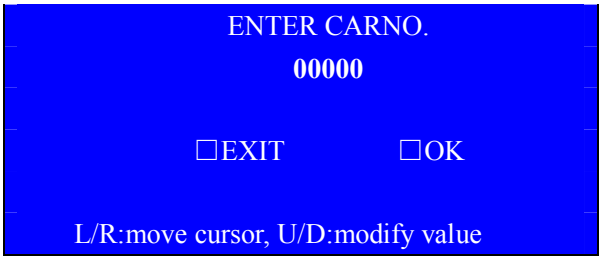


When the test is over, press the key〔EXIT〕to return to 〔TEST FUNCTION〕MENU, it would ask if you want to save DTC. There are two kinds of saving forms:

1. Save by testing date, the screen shows:



2. Save by car no., the screen shows:

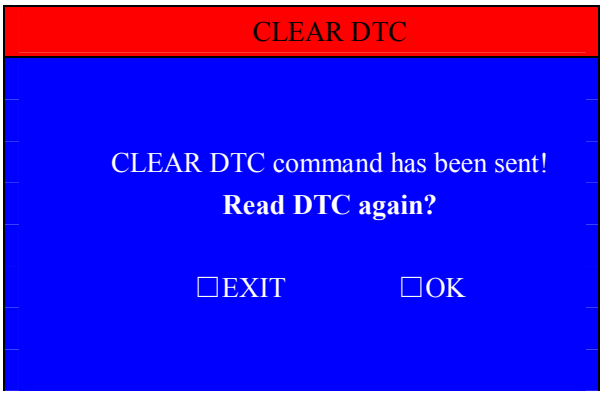


Press the keys of〔→〕〔←〕to move the cursor to change the digit position, press the keys of〔↑〕〔↓〕to change the value of some digit. When the date or the car number has been right, press the key〔OK〕,the auto scanner will save the test results into the memory of itself.

Note: If you want to change the record format, please refer to the previous introduced HISTORY RECORDER and its subdirectory DTC RECORDER FORMAT to change record format. The default format by JBT E-CARTOLDER is

Clear Diagnostic Trouble Code (DTC)

Press the keys of 〔↓〕〔↑〕to choose CLEAR DTC, press〔OK〕, the screen would show



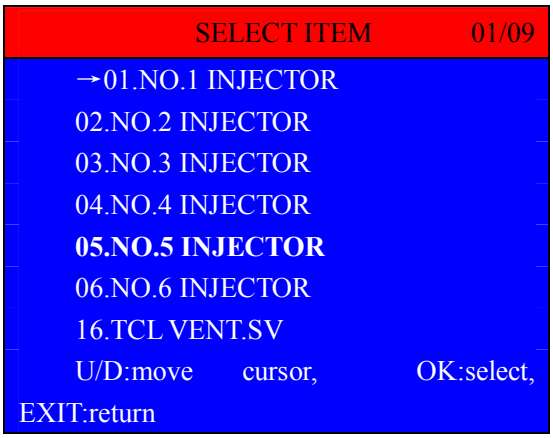
If you want to judge whether DTC has been cleared, the auto scanner

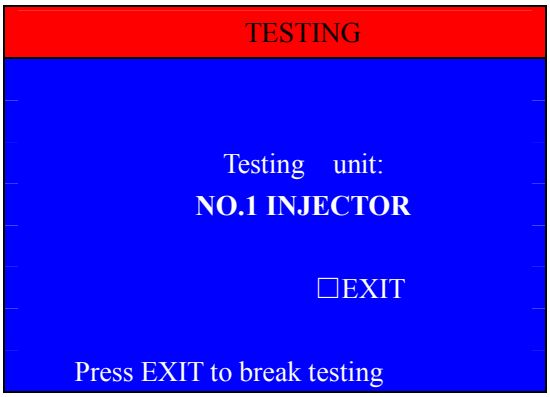
would ask: “Read DTC again?”, if you want to reread DTC, press the key 〔OK〕to read , otherwise, press the key 〔EXIT〕to return to the menu of SELECT FUNCTION, if the DTC can not be cleared, the remained DTCTAB will show up.

Perform the UNIT TEST

This function gives the orders to actuators through ECU which controls computer-controlling units to control actuators. We can also observe whether actuators perform the orders to judge if one actuator is normal or not.

Press the keys of 〔↓〕〔↑〕to choose a relevant UNIT TEST, press 〔OK〕, the screen would show



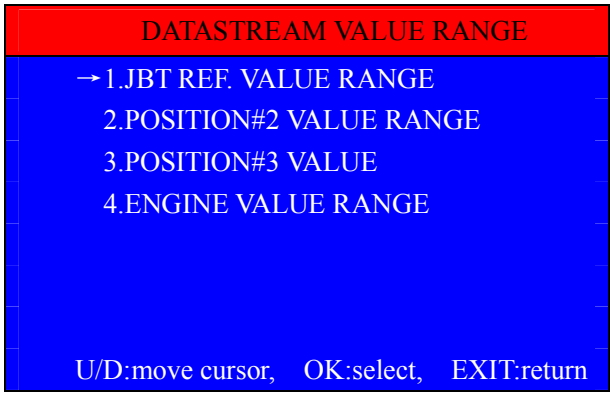


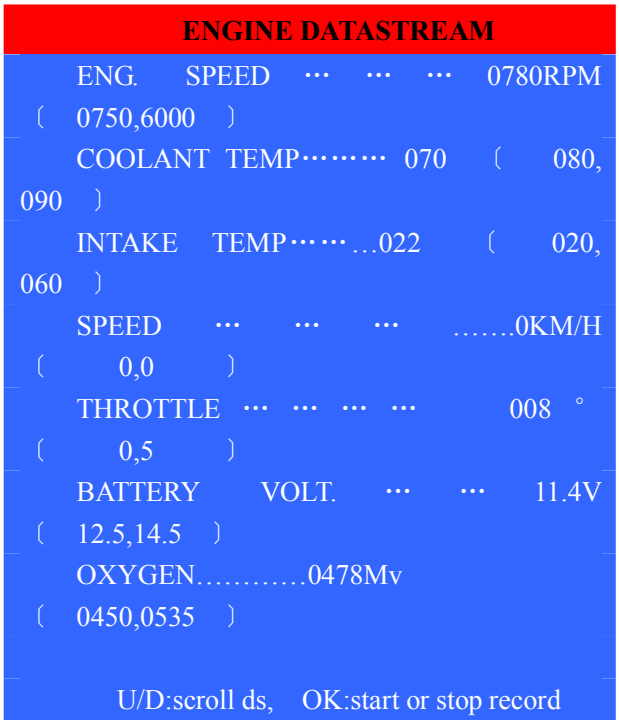
If you want to choose one actuator, press the key〔OK〕, if the test is over, press the key 〔EXIT〕.

Other actuators' operations would be same to this one. If the car ECU program provides no actuators to test, the screen would show "NO TEST UNIT!", press the key 〔EXIT〕to return to the upper level of the menu.

Running Data Analysis

In the process of scanning a car, data steams are the concrete expression of the car's running status and the proof to trouble shooting and repair. Press the keys〔↓〕〔↑〕to choose DATASTREAM, then press the key〔OK〕, if you choose ALL DATASTREAM, the DATA VALVE RANGE will appear, if you further choose 1.JBT REF. VALUE RANGE, the whole data streams of this car will show up as follows:





Update:Connecting auto scanner with PC, and do not open auto scanner.

1.Connect your JBT-CS auto scanner to computer and main unit well as upon pictures.

2.Download software in Desktop, and use Winrar to open it, because it is compressed.

3.Open CSUD2 program which marks JBT logo.

4.Look at Update Mode in the document, please select (N)ormal Update.

5.Touch (B)rowse and choose CSSYS program and turn on your auto scanner to update basic platform.

6.After basic platform update is ok, we introduce two methods about software update to you.

First method is Quick Update.

The method is as following:

① After finish basic platform update, Look at Update Mode in the document, select (Q)uick Update, then make C(a)ll Speed and Comm(U) Speed become maximum.

② Touch (B)rowse and choose CS-GENERAL (E-ALL)

③ Look at your auto scanner, enter Asia, Japan,Mitsubishi, waiting verifying, choose 2 QUICK UPDATE, you will see a document which is showing

Number, Machine makedate, Application makedate and Updated file makedate, contact with JBT and give us Number,

Machine makedate, Application makedate and Updated file makedate in order to get passport from us.

Quick update could update software quickly, but it is not so stable during update. If any problems happen during quick update, please contact with us or changing to normal update.

Second method is normal update, normal update could update slowly, but it is more stable, if quick update failed, you could change to normal update, or you could select normal update instead of quick update after baisc platform update complete.

That means quick update method and normal update method are all for software update, you could choose one of these two methods to do software update.

Normal update is as following:

① After finish basic platfor update, Look at Update Mode in the document, select (N)ormal Update.

② Touch (B)rowse and choose CS-GENERAL (E-ALL)

③ Turn on your Specilist again. You will see a document which is showing Number, Machine makedate, Application makedate and Updated file makedate, contact with JBT and give us Number, Machine makedate, Application makedate and Updated file makedate in order to get passport from us.

After input passport, touch OK, software update could start.

ALL TYPES OF CARS DIAGNOSTIC FUNCTION LIST

GM DIAGNOSTIC FUNCTION LIST :			
AUTOS		MAIN MENU	SUB MENU
BUICK	SAIL	ENGINE	
		A/T	
		ABS	
		SRS	
	REGAL(1999-2005)	POWER	2.0L L4 L34
	GL8(1999-2005)		2.5L V6 LB8 AT
			2.5L V6 LB8 MT
			3.0L V6 LW9 AT
			3.0L V6 LW9 MT
			3.0L V6 L46
		BODY	1.W LINE
		CHASSIS	1.D LINE
	LACROSSE AND	POWER	<C>3.0L V6 LZC
	GL8CAN(2006-2007)		<X>2.4L L4 LE5

		BODY(A/T OR M/T)	BCM
			COMB METER
			RAD
			R HVAC
			R ELEC DOOR ECM
			ASSI SRS
			R SOUNDING SYS
		CHASSIS	ABS ECM
		POWER	<C>3.0L V6 LZC
			<X>2.4L L4 LE5
		BODY(A/T OR M/T)	BCM
			COMB METER
			RAD
			R HVAC
			R ELEC DOOR ECM
			ASSI SRS
			R SOUNDING SYS
		CHASSIS	ABS ECM
CHEVROLET (2005-2006)	K	POWER	(0)1.0L L4 L11(Euro Ⅳ)
	T	POWER	(Y)1.5L L4 LV8
		BODY	AIR BAG
		CHASSIS	BCM
	N	POWER	(6)1.6L L4 L91(Euro Ⅳ)
		AT	(6)1.6L L4 L91(Euro Ⅳ)
		BODY	SRS
	V	POWER	(Z)2.0L L4 L34
		AT	(Z)2.0L L4 L34
		BODY	ISU
			SIR
		CHASSIS	BCM
	S	POWER	(N)1.6L L4 L01
		BODY	SIR
		CHASSIS	BCM

CHRYSLER DIAGNOSTIC FUNCTION LIST :

AUTOS	MAIN MENU	SUB MENU
CHRYSLER 6PIN	ENGINE	1988-1993
		1994
		1995-

FORD DIAGNOSTIC FUNCTION LIST :		
AUTOS	MAIN MENU	SUB MENU
FORD 【1】	PCM	
MONDEO 2.0L/2.5L	ABS	
	SRS	
FORD 【2】	BODY	A/T
		INSTRUMENT
		POWER DOOR WINDOW
		POWER REAR-VIEW MIRROR
		HEATING REAR LAMP
		HEATING WINDSHIELD
		POWER DOOR LOCK
		SRS
		GIRTH
	CHASSIS	ABS
		EPS
	ELECTRICAL	CHARGING SYSTEM
		EPS
		INTERIOR LAMPS
		TURN SIGNAL
		VEHICLE HEAD
		VEHICLE REAR
	POWER	ENG SYSTEM
		AT
	MODULE	ABS
		EPS
		I/C

		PCM
		TRAINSMISSION CONTROL
		GEM
		DRIVER DOOR CONTROL
		P_DCU
		PDM
		RESTRAINT GRASH
		RL_DCU
		RR_DCU
	SPECIAL FUNCTION	CLEAN UP CMDTC
		PATS
		PCM

FIAT/LANCIA DIAGNOSTIC FUNCTION LIST :		
AUTOS	MAIN MENU	SUB MENU
LANCIA	ENGINE	K<2.0> BOSCH MOTRONIC M2.10.3
		THEMA<92 16V I.E> BOSCH MOTRONIC M1.7
		THEMA<92 16V TURBO> BOSCH MOTRONIC M2.7
		DEDRA<2.0 I.E ECO> LAW P8 ECO
	AT	K<2.0> LANCIA AISIN AT
		K<3.0> ZF 4HP18K AT
		DEDRA<2.0> DR2.0 AT
	SRS	K<2.0> LANCIA TRW2 SRS1
		K<3.0> LANCIA TRW2 SRS2
	ABS	THEMA<92 3.0 V6> BOSCH 2SI ABS
		MAREA<1.6 16V> MAREA LUCAS ABS
FIAT	ENGINE	PUNTO<75> MAGNETI MARELLI LAW 08F
		PUNTO<GT> MAGNETI MARELLI LAW 08F
		BARCHETTA<16V ASPIRATO> HITACHI MPI INJECITON
		COUPE<16V TURBO> P8 PQP T/C INJECITON(E1.EKY)
		COUPE<96 2.0 TURBO 20V> BOSCH MOTRONIC M2.10.4
		UNO<1400 I.E.ECO> BOSCH MONOJETRONIC SPI

		CM2.0 CM2.0 ENG
		MAREA<1.6 16V> MARELLI LAW 1AF/1AB
	AT	PUNTO<SELECTA Ⅰ> FUJI MX665 AT Ⅰ
		PUNTO<SELECTA Ⅱ> FUJI MX665 AT Ⅱ
		MARAE<1.6 16V> FIAT AISIN AT
	SRS	COUPE<16V TURBO> FIAT TRW2 SRS1
		BRAVO_BRAVA<1.6 16V> BREED SRS
		PUNTO<GT> FIAT TRW2 SRS2
FIAT 16PIN		
FIAT	ENGINE	ME7.3 H4
	AT	FUJI SG-VCT
	ABS	MAREA LUCAS
PAILIO	ENGINE	(MM MFC)ENG SYSTEM
	SRS	
	ABS	
LANCIA	ABS	
SIENA	ENGINE	(MM MFC)ENG SYSTEM
	SRS	
	ABS	

PEUGEOT DIAGNOSTIC FUNCTION LIST :		
AUTOS	MAIN MENU	SUB MENU
PEUGEOT 307	ENGINE	ME7.4.4
		MM6LP
		MM4.8LP
	AT	2000
		96
	EPS	
	SRS	
	BSI	
	CIB	
	DM	
	SSW	
	DM DS	
	DM PS	

	RAD	
PEUGEOT 206	ENGINE	ME7.4.4
	AT	2000
	ABS	
	SRS	
	BSI	
	CIB	
	SSW	
	A/C	
	RB	

CITROEN DIAGNOSTIC FUNCTION LIST :		
AUTOS	MAIN MENU	SUB MENU
ZX(2PIN)	ENGINE	
ZX(16PIN)	ENGINE	
	AT	
	ABS	
ELYSEE 8V	ENGINE	
	AT	
	ABS	
ELYSEE 16V	ENGINE	M7.4.4
	ELYSEE IMB	
	ABS	
	SRS(16V)	
	Simens SRS	
XSARA	ENGINE	MM6LP
		MM4.8LP
		M7.4.4
	AT	AL4 96
		AL4 2000
	SRS	
	A/C	
	CD	
	RAD	

	BCM	
	BSI_VAR_C	
	ABS	
PICASSO	ENGINE	MM6LP
		MM4.8LP
		M7.4.4
	AT	AL4 96
		AL4 2000
	SRS	
	BCM	
	RAD	
	SCREEN	
	BSI	
	ABS	
CITROEN C5	ENGINE	MM6LP
	OIL ENGINE	SIEMENS SIRUS81
	DIESEL ENGINE	BOSCH EDC15CE
	BSI	
	ABS	
	SRS	
	A/C	
	AT	AL4 2000
		4HP20
	BCM	
	RAD	
	ORIENT ON-OFF CYCLOSTYLE	
	RAIN BRUSH	
	C5 IMB	
	SHOW MODULE	SAGEM A
		SAGEM B
		SIEMENS C
		TELEMATIC

RENAULT DIAGNOSTIC FUNCTION LIST :

AUTOS	MAIN MENU	AUTOS	MAIN MENU
SCENICII	ABS	MEGANEII	PANEL
	A/T		AAC
	ENG		UCH
	BREAK		SRS
	ASSISISTANT		CAR
	PAS		ROOF
	UPC		ABS
	PANEL		A/T
	AAC	MEGANEII CC	ENG
	UCH		BREAK
	SRS		ASSISISTANT
	CAR		PAS
	ROOF		UPC
MEGANEII	ABS		PANEL
	A/T		AAC
	ENG		UCH
	BREAK		SRS
	ASSISISTANT		CAR
	PAS		ROOF
	UPC		

LAND ROVER DIAGNOSTIC FUNCTION LIST :			
MAIN MENU			
DEM	EWS	LWS	BIT
EGS	ZKE3	BM	ALC
ABS	PDC	SHD	EXNON-left
SRS	SZM	AIC/RLS	XENON-right
A/C	TEL	NAV	ZKE5
IKE	LSZ/LCM	VAD	

MITSUBISHI DIAGNOSTIC FUNCTION LIST :			
AUTOS	MAIN MENU	AUTOS	MAIN MENU

MITSUBISHI	ENG	EUROIII OR CAN-BUS SYSTEM	ENG
	IMB		IMB
	AT		AT
	SS4 II		TCL
	A/C		ABS
	TCL		SRS
	ABS/ASC		A/C
	HBB		ETACS
	AYC		SWS
	CRS		METER
	SRS		GATE
	SWS	EURO-OBD SYSTEM	ENG
	ETACS		
MITSUBISHI CAN-BUS			

HONDA DIAGNOSTIC FUNCTION LIST :			
AUTOS	MAIN MENU	AUTOS	MAIN MENU
HONDA 3PIN	F20B2	CRV 2.0/2.4	ENG
	F22B1		A/T
	F22B2		SRS
	F22B4		ABS
	D15Z4	CIVIC 1.5	ENG
	C35A4		A/T
ACCORD 2.0(01-04)/2.3(99-04)/2.4(99-04)/3.0(01-04)			SRS
HONDA 16PIN			ABS
ACCORD 2.0/2.4/3.0	ENG	STREAM 2.0	ENG
	A/T		A/T
	SRS		SRS
	ABS		ABS
FIT 1.3/1.5	ENG	ODYSSEY 3.0	ENG
	A/T		A/T
	SRS		SRS

	ABS		ABS
	EPS		

NISSAN DIAGNOSTIC FUNCTION LIST :			
AUTOS	MAIN MENU	AUTOS	MAIN MENU
OLD MODULE	ENG		SRS
	A/T		NATS
	SRS		HCM
	ABS		E-4WD
	IVMS		A/T
OBD	ENG	CAN-BUS	EPS
	ABS		IPDM
	SMART		BCM
			METER

TOYOTA DIAGNOSTIC FUNCTION LIST :			
AUTOS	MAIN MENU	AUTOS	MAIN MENU
OBD II	ENG		VGRS
	A/T		EV
	SRS		Battery
	ABS		HV ECU
	IMMO		HV BATTERY
	CCS		MULTI-MODE MT
	Laser Cruise		SEQUENTIAL MT
	Steering Lock		STOP AND GO
	TDS	CAN-BUS	Engine
	AFS		ECT
	Air conditioner		Cruise Control
	Back-door		ABS/VSC/TRC
	Body		EMPS

	Body NO.2		SRS
	Body NO.3		Air Condition
	Body NO.4		Immobiliser
	Body NO.5		Body
	Clearance sonar		Body.3
	COMBI SW		Body.4
	D-Door		Body.5
	D-Seat		Driver Door
	Gateway		Passenger Door
	Master SW		RL-Door
	Meter		RR-Door
	Meter-NC		Gateway
	Mirror		Master Switch
	Mirror-L		Tilt&Telesopi
	Mirror-R		ABS/VSC/TRC
	Occupant Detect		Air Condition
	P-Door		Main Body
	P-Seat		Driver Door
	Rain Sensor		Sliding Door
	Rear-Seat SW		Combination Meter
	RL-Door	FLASH CODE	ENG
	RL-Seat		A/T
	RR-Door		ABS
	RR-Seat		SRS
	RTRCTBL HARDTOP		SSC
	Slide Roof		A/C
	Steering Pad	TOYOTA(INDONESIA)	
	TILT&TELESCO	Fortuner Diesel/Petrol	ENG and ETC
	Wiper		ABS/VSC/TRC
	AHC		IMMO
	Air Suspension		SRS

	EHPS	Innova Diesel/Petrol	ENG and ETC
	EMPS		ECT
	EMS		ABS/VSC/TRC
	FREE-TRONIC	Avanza	ENG
	TEMS	Rush	ENG
	Tire PRES Warn		ECT

MAZDA DIAGNOSTIC FUNCTION LIST :		
AUTOS	MAIN MENU	SUB MENU
17 HEMICYCLE+2	ENG	Engine(UAES)
		Engine(SIEMENS)
		Engine(MAZDA)
	ABS	ABS(MK60)
		ABS(DELPHI)
		ABS(BOSCH)
		ABS(MAZDA)
	SRS	JinHeng
		East JoyLong
	ATA	ATA(STEC)
	Flash Code System	Engine
OBDⅡ-16	ENG	Engine(UAES)
		Engine(SIEMENS)
		Engine(MAZDA)
	ABS	ABS(MK60)
		ABS(DELPHI)
		ABS(BOSCH)
		ABS(MAZDA)
	SRS	JinHeng
		East JoyLong
	ATA	ATA(STEC)
	Flash Code System	Engine
MAZDA 3 CAN	BODY	A/T

		Instrument
		Power Door Window
		POWER REAR-VIEW MIRROR
		HEATING REAR LAMP
		HEATING WINDSHIELD
		POWER DOOR LOCK
		SRS
		GIRTH
	CHASSIS	ABS
		EPS
	ELECTRICAL EQUIPMENT	CHARGING SYSTEM
		EPS
		INTERIOR LAMPS
		TURN SIGNAL
		VEHICLE HEAD
		VEHICLE REAR
	POWER	ENG SYSTEM
		A/T
	MODULE	ABS
		EPS
		I/C
		PCM
		TRAINSMISSION CONTROL
		GEM
		DRIVER DOOR CONTROL
		P_DCU
		PDM
		RESTRAINT CRASH
		RL_DCU
		RR_DCU
	SPECIAL FUNCTION	CLEAN UP CMDTC
		PATS
		PCM
MAZDA 6 CAN		

MAZDA3 2.0L	ENG	
MAZDA6 2.0L	A/T	
MAZDA6 2.3L	BCM	
	SRS	
	ABS	

DAIHATSU DIAGNOSTIC FUNCTION LIST :		
AUTOS	MAIN MENU	SUB MENU
KEMBARA	ENG	J100(HC-E5)
		J102 (K3-VE)
	A/T	With K3 Engine
	ABS	With K3 Engine
	IG.TIMING ADJ	
KELISA	ENG	J701(EJ-DE)
	IG.TIMING ADJ	
KENARI	ENG	L901(EJ-DE)
	IG.TIMING ADJ	
KANCIL	ENG	L201(ED-10)
DAIHATSU(INDONESIA)		
TERIOS	ENG	
	ECT	
XENIA	ENG	
GRANDMAX	ENG	
SIRION	ENG	

SUBARU DIAGNOSTIC FUNCTION LIST :	
MAIN MENU	SUB MENU
ENG	1.8L Engine System
	2.0L Engine System
	2.0L Engine 2003～

TRANSMISSION	
ABS	
ATA	

SUZUKI DIAGNOSTIC FUNCTION LIST :		
AUTOS	MAIN MENU	SUB MENU
LINGYANG	ENGINE	WITHOUT STEP EGR
		WITH STEP EGR
	SRS	
	ABS	
SWIFT	ENGINE	
	A/T	
	ABS	
	SRS	
	EPS	
	BODY	
	ATA	
SX4	ENGINE	
	A/T	
	ABS	
	SRS	
	EPS	
	BODY	
	ATA	
	A/C	
JUMNY	ENGINE	
	A/T	
	ABS	
	SRS	
CARRY	ENGINE	
	EPS	
LANDY	ENGINE	
	A/T	
	ABS	
	SRS	

	EPS	
GRANDVTARA	ENGINE	
	ABS	
LIANNA	ENGINE	
	A/T	
	ABS	
	A/C	
SOLIO	ENGINE	
	A/T	
	ABS	
	SRS	
	EPS	
SUZUKI NORTH AMERICAN		
PASSENGER CAR	SY413-1/SY416-1 (MFI)	
BALENO SY SERIES	SY416-3,4,5 (SFI)	
	ENGINE	
MR WAGON	ENGINE(SR410)	
WAGON R+	TRANSMISSION (SR410)	
	AIRBAG (SR410)	
TRUCK/VAN	ENGINE	
	AIRBAG	
	ABS	

ISUZU DIAGNOSTIC FUNCTION LIST :
MAIN MENU
ELF
NPR
NQR
VFR
Frontier,Lao-Rodeo

HYUNDAI DIAGNOSTIC FUNCTION LIST :		
AUTOS	MAIN MENU	SUB MENU

SONATA (04-)	ENG 2.0/2.7	
	A/T	
	ABS	
	SRS	
	ASR	
	AUTO LIGHT	
	ATA	
SONATA A/T +- (99-04)	UNLEAD ALL	ENG
		A/T
		ABS
		SRS
ELANTRA	ENG 1.8/1.6L (-CVVT) GEN	
	A/T	
	ABS	
	SRS	
	ASR	
	ATA	
ELANTRA(06-)	ENG	Unlead 1.6L
	A/T	
	ABS	
	SRS (06/07)	
TUCSON	ENG	Lead 2.0/2.7L ALL
		Unlead 2.0/2.7L GEN
		Unlead 2.0/2.7L EOBD
		Unlead 2.0/2.7 OBD-Ⅱ
		Diesel VGT
	A/T	
	ABS	
	SRS	
	A/C	
	4WD	
	ETAC	China

		General/Europe
		Nas
	CODE	
NF(05-)	ENG	Lead 2.0/2.4/3.3/3.8 GEN
		Unlead 2.0/2.4/3.3/3.8 GEN
		Unlead 2.0/2.4/3.3/3.8 EOBD
		Unlead 2.0/2.4/3.3/3.8 EOBDⅡ
	A/T	
	ABS	
	ABS1	
	SRS	
	A/C	
	POWER	
	BCM	
	CODE	
	ATA	
ACCENT(06-)	ENG	Unlead 1.4/1.6
	A/T	
	ABS	
	SRS(07)	
ACCENT(00-05)	Lead ALL	ENG
		A/T
	Unlead GEN	ENG
		A/T
SANTAFE(06-)	ENG	
	A/T (Gas)	
	A/T (Diesel)	
	ABS	
	SRS	
	A/C	
	POWER	

	BCM	
	LGT	
	4WD	
	ATA	
SANTAFE(01-02)	ENG 2.0/2.4/2.7/3.5（Gas）and Engine-VGT/Without VGT（Diesel）	ENG
		A/T
		ABS
		SRS
		ASR
		4WD
		ATA
ATOS 1.0L（98-02）	Unlead GEN	ENG
		A/T
	Unlead EOBD	ENG
		A/T
COUPE（97-01）	Lead 1.6/2.0L ALL	ENG
		A/T
		ABS
		SRS
	Unlead 1.6/2.0 IMM	ENG
		A/T
		ABS
		SRS
	OBDⅡ（97-00）	ENG
		A/T
		ABS
		SRS
COUPE(02-)	Lead 2.7L ALL	ENG
		A/T
		ABS
		SRS
	Unlead 2.0L（OBDⅡ	ENG
		A/T

	/EOBD+CVVT/	ABS
	GEN+CVVT)	SRS
GETZ (03-)	Unlead	ENG
	GEN/EOBD	A/T
		ABS
		SRS
MATRIX		
(02-)	Lead	ENG
	1.8L ALL	A/T
		ABS
		SRS
	Unlead	ENG
	1.6L ALL	A/T
		ABS
		SRS
TRAJET XG	Lead	ENG
(01-02)	2.7L ALL	A/T
		ABS
		SRS
	Unlead	ENG
	2.0/2.7L	A/T
	(GEN) ALL	ABS
		SRS
EQUUS(00-)	Unlead	ENG
	3.0 ALL	A/T
		ABS
		SRS
SENTRO	Unlead	
(98-02)	GEN	ENG
TERRACAN	ENG	Diesel 2.5L (TCI)
		Diesel 2.5L (C/RAIL)
		Unlead 3.5L (GEN/EOBD/OBDⅡ)
	A/T	
	ABS	
	SRS	
	4WD	
HYUNDAI	ENG	

12PIN		
	A/T	
	ABS	
	SRS	
	CCS	

DAEWOO DIAGNOSTIC FUNCTION LIST :		
AUTOS	MAIN MENU	SUB MENU
MAGNUS 16PIN	ENG	
	A/T	
	ABS	
	SRS	
	ESPERO ENGINE 12PIN (91-94/95-97)	
DAEWOO 12PIN	MPI (1.5/1.8/2.0L)	System 00/01
	SPI (2.0L)	System 00/01
MATIZ 12PIN	ENG	

KIA DIAGNOSTIC FUNCTION LIST :		
AUTOS	MAIN MENU	SUB MENU
RIO 16PIN	ENG	
	A/T	
	ABS	
	SRS	
OPTIMA 2.0L (00-04)	ENG	
	A/T	
	ABS	
	SRS	
CARNIVAL 2.5/3.5 (04-05)	ENG	
	A/T	
	A/T 1	
	ABS	
	SRS	
CERATO 1.6/1.8/2.0L (05)	ENG	
	ENG 1	

	A/T	
	A/T 1	
	ABS	
	SRS	
NAZA (CARNIVAL/SEDONA) (98-04)	Engine 2.5 KV6	ENG
		A/T
		ABS
		SRS
	Engine 2.5 KV6 (EUROⅢ)	ENG
		A/T
		ABS
		SRS
SEPHIA (MENTOR) (-00)	ENGINE 1.5 (BFD/BFE)	ENG
		A/T
		ABS
		SRS
CARENS (CITRA) (99-05)	DHOC 1.8 (TED)	ENG
		A/T
		A/T 1
		ABS
		SRS
SPORTAGE(-03MY)	DOHC 2.0 (HFM) Unlead (-98/00)	ENG
		A/T
	DOHC 2.0 (HFM) Lead (99/01-)	ENG
		A/T
	DOHC 2.0 (HFM) BOSH (99/01-)	ENG
		A/T
CLARUS	Engine 1.8/2.0 (-00)	ENG
		A/T
		ABS
		SRS
SHUMA (SPECTRA)	DOHC 1.6(Non	ENG

	Immo) (99-04)	A/T
		ABS
RIO	1.3/1.5 MAP	ENG
	(00-04)	A/T
OPIRUS (04)	V6 3.5L	ENG
	Gasoline (ETS) ALL	A/T 1
		ABS
		SRS
		POWER
		SUST
		A/C
		BCM 1
		BCM 2
		BCM 3
		BCM 4
		BCM 5
PRIDE (04)	SOHC 1.3 MAP	A/T
RETONA (04)	Engine ALL	ENG
EUROSTAR (PICANTO)	SOHC	ENG
	1.0/1.1L (04)	A/T
PRIDE	Engine	

SSANGYONG DIAGNOSTIC FUNCTION LIST:		
AUTOS	MAIN MENU	SUB MENU
ISTANA	ECU	2.3 DOHC Manual T / M(HFM)
		2.3 MSE(RATIO)
	ABS	ABS 5.0 Free Running
		ABS (TEVES)
CHAIRMAN	ENG	BOSCH 3.2
	A/T	NAG
	ABS	ABS/ABS 5.3
		ABS/ABD 5.3
		ABS/ASR 5.3
	SRS	

	ESP	

PROTON DIAGNOSTIC FUNCTION LIST:		
AUTOS	MAIN MENU	SUB MENU
	MMC	MPI/GDI/DIESEL
		IMMO
		ELC-4/5AT
		SS4 II
		ECS
		FULL AUTO A/C
		TCL
		ABS/ASC
		HBB
		AYC
		AUTO CRUISE
		4WS
		SRS
		SWS
		ETACS
	EMS	EMS400-VDO
		EMS700-VDO
		IMM-VDO
	RENAULT	EMS
		A/T
	ABS	ABS-BOSCH
		ABS-TRW
	ABS-TEVES	

PERODUA DIAGNOSTIC FUNCTION LIST:		
AUTOS	MAIN MENU	SUB MENU
KEMBARA	ENG	J100 (HC-E5)
		J102 (K3-VE)
	A/T	With K3 Engine
	ABS	With K3 Engine
	IG.TIMING ADJ.	
KELISA	ENG	L701 (EJ-DE)
	IG.TIMING ADJ.	

KENARI	ENG	L901 (EJ-DE)
	IG.TIMING ADJ.	
KANCIL	ENG	L201 (ED-10)

SAMARA DIAGNOSTIC FUNCTION LIST:	
AUTOS	MAIN MENU
	7.1
	1.5.4

LADA DIAGNOSTIC FUNCTION LIST:		
AUTOS	MAIN MENU	SUB MENU
	BOSCH	M1.5.4
		M1.5.4+
		M1.5.4N
		MP7.0 E2
		MP7.0 E3
		M7.9.7 E2
		M7.9.7 E3
	VS 5.1	VS 5.1 E2
	я н в а р ь	5.1.x
		5.1
		7.2

GW DIAGNOSTIC FUNCTION LIST :	
MAIN MENU	SUB MENU
ENG	Delphi ECU
	UAES ECU
	Reposition(Only UAES ECU)
	UAES Ⅱ ECU
	Same MITSUBISHI ECU
	MM SFI
	BOSCH-EDC 16 Diesel Engine
	Delphi EOBD ECU
	BOSCH-V50 Engine
	GW413E EOBD Engine

ABS	GW(HaFe/FengJun)ABS
	GW(JingLing)ABS
SRS	GW(HaFe/FengJun)SRS
	GW(JingLing)SRS

CHERY DIAGNOSTIC FUNCTION LIST :		
Auto	MAIN MENU	SUB MENU
Fulwin	ENG	MARELI SFI System
		MARELI MFI System
		MARELI MFI-AAA.A98 System
		MARELI MFI-AA9 System
		MOTOROLA System
		BOSCH M7
		MARELI(2-Valve)
	SRS	
	ABS	ABS(SABS)
		ABS(DELF)
Cowin °	ENG	DELPHI ECS
		SIEMENS ECS
		BOSCH ECS
		BOSCH ECS-EOBD
		TROITEC ECS
	SRS	
	ABS	ABS
		SABS-MK70 ABS
	Anti-Theft System	
		Remote Controller Match
		Remote Controller Synch
Easter	ENG	MITSUBISHI ECS
		DELPHI ECS
		BOSCH ECS(EOBD)
		1.9L Diesel ECS
	A/T	MITSUBISHI ECS
		DPO Transmission System
	ABS	DELPHI DBC7.0

		DELPHI DBC7.4	
	IP		
	SRS	SRS(HAE2)	
		SRS(HAE3)	
	Intelligent Controller S.W		
	Anti-Theft System		
	Body Controller System		YaHua Body System
			07 Body System
QQ3°	ENG		MARELI ECS-372 (MT)
			MARELI ECS-372EOBD(MT)
			MARELI ECS-372(AT)
			MARELI ECS-372EOBD(AT)
			MARELI ECS-472(MT)
			MARELI ECS-472EOBD(MT)
			SIEMENS ECS-372(MT)
			SIEMENS ECS-472(MT)
			TROITEC ECS-372(MT)
			BOSCH ECS-465
			LiuJi ECS-465
	ABS		
	SRS		
	A/T		
Tiggo °	ENG		DELPHI ECS
			MITSUBISHI ECS
			BOSCH ECS-1.6L
			BOSCH ECS-2.0L
			BOSCH ECS-EOBD
	SRS		
	ABS		
	Intelligent Controller S.W		
	IP		SIEMENS I/P
			ATECH I/P

	Intelligent Torque System	
	A/T	MITSUBISHI ECS
		DPO Transmission System
	Anti-Theft System	
	Body Controller System	
A5°	ENG	BOSCH ECS-A516
		BOSCH ECS-A520
		BOSCH ECS-EOBD
		BSG MIX Power System
	IP	SIEMENS VDO I/P
		ATECH I/P
	ABS	
	SRS	
	Body Controller System	
	Anti-Theft System	
	A/T	
V5°	ENG	MITSUBISHI ECS
		BOSCH ECS-2.0L
		BOSCH ECS-1.8L
		BOSCH ECS-EOBD
		1.9L Diesel ECS
	A/T	
	ABS	
	Body Controller System	Body Controller System
		YaHua Body System
	SRS	East JiuLe
		East JiuLe （Four SRS）
	Anti-Theft System	
QQ6°	ENG	BOSCH ECS
		BOSCH ECS-EOBD
		MARELI ECS-472
		MARELI ECS-472EOBD

	SRS	
	ABS	
	Body Controller System	ATECH Body System
		ZhongSheng Body System
	IP	
	Anti-Theft System	
KaiRui	ENG	
	ABS	
	SRS	
A1°	ENG	BOSCH ECS
		BOSCH ECS-EOBD
		MARELI ECS-472
	ABS	
	SRS	
	Body Controller System	ATECH Body System
		ZhongSheng Body System
	IP	
	Anti-Theft System	
V2°	ENG	BOSCH ECS
		BOSCH ECS-EOBD
		MARELI ECS-472
	ABS	
	SRS	
	Body Controller System	
	IP	
	Anti-Theft System	
M11/A3	ENG	
	ABS	
	SRS	
	Body Controller System	
	IP	

	Tire Pressure Detect System

HAFEI DIAGNOSTIC FUNCTION LIST :	
Auto	MAIN MENU
ZHONGYI	Delphi Engine System
	UAES Electron M1 System
	Delphi MT20U Engine System
BAILI	Delphi Engine System
	UAES Electron M1 System
SAIMA	Mitsubishi Engine System
	M7 Engine System
	Mitsubishi ABS System
	ManDo ABS System
	Mitsubishi SRS System
	JinHeng SRS System
	Mitsubishi A/T System
	Mitsubishi Multiwav System
LOBO	M7 Engine System
	UAES Electron M1 System
	ManDo ABS System
	JinHeng SRS System
	Power Strength System
MINYI	Delphi MT20 Engine System
	Delphi Engine System
	M7 Engine System
	Delphi MT20U Engine System
RUIYI	Delphi Engine System
	Delphi MT20 Engine System
SONGHUAJIANG	Delphi Engine System
	Delphi MT20U Engine System
SAIBAO	1.6L(UNITE Electron System)
	Delphi MT20U Engine System
	ManDo ABS System
	JinHeng SRS System
HAFEI-8	Mitsubishi Engine System
	M7 Engine System
	Mitsubishi ABS System

	ManDo ABS System
	Mitsubishi SRS System
	JinHeng SRS System
	Mitsubishi Multiwav System
	Mitsubishi Guard Against Theft

CHANGAN DIAGNOSTIC FUNCTION LIST :	
MAIN MENU	SUB MENU
ENG	UAES M154 Engine
	Delphi MT20U2 EOBD Engine
	DenSo Engine
SRS	ChangAn CM8
CHANGAN BENBEN	

BYD DIAGNOSTIC FUNCTION LIST :	
MAIN MENU	SUB MENU
FLYER QCJ7110	ENG
	ABS
	SRS
FLYER QCJ7081BD	UAES ENG
	ABS
	SRS
FLYER QCJ7081DD	ENG
	ABS
	SRS
BYD F3	F3 ENG
	ABS
	F3 SRS
FLYER Engine F8CV	
DELPHI EOBD	MT20U2 EOBD

GEELY DIAGNOSTIC FUNCTION LIST :

Auto	MAIN MENU
Geely	ZhongShun Engine System
	ZhongShun EOBD System
	UAES M797 Engine System
	UAES M154 Engine System
	ABS System
	MARELI MPI System
	TOYOTA 8A Engine
Leading	UAES M154 Engine System
	UAES M797 Engine System
	E-Injetion Euro3-EOBD
	MK/ABS System
	SRS
	TOYOTA 8A Engine
Ziyoujian	Delphi Engine System
	UAES M154 Engine System
	UAES M797 Engine System
	E-Injetion Euro3-EOBD
	UAES Euro4 System
	ABS
	SRS
	MK/ABS
	BOSCH 8.0 ABS
	MK70/60 ABS
	JiCheng IMMO (Delphi)
	JiCheng IMMO (UAES)
FC-1	UAES EOBD System
	E-Injetion Euro3-EOBD
	UAES Euro4 System
	BOSCH 8.0 ABS
	1.8L_VVT Engine
	MT80 Engine System
	HITACHI System
	MK70/60 System
	SRS SYSTEM
	JinHeng SRS
	IMMO

	BMBS System
	FC-2/3 A/C
LG-1	UAES M797 Engine System
	E-Injetion Euro3-EOBD
	UAES Euro4-MT20U2 System
	MK70/60 System
	SRS
	MK/ABS System
	BOSCH 8.0 ABS System
	MT80 Engine System
	JiCheng IMMO(DELPHI)
	JiCheng IMMO(UAES)
Long	SRS
Panda	Delphi Euro4 MT20U2 System
	3G10 Engine
	SRS
	MK70/60 ABS

SHAC DIAGNOSTIC FUNCTION LIST :	
MAIN MENU	SUB MENU
ECU	2.3 DOHC Manual T / M(HFM)
	2.3 MSE(RATIO)
ABS	ABS 5.0 Free Running
	ABS(TEVES)

MAZDA(CHINA) DIAGNOSTIC FUNCTION LIST :		
AUTO	MAIN MENU	SUB MENU
HAI-MAZDA	PCM	BOSCH ENG
		SIEMENS ENG
		MAZDA PCM
	ABS	MK60 ABS
		DELPHI ABS
		BOSCH ABS
		MAZDA ABS
	SRS	JinHeng SRS

		East Joy Long SRS
	A/T	STEC Immobilizer
	FLASH CODE SYSTEM	ENG

SOUTH EAST DIAGNOSTIC FUNCTION LIST :	
MAIN MENU	SUB MENU
DELPHI MT20U2-EOBD ENG	
UAES M797 ENG	ENG
MITSUBISHI ECS	MPI/GDI/Diesel
	IMMO
	ELC-4/5AT
	SS4-II
	ECS
	Full Auto A/C
	TCL
	ABS/ASC
	HBB
	AYC
	CRS
	4WS
	SRS
	SWS
	ETACS
Mitsubishi EuroIII or CAN-BUS System	ENG
	IMMO
	A/T
	TCL
	ABS
	SRS
	A/C
	ETACS
	SWS
	Meter
	Gate

Mitsubishi Euro-OBD System	ENG
BOSCH 8.0 ABS SYSTEM	ABS 8.0 (Customer Plant)
	ABS 8.0 (Start Communiction)
	ABS 8.0 on CAN
ZINGER	MPI/GDI/Diesel
	AT/CVT/A-MT/TC-SST
	ABS/ASC/ASTC/WSS
	SRS
	Air Conditioner
	ETACS
ENG(V3)	ENG
ABS(V3)	SABS MK70
SRS (V3)	SRS (CN)
IMMO (V3)	

TJ FAW DIAGNOSTIC FUNCTION LIST :		
AUTO	MAIN MENU	SUB MENU
XIALI	UAES M154 ENG	
	UAES M797 ENG	
	MOTOROLA 313B ENG	
	TOYOTA FLASH CODE	ENG
		A/T
		ABS
		SRS
		CCS
		A/C
XIALI2000	TOYOTA OBD II	ENG
		AT
		ABS
		SRS
		AC
	TOYOTA	ENG

	CAN-BUS	
		AT
		ABS
		SRS
		AC
	TOYOTA FLASH CODE	ENG
		A/T
		ABS
		SRS
		CCS
		A/C
	VW ABS	BRAKE SYSTEM
XIALI		
WEIZHI		
VIZI/VILA	TOYOTA ECS	ENG
		AT
		ABS
		SRS
		AC

JONWAY DIAGNOSTIC FUNCTION LIST :
MAIN MENU
Delphi MT20U
UAES M797
ManDo ABS
Delphi(U2-EOBD)

SCEO DIAGNOSTIC FUNCTION LIST :
MAIN MENU

Delphi Mult-Port(A)
Delhpi System(Euro 3)
AP ABS
Delphi System(ITMS-6)
UAES M797
JinHeng SRS
JinHeng SRS(ACF1)

GONOW DIAGNOSTIC FUNCTION LIST :
MAIN MENU
Delphi System(EURO3)
UAES M797
Delphi System(U2-EOBD)

BMW DIAGNOSTIC FUNCTION LIST :

AUTOS	MAIN	AUTOS	MAIN	AUTOS	MAIN	AUTOS	MAIN
3° E46	DME	3° Z3_E36 (1993-2000)	DEM	7° E38 (1995-2001)	DME	X3°	DME
	EGS		EGS		EGS		EGS
	ABS /		ABS		ABS		ABS
	A/C	5° E34 (1989-1995)	SRS		SRS		SRS
	IKE		A/C		A/C		A/C
	EWS		IKE		IKE		IKE
	ZKE3		EWS		EWS		EWS
	PDC		ZKE3		ZKE3		ZKE3
	SZM		PDC		PDC		PDC
	TEL	5° E28 (-1990)	DME		SZM		SZM
	LAZ/LCM		EGS		TEL		TEL
	LEW		ABS		LSZ/LCM		LSZ/LCM
	RAD		SRS		LWS		LWS
	BM		A/C		RAD		RAD
	SHD		IKE		BM		AIC/RLS
	AIC/RLS	5° E39 (1995-)	DME		SLM/SM		NAV
	NAV		EGS		AIC/RLS		VID
	VID		ABS		NAV		BIT
	BIT		SRS		VID		ALC
	ALC		A/C		LWR		XENON_L
	XENON_L		IKE		HKM		XENON_R

	XENON_R		EWS		FG	X5°	DME
	ZKE5		ZKE3		DSP	E53	EGS
3°	CAS		PDC		VID/GT		ABS
E90	DME		SZM		DSP_BT		SRS
	EGS		TEL		ZKE5		A/C
	DSC		LSZ/LCM	7°	CAS		IKE
	IHKA		LWS	E65/E66	DME		EWS
	KOM		RAD	（2000-）	EGS		ZKE3
	CD		BM		ARS		PDC
	CD-GW		SLM/SM		CIM		SZM
	JBE		EHC/EDC		DSC		LSZ/LCM
	MRS		AIC/RLS		EHC		LWS
	FRM		NAV		EMF		RAD
	RLS		VID		AMP		BM
	FZD		IRIS		ASK		EHC/EDC
	RAD2		DSP		SZM BZM		NAV
	RAD2-GW		VID/GT		CD		IRIS
	SINE		BIT		CD-GW		DSP
	SMFA		ZKE5		CON		BIT
5°	CAS	6° E24	DME		DWA		ALC
E60/E61	DME		EGS		IHKA		ZKE5
（2003-）	EGS		ABS		HKL	Z4°	DME
	DSC		SRS		KOM		EGS
	DWA		A/C		LM		ABS
	IHKA		IKE		NAV		A/C
	KOM	6°	CAS		PDC		IKE
	PDC		DME		PM MPM（Micro）		EWS
	SBSL		EGS		RLS		ZKE3
	SBSR		DSC		SASL		SZM
	SFZ		AHL		SASR		TEL
	ZGM		AMP		SBSL		LSZ/LCM
	SIM		SZM/BZM		SBSR		LWS
	KBM		CON		SFZ		RAD
	SZL		IHKA		SSBF		AIC/RLS
	SZM/BZM		DWA		SSFA		NAV
	SMFA		KOM		SSH		VID
	SMBF		LM		STVL		DSP
	TMFA		PDC		STVR		BIT

	TMBF		PM MPM (Micro)		SINE	Z8°	DME
	TCU		SBSL		SMFA	E52	EGS
	LM		SBSR		SMBF		ABS
	CD		SFZ		SVS		SRS
	CD-GW		SHD		SZL		A/C
	CDC		SZL		TMBFT		IKE
	CID		TCU		TMFBFH		EWS
	PM MPM (Micro)		ZGM		TMFAT		ZKE3
	RLS		SIM		TMFAH		TEL
	SHD		KBM		VM		LSZ/LCM
	SINE		TMFA		WIM		LWS
	CON		TMBF		ZGM		RAD
	CCC-A		CID		SIM		NAV
	CCC-BO		AL/AFS		SMFAH		DSP
	CCC-GW		AHL		SMBFH		BIT
	CCC-ANT		CDC		FD	MINI	DME
	AL/AFS		CCC-ANT		FKA		EGS
1°	CAS	7° E23	DME		SG-FD-GW		ABS
E87	DME	(-1988)	EGS		SG-FD		SRS
	EGS		ABS		TEL		A/C
	DSC		SRS		FCON		IKE
	IHKA		A/C		BZMF		EWS
	KOM		IKE		CCC-ANT		ZKE3
	CD		EML		CDC		LSZ/LCM
	CD-GW		DME		SHD		LWS
	JBE	7° E32	EGS		TCU		RAD
	MRS	(1988-1994)	ABS	8° E31	DME		BM
	FRM		SRS	(-1999)	EGS		AIC/RLS
	RLS		A/C		ABS	OLD	DME
	FZD		IKE		SRS	MODELS	EGS
3°	DME		EML		A/C		
ZL_E30	EGS		ZKE3		IKE		
	ABS		PDC		EWS		
	SRS		EHC/EDC		ZKE3		
	A/C						
	IKE						

OPEL DIAGNOSTIC FUNCTION LIST :

AUTOS	MAIN	SUB MENU	AUTOS	MAIN	SUB MENU
Opel	ENGIN	SIMTEC 56	Speedster/v	ENGIN	Z 22 SE
		C 14NZ	x220	AT	AF 13Ⅱ
		C 14SE			AF 13Ⅱ
	AT	AF13/14/20		CHASS	ABS 430
		AF13/14/20		BODY	SRS
		AR-25/35	Vetra-B	ENGIN	Z 16 XE
	ABS	ABS-2E			X 18 XE
		ABS-2SE+TC			Z 18 XE
	SRS-S				Z 18 XEL
Opel 16PIN (1997-2006)					C 20 SEL
Agila	ENGIN	Z 10 XE			X 20 XEV
		Z 12 XE			C 22 SEL
	AT	AF 13Ⅱ/20			Z 22 SE
	CHASS	ABS		AT	AF 13Ⅱ
	BODY	SRS			AF 13Ⅱ
Corsa-	ENGIN	X 14 XE		CHASS	ABS 430
		X 16 XE			ABS-5.3/5
	AT	AF 13Ⅱ/20		BODY	SRS
	CHASS	ABS 5.3			SRS SAB6
	BODY	SRS-S	Vetra-C/Sig	ENGIN	Z 16 XE
		SRS SAB6	num		Z 18 XE
Corsa-	ENGIN	Z 10 XE			Z 22 SE
		Z 12 XE		AT	AF 13Ⅱ
		Z 14 XE			AF 13Ⅱ
		Z 18 XE		CHASS	ABS 430
	AT	AF 13Ⅱ CAN			ABS-5.3/5
		MTA Easytron		BODY	SRS
	CHASS	ABS-5.3/5.4	Zafirra	ENGIN	Z 16 XE
	BODY	SRS			Z 18 XE
Tigra	ENGIN	X 14 XE			Z 22 SE
		X 16 XE		AT	AF 13Ⅱ
	AT	AF 13Ⅱ/20		CHASS	ABS-5.3/5
	CHASS	ABS-5.3		BODY	SRS
	BODY	SRS-S	Omega-B	ENGIN	Z 22 XE
		SRS SAB6			X 30 XE
Tigra-	ENGIN	Z 18 XE		AT	AR 25/35
	AT	MTA Easytron		CHASS	ABS-5.3/5

	CHASS	ABS-5.3/5.4		BODY	SRS
	BODY	SRS			PANEL
Meriva	ENGIN	Z 16 XE	Frontera	ENGIN	X 20 SE
		Z 18 XE		AT	AR 25/35
	AT	MTA Easytron		CHASS	ABS
	CHASS	ABS-5.3/5.4		BODY	SRS
	BODY	SRS	Frontera-B	ENGIN	X 14 XE
Astra-	ENGIN	X 14 XE			X 16 XE
		X 16 XE		AT	AR 25/35
	AT	AF 13Ⅱ/20		CHASS	ABS
	CHASS	ABS-5.3/5.4		BODY	SRS
	BODY	SRS-S	Monterey	ENGIN	X 14 XE
Astra-	ENGIN	Z 12 XE			X 16 XE
		Z 14 XE		AT	AF 13Ⅱ/20
		Z 16 XE		CHASS	ABS 5
		X 18 XE		BODY	SRS
		Z 18 XE	Sintra	ENGIN	X 30 XE
		Z 18 XEL		AT	AF 13Ⅱ/20
		Z 22 SE		CHASS	ABS 5
	AT	AF 13Ⅱ		BODY	SRS
		AF 13Ⅱ CAN	Calibra	ENGIN	X 20 XEV
	CHASS	ABS-5.3/5.4			X 25 XE
	BODY	SRS		AT	AF 13Ⅱ/20
Astra-	ENGIN	Z 18 XE		CHASS	ABS-SE
	AT	MTA Easytron		BODY	SRS-S
	CHASS	ABS-5.3/5.4			
	BODY	SRS			