

## DIESEL TEST BENCH SYSTEM



### Function Introduction

(1) Test Bosch, Delphi, Denso, Siemens, Caterpillar, Cummins, solenoid or piezo common rail injector and pump (Included the pump with 2 ZME metering units).

(2) Injector coding can be generated, including Bosch IQA / IMA / ISA, Denso 16/22/24/26/28/30/32QR, Delphi I2C / I3C, Siemens IIC and Cummins XPI (optional);

(3) Can test Bosch, Caterpillar, Cummins, Delphi EUI and EUP, including Delphi E3 double solenoid EUI and Cummins M11 double pulsing EUI (optional);



(4) Test HEUI injector and HEU pump (optional);

(5) Test Caterpillar 320D pump (optional);

(6) Test VP37, VP44, RED4, Denso V3/V4/V5 pump (optional);

(7) Test Cummins HPI injector, PT pump (optional);

(8) Test Injector response time, EUI/EUP BIP;

(9) Test injector resistance and inductance.

(10) Test the armature lift of the injector solenoid valve (AHE).

(11) The test plan is consistent with the original data, and the test accuracy reaches the original factory standard;

(12) The database is fully open, the part number can be increased.

(13) Automatic network upgrade, test data and functions are kept up to date;

1. How many data are there for the system common rail injectors?

Common rail injectors 7725 (including 2587 from Bosch, 4287 from Denso, 171 from Siemens, 449 from Delphi, 17 from Caterpillar, 54 from Cummins, 19 from MTU)

The screenshot shows the software interface with the following components:

- Type-PN:** Input field for entering a part number.
- Maker:** A list of manufacturers including Bosch, Denso, Siemens, Delphi, Caterpillar, BYC, Cummins, LongBeng, Yu Chai, XinFeng, ChongQing, L'ORANGE, and AZPI.
- Search:** A magnifying glass icon and fields for Valve Number, Nozzle Number, and Replacement Part Number, along with a Code Adjust button.
- Data Table:** A table titled "There are 7725 part numbers" with columns for Type-PN, Maker, and Version. The table lists various part numbers and their manufacturers, primarily Denso.
- Navigation:** A bottom toolbar with function keys F1-F8: Exit (power icon), Keyboard (keyboard icon), Add (plus icon), Modify (pencil icon), Delete (trash icon), Find (magnifying glass icon), Back (left arrow icon), and Continue (right arrow icon).

The screenshot shows the software interface with the following components:

- Type-PN:** Input field for entering a part number.
- Maker:** A list of manufacturers including Bosch, Denso, Siemens, Delphi, Caterpillar, BYC, Cummins, LongBeng, Yu Chai, XinFeng, ChongQing, L'ORANGE, and AZPI.
- Search:** A magnifying glass icon and fields for Valve Number, Nozzle Number, and Replacement Part Number, along with a Code Adjust button.
- Data Table:** A table titled "There are 2587 part numbers" with columns for Type-PN, Maker, and Version. The table lists various part numbers and their manufacturers, primarily Bosch.
- Navigation:** A bottom toolbar with function keys F1-F8: Exit (power icon), Keyboard (keyboard icon), Add (plus icon), Modify (pencil icon), Delete (trash icon), Find (magnifying glass icon), Back (left arrow icon), and Continue (right arrow icon).

**Data**  
There are 4187 part numbers

Type-PN  
Input PN

Maker  
**Bosch**  
**Denso**  
 Siemens  
 Delphi  
 Caterpillar  
 BYC  
 Cummins  
 LongBeng  
 Yu Chai  
 XinFeng  
 ChongQing  
 L'ORANGE

Valve Number: --  
 Nozzle Number: --  
 Replacement Part Number: --  
 Code Adjust

Type-PN	Maker	Version	
1	0060-0180-0280M	Denso	Manufacturer
2	01U00412	Denso	Manufacturer
3	023 09S17053-V2	Denso	Manufacturer
4	023 09S17053	Denso	Manufacturer
5	0351	Denso	Manufacturer
6	03U01595-0221.	Denso	Manufacturer
7	0451	Denso	Manufacturer
8	04H00530	Denso	Manufacturer
9	0613	Denso	Manufacturer
10	06U12917-0140.	Denso	Manufacturer
11	0761.	Denso	Manufacturer
12	07U14887-0290.	Denso	Manufacturer
13	093209R04274	Denso	Manufacturer
14	0933-V2	Denso	Manufacturer
15	0933	Denso	Manufacturer
16	095000-013#-V2	Denso	Manufacturer
17	095000-0130	Denso	Manufacturer

F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 Continue

**Data**  
There are 171 part numbers

Type-PN  
Input PN

Maker  
**Bosch**  
**Denso**  
**Siemens**  
 Delphi  
 Caterpillar  
 BYC  
 Cummins  
 LongBeng  
 Yu Chai  
 XinFeng  
 ChongQing  
 L'ORANGE

Valve Number: --  
 Nozzle Number: --  
 Replacement Part Number: --  
 Code Adjust

Type-PN	Maker	Version	
1	02C2S40004	Siemens	Manufacturer
2	03L130277B	Siemens	Manufacturer
3	03L130277S	Siemens	Manufacturer
4	03P130277	Siemens	Manufacturer
5	1346476	Siemens	Manufacturer
6	1348623	Siemens	Manufacturer
7	1355051	Siemens	Manufacturer
8	1373549	Siemens	Manufacturer
9	1432322	Siemens	Manufacturer
10	1469709	Siemens	Manufacturer
11	1483820	Siemens	Manufacturer
12	1489400	Siemens	Manufacturer
13	1489401	Siemens	Manufacturer
14	166000282R	Siemens	Manufacturer
15	166000372R	Siemens	Manufacturer
16	198090	Siemens	Manufacturer
17	1980C0	Siemens	Manufacturer

F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 Continue

**Data**  
There are 449 part numbers

Type-PN  
Input PN

Maker  
**Bosch**  
**Denso**  
**Siemens**  
**Delphi**  
 Caterpillar  
 BYC  
 Cummins  
 LongBeng  
 Yu Chai  
 XinFeng  
 ChongQing  
 L'ORANGE

Valve Number: --  
 Nozzle Number: --  
 Replacement Part Number: --  
 Code Adjust

Type-PN	Maker	Version	
1	03P130277	Delphi	Manufacturer
2	08232251	Delphi	Manufacturer
3	082530966	Delphi	Manufacturer
4	1112010-E9300	Delphi	Manufacturer
5	1112100TAR	Delphi	Manufacturer
6	1152989	Delphi	Manufacturer
7	1307449	Delphi	Manufacturer
8	1465A257	Delphi	Manufacturer
9	1521000311	Delphi	Manufacturer
10	16600-00Q0B	Delphi	Manufacturer
11	166001137R	Delphi	Manufacturer
12	166003978R	Delphi	Manufacturer
13	166009384R	Delphi	Manufacturer
14	1820820	Delphi	Manufacturer
15	1820820R	Delphi	Manufacturer
16	1820821R	Delphi	Manufacturer
17	1825900	Delphi	Manufacturer

F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 Continue

Type-PN

Maker

- Bosch
- Denso
- Siemens
- Delphi
- Caterpillar
- BYC
- Cummins**
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

Valve Number: --

Nozzle Number: --

Replacement Part Number: --

Data

There are 54 part numbers

	Type-PN	Maker	Version
1	1881564	Cummins	Manufacturer
2	1933613	Cummins	Manufacturer
3	2057401	Cummins	Manufacturer
4	2086663	Cummins	Manufacturer
5	212033275	Cummins	Manufacturer
6	2488244	Cummins	Manufacturer
7	2867147-1	Cummins	Manufacturer
8	2867147-L	Cummins	Manufacturer
9	2867147	Cummins	Manufacturer
10	2872056	Cummins	Manufacturer
11	2872127	Cummins	Manufacturer
12	2872331	Cummins	Manufacturer
13	2872405	Cummins	Manufacturer
14	2872544(H)	Cummins	Manufacturer
15	2872544(W)	Cummins	Manufacturer
16	2872544(Y)	Cummins	Manufacturer
17	2872544	Cummins	Manufacturer

F1

F2

F3

F4

F5

F6

F7

F8

Type-PN

Maker

- Bosch
- Denso
- Siemens
- Delphi
- Caterpillar**
- BYC
- Cummins
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

Valve Number: --

Nozzle Number: --

Replacement Part Number: --

Data

There are 17 part numbers

	Type-PN	Maker	Version
1	10R7675	Caterpillar	Manufacturer
2	2645A710	Caterpillar	Manufacturer
3	2645A731	Caterpillar	Manufacturer
4	294-3028	Caterpillar	Manufacturer
5	320-0677	Caterpillar	Manufacturer
6	320-0680	Caterpillar	Manufacturer
7	320-0690	Caterpillar	Manufacturer
8	326-4700	Caterpillar	Manufacturer
9	326-4756	Caterpillar	Manufacturer
10	32E61-00021	Caterpillar	Manufacturer
11	32E61-00022	Caterpillar	Manufacturer
12	32F61-00012	Caterpillar	Manufacturer
13	32F61-00013	Caterpillar	Manufacturer
14	32F61-00014	Caterpillar	Manufacturer
15	32F61-00062	Caterpillar	Manufacturer
16	456-3493	Caterpillar	Manufacturer
17	456-3544	Caterpillar	Manufacturer

F1

F2

F3

F4

F5

F6

F7

F8

Type-PN: Input PN

Maker: Bosch, Denso, Siemens, Delphi, Caterpillar, BYC, **Cummins**, LongBeng, Yu Chai, XinFeng, ChongQing, L'ORANGE

Valve Number: --

Nozzle Number: --

Replacement Part Number: --

Code Adjust

Data: There are 54 part numbers

	Type-PN	Maker	Version
1	1881564	Cummins	Manufacturer
2	1933613	Cummins	Manufacturer
3	2057401	Cummins	Manufacturer
4	2086663	Cummins	Manufacturer
5	212033275	Cummins	Manufacturer
6	2488244	Cummins	Manufacturer
7	2867147-1	Cummins	Manufacturer
8	2867147-L	Cummins	Manufacturer
9	2867147	Cummins	Manufacturer
10	2872056	Cummins	Manufacturer
11	2872127	Cummins	Manufacturer
12	2872331	Cummins	Manufacturer
13	2872405	Cummins	Manufacturer
14	2872544(H)	Cummins	Manufacturer
15	2872544(W)	Cummins	Manufacturer
16	2872544(Y)	Cummins	Manufacturer
17	2872544	Cummins	Manufacturer

Exit, Keyboard, Add, Modify, Delete, Find, Back, Continue

2. How many data are there in the system code?

4185 codes (Bosch 1174, Denso 2375, Siemens 160, Delphi 438, Cummins 28)

Type-PN: Input PN

Maker: Bosch, Denso, Siemens, Delphi, Caterpillar, BYC, Cummins, LongBeng, Yu Chai, XinFeng, ChongQing, L'ORANGE

Calibration injector

Data: There are 4185 part numbers

	Type-PN	Maker	Version
1	0060-0180-0280M	Denso	Manufacturer
2	00SMS-TEST	Siemens	User
3	01U00412	Denso	Manufacturer
4	023 09S17053..	Denso	Manufacturer
5	023 09S17053..	Denso	Manufacturer
6	02C2S40004	Siemens	User
7	03L130277B	Siemens	Manufacturer
8	03L130277S	Siemens	Manufacturer
9	03P130277	Delphi	User
10	03U01595-0221.	Denso	Manufacturer
11	0445110002	Bosch	Manufacturer
12	0445110003	Bosch	Manufacturer
13	0445110004	Bosch	Manufacturer
14	0445110005	Bosch	Manufacturer
15	0445110006	Bosch	Manufacturer
16	0445110007	Bosch	Manufacturer
17	0445110008	Bosch	Manufacturer

Exit, Keyboard, Add, Modify, Delete, Find, Back, Continue

Type-PN

Input PN

Maker

- Bosch
- Denso
- Siemens**
- Delphi
- Caterpillar
- BYC
- Cummins
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

Calibration injector

Data

There are 160 part numbers

	Type-PN	Maker	Version
1	00SMS-TEST	Siemens	User
2	02C2S40004	Siemens	User
3	03L130277B	Siemens	Manufacturer
4	03L130277S	Siemens	Manufacturer
5	1346476	Siemens	Manufacturer
6	1348623	Siemens	Manufacturer
7	1355051	Siemens	Manufacturer
8	1373549	Siemens	Manufacturer
9	1432322	Siemens	Manufacturer
10	1469709	Siemens	Manufacturer
11	1483820	Siemens	Manufacturer
12	1489400	Siemens	Manufacturer
13	1489401	Siemens	Manufacturer
14	166000282R	Siemens	User
15	166000372R	Siemens	User
16	198090	Siemens	Manufacturer
17	1980C0	Siemens	Manufacturer

F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 Continue

Type-PN

Input PN

Maker

- Bosch**
- Denso
- Siemens
- Delphi
- Caterpillar
- BYC
- Cummins
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

Calibration injector

Data

There are 1174 part numbers

	Type-PN	Maker	Version
1	0445110002	Bosch	Manufacturer
2	0445110003	Bosch	Manufacturer
3	0445110004	Bosch	Manufacturer
4	0445110005	Bosch	Manufacturer
5	0445110006	Bosch	Manufacturer
6	0445110007	Bosch	Manufacturer
7	0445110008	Bosch	Manufacturer
8	0445110009	Bosch	Manufacturer
9	0445110010	Bosch	Manufacturer
10	0445110011	Bosch	Manufacturer
11	0445110012	Bosch	Manufacturer
12	0445110013	Bosch	Manufacturer
13	0445110014	Bosch	Manufacturer
14	0445110015	Bosch	Manufacturer
15	0445110016	Bosch	Manufacturer
16	0445110017	Bosch	Manufacturer
17	0445110018	Bosch	Manufacturer

F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 Continue

Type-PN

Input PN

Maker

- Bosch
- Denso**
- Siemens
- Delphi
- Caterpillar
- BYC
- Cummins
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

Calibration injector

Data

There are 2375 part numbers

	Type-PN	Maker	Version
1	0060-0180-0280M	Denso	Manufacturer
2	01U00412	Denso	Manufacturer
3	023 09S17053..	Denso	Manufacturer
4	023 09S17053..	Denso	Manufacturer
5	03U01595-0221.	Denso	Manufacturer
6	06U12917-0140.	Denso	Manufacturer
7	07U14887-0290.	Denso	Manufacturer
8	093209R04274	Denso	Manufacturer
9	0933..	Denso	Manufacturer
10	0933..	Denso	Manufacturer
11	095000-013# 103#..	Denso	Manufacturer
12	095000-0137	Denso	User
13	095000-014#	Denso	Manufacturer
14	095000-0140	Denso	Manufacturer
15	095000-0141	Denso	Manufacturer
16	095000-0142	Denso	Manufacturer
17	095000-0143	Denso	Manufacturer

F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 Continue

Data There are 438 part numbers

	Type-PN	Maker	Version
1	03P130277	Delphi	User
2	08232251	Delphi	Manufacturer
3	082530966	Delphi	Manufacturer
4	1112100TAR	Delphi	Manufacturer
5	1152989	Delphi	Manufacturer
6	1307449	Delphi	Manufacturer
7	1521000311	Delphi	Manufacturer
8	16600-00Q0B	Delphi	Manufacturer
9	166001137R	Delphi	Manufacturer
10	166003978R	Delphi	Manufacturer
11	166009384R	Delphi	Manufacturer
12	1820820	Delphi	Manufacturer
13	1820820R	Delphi	Manufacturer
14	1820821R	Delphi	Manufacturer
15	1825900	Delphi	User
16	1S4Q-9F593-AF	Delphi	Manufacturer
17	22311990	Delphi	User

Type-PN

Maker

- Bosch
- Denso
- Siemens
- Delphi**
- Caterpillar
- BYC
- Cummins
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

Calibration injector

F1 
F2 
F3 
F4 
F5 
F6 
F7 
F8

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Data There are 28 part numbers

	Type-PN	Maker	Version
1	1881564	Cummins	Manufacturer
2	1933613	Cummins	Manufacturer
3	2867147	Cummins	Manufacturer
4	2872056	Cummins	Manufacturer
5	2872127	Cummins	Manufacturer
6	2872405	Cummins	Manufacturer
7	2872544	Cummins	Manufacturer
8	2897414	Cummins	Manufacturer
9	4307452	Cummins	Manufacturer
10	4307472	Cummins	Manufacturer
11	4307475	Cummins	Manufacturer
12	4327072	Cummins	Manufacturer
13	4327452	Cummins	Manufacturer
14	4359204	Cummins	Manufacturer
15	4384786	Cummins	Manufacturer
16	4954927	Cummins	Manufacturer
17	5283275	Cummins	Manufacturer

Type-PN

Maker

- Bosch
- Denso
- Siemens
- Delphi
- Caterpillar
- BYC
- Cummins**
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

Calibration injector

F1 
F2 
F3 
F4 
F5 
F6 
F7 
F8

3. How much data is there for the system common rail pump?

Common rail pump 1821 test plan

The screenshot shows the 'Data' window with 1821 part numbers. The selected row is:

Type-PN	Maker	Type
4359487	Cummins	Cumminus Pump

4. How much data does the system DENSO HP0 have?

HP0 pumps 83 test plan

The screenshot shows the 'Data' window with 83 part numbers. The selected row is:

Type-PN	Maker	Type
094000-0321	Denso	HP0

5. How much data does the system EUI EUP have?

## 667 test plan

Type-PN	Maker	Type
264	1170482	Caterpillar
265	1171146	Caterpillar
266	1171148	Caterpillar
267	1187929	Caterpillar
268	1518142	Cummins
269	1521978	Cummins
270	1547909	Delphi
271	1665-00Z0B	Delphi
272	1665-00Z1B	Delphi
273	1665-00Z2B	Delphi
274	1665-00Z3B	Delphi
275	1665-00Z4B	Delphi
276	16650-00Z1B	Delphi
277	1668325	Delphi
278	1677154	Delphi
279	1764365	Cummins

6. How much data does the system HEUI have?

HEUI 74 test plan

Type-PN	Maker	Version
1	00001	User
2	00Test_Heui	User
3	0R-9350	Manufacturer
4	0R-93501	Manufacturer
5	10R-0782	Manufacturer
6	10R7222	Manufacturer
7	10R7224	Manufacturer
8	10R7225	Manufacturer
9	141-7837	Manufacturer
10	153-5733	Manufacturer
11	173-1013	Manufacturer
12	173-9272	Manufacturer
13	177-4752	Manufacturer
14	177-4754	Manufacturer
15	178-0199	Manufacturer
16	1816187C3	User
17	1830560C2	Manufacturer

7. How much data is there in the system test HEUP?

HEUP pump 10 test plan



**Description**

Type-PN

Maker

- Bosch
- Denso
- Siemens
- Delphi
- Caterpillar
- BYC
- Cummins
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

**Data**

There are 10 part numbers

	Type-PN	Maker	Type
1	186-3410	Caterpillar	HEU PUMP
2	204-4945	Caterpillar	HEU PUMP
3	254-4355	Caterpillar	HEU PUMP
4	254-4357	Caterpillar	HEU PUMP
5	319-0675	Caterpillar	HEU PUMP
6	319-0677	Caterpillar	HEU PUMP
7	319-0812	Caterpillar	HEU PUMP
8	476-8766	Caterpillar	HEU PUMP
9	HEU-Pump-L	Caterpillar	HEU PUMP
10	HEU-Pump-R	Caterpillar	HEU PUMP

F1 
F2 
F3 
F4 
F5 
F6 
F7 
F8

8. How much data is there for the system test 320D?

CAT 320D pump 9 test plan

**Description**

Type-PN

Maker

- Bosch
- Denso
- Siemens
- Delphi
- Caterpillar
- BYC
- Cummins
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

**Data**

There are 9 part numbers

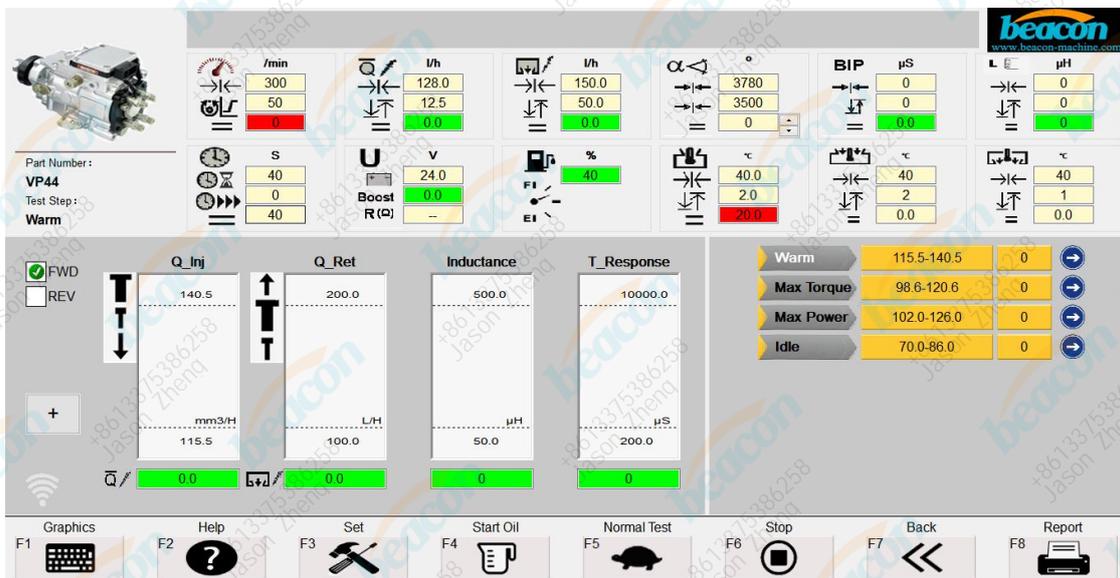
	Type-PN	Maker	Type
1	00CatTest	Caterpillar	CRP
2	2641A312	Caterpillar	CRP
3	295-9127	Caterpillar	CRP
4	317-8021	Caterpillar	CRP
5	324-0532	Caterpillar	CRP
6	326-4635	Caterpillar	CRP
7	326-4653	Caterpillar	CRP
8	32F61-10302	Caterpillar	CRP
9	397-0150	Caterpillar	CRP

F1 
F2 
F3 
F4 
F5 
F6 
F7 
F8

8. system test VP37 interface diagram



9. system test VP44 test interface diagram

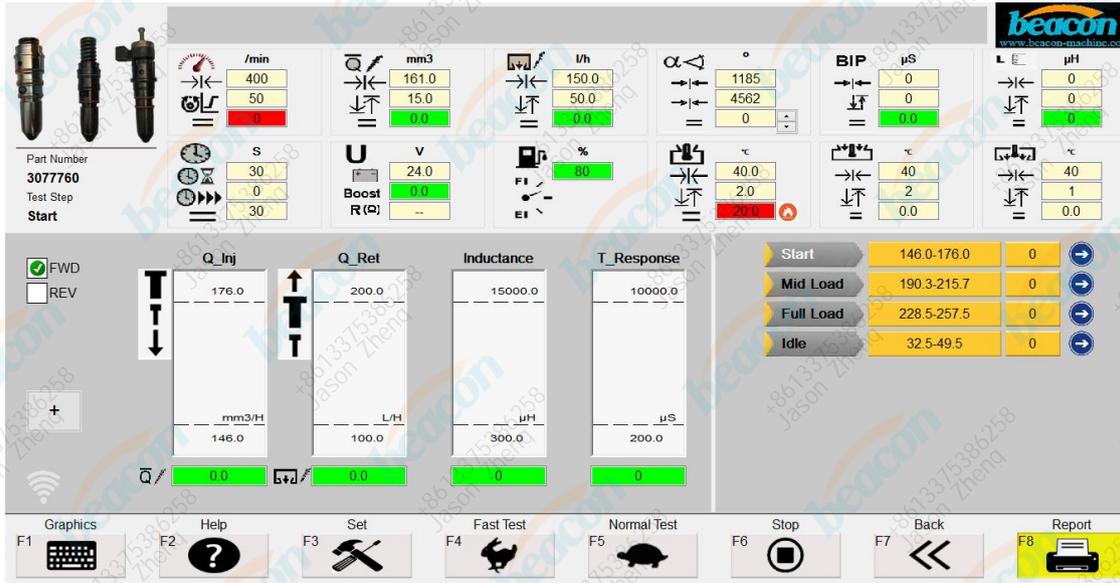


10. system test RED4 interface diagram

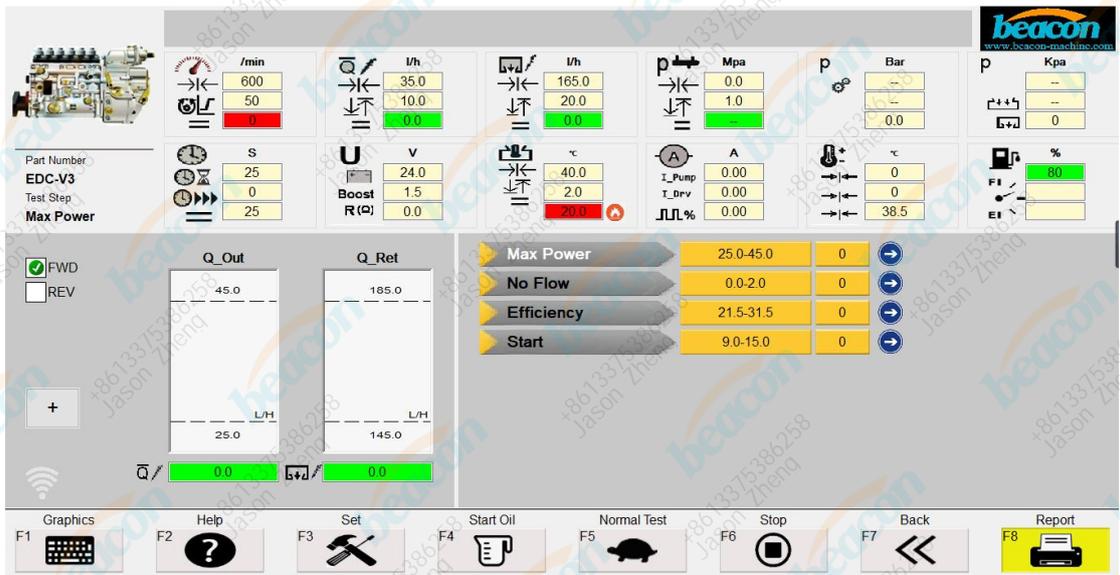
11. How much data does the system have for testing PT injectors

PT injectors 15 test plan

There are 15 part numbers			
	Type-PN	Maker	Type
1	3016676	Cummins	
2	3047973	Cummins	
3	3047991	Cummins	
4	3049860	Cummins	
5	3052255	Cummins	
6	3053124	Cummins	
7	3054218	Cummins	
8	3054233	Cummins	
9	3071497	Cummins	
10	3076132	Cummins	
11	3076703	Cummins	
12	3077760	Cummins	
13	3095733	Cummins	
14	3406604	Cummins	
15	3609849	Cummins	



## 12. system test V3V4V5 interface diagram



The screenshot shows the Beacon Diesel Test Bench System software interface. It displays various engine parameters in a grid layout. The top row shows RPM (600), Fuel Flow (35.0 L/h), Air Flow (165.0 L/h), Boost Pressure (0.0 Mpa), and other pressure and temperature readings. The middle section shows flow rates (Q\_Out: 45.0, Q\_Ret: 185.0) and a 'Max Power' status bar with ranges for Power, No Flow, Efficiency, and Start. The bottom section contains function keys (F1-F8) for navigation and control.

13. How much data does system test ZME have?

ZME 42 test plan

**Description**

Type-PN

Maker

**Bosch**  
Denso  
Siemens  
Delphi  
Caterpillar  
BYC  
Cummins  
LongBeng  
Yu Chai  
XinFeng  
ChongQing  
L'ORANGE

**Data**

There are 42 part numbers

	Type-PN	Maker	Type
1	0928400313	Bosch	ZME
2	0928400508	Bosch	ZME
3	0928400617	Bosch	ZME
4	0928400627	Bosch	ZME
5	0928400633	Bosch	ZME
6	0928400644	Bosch	ZME
7	0928400669	Bosch	ZME
8	0928400672	Bosch	ZME
9	0928400680	Bosch	ZME
10	0928400689	Bosch	ZME
11	0928400705	Bosch	ZME
12	0928400728	Bosch	ZME
13	0928400739	Bosch	ZME
14	0928400741	Bosch	ZME
15	0928400746	Bosch	ZME
16	0928400748	Bosch	ZME
17	0928400756	Bosch	ZME

F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 Continue

/min

1000

50

0

l/h

94.2

10.4

0.0

l/h

0.0

0.0

20.0

Mpa

50.0

1.0

0.0

Bar

--

0.0

Kpa

122

122

122

Part Number: 0928400741  
Test Step: Max Power

S

60

0

60

V

24.0

0.0

0.0

κ

40.0

2.0

20.0

A

0.00

0.00

0.00

κ

0

0

38.5

%

80

Q\_Out

104.6

83.8

Q\_Ret

35.0

0.0

Max Power: 83.8-104.6

No Flow: 0.0-2.0

Efficiency: 46.8-56.8

Start: 7.7-11.7

IMV 1: 42.3-79.5

IMV 2: 19.0-42.2

IMV 3: 6.5-18.7

IMV 4: 2.0-10.0

F1 Graphics F2 Help F3 Set F4 Fast Test F5 Normal Test F6 Stop F7 Back F8 Report

14. How much data is there for the system test AHE?

AHE 7343 test plan

Data

There are 7343 part numbers

	Type-PN	Maker	Version
1	0096AD1038	Bosch	Manufacturer
2	00Test_Bosch4.2	Bosch	Manufacturer
3	00Test_Normal	Bosch	Manufacturer
4	00Test_Piezo	Bosch	Manufacturer
5	0445110002	Bosch	Manufacturer
6	0445110003	Bosch	Manufacturer
7	0445110004	Bosch	Manufacturer
8	0445110005	Bosch	Manufacturer
9	0445110006	Bosch	Manufacturer
10	0445110007	Bosch	Manufacturer
11	0445110008	Bosch	Manufacturer
12	0445110009	Bosch	Manufacturer
13	0445110010	Bosch	Manufacturer
14	0445110011	Bosch	Manufacturer
15	0445110012	Bosch	Manufacturer
16	0445110013	Bosch	Manufacturer
17	0445110014	Bosch	Manufacturer

Type-PN: Input PN

Maker: Bosch, Denso, Siemens, Delphi, Caterpillar, BYC, Cummins, LongBeng, Yu Chai, XinFeng, ChongQing, L'ORANGE

Valve Number: --

Nozzle Number: --

Replacement Part Number: --

Code Adjust

F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 AHE

Current type: 14V

Target Pre: 20.0 Mpa Speed: 300 RPM Pull voltage: 0.0 V

Real Pre: 0.0 Mpa LDRV: 0.00A Inductance: --

PW: 1,000

10 60 100 120 160

1 2 3 4 5

-0.5 +0.5 Mpa

Start (MPa) Keep inject Atomize

Channel: Ch1

Start

Back

## 15. system tests two interface diagrams at the same time

**Injector Test**

Part Number: 28397569  
Test Step: WARM

<input checked="" type="checkbox"/> 1 SN	/min	mm3/H	mm3/H	MPa	BIP μS	μH
<input type="checkbox"/> 2	600	150.0	0.0	100.0	800	--
<input type="checkbox"/> 3	50	150.0	0.0	1.0	600	--
<input type="checkbox"/> 4	0	0.0	0.0	100.0	0	0
<input type="checkbox"/> 5	30	24.0	1000	40.0	0.00	80
<input type="checkbox"/> 6	30	0.0	1000	2.0	0.00	0
		Boost R (P)	t μS	°C	I_Pump A	I_Drv A
		0.0	1000	20.0	0.00	0.00
			0	JL/L%		

Q\_Inj: 300.0 mm3/H

Q\_Ret: 35.0 mm3/H

Inductance: 500.0 μH

WARM 150.0(0.0-300.0) INJ 1 0 0

LEAK 35.0(0.0-70.0)(R) 0 0

VL 60.0(52.5-67.5) 0 0

VL(R) 45.0(23.0-67.0)(R) 0 0

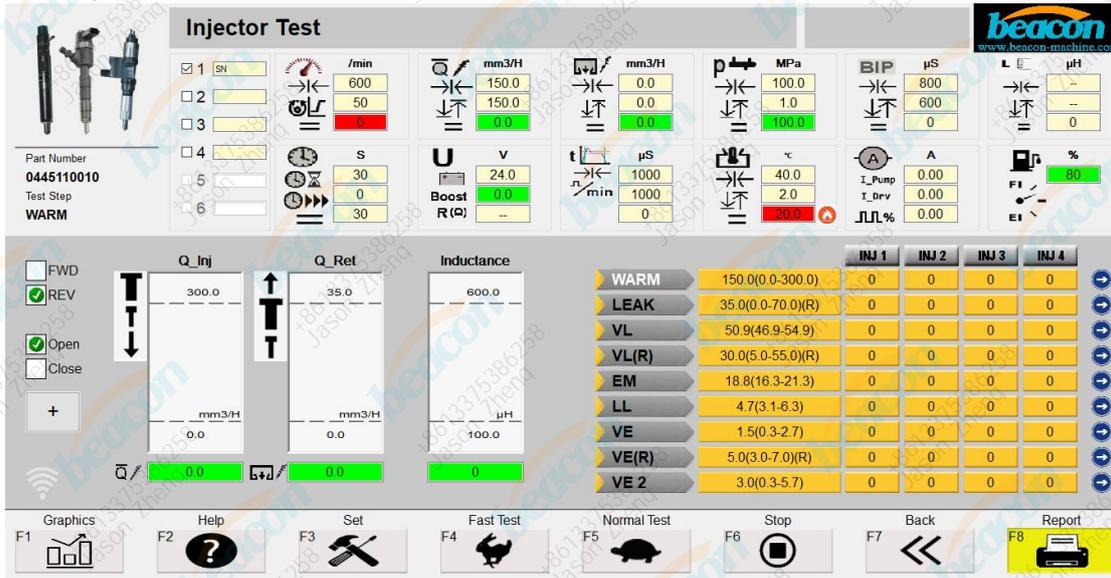
EM 20.0(15.8-24.2) 0 0

LL 5.2(2.1-8.3) 0 0

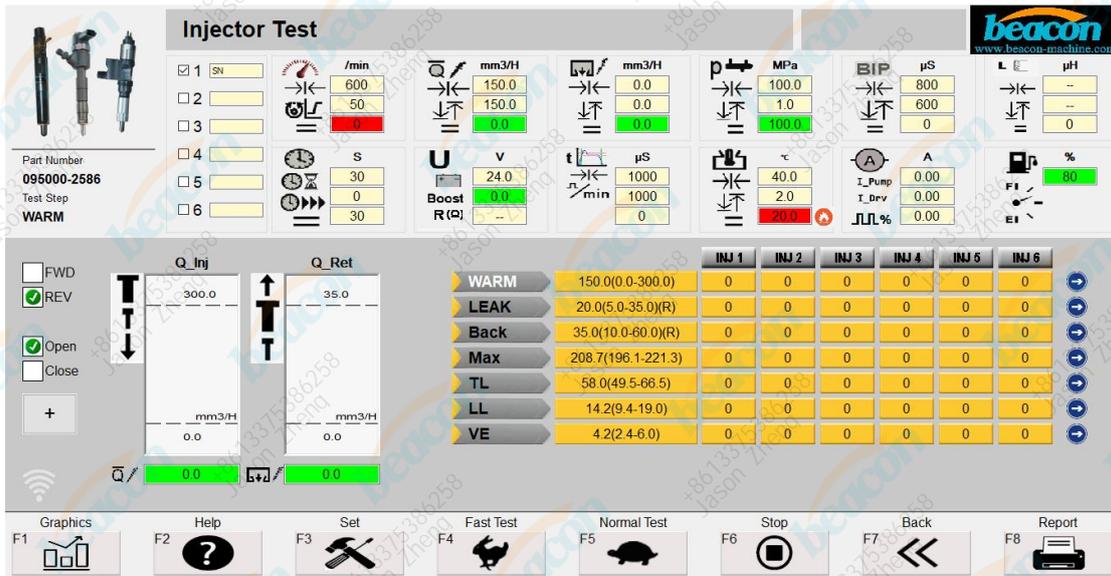
VE 1.6(0.3-2.9) 0 0

F1 Graphics F2 Help F3 Set F4 Fast Test F5 Normal Test F6 Stop F7 Back F8 Report

16. system tests four interfaces diagrams at the same time



17. System tests six interfaces diagrams at the same time



18. HP5 pump test data



Electronic Diesel System Test Bench

Description

Type-PN

Maker

- Bosch
- Denso
- Siemens
- Delphi
- Caterpillar
- BYC
- Cummins
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE
- Creation time

Data

There are 6 part numbers

	Type-PN	Maker	Type
1	22100-0E010-V2	Denso	HP5S
2	22100-0E010	Denso	HP5S
3	22100-0E020	Denso	HP5S
4	8-98399619-0	Denso	HP5S
5	HP5-Template	Denso	HP5S
6	HP5-TEST- 0 Mpa	Denso	HP5S

F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 Continue

## 19.HP6 pump test data

Electronic Diesel System Test Bench

Description

Type-PN

Maker

- Bosch
- Denso
- Siemens
- Delphi
- Caterpillar
- BYC
- Cummins
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE
- Creation time

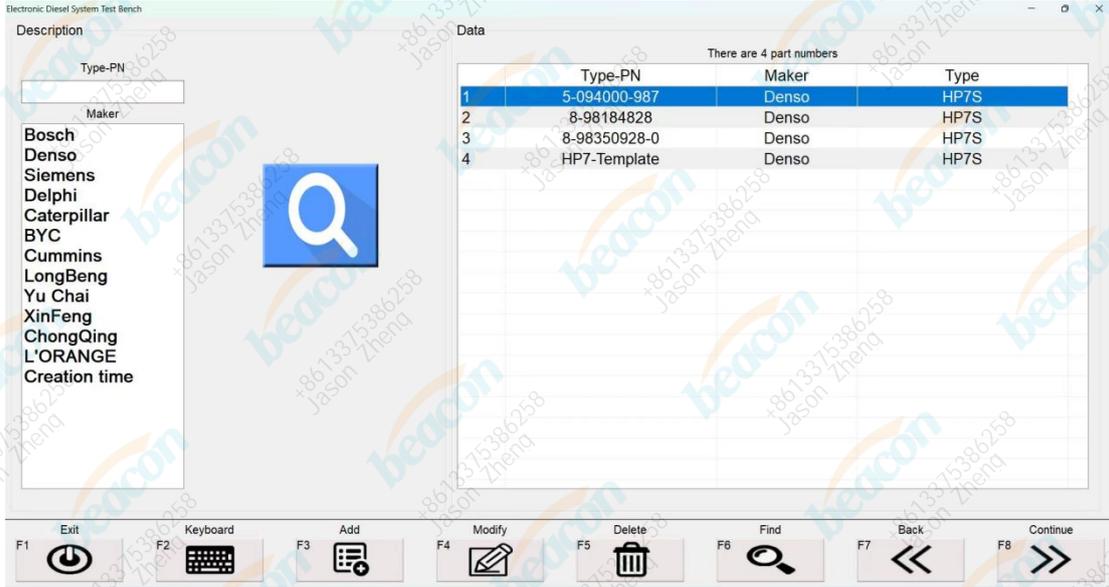
Data

There are 5 part numbers

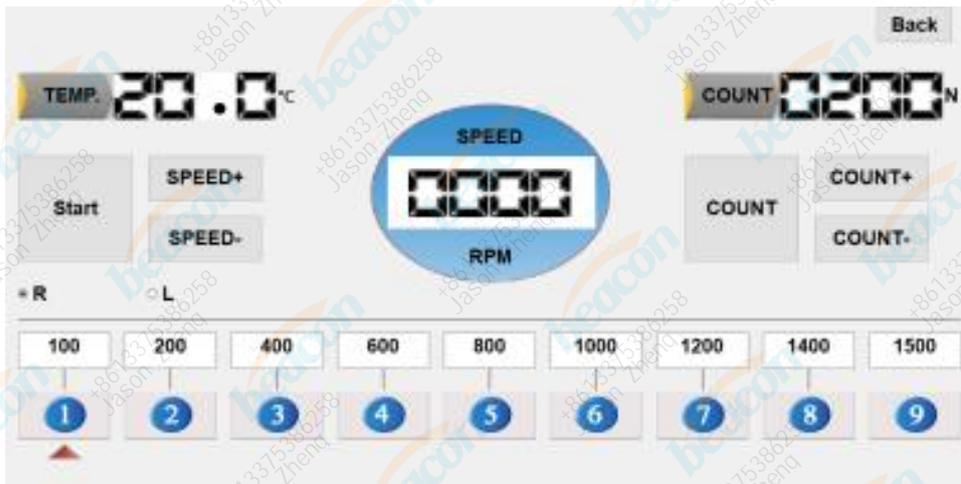
	Type-PN	Maker	Type
1	22100-E0491	Denso	HP6-0101
2	HP6-4C	Denso	HP6-4C
3	HP6-6C	Denso	HP6-6C
4	HP6-AIR OUT	Denso	HP6-0101
5	HP6-Template	Denso	HP6-0101

F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 Continue

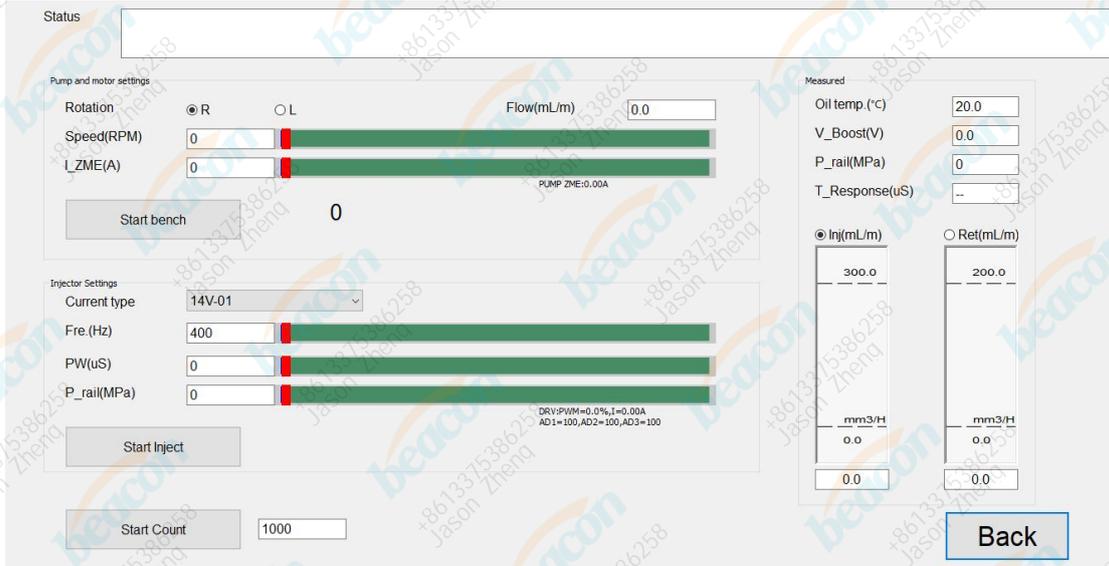
## 20.HP7 pump test data



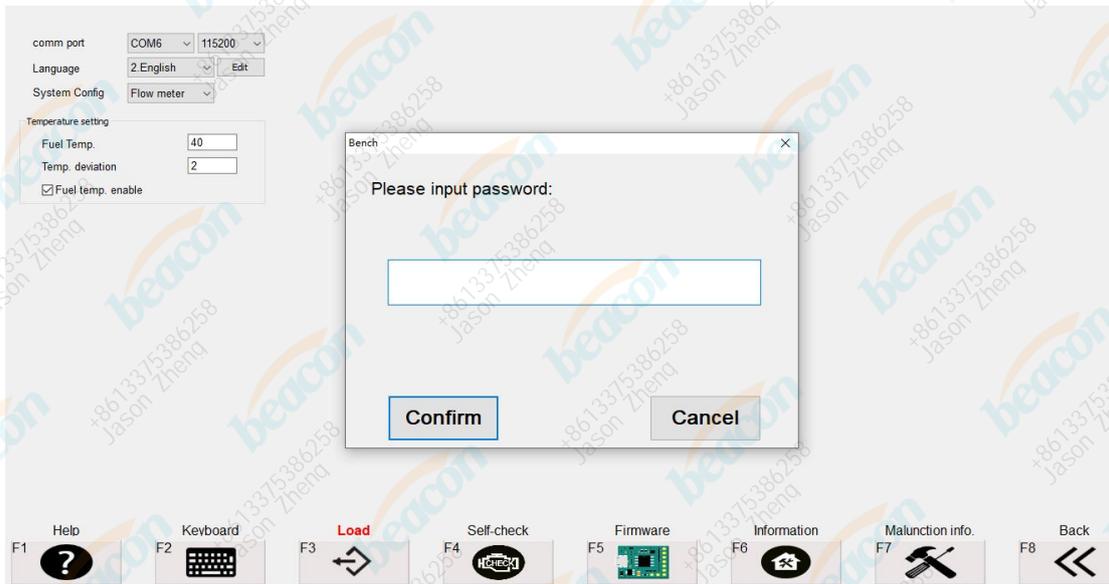
21. System mechanical pump interface diagram



22. System manual test interface diagram



23. What is the password for the system?



Password: 1357 or cr1357

The data settings in the backend are all set before leaving the factory and generally do not need to be changed. If the customer changes the settings, be sure to take a photo of the original data and save it before changing it.

24. How many languages are there in the test system?

15 types

25. How can customers change the language?

Step 1: Click: Settings

Step 2: Select language

Step 3: Close the system and reopen it



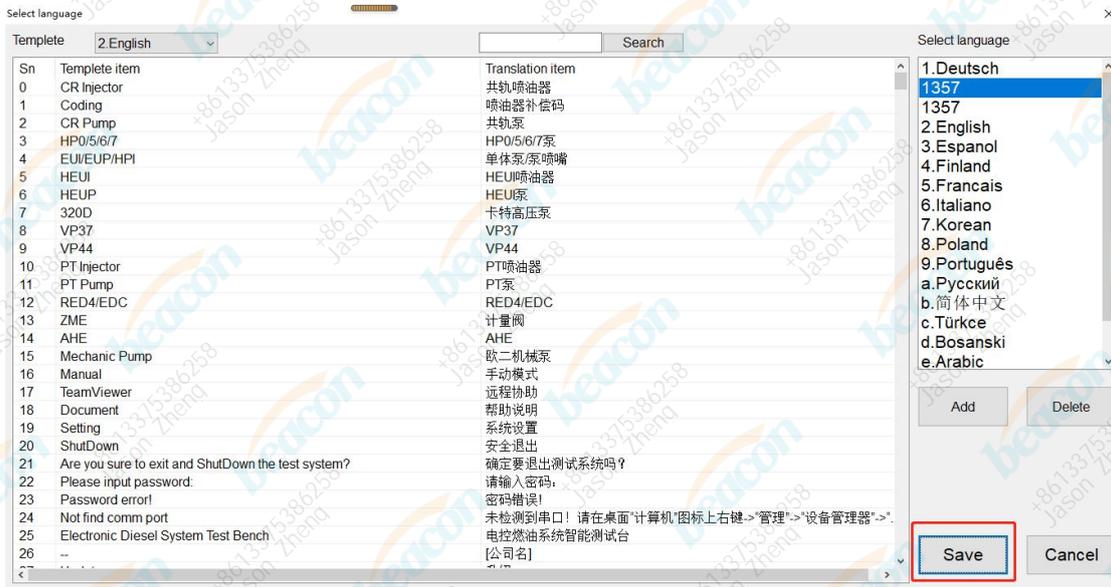
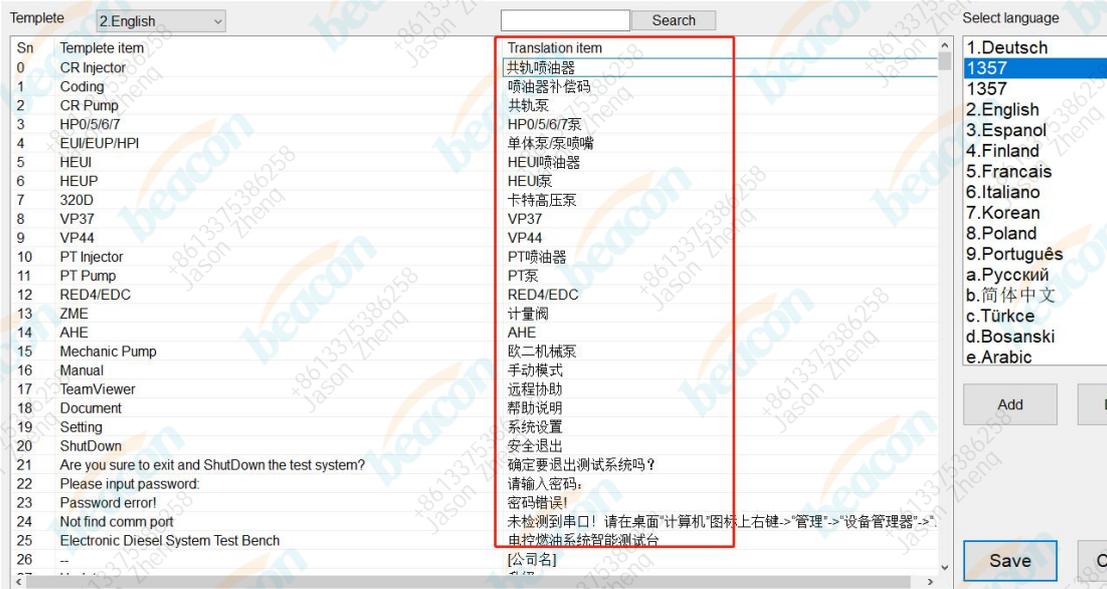
## 26. How can customers add languages?

- Step 1: Click: Settings
- Step 2: Click Edit
- Step 3: Select Add
- Step 4: Edit
- Step 5: Click Save



Sn	Template item	Translation item	Select language
0	共轨喷油器		1. Deutsch
1	喷油器补偿码		2. English
2	共轨泵		3. Espanol
3	HP0/5/6/7泵		4. Finland
4	单体泵/泵喷嘴		5. Francais
5	HEUI喷油器		6. Italiano
6	HEUI泵		7. Korean
7	卡特高压泵		8. Poland
8	VP37		9. Portugues
9	VP44		a. Русский
10	PT喷油器		b. 简体中文
11	PT泵		c. Türkce
12	RED4/EDC		d. Bosanski
13	计量阀		e. Arabic
14	AHE		f. Hrvatski
15	欧二机械泵		
16	手动模式		
17	远程协助		
18	帮助说明		
19	系统设置		
20	安全退出		
21	确定要退出测试系统吗?		
22	请输入密码:		
23	密码错误!		
24	未检测到串口! 请在桌面“计算机”图标上右键->“管理”->“设备管理器”->“...“		
25	电控燃油系统智能测试台		
26	[公司名]		

Buttons: Add, Delete, Save, Cancel



27.If the test system does not have the encoding function at the beginning, can the encoding function be added remotely?

Yes, you can add encoding remotely later

28.Do we have data on the ISX injector in the system?

Yes, XPI has 54 and X15 has 12 data

Type-PN

Maker

- Bosch
- Denso
- Siemens
- Delphi
- Caterpillar
- BYC
- Cummins**
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

Valve Number:  
--

Nozzle Number:  
--

Replacement Part Number:  
--

Code Adjust

Data

There are 54 part numbers

	Type-PN	Maker	Version
1	1881564	Cummins	Manufacturer
2	1933613	Cummins	Manufacturer
3	2057401	Cummins	Manufacturer
4	2086663	Cummins	Manufacturer
5	212033275	Cummins	Manufacturer
6	2488244	Cummins	Manufacturer
7	2867147-1	Cummins	Manufacturer
8	2867147-L	Cummins	Manufacturer
9	2867147	Cummins	Manufacturer
10	2872056	Cummins	Manufacturer
11	2872127	Cummins	Manufacturer
12	2872331	Cummins	Manufacturer
13	2872405	Cummins	Manufacturer
14	2872544(H)	Cummins	Manufacturer
15	2872544(W)	Cummins	Manufacturer
16	2872544(Y)	Cummins	Manufacturer
17	2872544	Cummins	Manufacturer

---

Description

Type-PN

Maker

- Bosch
- Detroit
- Siemens
- Delphi
- Caterpillar
- Cummins**
- NanYue
- WIT

Data

There are 50 part numbers

	Type-PN	Maker	Type
35	4903084	Cummins	Select Series
36	4903319-1	Cummins	Select Series
37	4903319	Cummins	Select Series
38	4903472	Cummins	Select Series
39	4928260	Cummins	X15
40	4928347	Cummins	Q60
41	4954434	Cummins	X15
42	4954646	Cummins	X15
43	4954648	Cummins	X15
44	4954888	Cummins	X15
45	Q60-Standard-17Bar	Cummins	Q60
46	Q60-Standard-5Bar	Cummins	Q60
47	Q60-Standard-8Bar	Cummins	Q60
48	X15-PCV	Cummins	X15
49	X15-Standard-5Bar	Cummins	X15
50	X15-TEST	Cummins	X15

---

Description

Type-PN

Maker

- Bosch
- Detroit
- Siemens
- Delphi
- Caterpillar
- Cummins**
- NanYue
- WIT

Data

There are 50 part numbers

	Type-PN	Maker	Type
19	4061851	Cummins	Select Series
20	4062568	Cummins	X15
21	4062569	Cummins	X15
22	4076912	Cummins	X15
23	4088327	Cummins	Q60
24	4088427	Cummins	Q60
25	4088665	Cummins	X15
26	4092921	Cummins	Select Series
27	4093319	Cummins	Select Series
28	4093472	Cummins	Select Series
29	4307516 N14	Cummins	Select Series
30	4307516-N14	Cummins	Select Series
31	4307547	Cummins	Select Series
32	4326780	Cummins	Q60
33	4902828	Cummins	Q60
34	4902921	Cummins	Select Series

29.Can test Mprop valve?

The equipment installed can be tested by adding the ZME function.

Type-PN	Maker	PN
1	Bosch	Manufacturer
2	Bosch	Manufacturer
3	Bosch	Manufacturer
4	Bosch	Manufacturer
5	Bosch	Manufacturer
6	Bosch	Manufacturer
7	Bosch	Manufacturer
8	Bosch	Manufacturer
9	Bosch	Manufacturer
10	Bosch	Manufacturer
11	Bosch	Manufacturer
12	Bosch	Manufacturer
13	Bosch	Manufacturer
14	Bosch	Manufacturer
15	Bosch	Manufacturer
16	Bosch	Manufacturer
17	Bosch	Manufacturer

30. Can test Denso SCV?

Yes, Denso SCV is a ZME function.

The equipment installed in can add the ZME function to measure.

Part Number: 294200-0300  
Test Step: Max Power

Q\_Out: 104.6 L/H  
Q\_Ret: 35.0 L/H

Max Power Test Results:

Max Power	83.8-104.6	0
No Flow	0.0-2.0	0
Efficiency	46.8-56.8	0
Start	7.7-11.7	0
IMV 1	42.3-79.5	0
IMV 2	19.0-42.2	0
IMV 3	6.5-18.7	0
IMV 4	2.0-10.0	0

Search Panel:

Maker: Bosch, Denso, Siemens, Delphi, Caterpillar, BYC, Cummins, LongBeng, Yu Chai, XinFeng, ChongQing, L'ORANGE

Type-PN	Maker	PN	
1	294009-0120	Denso	Manufacturer
2	294009-0260	Denso	Manufacturer
3	294009-1221	Denso	Manufacturer
4	294200-0040	Denso	Manufacturer
5	294200-0042	Denso	Manufacturer
6	294200-0170	Denso	Manufacturer
7	294200-0190	Denso	Manufacturer
8	294200-0300	Denso	Manufacturer
9	294200-0360	Denso	Manufacturer
10	294200-0370	Denso	Manufacturer
11	294200-0460	Denso	Manufacturer
12	294200-0650	Denso	Manufacturer
13	294200-0660	Denso	Manufacturer
14	294200-0760	Denso	Manufacturer
15	294200-2750	Denso	Manufacturer
16	294200-2760	Denso	Manufacturer
17	294200-2970	Denso	Manufacturer

31. Can test the cp4 pump function?

Yes, the equipment installed in can be tested by adding the CP4 function.

**Description**

Type-PN

Maker

- Bosch
- Denso
- Siemens
- Delphi
- Caterpillar
- BYC
- Cummins
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

**Data**

There are 1039 part numbers

	Type-PN	Maker	Type
446	0445010552	Bosch	CR/CP4S1/R30/20
447	0445010553	Bosch	CR/CP4S1/R30/20
448	0445010554	Bosch	CR/CP4
449	0445010555	Bosch	CR/CP4S1/R35/20
450	0445010556	Bosch	CR/CP4S1/R40/20
451	0445010557	Bosch	CR/CP4S1/R40/20
452	0445010558	Bosch	CR/CP4S1/L35/20(85...
453	0445010559	Bosch	CR/CP4S1/R45/20
454	0445010560	Bosch	CR/CP4S1/R40/20
455	0445010561	Bosch	CR/CP4HS1/L40/20
456	0445010562	Bosch	CR/CP4HS1/R40/20-S
457	0445010563	Bosch	CR/CP4HS1/R30/10
458	0445010564	Bosch	CR/CP4HS1/R30/20
459	0445010565	Bosch	CR/CP4HS1/R40/20S
460	0445010566	Bosch	CR/CP4HS1/R40/20S
461	0445010567	Bosch	CR/CP4HS1/R40/20S
462	0445010568	Bosch	CR/CP4HS1/R40/20S

F1 Exit    F2 Keyboard    F3 Add    F4 Modify    F5 Delete    F6 Find    F7 Back    F8 Continue

32. Can the system add the customer's logo? Can the printed page also add the customer's logo?

Yes, just replace BEACON with the customer's LOGO

## Electronic Diesel System Test Bench

www.beacon-machine.com

CR Injector

Coding

CR Pump

HP0/5/6/7

EUI/EUP/HPI

HEUI

HEUP

320D

VP37

VP44

PT Injector

PT Pump

RED4/EDC

ZME

AHE/Atomize

Mechanic Pump

Manual

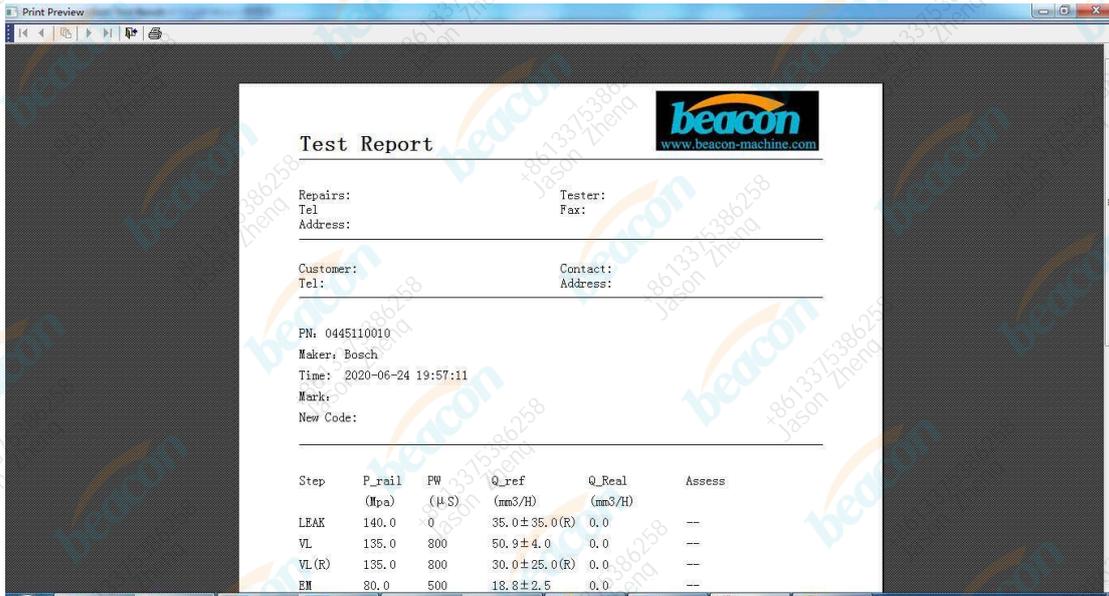
TeamViewer

Document

Setting

ShutDown

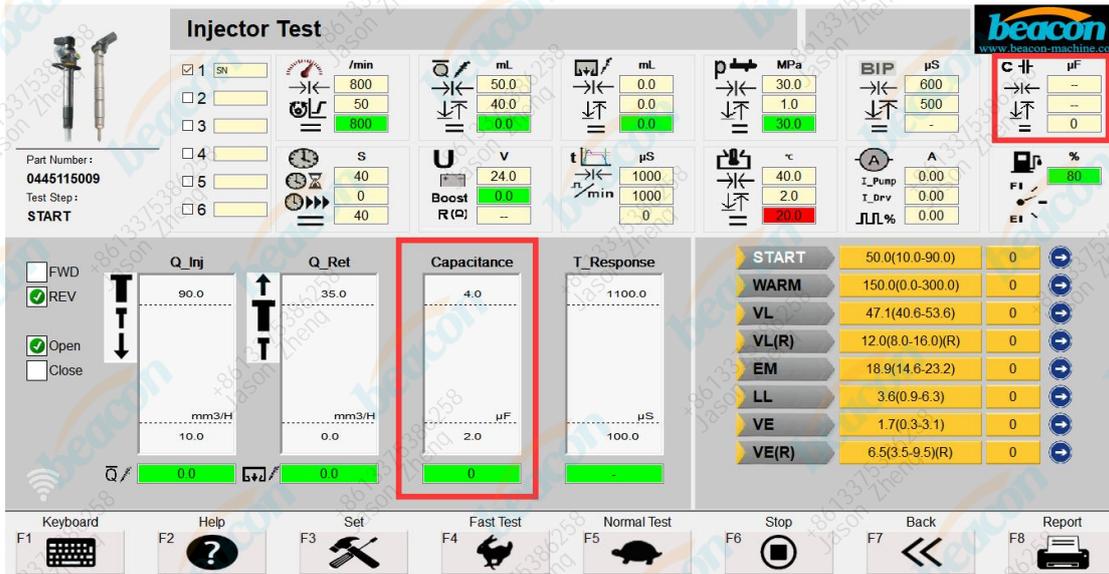
Version: NV1.79



33. Can the system measure capacitance and inductance?

Yes, it is standard. The red frame parts are capacitors and inductors.

Measurement of piezoelectric injectors shows capacitance, and measurement of ordinary injectors shows inductance



**Injector Test**

Part Number: 0445110326  
Test Step: LEAK

Q<sub>Inj</sub>: 35.0 mm<sup>3</sup>/H  
Q<sub>Ret</sub>: 80.0 mm<sup>3</sup>/H  
Inductance: 600.0 μH  
T<sub>Response</sub>: 1400.0 μS

LEAK: 40.0(0.0-80.0)(R) 0  
WARM: 150.0(0.0-300.0) 0  
VL: 56.0(48.0-64.0) 0  
VL(R): 30.0(5.0-55.0)(R) 0  
EM: 14.4(9.6-19.2) 0  
LL: 4.5(1.0-8.0) 0  
VE: 2.2(0.3-4.1) 0  
VE(R): 5.0(3.0-7.0)(R) 0  
VE 2: 3.0(0.3-5.7) 0

Control Panel: F1 Keyboard, F2 Help, F3 Set, F4 Fast Test, F5 Normal Test, F6 Stop, F7 Back, F8 Report

33. What do these two Siemens data in the system mean?

DIMED is a special brand. If it is this brand, choose DIMED data test.

If it is not this brand, choose data test without DIMED.

The two data are different.

DIMED是国外一个专用品牌的数据，是DIMED品牌的西门子喷油器用这个数据测试  
There are 2 part numbers

Type-PN	Maker	Version
1 BK2Q-9K546-AG DIMED	Siemens	Manufacturer
2 BK2Q-9K546-AG	Siemens	Manufacturer

不带DIMED的是正常的西门子数据。正常测试用这个

Valve Number:  
Nozzle Number:  
Replacement Part Number:

**Injector Test**

Part Number: **BK2Q-9K546-AG**  
 Test Step: **WARM**

Q<sub>Inj</sub>: 300.0 mm<sup>3</sup>/H  
 Q<sub>Ret</sub>: 35.0 mm<sup>3</sup>/H

**不带DIMED的数据**

Parameter	Value	INJ 1
WARM	150.0(0.0-300.0)	0
BACK	30.0(10.0-50.0)(R)	0
MAX	64.0(60.0-68.0)	0
EM	31.7(28.1-35.3)	0
LL	3.1(2.1-4.1)	0
VE	2.4(1.7-3.1)	0

**Injector Test**

Part Number: **BK2Q-9K546-AG I**  
 Test Step: **WARM**

Q<sub>Inj</sub>: 300.0 mm<sup>3</sup>/H  
 Q<sub>Ret</sub>: 35.0 mm<sup>3</sup>/H

**带DIMED的数据**

Parameter	Value	INJ 1
WARM	150.0(0.0-300.0)	0
BACK	35.0(13.0-57.0)(R)	0
MAX	56.2(52.6-59.8)	0
EM	13.2(9.7-16.7)	0
EM*	13.9(12.6-15.2)	0
PILOT	2.9(1.9-3.9)	0
IDLE	3.1(1.6-4.6)	0
IDLE LEAK	6.5(3.0-10.0)(R)	0

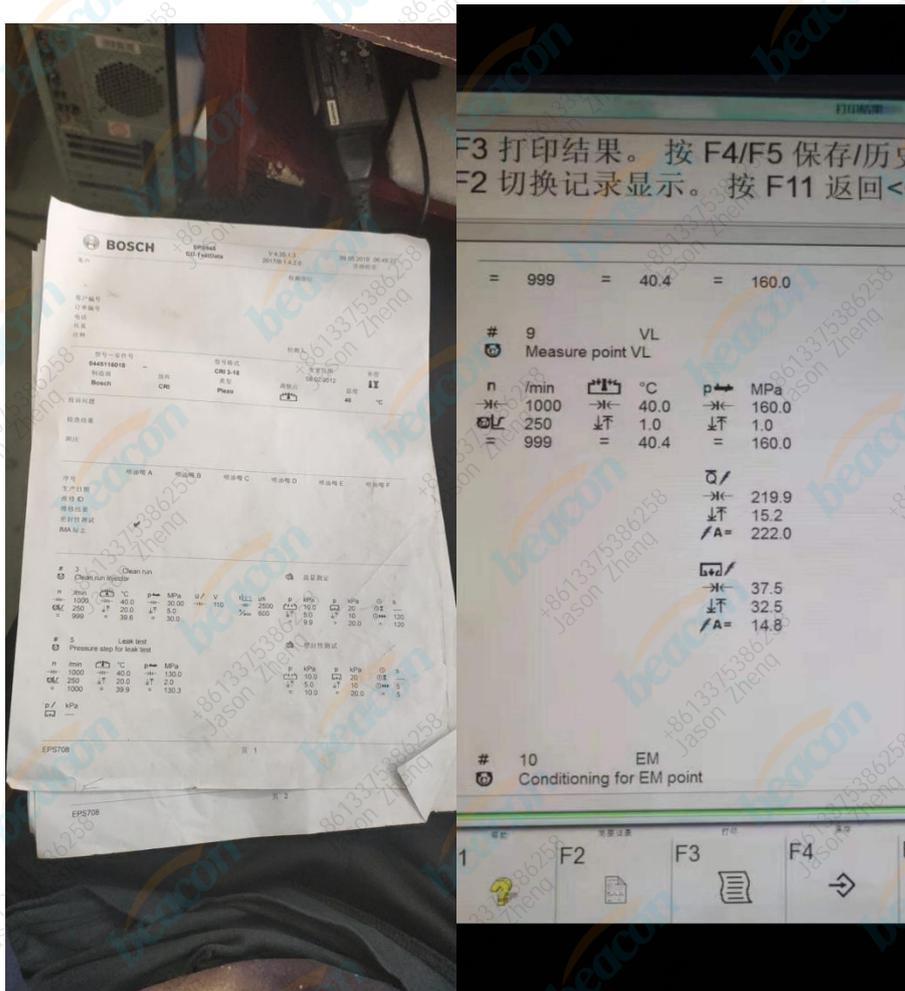
34. Can the data in the system print report be in color?

Can it show whether the injector is normal?

No.

Bosch original equipment EPS708 and other equipment also prints in black and white.

As shown in the figure, the print report of Bosch original EPS708

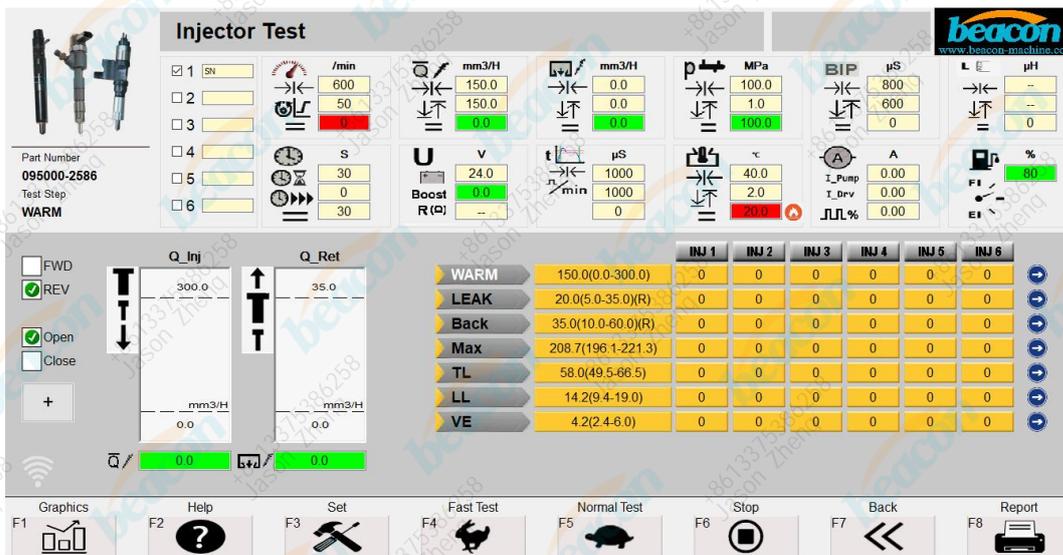


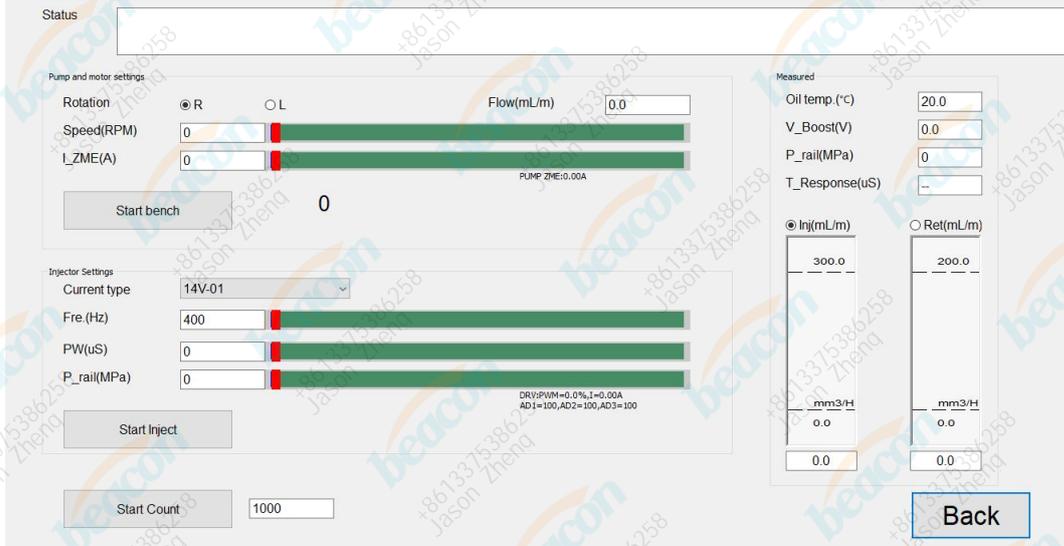
35. Is the system automatic or manual speed regulation?

Both are OK.

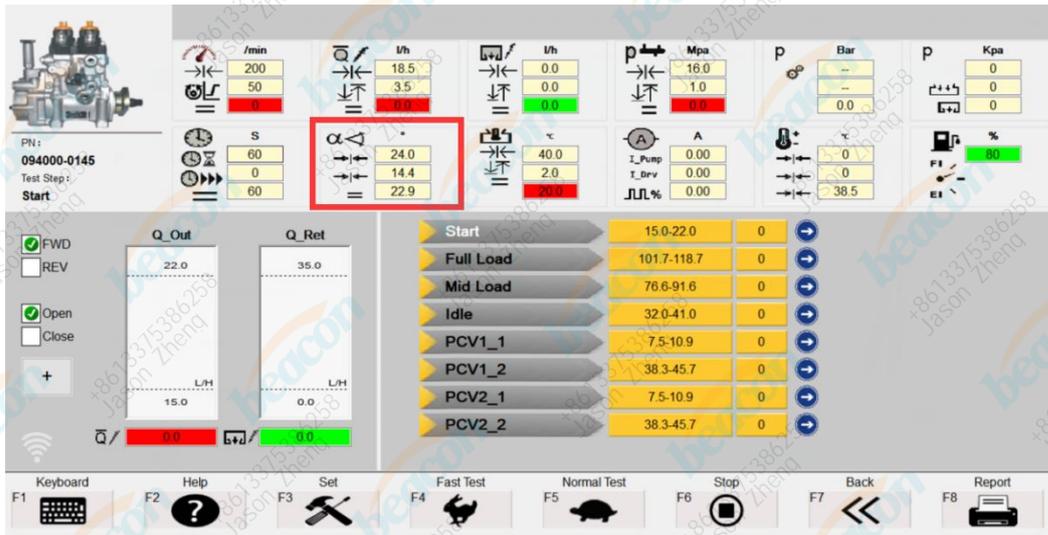
Selecting data test means automatic speed adjustment.

Selecting manual test means manual speed adjustment.





46. testing the HPO pump, what do the numbers in the red frame mean

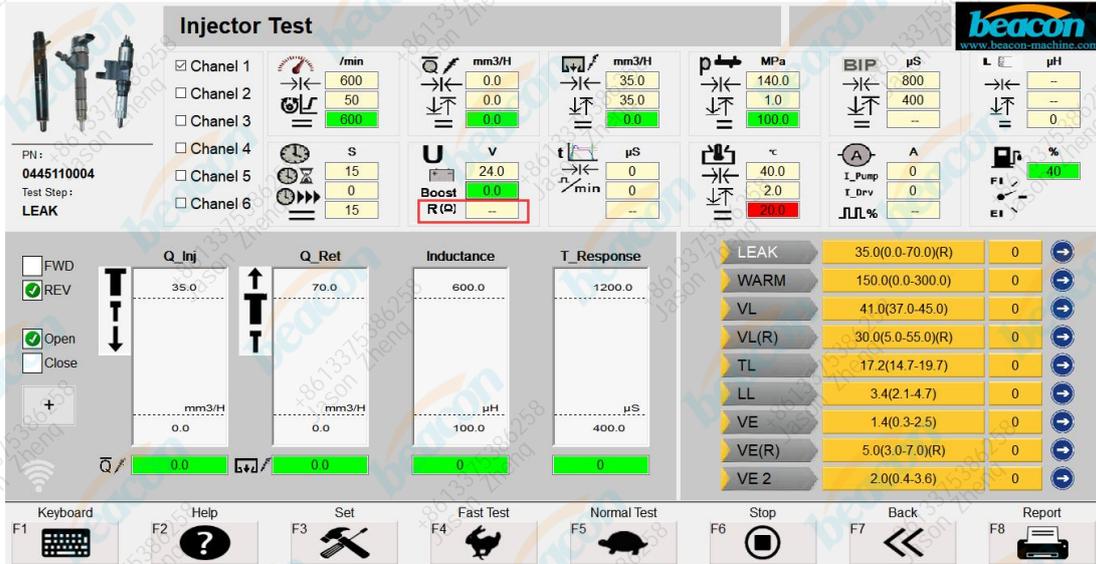


24, 14.4 is the driving voltage.

22.9 is the driving angle

36. Can the system test the injector to measure resistance?

Yes, the red box in the picture is the resistor.



37. The customer bought the system, but wants to control it with his own computer. Is that possible? What are the requirements for the customer's computer system? Is Windows 7 system OK?

Yes

The system is suitable for Windows 7 Windows 10 XP systems, and can be installed and used.

Technical remote debugging is required, which is prone to after-sales problems. It is not recommended to do so.

It is recommended to use the factory standard.

38. What is the standard solenoid voltage of the system?

Can the customer's own 220V solenoid valve be used in our system?

Standard 24V

220V solenoid valves cannot be used on our equipment.



39. How to prove that the system can test piezoelectric injectors?

- 1: Send the parameters, quantity, photos and videos of the system, especially the parameters of Siemens (Siemens injectors are all piezoelectric injectors)
- 2: Send the wiring harness of the piezoelectric injector
- 3: Send the video of testing the Siemens injector on the network disk

Type-PN

Maker

- Bosch
- Denso
- Siemens
- Delphi
- Caterpillar
- BYC
- Cummins
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

Valve Number: --

Nozzle Number: --

Replacement Part Number: --

Code Adjust

Data

There are 7343 part numbers

	Type-PN	Maker	Version
3483	095000-5277	Denso	Manufacturer
3484	095000-5278	Denso	Manufacturer
3485	095000-5279	Denso	Manufacturer
3486	095000-528#	Denso	Manufacturer
3487	095000-5280	Denso	Manufacturer
3488	095000-5281	Denso	Manufacturer
3489	095000-5282	Denso	Manufacturer
3490	095000-5283	Denso	Manufacturer
3491	095000-5284	Denso	Manufacturer
3492	095000-5285	Denso	Manufacturer
3493	095000-5286	Denso	Manufacturer
3494	095000-5287	Denso	Manufacturer
3495	095000-5288	Denso	Manufacturer
3496	095000-5289	Denso	Manufacturer
3497	095000-532#	Denso	Manufacturer
3498	095000-5320	Denso	Manufacturer
3499	095000-5321	Denso	Manufacturer

F1 Exit    F2 Keyboard    F3 Add    F4 Modify    F5 Delete    F6 Find    F7 Back    F8 Continue

**Injector Test**

Part Number: **AZC335190080**  
Test Step: **WARM**

<input checked="" type="checkbox"/> 1 SN	<input checked="" type="checkbox"/> /min	<input checked="" type="checkbox"/> mm <sup>3</sup> /H	<input checked="" type="checkbox"/> mm <sup>3</sup> /H	<input checked="" type="checkbox"/> MPa	<input checked="" type="checkbox"/> BIP	<input checked="" type="checkbox"/> C
<input type="checkbox"/> 2	<input type="checkbox"/> 600	<input type="checkbox"/> 150.0	<input type="checkbox"/> 0.0	<input type="checkbox"/> 100.0	<input type="checkbox"/> 600	<input type="checkbox"/> --
<input type="checkbox"/> 3	<input type="checkbox"/> 50	<input type="checkbox"/> 150.0	<input type="checkbox"/> 0.0	<input type="checkbox"/> 1.0	<input type="checkbox"/> 500	<input type="checkbox"/> --
<input type="checkbox"/> 4	<input type="checkbox"/> 0	<input type="checkbox"/> 0.0	<input type="checkbox"/> 0.0	<input type="checkbox"/> 100.0	<input type="checkbox"/> 0	<input type="checkbox"/> 0
<input type="checkbox"/> 5	<input type="checkbox"/> S	<input type="checkbox"/> U	<input type="checkbox"/> V	<input type="checkbox"/> t	<input type="checkbox"/> A	<input type="checkbox"/> %
<input type="checkbox"/> 6	<input type="checkbox"/> 30	<input type="checkbox"/> Boost	<input type="checkbox"/> 24.0	<input type="checkbox"/> min	<input type="checkbox"/> I_Pump	<input type="checkbox"/> I_Drv
	<input type="checkbox"/> 0	<input type="checkbox"/> R (Ω)	<input type="checkbox"/> 0.0	<input type="checkbox"/> 1000	<input type="checkbox"/> 0.00	<input type="checkbox"/> 0.00
	<input type="checkbox"/> 30			<input type="checkbox"/> 20.0	<input type="checkbox"/> J1%	<input type="checkbox"/> E1

Q<sub>Inj</sub>: 300.0 mm<sup>3</sup>/H  
Q<sub>Ret</sub>: 35.0 mm<sup>3</sup>/H  
Capacitance: 4.2 μF  
T<sub>Response</sub>: 1100.0 μS

WARM: 150.0(0.0-300.0) 0  
BACK: 30.0(10.0-50.0)(R) 0  
MAX: 77.0(70.3-83.7) 0  
EM: 34.0(28.4-39.6) 0  
LL: 3.4(2.4-4.4) 0  
VE: 2.7(0.7-4.7) 0

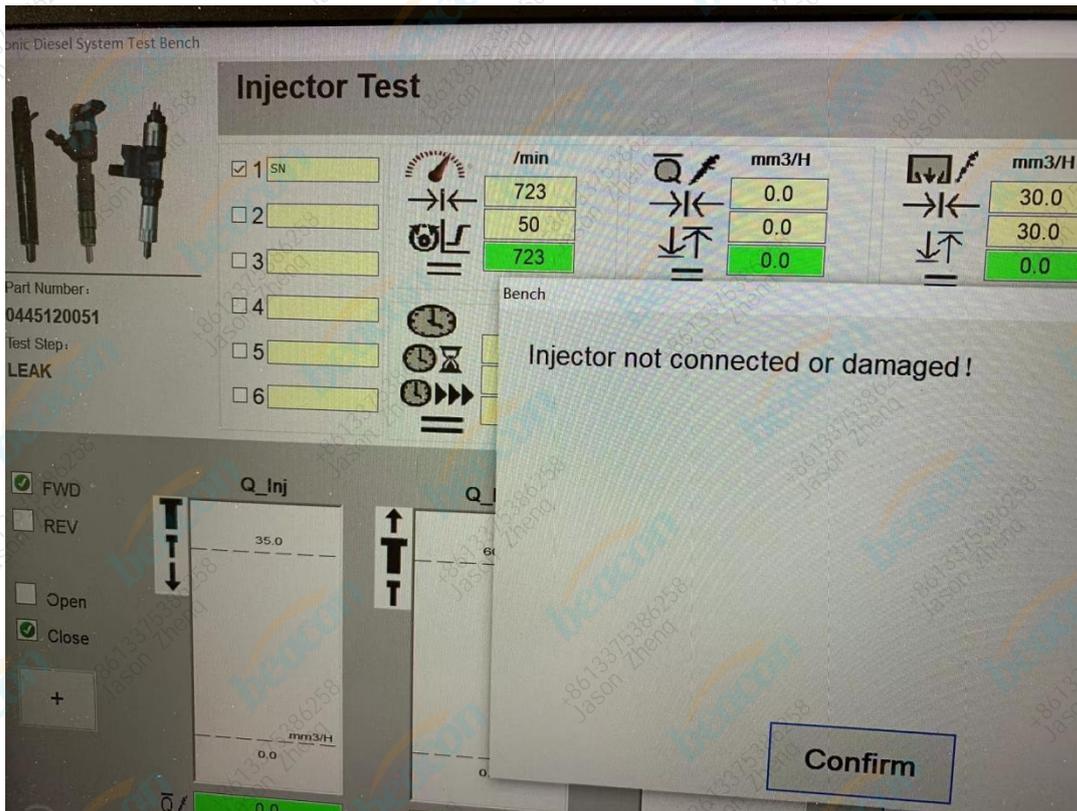
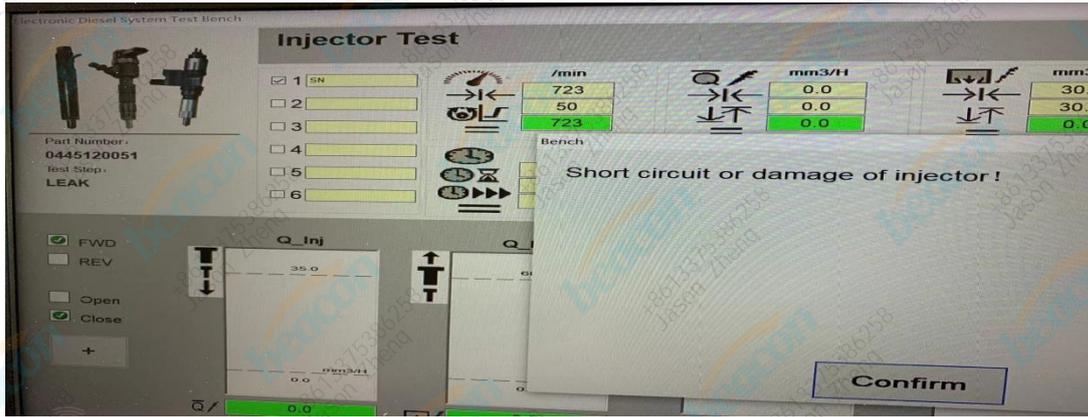
F1 Keyboard F2 Help F3 Set F4 Fast Test F5 Normal Test F6 Stop F7 Back F8 Report



40. When the injector to be tested is short-circuited or open-circuited, can the system detect it?

Yes, as shown in the picture (the left picture shows a short circuit, the right picture shows an open circuit)

It is a protection for the system



41. For the system test bench with BIP function, does the test report show BIP?

Yes, it will be displayed in the test report.

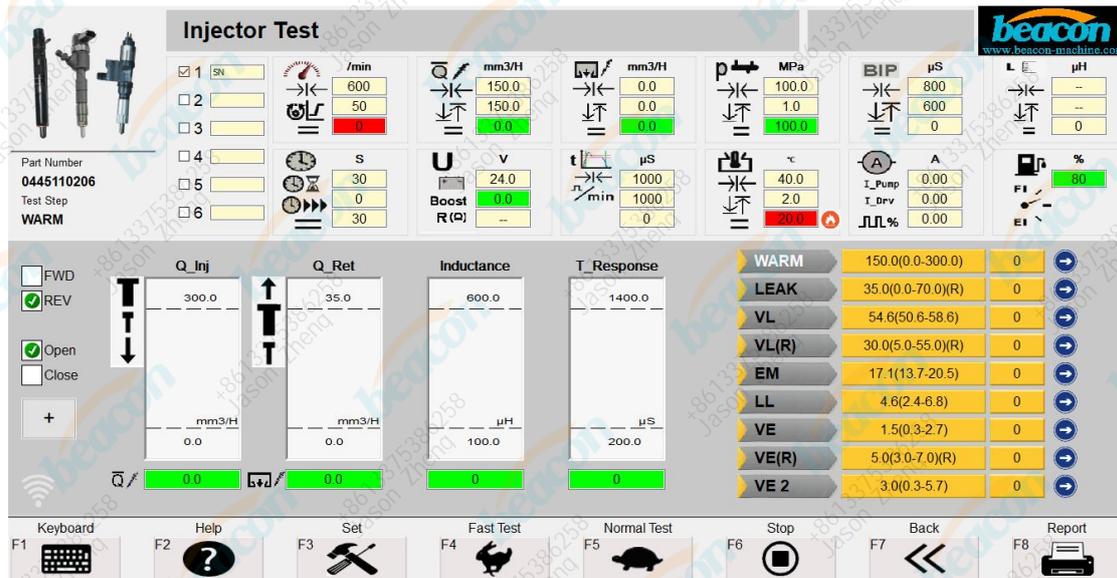


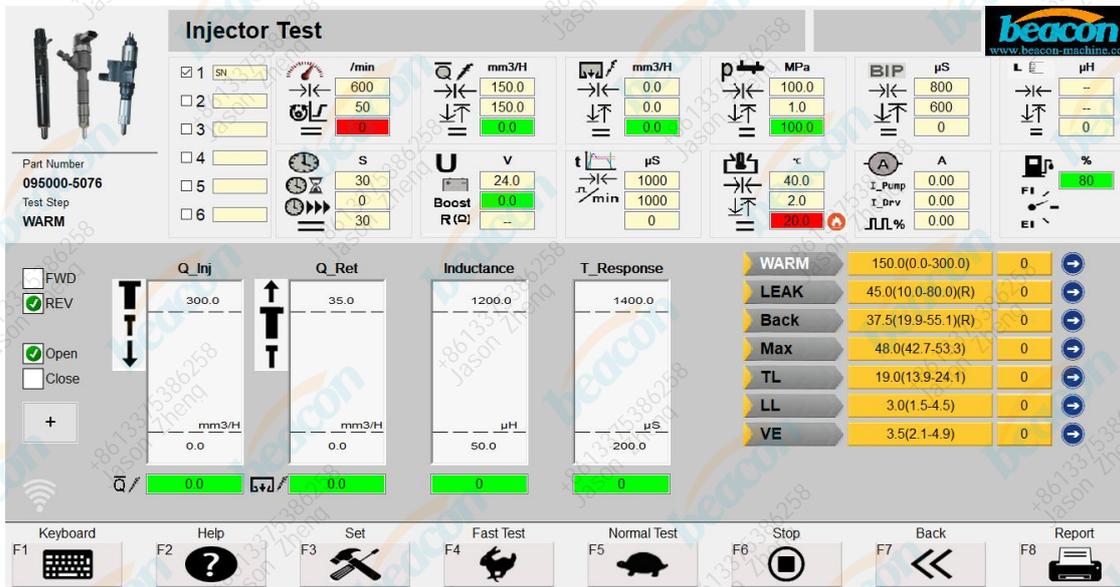
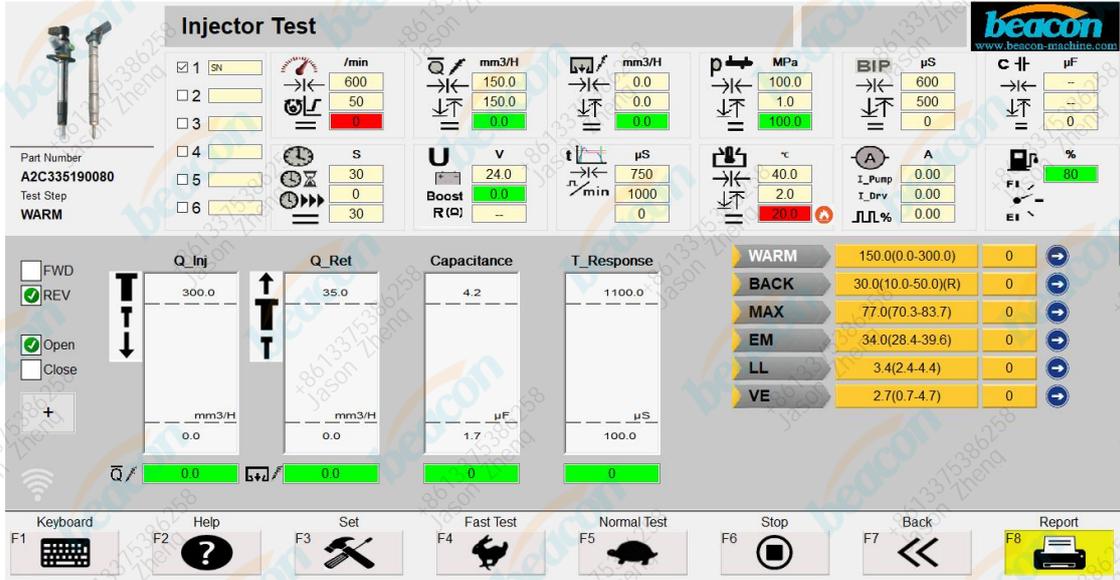
42. How long does it take for the system to normally test an injector?

Different injector tests require different times.

Some injector tests have more steps, while others have fewer steps.

Each step takes about 30 seconds, and the test time ranges from 3 minutes to 5 minutes.





43. How long does it take to encode the system?

Different injectors require different coding times. Like the test interface, it ranges from 6 to 25 minutes.

As shown in the figure, Bosch 0445110100 takes 1 minute and 35 seconds for each step, 7 steps in total

As shown in the figure, Denso 095000-0760, each step takes about 2 minutes, 13 steps in total

As shown in the figure, Delphi 28230673, each step takes about 2 minutes, 13 steps in total

As shown in the figure, Siemens 03L130277B, each step takes about 2 minutes, 6 steps in total



**0445110100 (IMA-7)**



- LEAK
- WARM
- VL
- EM
- LL
- VE
- VE 2



**1:35**

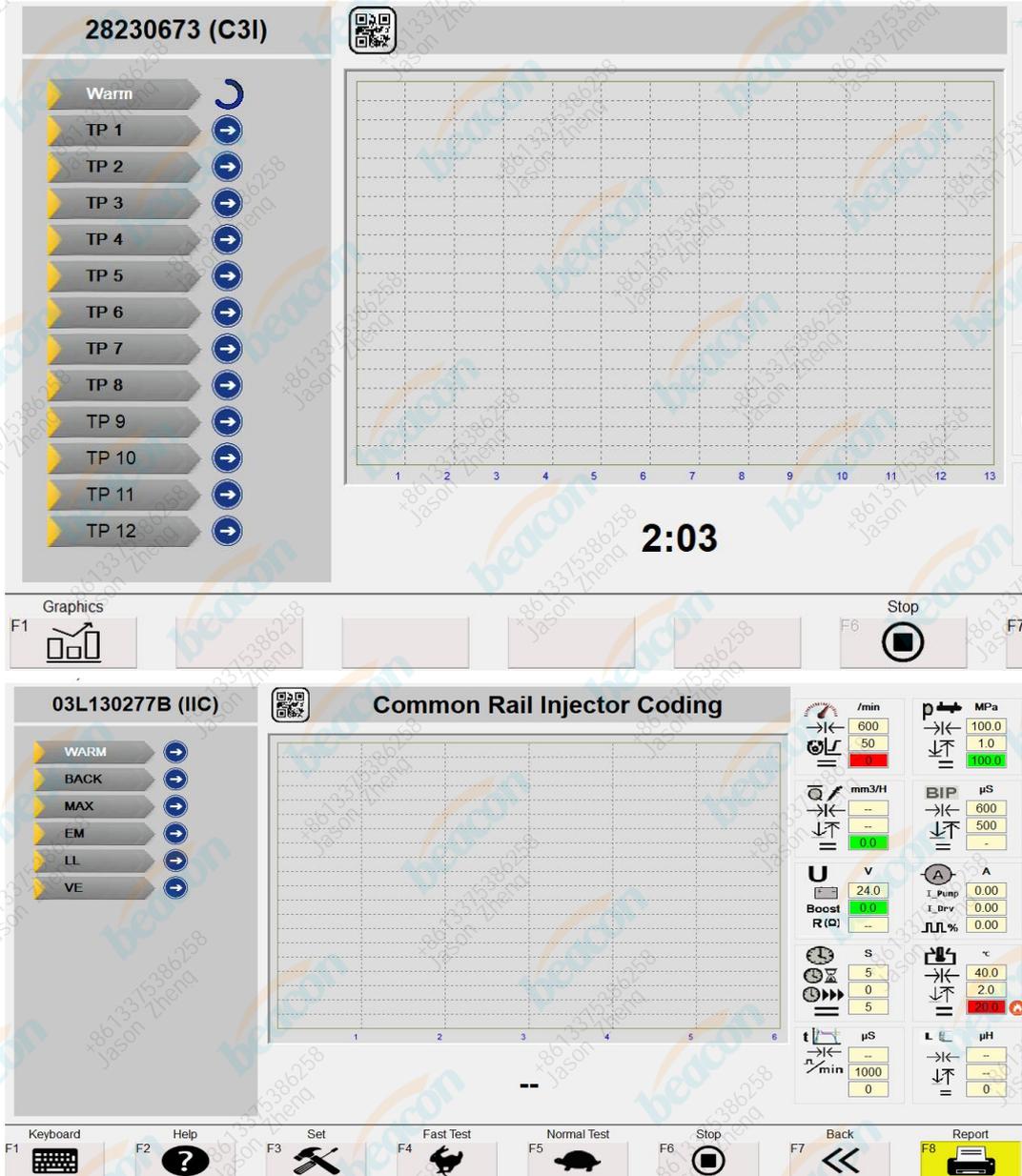
**095000-0760 (00QR)**



- Clean run
- TP 1
- TP 2
- TP 3
- TP 4
- TP 5
- TP 6
- TP 7
- TP 8
- TP 9
- TP 10
- TP 11
- TP 12

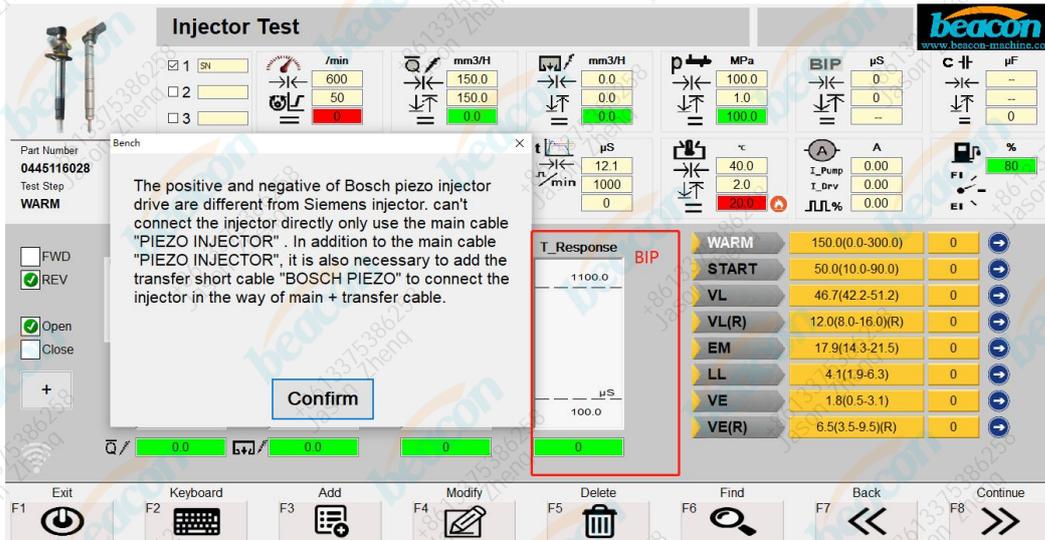


**2:04**



44. Does the BIP signal also work for piezo injectors?

Yes. As shown in the figure, the piezoelectric injector test interface with BIP function



45. If the system tests an injector and repeats the test multiple times, will the test results be the same or different?

Theoretically, they are the same.

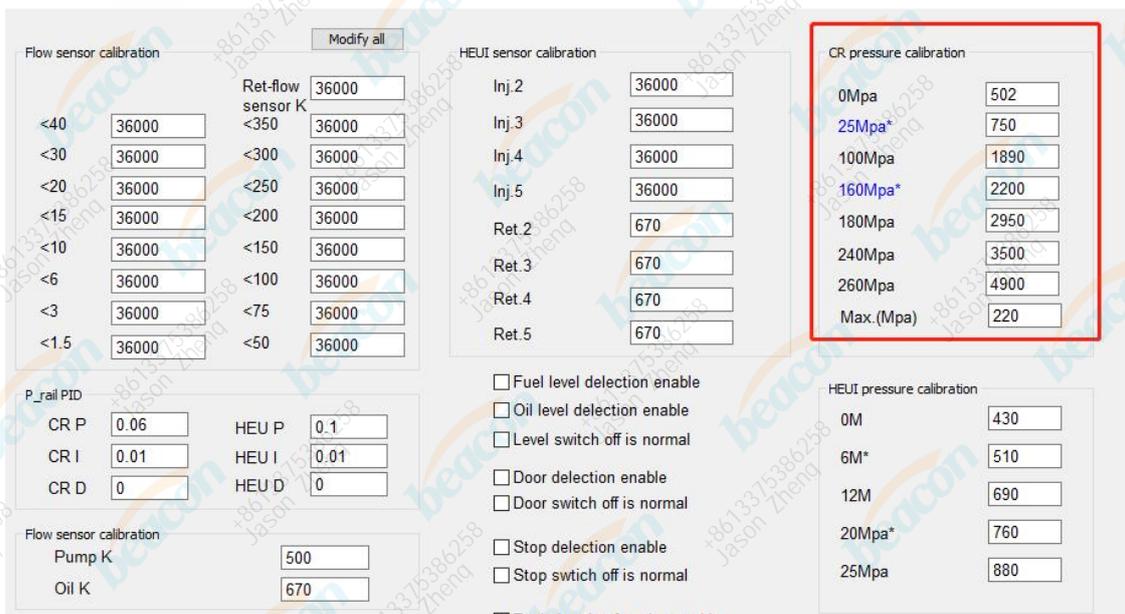
However, in the actual test process, the measured data will be slightly different due to objective factors such as the influence of the air in the pipeline and the filter, and the different oil temperatures before and after the test.

46. What kind of rail tubes are used during system testing?

There are no requirements for rail pipes, but there are requirements for rail pressure sensors and DRV's at both ends of the rail pipes.

According to different rail pressure sensors, rail pressure parameters need to be set in the background, otherwise the test results will be inaccurate.

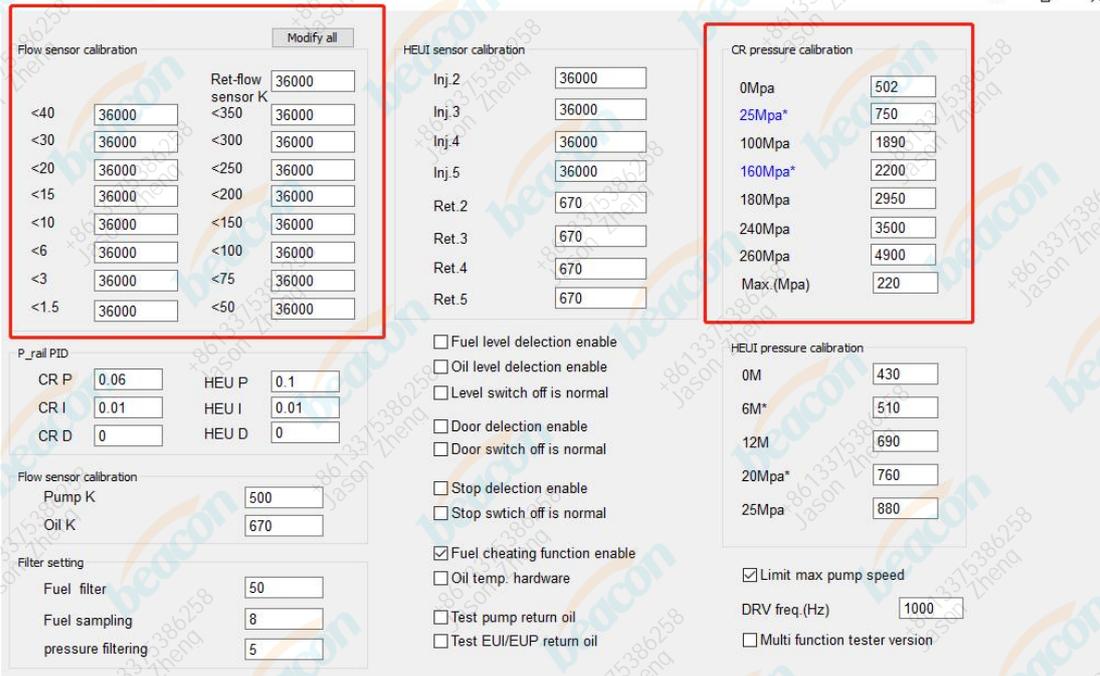
Different DRV's can bear different maximum pressures, and different DRV's need to be configured according to the maximum pressure required by the customer.



47. What pump is used when testing the system?

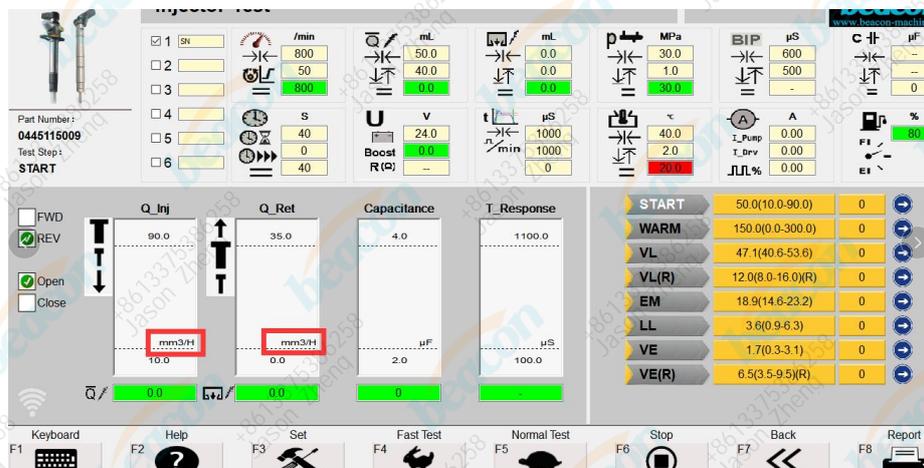
It mainly depends on how many kilograms of pressure the customer requires the injector to reach when testing it. Generally, a CP1 pump can only reach 2,000 kilograms of pressure. A CP3 pump can reach 2,400 kilograms of pressure. A CP4 pump can reach 2,600 kilograms of pressure.

48.If the system tests a new injector that has just been manufactured, but the test result shows an error or indicates that there is a problem with the injector, what should be done in this case? It is necessary to adjust the background parameters according to the flow sensor, pressure sensor, and pipeline length connected by the customer, as shown in the figure to make the test results within the standard range.

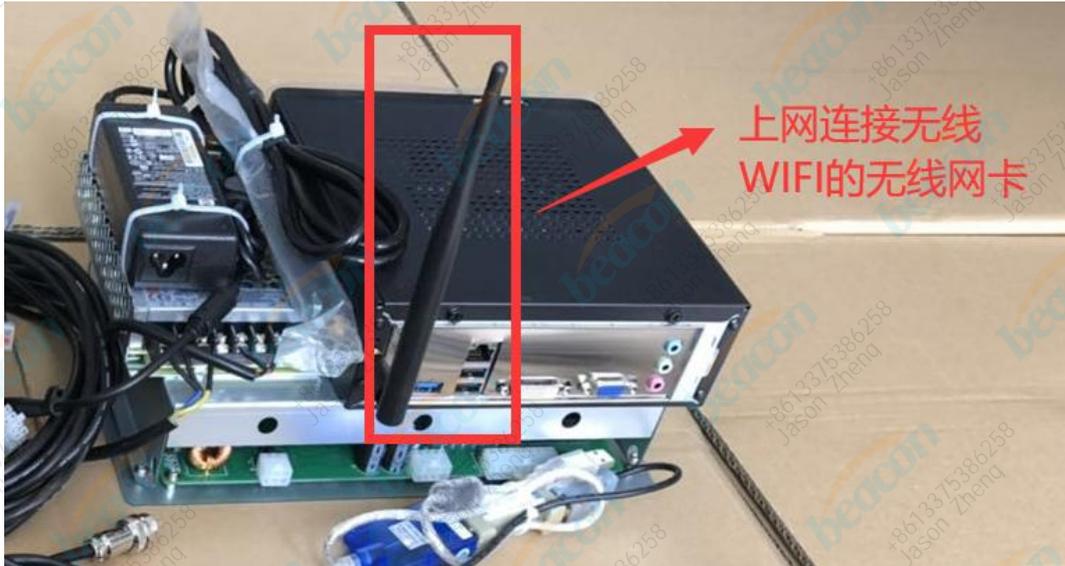


49.How to view the unit of system test traffic?

As shown in the red box, the unit of flow measurement is mm<sup>3</sup>/H (cubic millimeters per hour) for the injector and L/H (liters per hour) for the oil pump.







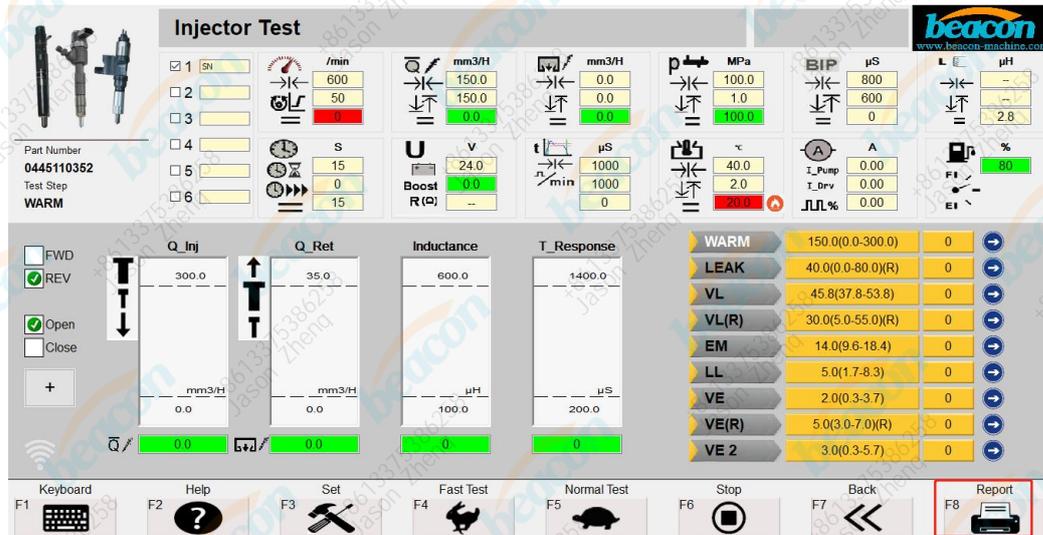
51. How to change the header information of the printed report in the system?

First: After the injector or pump test is completed, click "report"

Second: Click "edit"

Third: Enter the customer's information

Fourth: Save





Edit Print

### TEST REPORT

**Servicer:**  
**Tel:**  
**Address:**

**Tester:**  
**Fax:**

---

**Repairer:**  
**Tel:**  
**Address:**

**Customer:**  
**Fax:**

---

Date: 10.05.2023 08:02

**Part Number:** 0445110352

**Maker:** Bosch

Serial Number: SN      Inductance:  
 New Code:

Step	P_rail (Mpa)	PW (μS)	Q_ref (mm3/H)	Q_Real (mm3/H)	BIP (μS)	Assess
LEAK	170.0	0	40.0±40.0(R)	0.0	0	--
VL	160.0	800	45.8±8.0	0.0	0	--

Information

Repair

Repair

Tester

Tel

Fax

Address

Web

Remarks

Repairer	Customer	Tel
[empty]		
Logistics company	Martin	+86 11111111

Repairer       Customer   
 Tel       Fax   
 Address   
 Remarks

Select Save Delete

### 52. How to modify data in the system?

- Step 1: Select data, such as 0445110352
- Step 2: Click "modify"
- Step 3: Edit the data to be modified and save

The screenshot shows the software interface for adding injector data. It is divided into three main sections:

- Top Section:** A search interface with a 'Type-PN' input field, a 'Maker' list (Bosch, Denso, Siemens, Delphi, Caterpillar, BYC, Cummins, LongBeng, Yu Chai, XinFeng, ChongQing, L'ORANGE), a magnifying glass icon, and fields for 'Valve Number', 'Nozzle Number', and 'Replacement Part Number'. A 'Code Adjust' button is at the bottom.
- Middle Section:** A table of data with columns 'Type-PN', 'Maker', and 'Version'. The row for '0445110352' by 'Bosch' is highlighted in blue. A toolbar below the table includes buttons for Exit (F1), Keyboard (F2), Add (F3), Modify (F4), Delete (F5), Find (F6), Back (F7), and Continue (F8).
- Bottom Section:** A detailed view of the selected part. It shows 'Part Number: 0445110352', 'Maker: Bosch', and 'Curve: 14V'. On the left, a 'Test step' list includes 'WARM' (selected), LEAK, VL, EM, LL, VE, and VE 2. On the right, a 'Test value' table lists parameters like 'Rail pressure' (100), 'Inj standard quantity' (150.0), etc. A toolbar at the bottom includes buttons for keyboard (F1), Curve (F2), Edit (F3), Add (F4), Delete (F5), Save (F6), Back (F7), and Continue (F8).

### 53. How to add data to the system?

- Step 1: Select "add" on the injector data interface
- Step 2: Enter the password "1357"
- Step 3: Enter the new model and parameters, and save

Type-PN  
Input PN

Maker  
Bosch  
Denso  
Siemens  
Delphi  
Caterpillar  
BYC  
Cummins  
LongBeng  
Yu Chai  
XinFeng  
ChongQing  
L'ORANGE

Valve Number: --  
Nozzle Number: --  
Replacement Part Number: --  
Code Adjust

Data  
There are 7343 part numbers

Type-PN	Maker	Version
313	0445110334	Bosch
314	0445110335	Bosch
315	0445110336	Bosch
316	0445110337	Bosch
317	0445110338	Bosch
318	0445110339	Bosch
319	0445110340	Bosch
320	0445110342	Bosch
321	0445110343	Bosch
322	0445110344	Bosch
323	0445110345	Bosch
324	0445110346	Bosch
325	0445110347	Bosch
326	0445110348	Bosch
327	0445110351	Bosch
328	0445110352	Bosch
329	0445110353	Bosch

F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 Continue

Type-PN  
Input PN

Maker  
Bosch  
Denso  
Siemens  
Delphi  
Caterpillar  
BYC  
Cummins  
LongBeng  
Yu Chai  
XinFeng  
ChongQing  
L'ORANGE

Valve Number: --  
Nozzle Number: --  
Replacement Part Number: --  
Code Adjust

Data  
There are 7343 part numbers

Type-PN	Maker	Version
313	0445110334	Bosch
314	0445110335	Bosch
315	0445110336	Bosch
316	0445110337	Bosch
317	0445110338	Bosch
318	0445110339	Bosch
319	0445110340	Bosch
320	0445110342	Bosch
321	0445110343	Bosch
322	0445110344	Bosch
323	0445110345	Bosch
324	0445110346	Bosch
325	0445110347	Bosch
326	0445110348	Bosch
327	0445110351	Bosch
328	0445110352	Bosch
329	0445110353	Bosch

Input new PN: 1357  
Confirm Cancel

F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 Continue

Part Number: 1357 Maker: Bosch Curve: 14V

Test step  
WARM  
LEAK  
VL  
TL  
LL  
VE  
VE 2

Test value

Item	Value	Unit
Step name	WARM	--
Rail pressure	100	Mpa
Inj standard quantity	150.0	mm3/H
Inj deviation quantity	150.0	mm3/H
Ret standard quantity	0.0	mm3/H
Ret deviation quantity	0.0	mm3/H
Test time	20	s
Inj pulse width	1000	µS
Magnification	10	--
Response time stand...	800	µS
Response time devia...	600	µS
Inj frequency	1000	n/min

keyboard Curve Edit Add Delete Save Back Continue

54. Where can I see this screenshot in the system?

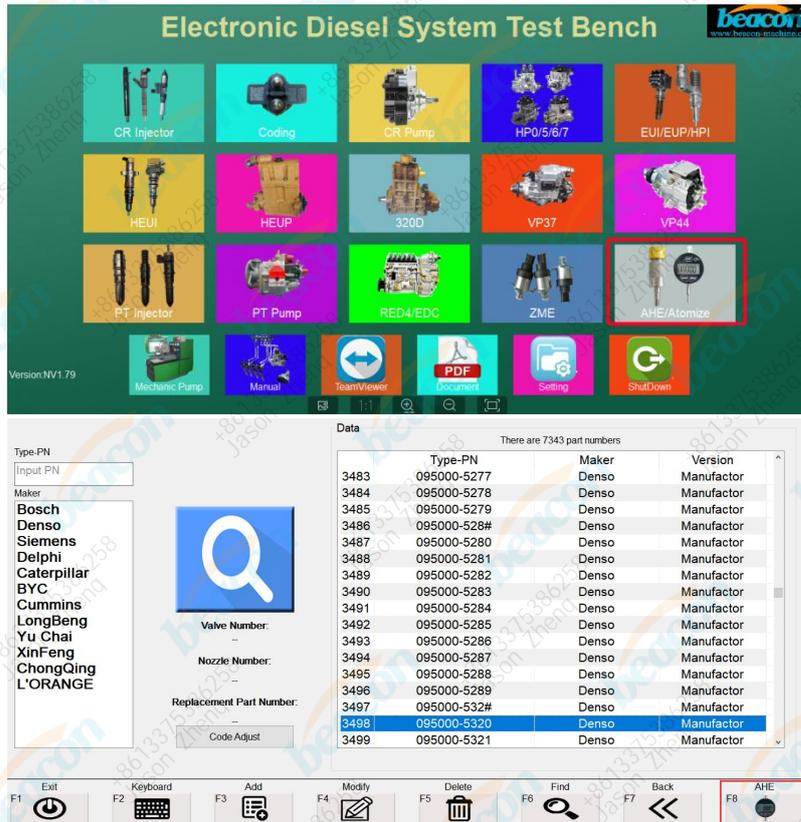


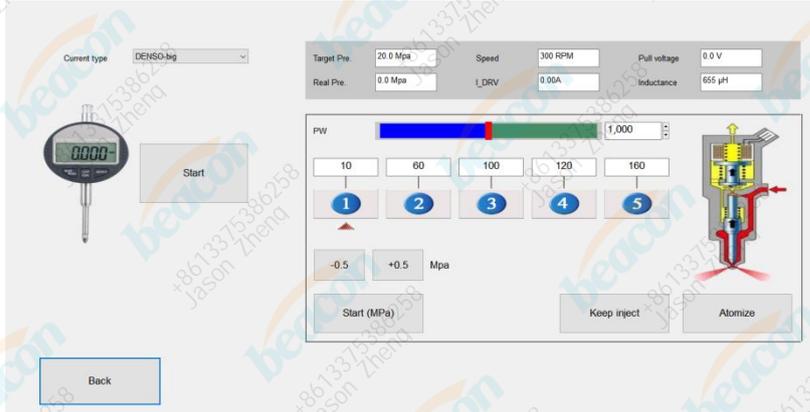
This is the AHE test interface

Step 1: Click: Main interface AHE

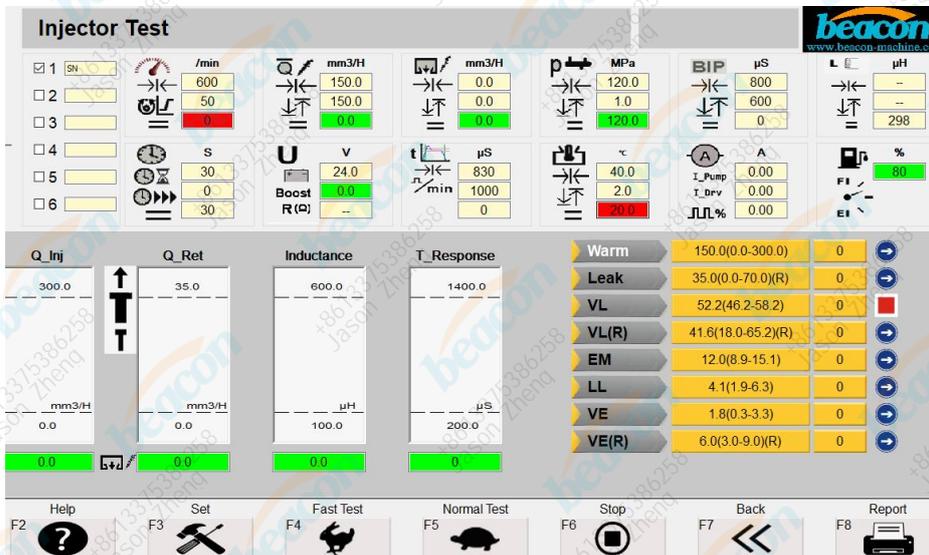
Step 2: Select parameters

Step 3: Click AHE on the test interface



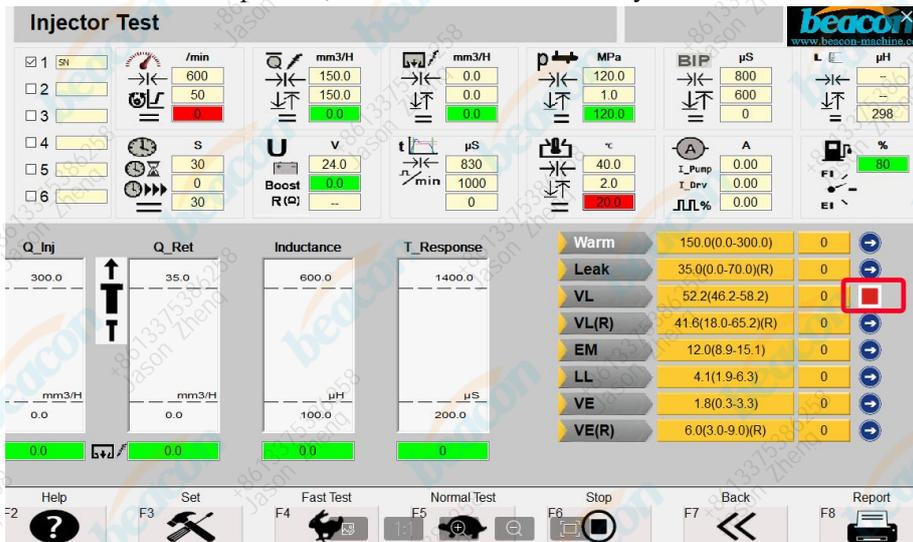


55. Can the system test the injector manually? For example, test one step? Without running the entire test process?



Yes, any device with system can be used.

As shown in the test process, click VL to test VL directly



56. Where to enter the interface?

Pump speed(RPM)		Test time(S)	
LEAK:	<input type="text" value="600"/>	LEAK:	<input type="text" value="40"/>
CLEAN:	<input type="text" value="600"/>	CLEAN:	<input type="text" value="60"/>
VL:	<input type="text" value="800"/>	VL:	<input type="text" value="40"/>
VL(R):	<input type="text" value="800"/>	VL(R):	<input type="text" value="40"/>
EM:	<input type="text" value="500"/>	EM:	<input type="text" value="40"/>
LL:	<input type="text" value="300"/>	LL:	<input type="text" value="40"/>
VE:	<input type="text" value="600"/>	VE:	<input type="text" value="40"/>

Pump direct	REV	Pump builds pre:
Pump valve	Open	Max. cup range(r
Flow sensors	Open	Cup control chan
Data template	EPS-708	

Enter from the set as shown

**Injector Test**

Part Number: 0445110807  
Test Step: WARM

	Q_Inj	Q_Ret	INJ 1	INJ 2	INJ 3	INJ 4	INJ 5	INJ 6
WARM	150.0(0.0-300.0)	35.0	0	0	0	0	0	0
LEAK	35.0(0.0-70.0)(R)	0	0	0	0	0	0	0
VL	65.6(60.6-70.6)	0	0	0	0	0	0	0
VL(R)	30.0(5.0-55.0)(R)	0	0	0	0	0	0	0
EM	14.1(11.1-17.1)	0	0	0	0	0	0	0
LL	5.0(3.0-7.0)	0	0	0	0	0	0	0
VE	1.7(0.4-3.0)	0	0	0	0	0	0	0
VE(R)	5.0(3.0-7.0)(R)	0	0	0	0	0	0	0
VE 2	3.0(0.3-5.7)	0	0	0	0	0	0	0

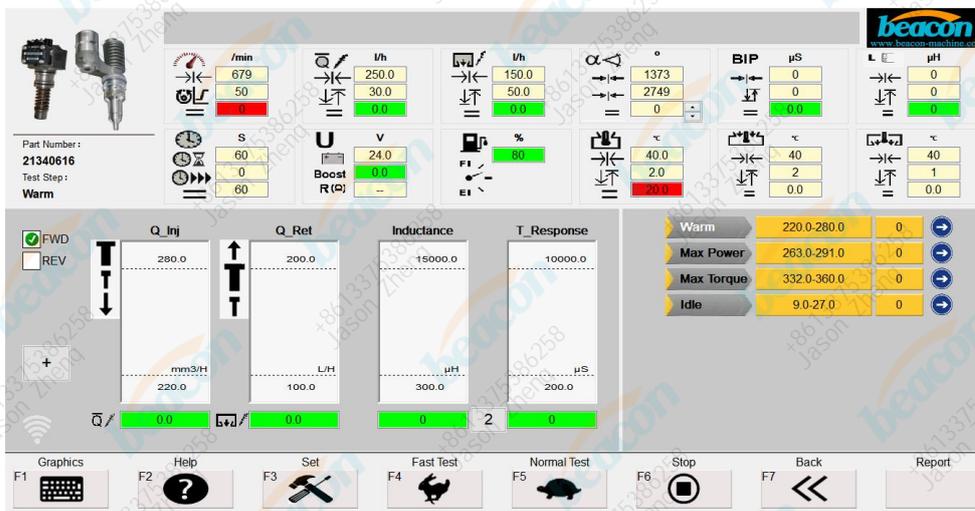
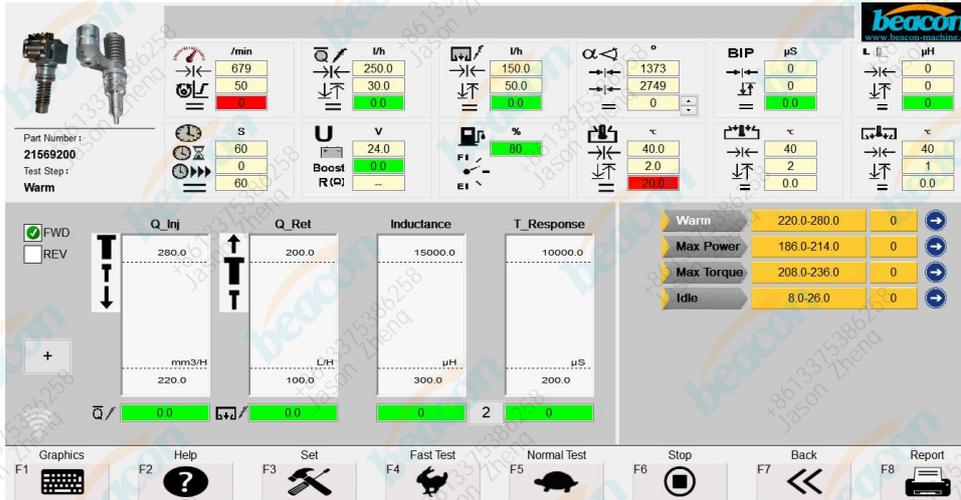
Keyboard: F1, F2, F3 (Set), F4, F5, F6, F7, F8

57. Can the system detect Volvo EUI Injector 21569200 21340616?

Yes.

Input these two models into Alibaba International Station or AliExpress to check which category they belong to.

These two belong to Delphi E3. Activate the Delphi E3 function, and there is data in the system



58. The screen of the being tested lights up for a while and then goes off. What is the reason?

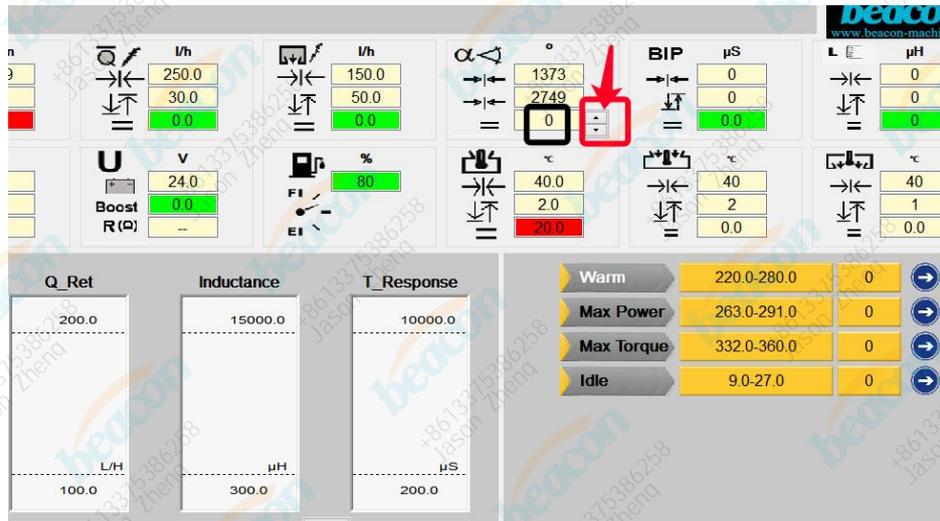
The VGA cable connecting the screen to the computer has a problem and needs to be replaced. Customers can purchase it locally



59. For equipment with system, when testing EUI EUP, there is no error, but no oil injection.

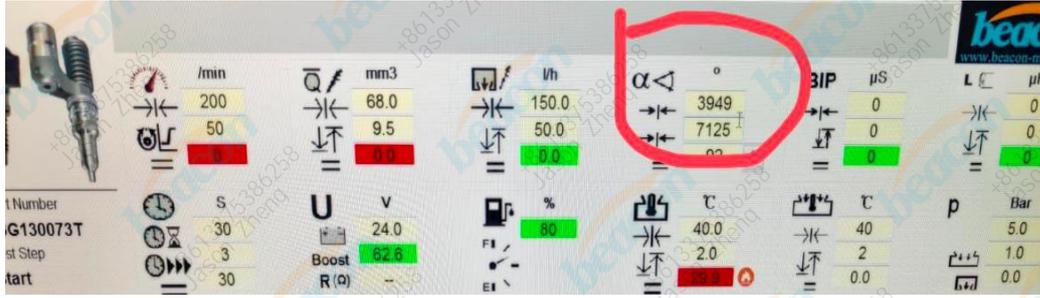
What is the reason?

You need to adjust the angle of the cam box, as shown in the picture, click the arrow and the angle will change (there is a video on adjusting the angle on the network disk)



## 60. system circuit board diagram

		<b>(9) Injector</b> V4 Injector driver Double valve injector 2 Injector driver Double valve injector 2 Injector driver Double valve injector 2 Injector driver		<b>(9) Temp. &amp; Pressure</b> Fuel Temperature Oil Temperature CR pressure sensor 1 CR Pressure sensor CR pressure sensor 2 CR (reserve) CR1 CR2 CR3 CR4 CR5 CR6 CR7 CR8 CR9 CR10 CR11 CR12 CR13 CR14 CR15 CR16 CR17 CR18 CR19 CR20 CR21 CR22 CR23 CR24 CR25 CR26 CR27 CR28 CR29 CR30 CR31 CR32 CR33 CR34 CR35 CR36 CR37 CR38 CR39 CR40 CR41 CR42 CR43 CR44 CR45 CR46 CR47 CR48 CR49 CR50 CR51 CR52 CR53 CR54 CR55 CR56 CR57 CR58 CR59 CR60 CR61 CR62 CR63 CR64 CR65 CR66 CR67 CR68 CR69 CR70 CR71 CR72 CR73 CR74 CR75 CR76 CR77 CR78 CR79 CR80 CR81 CR82 CR83 CR84 CR85 CR86 CR87 CR88 CR89 CR90 CR91 CR92 CR93 CR94 CR95 CR96 CR97 CR98 CR99 CR100 CR101 CR102 CR103 CR104 CR105 CR106 CR107 CR108 CR109 CR110 CR111 CR112 CR113 CR114 CR115 CR116 CR117 CR118 CR119 CR120 CR121 CR122 CR123 CR124 CR125 CR126 CR127 CR128 CR129 CR130 CR131 CR132 CR133 CR134 CR135 CR136 CR137 CR138 CR139 CR140 CR141 CR142 CR143 CR144 CR145 CR146 CR147 CR148 CR149 CR150 CR151 CR152 CR153 CR154 CR155 CR156 CR157 CR158 CR159 CR160 CR161 CR162 CR163 CR164 CR165 CR166 CR167 CR168 CR169 CR170 CR171 CR172 CR173 CR174 CR175 CR176 CR177 CR178 CR179 CR180 CR181 CR182 CR183 CR184 CR185 CR186 CR187 CR188 CR189 CR190 CR191 CR192 CR193 CR194 CR195 CR196 CR197 CR198 CR199 CR200 CR201 CR202 CR203 CR204 CR205 CR206 CR207 CR208 CR209 CR210 CR211 CR212 CR213 CR214 CR215 CR216 CR217 CR218 CR219 CR220 CR221 CR222 CR223 CR224 CR225 CR226 CR227 CR228 CR229 CR230 CR231 CR232 CR233 CR234 CR235 CR236 CR237 CR238 CR239 CR240 CR241 CR242 CR243 CR244 CR245 CR246 CR247 CR248 CR249 CR250 CR251 CR252 CR253 CR254 CR255 CR256 CR257 CR258 CR259 CR260 CR261 CR262 CR263 CR264 CR265 CR266 CR267 CR268 CR269 CR270 CR271 CR272 CR273 CR274 CR275 CR276 CR277 CR278 CR279 CR280 CR281 CR282 CR283 CR284 CR285 CR286 CR287 CR288 CR289 CR290 CR291 CR292 CR293 CR294 CR295 CR296 CR297 CR298 CR299 CR300 CR301 CR302 CR303 CR304 CR305 CR306 CR307 CR308 CR309 CR310 CR311 CR312 CR313 CR314 CR315 CR316 CR317 CR318 CR319 CR320 CR321 CR322 CR323 CR324 CR325 CR326 CR327 CR328 CR329 CR330 CR331 CR332 CR333 CR334 CR335 CR336 CR337 CR338 CR339 CR340 CR341 CR342 CR343 CR344 CR345 CR346 CR347 CR348 CR349 CR350 CR351 CR352 CR353 CR354 CR355 CR356 CR357 CR358 CR359 CR360 CR361 CR362 CR363 CR364 CR365 CR366 CR367 CR368 CR369 CR370 CR371 CR372 CR373 CR374 CR375 CR376 CR377 CR378 CR379 CR380 CR381 CR382 CR383 CR384 CR385 CR386 CR387 CR388 CR389 CR390 CR391 CR392 CR393 CR394 CR395 CR396 CR397 CR398 CR399 CR400 CR401 CR402 CR403 CR404 CR405 CR406 CR407 CR408 CR409 CR410 CR411 CR412 CR413 CR414 CR415 CR416 CR417 CR418 CR419 CR420 CR421 CR422 CR423 CR424 CR425 CR426 CR427 CR428 CR429 CR430 CR431 CR432 CR433 CR434 CR435 CR436 CR437 CR438 CR439 CR440 CR441 CR442 CR443 CR444 CR445 CR446 CR447 CR448 CR449 CR450 CR451 CR452 CR453 CR454 CR455 CR456 CR457 CR458 CR459 CR460 CR461 CR462 CR463 CR464 CR465 CR466 CR467 CR468 CR469 CR470 CR471 CR472 CR473 CR474 CR475 CR476 CR477 CR478 CR479 CR480 CR481 CR482 CR483 CR484 CR485 CR486 CR487 CR488 CR489 CR490 CR491 CR492 CR493 CR494 CR495 CR496 CR497 CR498 CR499 CR500 CR501 CR502 CR503 CR504 CR505 CR506 CR507 CR508 CR509 CR510 CR511 CR512 CR513 CR514 CR515 CR516 CR517 CR518 CR519 CR520 CR521 CR522 CR523 CR524 CR525 CR526 CR527 CR528 CR529 CR530 CR531 CR532 CR533 CR534 CR535 CR536 CR537 CR538 CR539 CR540 CR541 CR542 CR543 CR544 CR545 CR546 CR547 CR548 CR549 CR550 CR551 CR552 CR553 CR554 CR555 CR556 CR557 CR558 CR559 CR560 CR561 CR562 CR563 CR564 CR565 CR566 CR567 CR568 CR569 CR570 CR571 CR572 CR573 CR574 CR575 CR576 CR577 CR578 CR579 CR580 CR581 CR582 CR583 CR584 CR585 CR586 CR587 CR588 CR589 CR590 CR591 CR592 CR593 CR594 CR595 CR596 CR597 CR598 CR599 CR600 CR601 CR602 CR603 CR604 CR605 CR606 CR607 CR608 CR609 CR610 CR611 CR612 CR613 CR614 CR615 CR616 CR617 CR618 CR619 CR620 CR621 CR622 CR623 CR624 CR625 CR626 CR627 CR628 CR629 CR630 CR631 CR632 CR633 CR634 CR635 CR636 CR637 CR638 CR639 CR640 CR641 CR642 CR643 CR644 CR645 CR646 CR647 CR648 CR649 CR650 CR651 CR652 CR653 CR654 CR655 CR656 CR657 CR658 CR659 CR660 CR661 CR662 CR663 CR664 CR665 CR666 CR667 CR668 CR669 CR670 CR671 CR672 CR673 CR674 CR675 CR676 CR677 CR678 CR679 CR680 CR681 CR682 CR683 CR684 CR685 CR686 CR687 CR688 CR689 CR690 CR691 CR692 CR693 CR694 CR695 CR696 CR697 CR698 CR699 CR700 CR701 CR702 CR703 CR704 CR705 CR706 CR707 CR708 CR709 CR710 CR711 CR712 CR713 CR714 CR715 CR716 CR717 CR718 CR719 CR720 CR721 CR722 CR723 CR724 CR725 CR726 CR727 CR728 CR729 CR730 CR731 CR732 CR733 CR734 CR735 CR736 CR737 CR738 CR739 CR740 CR741 CR742 CR743 CR744 CR745 CR746 CR747 CR748 CR749 CR750 CR751 CR752 CR753 CR754 CR755 CR756 CR757 CR758 CR759 CR760 CR761 CR762 CR763 CR764 CR765 CR766 CR767 CR768 CR769 CR770 CR771 CR772 CR773 CR774 CR775 CR776 CR777 CR778 CR779 CR780 CR781 CR782 CR783 CR784 CR785 CR786 CR787 CR788 CR789 CR790 CR791 CR792 CR793 CR794 CR795 CR796 CR797 CR798 CR799 CR800 CR801 CR802 CR803 CR804 CR805 CR806 CR807 CR808 CR809 CR810 CR811 CR812 CR813 CR814 CR815 CR816 CR817 CR818 CR819 CR820 CR821 CR822 CR823 CR824 CR825 CR826 CR827 CR828 CR829 CR830 CR831 CR832 CR833 CR834 CR835 CR836 CR837 CR838 CR839 CR840 CR841 CR842 CR843 CR844 CR845 CR846 CR847 CR848 CR849 CR850 CR851 CR852 CR853 CR854 CR855 CR856 CR857 CR858 CR859 CR860 CR861 CR862 CR863 CR864 CR865 CR866 CR867 CR868 CR869 CR870 CR871 CR872 CR873 CR874 CR875 CR876 CR877 CR878 CR879 CR880 CR881 CR882 CR883 CR884 CR885 CR886 CR887 CR888 CR889 CR890 CR891 CR892 CR893 CR894 CR895 CR896 CR897 CR898 CR899 CR900 CR901 CR902 CR903 CR904 CR905 CR906 CR907 CR908 CR909 CR910 CR911 CR912 CR913 CR914 CR915 CR916 CR917 CR918 CR919 CR920 CR921 CR922 CR923 CR924 CR925 CR926 CR927 CR928 CR929 CR930 CR931 CR932 CR933 CR934 CR935 CR936 CR937 CR938 CR939 CR940 CR941 CR942 CR943 CR944 CR945 CR946 CR947 CR948 CR949 CR950 CR951 CR952 CR953 CR954 CR955 CR956 CR957 CR958 CR959 CR960 CR961 CR962 CR963 CR964 CR965 CR966 CR967 CR968 CR969 CR970 CR971 CR972 CR973 CR974 CR975 CR976 CR977 CR978 CR979 CR980 CR981 CR982 CR983 CR984 CR985 CR986 CR987 CR988 CR989 CR990 CR991 CR992 CR993 CR994 CR995 CR996 CR997 CR998 CR999 CR1000 CR1001 CR1002 CR1003 CR1004 CR1005 CR1006 CR1007 CR1008 CR1009 CR1010 CR1011 CR1012 CR1013 CR1014 CR1015 CR1016 CR1017 CR1018 CR1019 CR1020 CR1021 CR1022 CR1023 CR1024 CR1025 CR1026 CR1027 CR1028 CR1029 CR1030 CR1031 CR1032 CR1033 CR1034 CR1035 CR1036 CR1037 CR1038 CR1039 CR1040 CR1041 CR1042 CR1043 CR1044 CR1045 CR1046 CR1047 CR1048 CR1049 CR1050 CR1051 CR1052 CR1053 CR1054 CR1055 CR1056 CR1057 CR1058 CR1059 CR1060 CR1061 CR1062 CR1063 CR1064 CR1065 CR1066 CR1067 CR1068 CR1069 CR1070 CR1071 CR1072 CR1073 CR1074 CR1075 CR1076 CR1077 CR1078 CR1079 CR1080 CR1081 CR1082 CR1083 CR1084 CR1085 CR1086 CR1087 CR1088 CR1089 CR1090 CR1091 CR1092 CR1093 CR1094 CR1095 CR1096 CR1097 CR1098 CR1099 CR1100 CR1101 CR1102 CR1103 CR1104 CR1105 CR1106 CR1107 CR1108 CR1109 CR1110 CR1111 CR1112 CR1113 CR1114 CR1115 CR1116 CR1117 CR1118 CR1119 CR1120 CR1121 CR1122 CR1123 CR1124 CR1125 CR1126 CR1127 CR1128 CR1129 CR1130 CR1131 CR1132 CR1133 CR1134 CR1135 CR1136 CR1137 CR1138 CR1139 CR1140 CR1141 CR1142 CR1143 CR1144 CR1145 CR1146 CR1147 CR1148 CR1149 CR1150 CR1151 CR1152 CR1153 CR1154 CR1155 CR1156 CR1157 CR1158 CR1159 CR1160 CR1161 CR1162 CR1163 CR1164 CR1165 CR1166 CR1167 CR1168 CR1169 CR1170 CR1171 CR1172 CR1173 CR1174 CR1175 CR1176 CR1177 CR1178 CR1179 CR1180 CR1181 CR1182 CR1183 CR1184 CR1185 CR1186 CR1187 CR1188 CR1189 CR1190 CR1191 CR1192 CR1193 CR1194 CR1195 CR1196 CR1197 CR1198 CR1199 CR1200 CR1201 CR1202 CR1203 CR1204 CR1205 CR1206 CR1207 CR1208 CR1209 CR1210 CR1211 CR1212 CR1213 CR1214 CR1215 CR1216 CR1217 CR1218 CR1219 CR1220 CR1221 CR1222 CR1223 CR1224 CR1225 CR1226 CR1227 CR1228 CR1229 CR1230 CR1231 CR1232 CR1233 CR1234 CR1235 CR1236 CR1237 CR1238 CR1239 CR1240 CR1241 CR1242 CR1243 CR1244 CR1245 CR1246 CR1247 CR1248 CR1249 CR1250 CR1251 CR1252 CR1253 CR1254 CR1255 CR1256 CR1257 CR1258 CR1259 CR1260 CR1261 CR1262 CR1263 CR1264 CR1265 CR1266 CR1267 CR1268 CR1269 CR1270 CR1271 CR1272 CR1273 CR1274 CR1275 CR1276 CR1277 CR1278 CR1279 CR1280 CR1281 CR1282 CR1283 CR1284 CR1285 CR1286 CR1287 CR1288 CR1289 CR1290 CR1291 CR1292 CR1293 CR1294 CR1295 CR1296 CR1297 CR1298 CR1299 CR1300 CR1301 CR1302 CR1303 CR1304 CR1305 CR1306 CR1307 CR1308 CR1309 CR1310 CR1311 CR1312 CR1313 CR1314 CR1315 CR1316 CR1317 CR1318 CR1319 CR1320 CR1321 CR1322 CR1323 CR1324 CR1325 CR1326 CR1327 CR1328 CR1329 CR1330 CR1331 CR1332 CR1333 CR1334 CR1335 CR1336 CR1337 CR1338 CR1339 CR1340 CR1341 CR1342 CR1343 CR1344 CR1345 CR1346 CR1347 CR1348 CR1349 CR1350 CR1351 CR1352 CR1353 CR1354 CR1355 CR1356 CR1357 CR1358 CR1359 CR1360 CR1361 CR1362 CR1363 CR1364 CR1365 CR1366 CR1367 CR1368 CR1369 CR1370 CR1371 CR1372 CR1373 CR1374 CR1375 CR1376 CR1377 CR1378 CR1379 CR1380 CR1381 CR1382 CR1383 CR1384 CR1385 CR1386 CR1387 CR1388 CR1389 CR1390 CR1391 CR1392 CR1393 CR1394 CR1395 CR1396 CR1397 CR1398 CR1399 CR1400 CR1401 CR1402 CR1403 CR1404 CR1405 CR1406 CR1407 CR1408 CR1409 CR1410 CR1411 CR1412 CR1413 CR1414 CR1415 CR1416 CR1417 CR1418 CR1419 CR1420 CR1421 CR1422 CR1423 CR1424 CR1425 CR1426 CR1427 CR1428 CR1429 CR1430 CR1431 CR1432 CR1433 CR1434 CR1435 CR1436 CR1437 CR1438 CR1439 CR1440 CR1441	
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Pulse width. It means the amount of fuel injected.

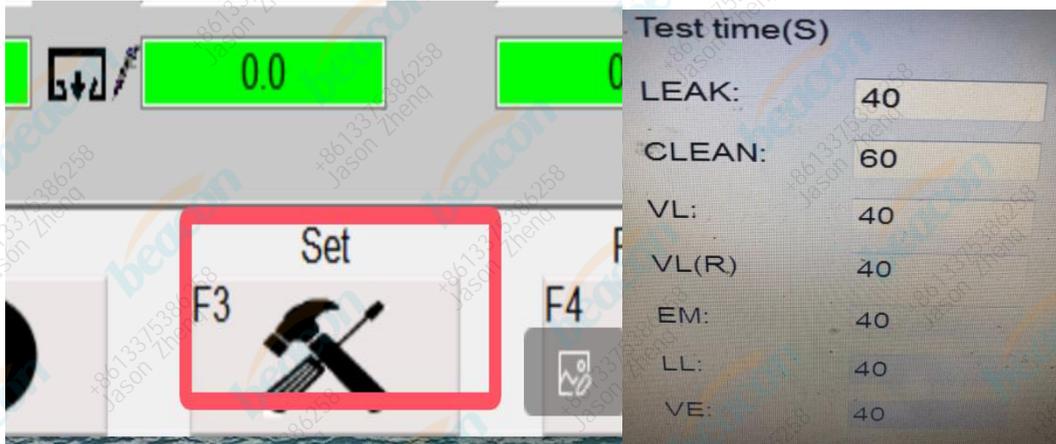
64. When testing HEUI, how do you set the angle correctly?

The amount of fuel injected is different at different angles. When the amount of fuel injected is the largest, the angle is correct.

65. The customer wants to increase the time of each test step, how to set it?

Step 1: Click Settings.

Step 2: Enter the time.



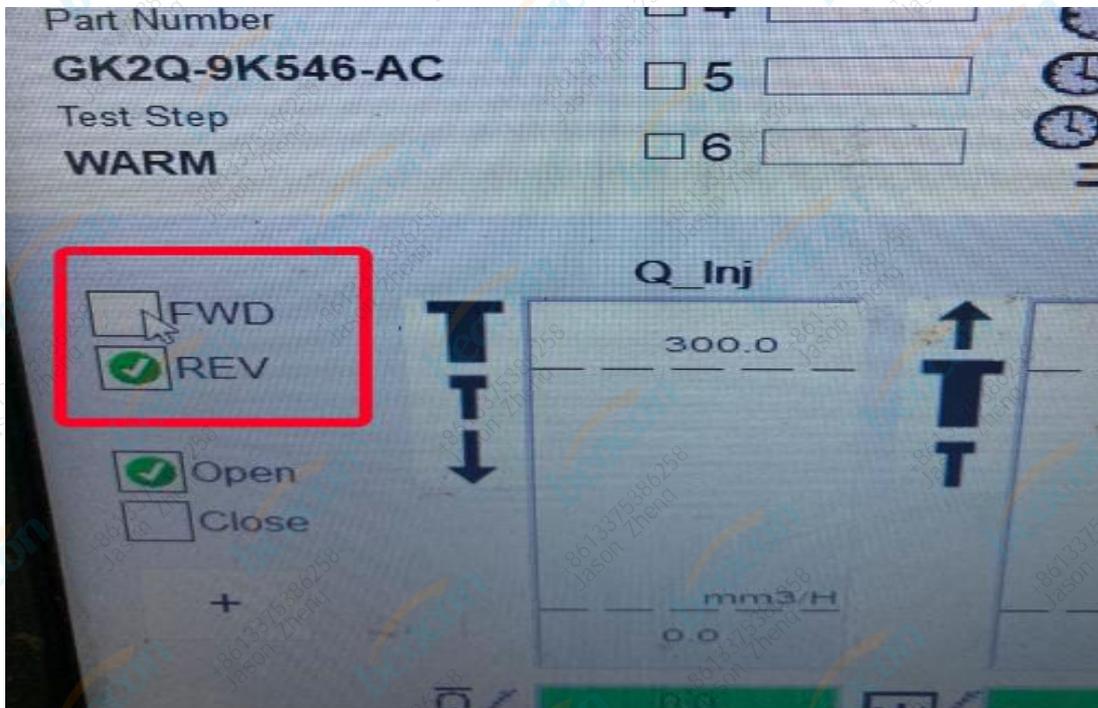
66. system common injector main wiring harness picture



67. system piezoelectric injector main wiring harness picture



68. The steering direction of the test bench system is converted as shown in the figure?



122. What does REV and FWD mean?

REV----Forward

FWD----Reverse

123. How to change the speed?

Step 1: Click: set

Step 2: Input: Speed

