

CR919 Multifunctional EUI EUP HEUI common rail diesel injector fuel injection pump test bench

(Standard configuration 15KW+380V 3 phase)





1. Machine dimension (L*W*H):205*130*192 cm
2. Packing dimension (L*W*H):216*138*204 cm

TECHNICAL PARAMETERS

1.Host power	15KW/18.5KW/22KW
2.Spindle speed	0-3000r / min
3.Host center height	128 cm
4.Wheel oil pump	10L / min
5.Oil supply pressure	0-0.4mpa
6.Fuel tank capacity	40L
7.Oil tank capacity	20L
8.High pressure oil supply	0-250mpa
9.Oil supply	0-35mpa
10.Hotbed control	40°C ± 2°C
11.Oil hotbed	40°C ± 2°C
12.Drive voltage	0-180v
13.Drive current	0-25A
14.Input voltage	220v-380v (according to customer needs)
15.Machine dimension(CM):	205*130*192
16.Weight (KG):	1250

PRODUCT DETAILS



control Panel



Flow sensors



Voltage indicator



Motor



Cooling fan



Distribution panel



Oil tank + Diesel tank



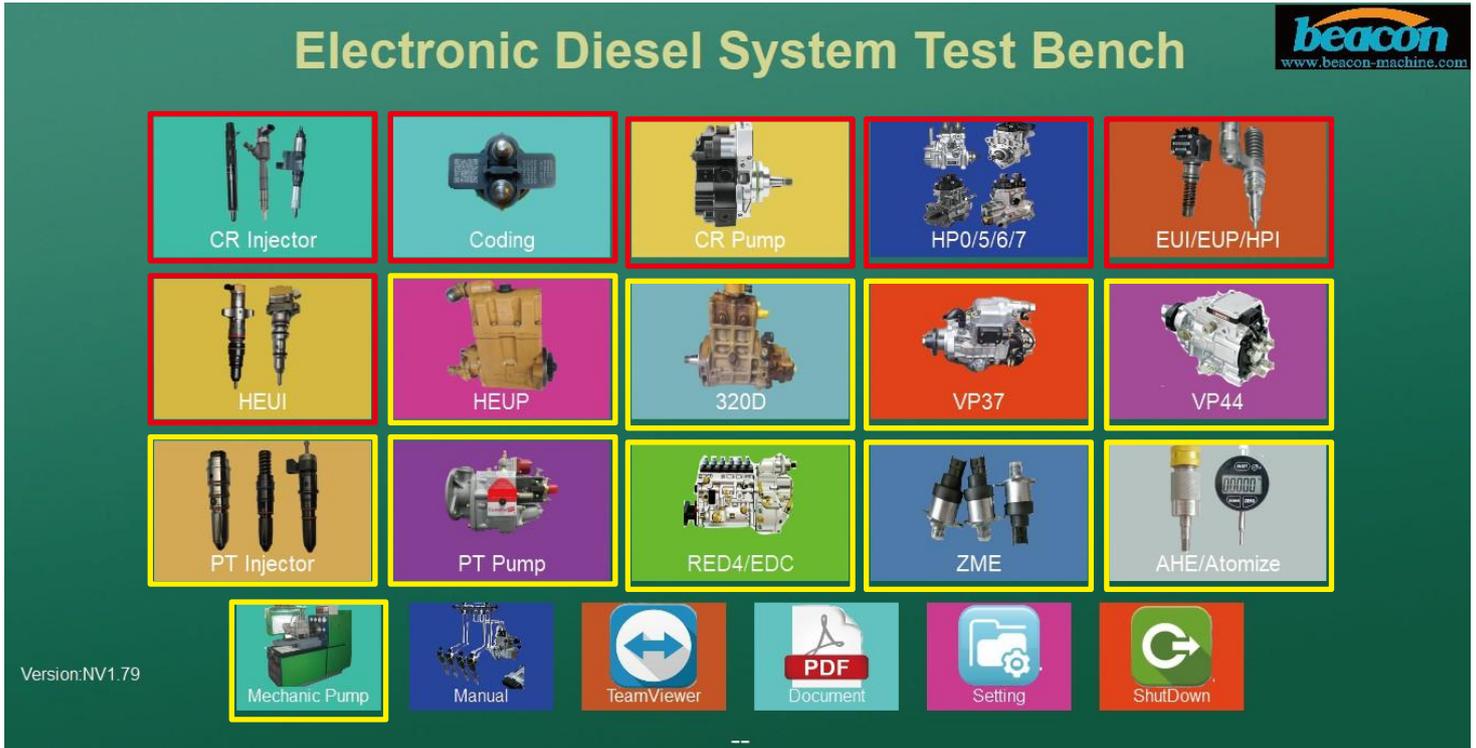
Wiring harness panel



Solenoid valve and filter element

DIESEL COMMON RAIL SYSTEM SOFTWARE PART

1. Main interface



Basic function



Optional function

1.1 CR Injector

1.2 Coding

1.3 CR Pump

1.4 HP0/5/6/7

1.5 EUI/EUP/HPI

1.6 HEUI

1.7 HEUP

1.8 320D

1.9 VP37

1.10 VP44

1.11 PT Injector

1.12 PT Pump

1.13 RED4/EDC

1.14 ZME

1.15 AHE/Atomize

1.16 Mechanical Pump

1.17 Manual

1.18 TeamViewer

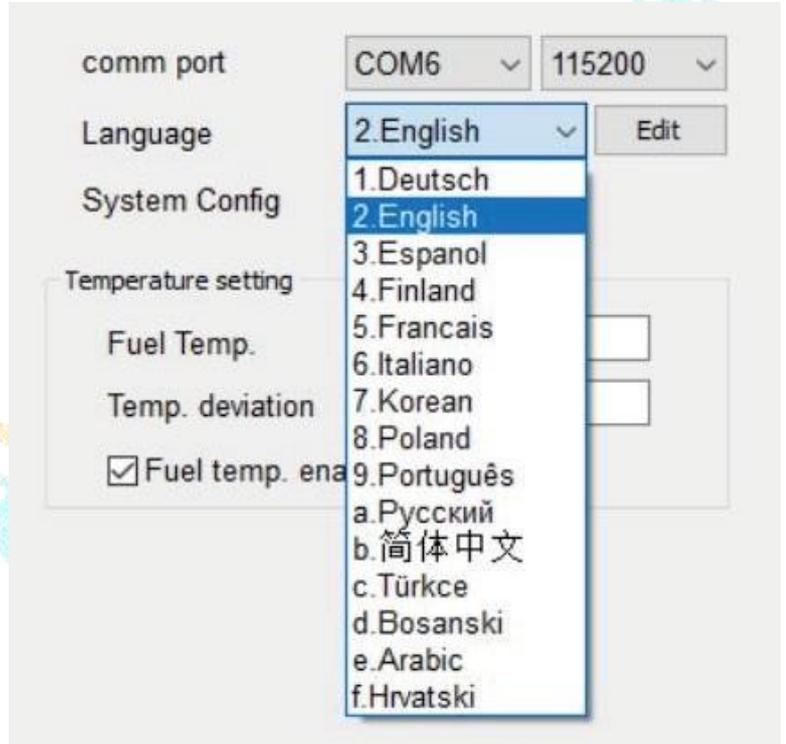
1.19 Document

1.20 Setting

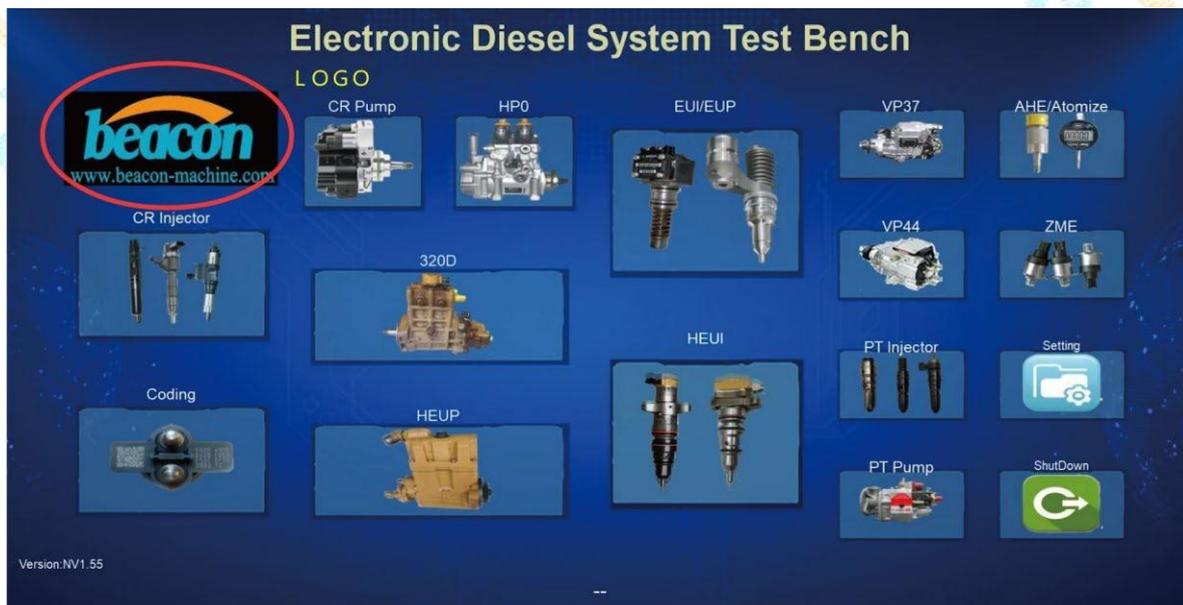
1.21 ShutDown

2. How many languages are there in the control system?

Software supports 15 languages, including Chinese, English, Spanish, Finnish, French, Italian, Korean, Polish, Portuguese, Russian, Simplified Chinese, Turkish, Bosnian, Arabic, and Croatian.



Note: Other main interface options and **customer LOGO** can be customized.



BASIC FUNCTION

1. Common injectors test
2. Piezo injector test
3. Common rail pump test
4. Denso HP0 pump test
5. Test Heui CAT C7 C9 3126B&3116
6. Bosch denso, siemens, Delphi coding functions
7. Test Eui eup with TU-A cam box

1.Common injectors test

(The latest system has 7543 injector test data, including Bosch 2493, Denso 4287, Siemens 171, Delphi 449, Carter 17, Cummins 54, MTU 19)

The screenshot displays the Beacon software interface. The top window shows a search for 'Type-PN' with a list of manufacturers including Bosch, Denso, Siemens, Delphi, Caterpillar, BYC, Cummins, LongBeng, Yu Chai, XinFeng, ChongQing, and L'ORANGE. A search icon is visible. Below the search results, a table lists 10 Denso injector part numbers (3483-3499) with their respective 'Type-PN', 'Maker', and 'Version'.

Type-PN	Maker	Version
3483	Denso	Manufacturer
3484	Denso	Manufacturer
3485	Denso	Manufacturer
3486	Denso	Manufacturer
3487	Denso	Manufacturer
3488	Denso	Manufacturer
3489	Denso	Manufacturer
3490	Denso	Manufacturer
3491	Denso	Manufacturer
3492	Denso	Manufacturer
3493	Denso	Manufacturer
3494	Denso	Manufacturer
3495	Denso	Manufacturer
3496	Denso	Manufacturer
3497	Denso	Manufacturer
3498	Denso	Manufacturer
3499	Denso	Manufacturer

The bottom window shows the 'Injector Test' configuration screen. It includes fields for 'Part Number' (0445110352), 'Test Step' (WARM), and various test parameters such as flow rate (Q_Inj, Q_Ret), inductance, and temperature response. A 'Report' button is highlighted in the bottom right corner.

Can print Test report.

The logo of the test report can be changed or put yours

TEST REPORT

Servicer:
Tel:
Address:

Tester:
Fax:

Repairer:
Tel:
Address:

Customer:
Fax:

Date: 07.04.2023 17:46

Part Number: 0445010012 Maker: Bosch

Serial Number: SN

Step	P_rail (Mpa)	I_ZME (A)	Q_pump (L/H)	Q_Real (L/H)	Assess
Max Power	100.0	0.40	46.7±4.6	2.8	×
No Flow	100.0	1.60	1.0±1.0	0.8	✓
Max Power	135.0	0.40	44.8±4.1	2.7	×

2. Piezo injector test

Injector Test

Part Number
A2C335190080

Test Step
WARM

<input checked="" type="checkbox"/> 1 SN	/min 600	mm3/H 150.0	mm3/H 0.0	MPa 100.0	BIP μS 600	C μF --
<input type="checkbox"/> 2	/min 50	mm3/H 150.0	mm3/H 0.0	MPa 1.0	BIP μS 500	C μF --
<input type="checkbox"/> 3	/min 0	mm3/H 0.0	mm3/H 0.0	MPa 100.0	BIP μS 0	C μF 0
<input type="checkbox"/> 4	/min 30	mm3/H 24.0	mm3/H 0.0	MPa 40.0	BIP μS 0.00	C μF 80
<input type="checkbox"/> 5	/min 0	mm3/H 0.0	mm3/H 750	MPa 2.0	BIP μS 1000	C μF 0.00
<input type="checkbox"/> 6	/min 30	mm3/H 0.0	mm3/H 1000	MPa 20.0	BIP μS 0	C μF 0.00

FWD

REV

Open

Close

+

Q_Inj 300.0

Q_Ret 35.0

mm3/H

Capacitance 4.2

μF

T_Response 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

Keyboard

Help

Set

Fast Test

Normal Test

Stop

Back

Report

3. Prueba de la bomba common rail

Description
Type-PN
Maker

Data
Common Rail Pump There are 1039 part numbers

Type-PN	Maker	Type
10...	294050-0044	Denso CR
10...	294050-0060	Denso CR
10...	294050-0061	Denso CR
10...	294050-0065	Denso CR
10...	294050-0066	Denso CR
10...	294050-0071	Denso CR
10...	294050-0081	Denso CR
10...	294050-0105	Denso CR
10...	294050-0138	Denso CR
10...	294050-0661	Denso CR
1011	294050-0860	Denso CR
10...	33100-4A700	Delphi CR
10...	3Q-9B395-AD	Siemens CR
10...	4306945	Cummins Cumminus Pump
10...	4327066	Cummins Cumminus Pump
10...	4921431	Cummins Cumminus Pump
10...	4G33TC-180100	XinFeng CRP

Exit Keyboard Add Modify Delete Find Back Continue

4. Denso HP0 pump test

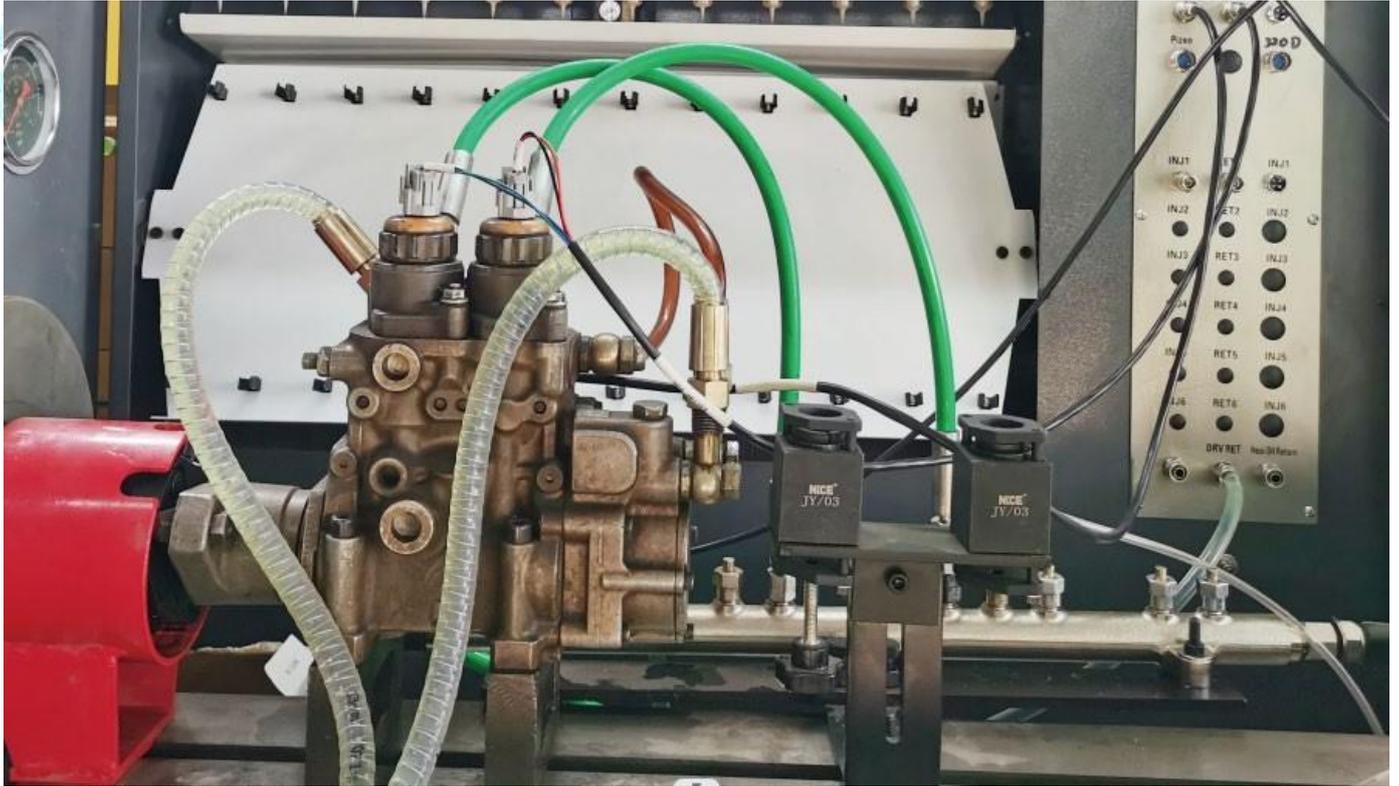
PN: 094000-0145
Test Step: Start

200	18.5	0.0	16.0	0
50	3.5	0.0	1.0	0
0	0.0	0.0	0.0	0

Q_Out: 22.0, Q_Ret: 35.0

Start: 15.0-22.0, Full Load: 101.7-118.7, Mid Load: 76.6-91.6, Idle: 32.0-41.0, PCV1_1: 7.5-10.9, PCV1_2: 38.3-45.7, PCV2_1: 7.5-10.9, PCV2_2: 38.3-45.7

Keyboard Help Set Fast Test Normal Test Stop Back Report



5. Test HEUI CAT C7 C9 3126B&3116

Part Number: 10R7224
Test Step: LEAK

Q_{inj} /min	Q_{ret} mm3/H	Q_{ind} mm3/H	p MPa	BIP μS	L μH
800	0.0	15.0	25.0	3000	0
50	0.0	15.0	1.0	1900	0
800	0.0	0.0	25.0	--	0

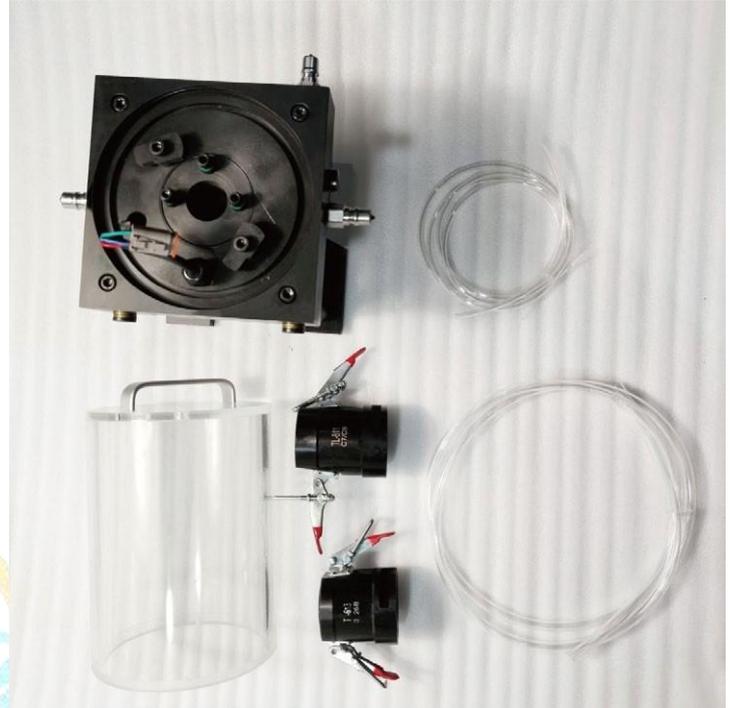
S	U V	t μs	τ °C	τ °C	%
60	24.0	0	40.0	45.0	80
0	Boost 0.9	0	2.0	5.0	80
60	R (Ω) 0.00	0.00	20.0	38.5	

Q_{Inj}	Q_{Ret}	Inductance	τ_{Response}
35.0	30.0	8000.0	4900.0
mm3/H	mm3/H	μH	μS
0.0	0.0	500.0	1100.0

	Inject	Return
LEAK	0.0-0.0	0 0.0-30.0(R)
VL	108.1-131.9	0 410.0-610.0(R)
LL	38.1-51.9	0 295.0-395.0(R)
VE	2.3-8.7	0 350.0-430.0(R)
START	14.0-31.0	0 225.0-325.0(R)

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

C7 C9 3126B&3116 Accessories



6. Bosch, Denso, Siemens, Delphi coding functions

Injector Coding

Type-PN
Input PN

Maker

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

Calibration injector

Data

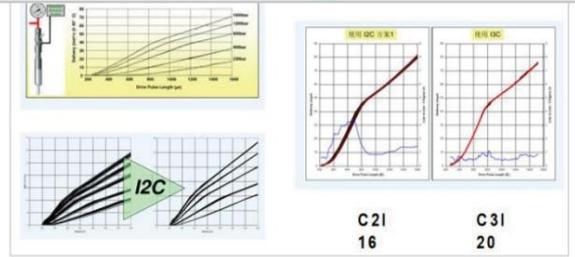
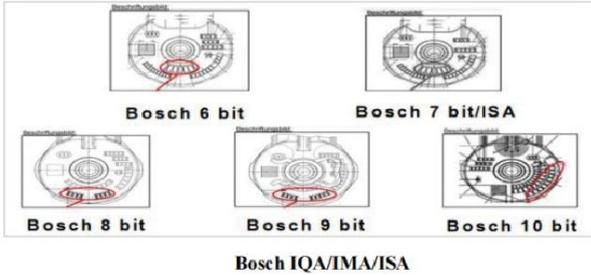
There are 4185 part numbers

	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

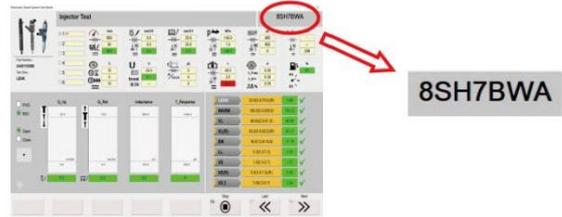
F1 Exit F2 Keyboard F3 Add F4 Modify F5 Delete F6 Find F7 Back F8 Continue



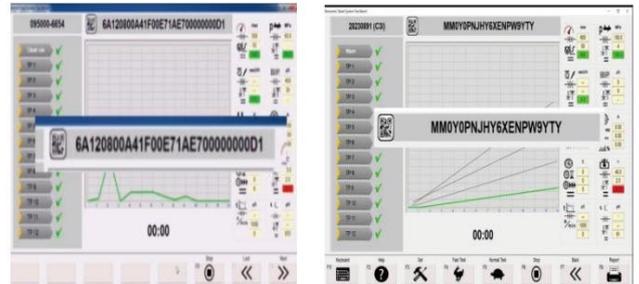
- Bosch IQA / IMA / IS
- Denso 16/22/24/26/28/30/32QR
- Delphi I2C / I3C
- Siemens IIC
- Cummins XPI



Delphi C21/C31



Bosch IMA-7



Denso 30QR

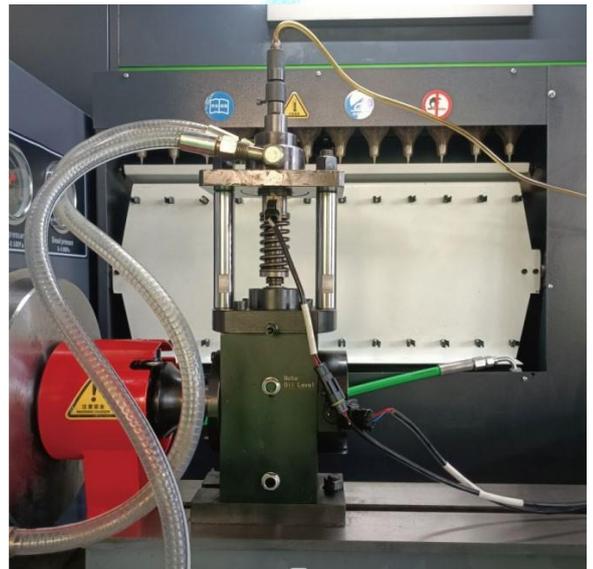
Delphi C31

7. Test EUI EUP with TU-A cam box



TU-A CAMBOX with 10 adapters

- IVECO 8
- M11
- CAT 3196 3176A 3176B
- VOLVO A3 E1 E3
- CAT3406 C13 C15
- IVECO 10/13 VOLVO D12A D12C
- Audi VW
- DEUTZ EUP
- Delphi EUP
- WT EUP



ACCESSORIES INCLUDED WITH BASIC FUNCTIONS



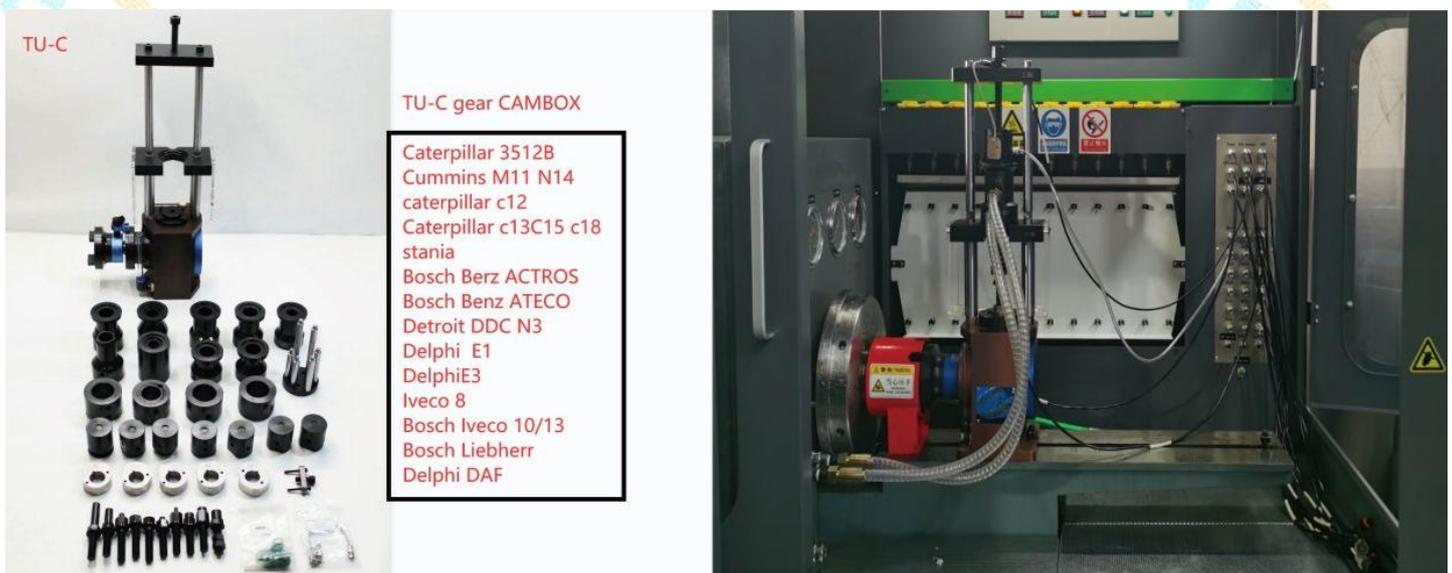
OPTIONAL FUNCTION

1. Test EUI EUP

1.1 TU-A replaced by TU-B EUI EUP CAMBOX



1.2 TU-A replaced by TU-C EUI EUP CAMBOX



1.3 TU-A replaced by TU-D EUI EUP CAMBOX



1.4 TU-A replaced by TU-E EUI EUP CAMBOX



2. Test HEUI(6 types of adapters)



2.1 CAT 3126A

2.2 CAT3412E

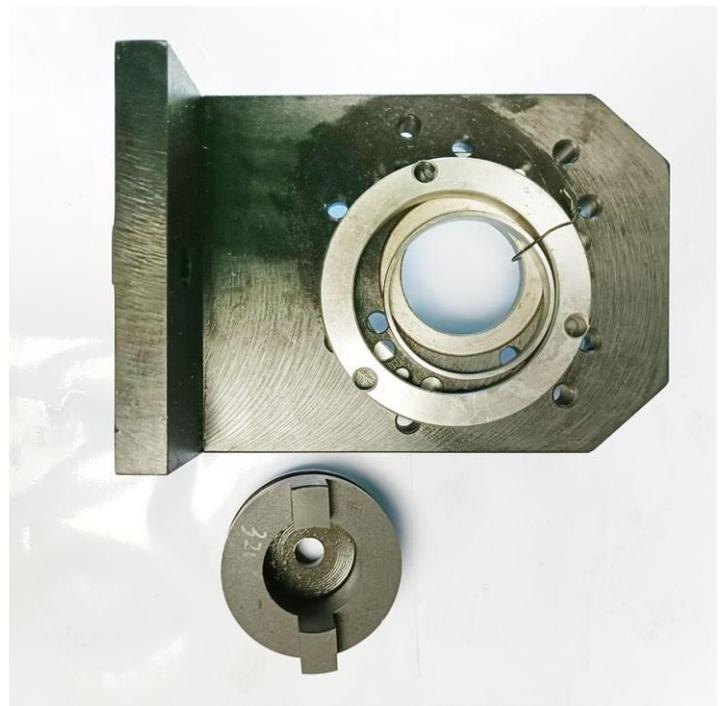
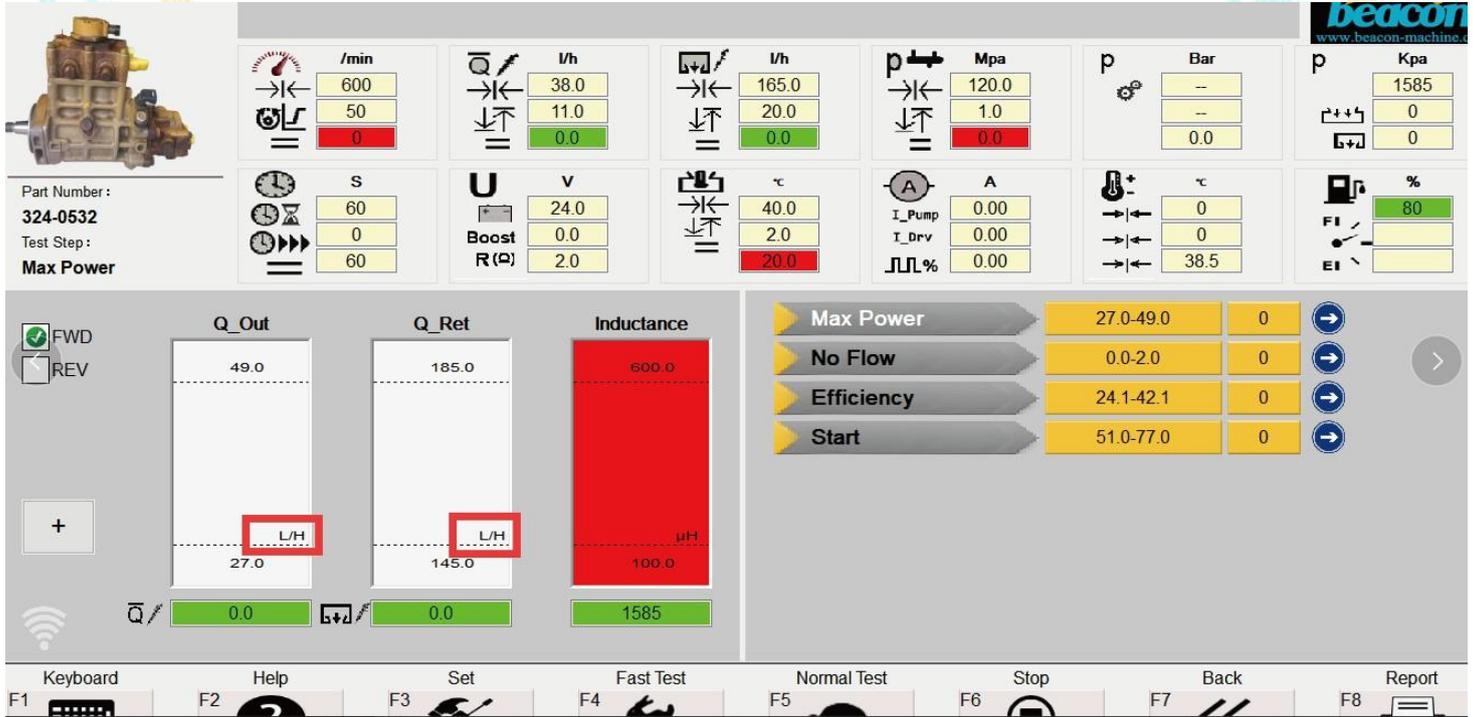
2.3 NAVISTAR

2.4 ISUZU

2.5 Ford G2.8& Ford 6.0

2.6 Ford G2.9

3. Test CAT 320D pump



Need with this Accessories

4. Test CAT C7 C9 pump

Description

Type-PN

Maker

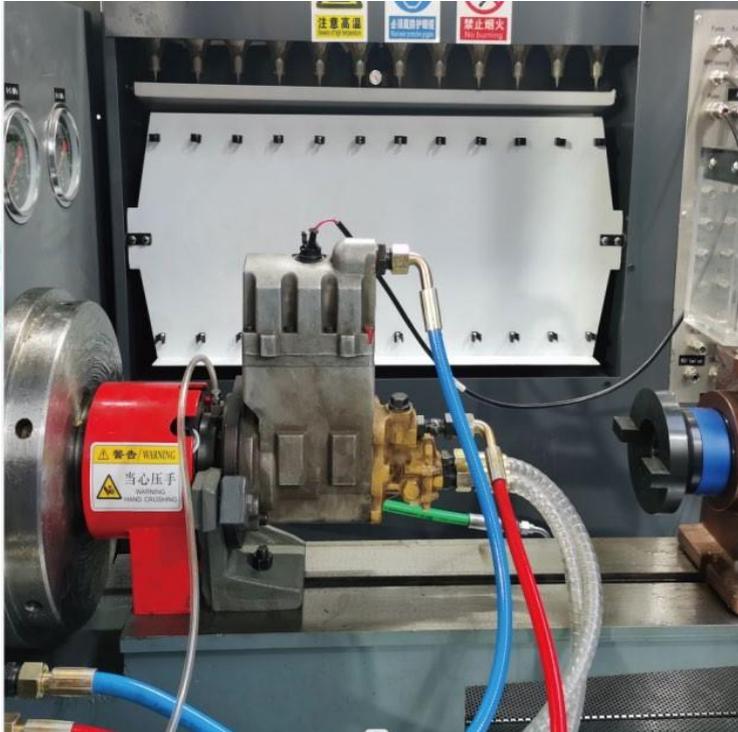
- Bosch
- Denso
- Siemens
- Delphi
- Caterpillar
- BYC
- Cummins
- LongBeng
- Yu Chai
- XinFeng
- ChongQing
- L'ORANGE

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



Need with this Accessories

5. Test 2 injectors in same time

(2 injectors testing system + additionally add 1 flow sensor + 1 high-pressure oil pipe + 2 solenoid valves + 2 filter elements + 1 filter + 1 double injector clamp)

Part Number
28397569
Test Step
WARM

Injector Test

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

<input type="checkbox"/> FWD	Q_Inj 300.0 mm3/H	Q_Ret 35.0 mm3/H	Inductance 500.0 μH	INJ 1	INJ 2
<input checked="" type="checkbox"/> REV				WARM 150.0(0.0-300.0)	0
<input checked="" type="checkbox"/> Open				LEAK 35.0(0.0-70.0)(R)	0
<input type="checkbox"/> Close				VL 60.0(52.5-67.5)	0
<input type="checkbox"/> +				VL(R) 45.0(23.0-67.0)(R)	0
				EM 20.0(15.8-24.2)	0
				LL 5.2(2.1-8.3)	0
				VE 1.6(0.3-2.9)	0

Graphics
F1

Help
F2

Set
F3

Fast Test
F4

Normal Test
F5

Stop
F6

Back
F7

Report
F8



6. Test 4 injectors in same time

(4 injector test system + 3 additional flow sensors + 3 high-pressure oil pipes + 6 solenoid valves + 6 filter elements + 3 filters + 1 four-injector fixture)

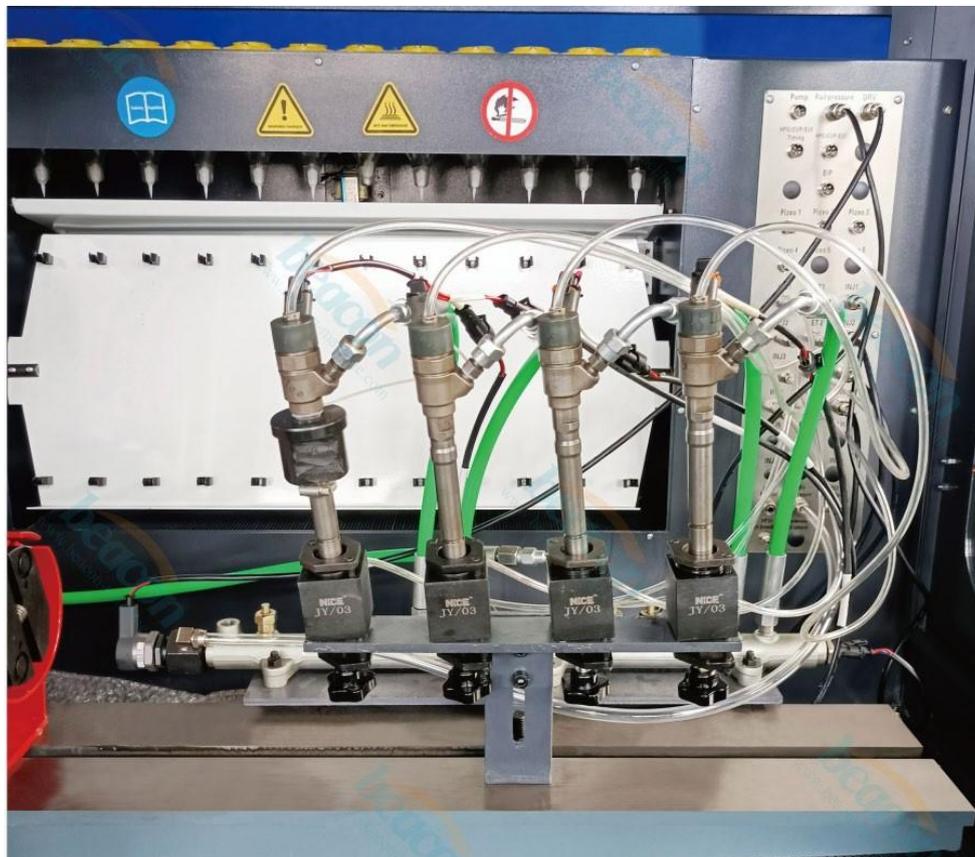
Injector Test

Part Number: 0445110010
Test Step: WARM

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

	Q_Inj	Q_Ret	Inductance	INJ 1	INJ 2	INJ 3	INJ 4
WARM	300.0	35.0	600.0	150.0(0.0-300.0)	0	0	0
LEAK				35.0(0.0-70.0)(R)	0	0	0
VL				50.9(46.9-54.9)	0	0	0
VL(R)				30.0(5.0-55.0)(R)	0	0	0
EM				18.8(16.3-21.3)	0	0	0
LL				4.7(3.1-6.3)	0	0	0
VE				1.5(0.3-2.7)	0	0	0
VE(R)				5.0(3.0-7.0)(R)	0	0	0
VE 2				3.0(0.3-5.7)	0	0	0

Buttons: Graphics (F1), Help (F2), Set (F3), Fast Test (F4), Normal Test (F5), Stop (F6), Back (F7), Report (F8)



7. Test 6 injectors in same time

(6 injector test system + 5 additional flow sensors + 5 high-pressure oil pipes + 10 solenoid valves + 10 filter elements + 5 filters + 1 six-injector fixture)

Part Number
095000-2586
Test Step
WARM

Injector Test

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

FWD
 REV
 Open
 Close

+
mm3/H
0.0

Q_Inj: 300.0
Q_Ret: 35.0

mm3/H
0.0

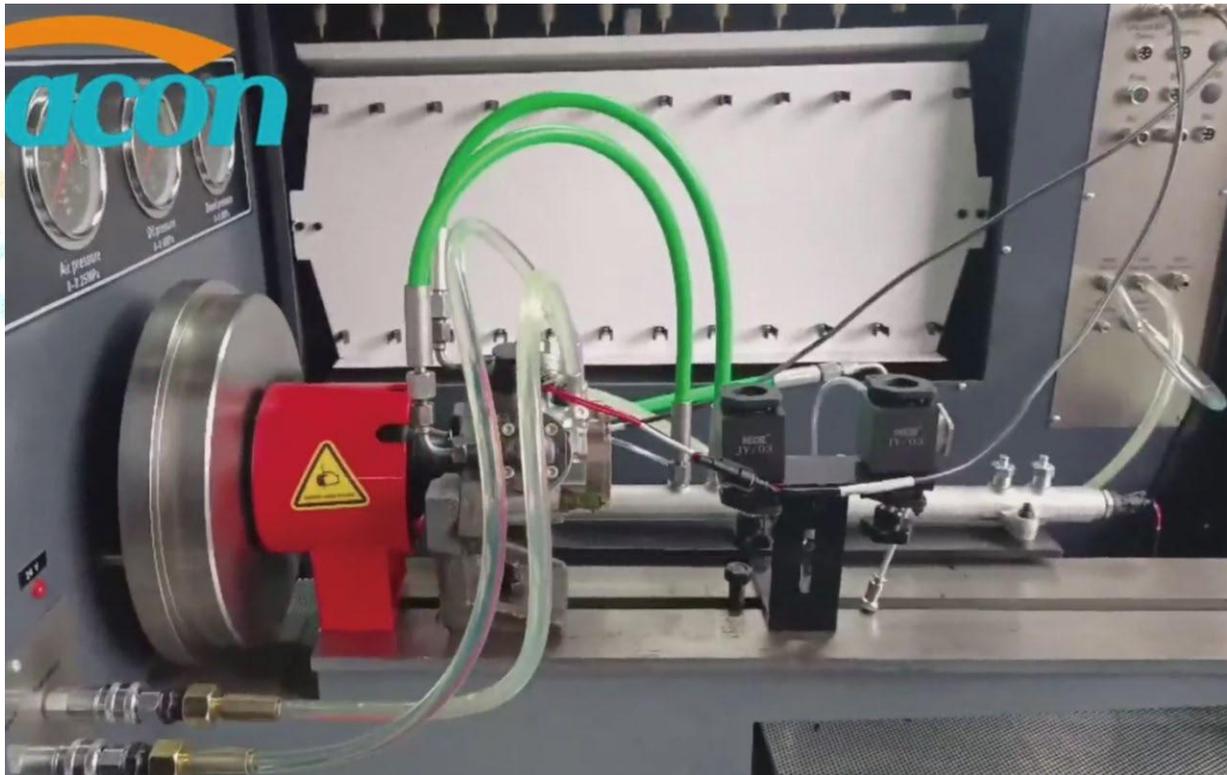
	INJ 1	INJ 2	INJ 3	INJ 4	INJ 5	INJ 6
WARM	150.0(0.0-300.0)	0	0	0	0	0
LEAK	20.0(5.0-35.0)(R)	0	0	0	0	0
Back	35.0(10.0-60.0)(R)	0	0	0	0	0
Max	208.7(196.1-221.3)	0	0	0	0	0
TL	58.0(49.5-66.5)	0	0	0	0	0
LL	14.2(9.4-19.0)	0	0	0	0	0
VE	4.2(2.4-6.0)	0	0	0	0	0

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



Need with this Accessories

8. Test CP4 pump



9. Test Cummins PT injector (This function must be equipped with TU-C/D/E cam box)

Part Number: 3077760
Test Step: Start

Speed /min	Flow mm3	Volume l/h	Angle °	BIP μS	Inductance μH
400	161.0	150.0	1185	0	0
50	15.0	50.0	4562	0	0
0	0.0	0.0	0	0.0	0
Time S	Voltage V	Boost %	Temp °C	Temp °C	Temp °C
30	24.0	80	40.0	40	40
0	0.0		2.0	2	1
30	--		20.0	0.0	0.0

Q_Inj mm3/H	Q_Ret L/H	Inductance μH	T_Response μS
176.0	200.0	15000.0	10000.0
146.0	100.0	300.0	200.0

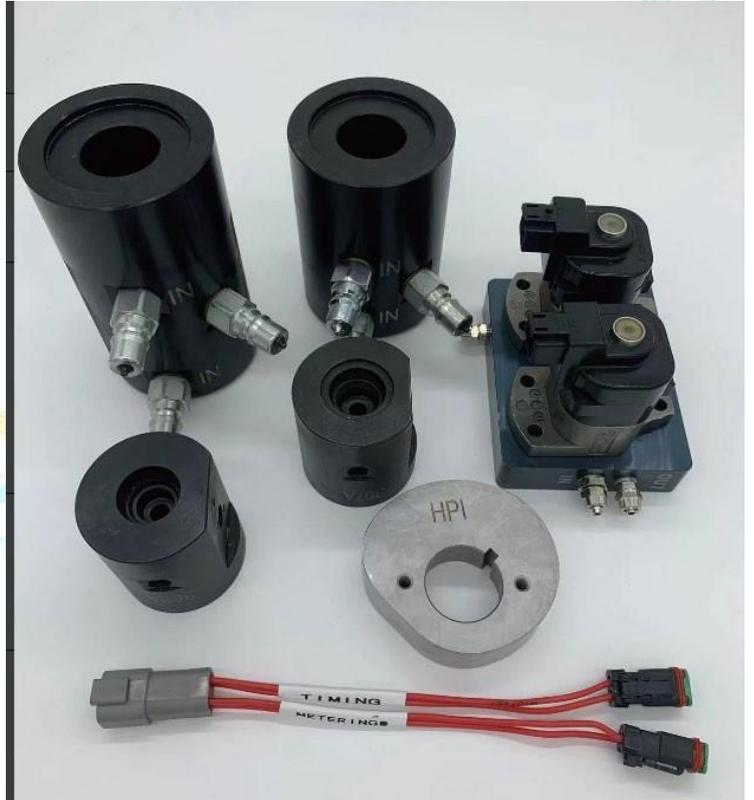
Start	146.0-176.0	0
Mid Load	190.3-215.7	0
Full Load	228.5-257.5	0
Idle	32.5-49.5	0

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

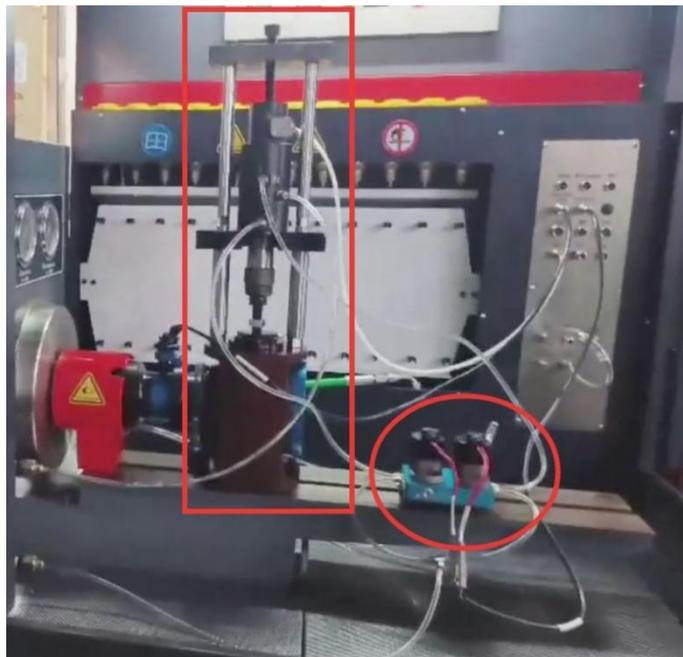


Need with this Accessories

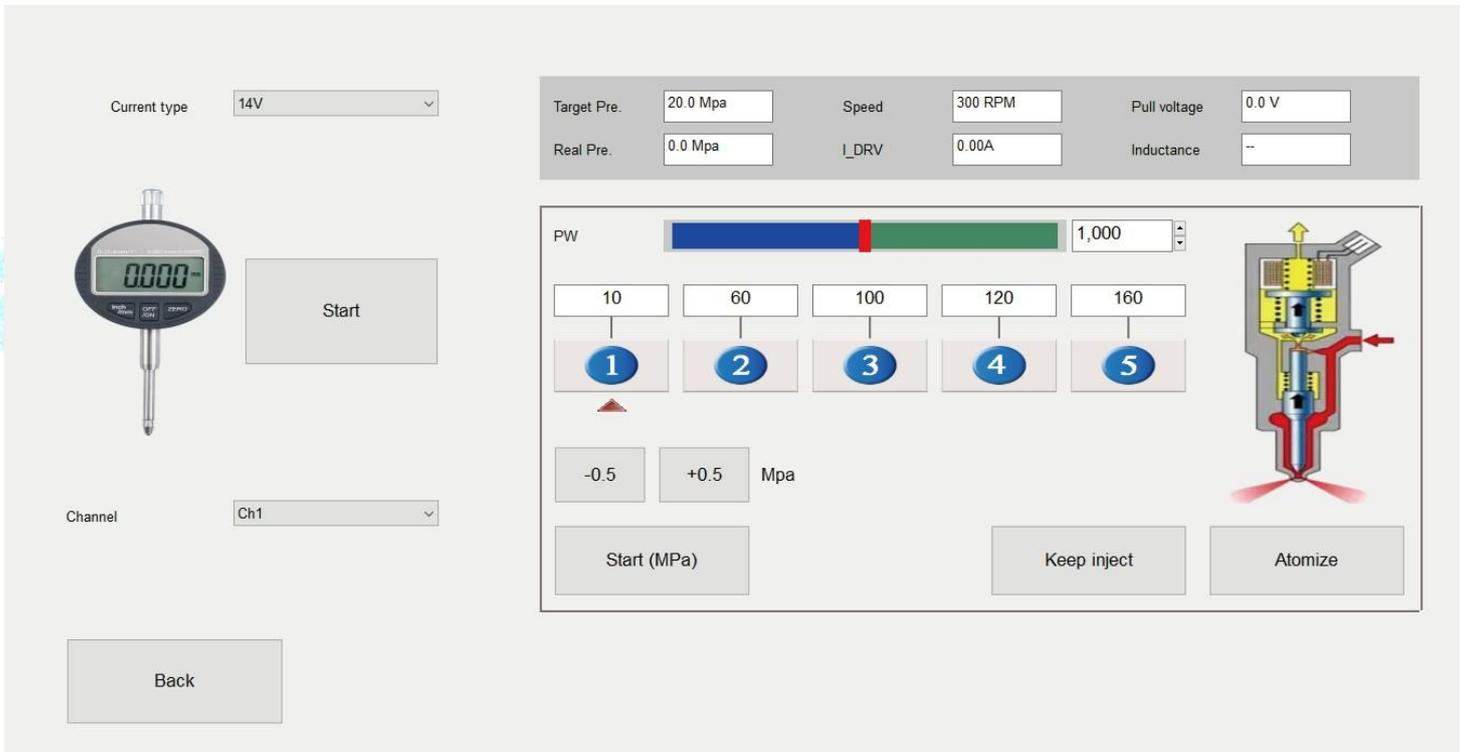
11. Test Cummins HPI Q60 X15 injector (This function must be equipped with TU-C/D/E cam box)



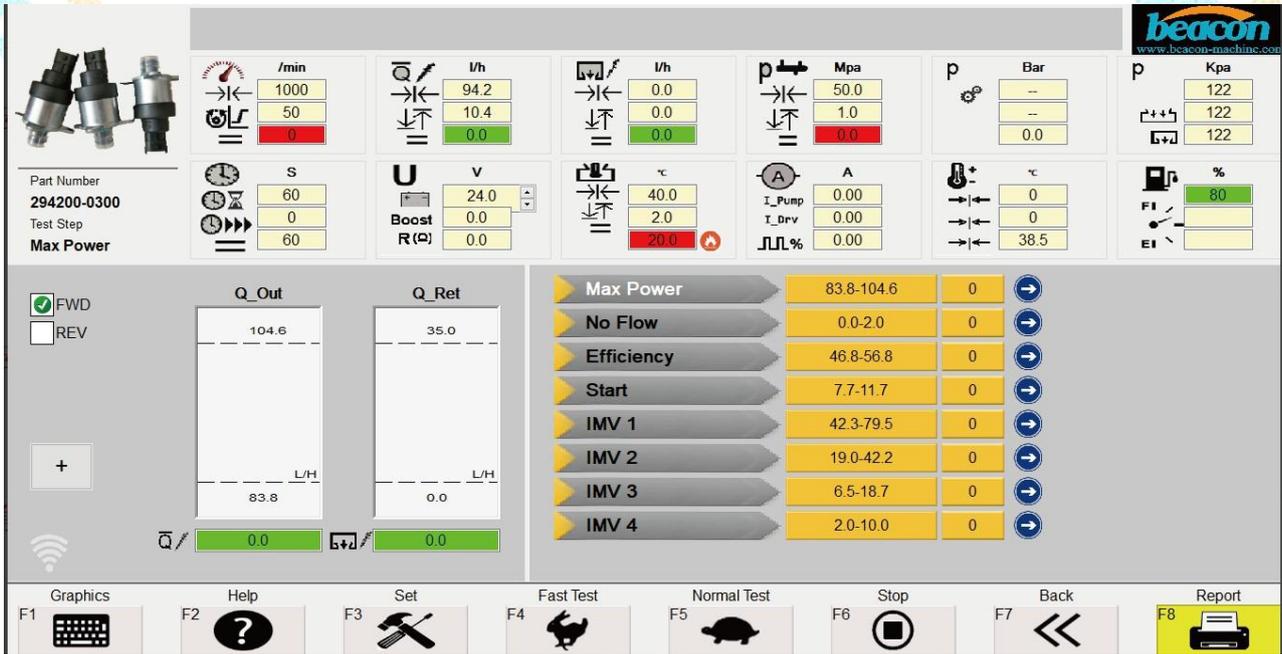
Need with this Accessories



12. AHE injector dynamic stroke (with Bosch 110, 120 stroke measuring tool + dial indicator)

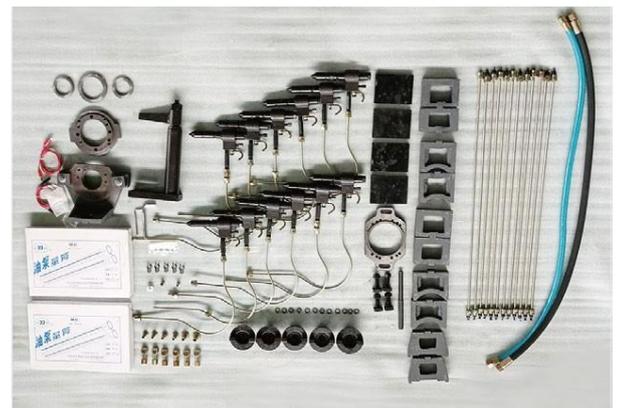
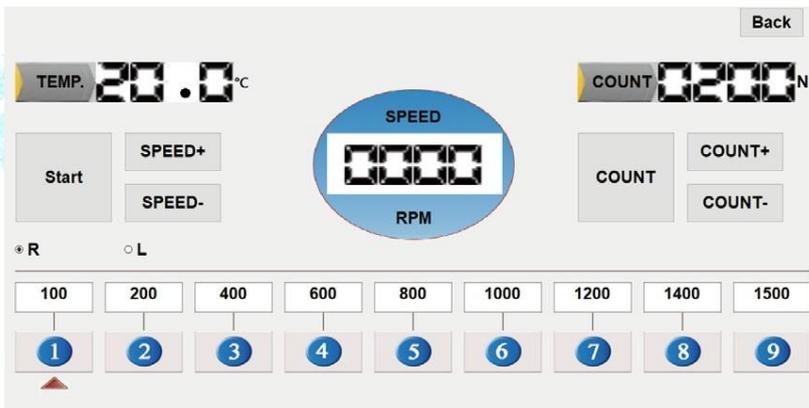


13. Test ZME



14. Delphi E3 double pulse control system

15. Test Diesel Fuel Injection pump



16. Test VP37 VP44 pump



Part Number:
VP37

Test Step:
Full Load

/min

→ 600

↙ 50

l/h

→ 35.0

↙ 10.0

↘ 0.0

l/h

→ 165.0

↙ 20.0

↘ 0.0

p Mpa

→ 0.0

↙ 1.0

↘ 0.0

p Bar

→ -

↙ -

↘ 0.0

p Kpa

→ -

↙ -

↘ 0

S

→ 25

↙ 0

↘ 25

U V

→ 24.0

↙ 3.5

↘ 0.0

τ

→ 40.0

↙ 2.0

↘ 20.0

A

I_Pump 0.00

I_Drv 0.00

∑% 0.00

τ

→ 0

↙ 0

↘ 38.5

%

→ 80

↙

↘

FWD

REV

Q_Out

45.0

L/H

25.0

Q_Ret

185.0

L/H

145.0

Q / 0.0 B+ / 0.0

Full Load 25.0-45.0 0

No Flow 0.0-2.0 0

Idle 21.5-31.5 0

Start 9.0-15.0 0

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



Part Number:
VP44

Test Step:
Warm

/min

→ 300

↙ 50

↘ 0

l/h

→ 128.0

↙ 12.5

↘ 0.0

l/h

→ 150.0

↙ 50.0

↘ 0.0

α °

→ 3780

↙ 3500

↘ 0

BIP μS

→ 0

↙ 0

↘ 0.0

L μH

→ 0

↙ 0

↘ 0

S

→ 40

↙ 0

↘ 40

U V

→ 24.0

↙ 0.0

↘ -

%

→ 40

τ

→ 40.0

↙ 2.0

↘ 20.0

τ

→ 40

↙ 2

↘ 0.0

τ

→ 40

↙ 1

↘ 0.0

FWD

REV

Q_Inj

140.5

mm3/H

115.5

Q_Ret

200.0

L/H

100.0

Inductance

500.0

μH

50.0

T_Response

10000.0

μS

200.0

Q / 0.0 B+ / 0.0

Warm 115.5-140.5 0

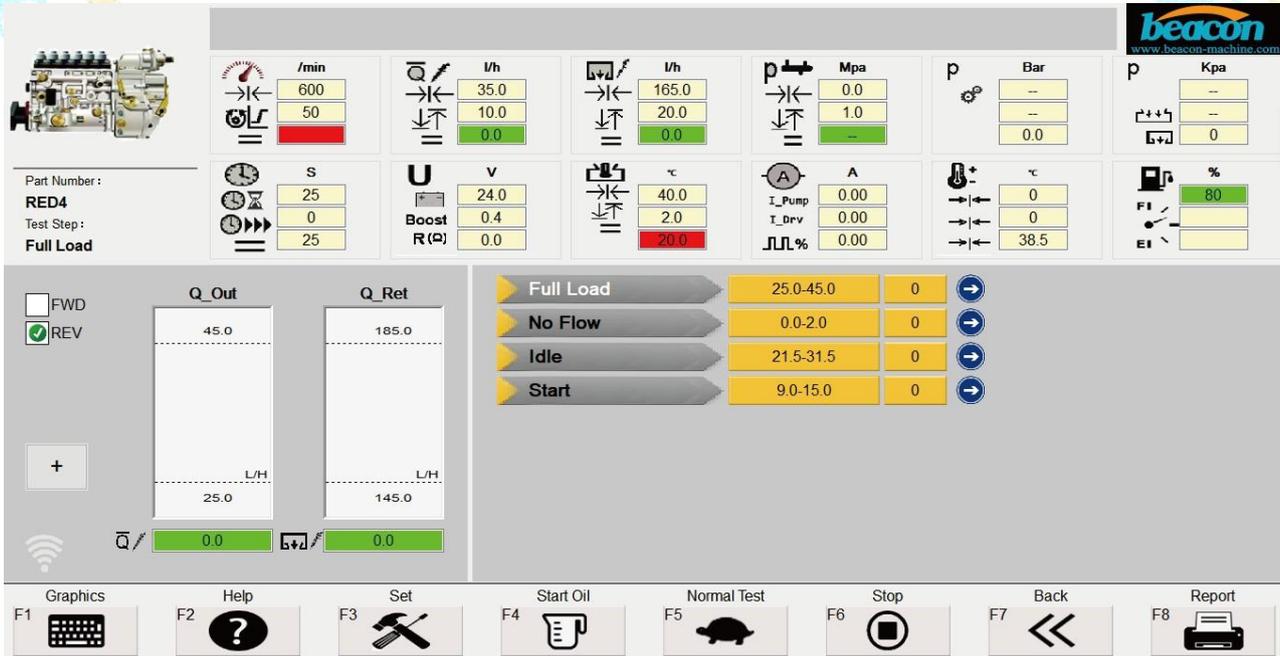
Max Torque 98.6-120.6 0

Max Power 102.0-126.0 0

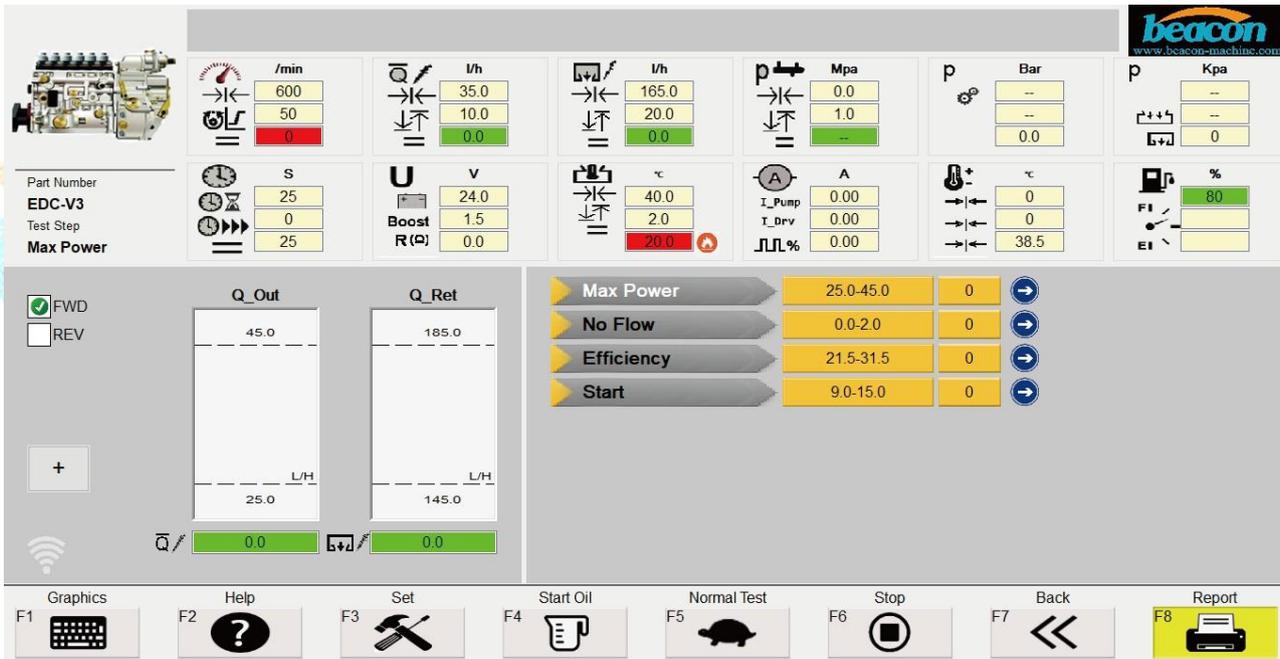
Idle 70.0-86.0 0

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

17. Test RED4 PUMP



18. Test V3 V4 V5 pump



19. Test MTU L'ORANGE Injector

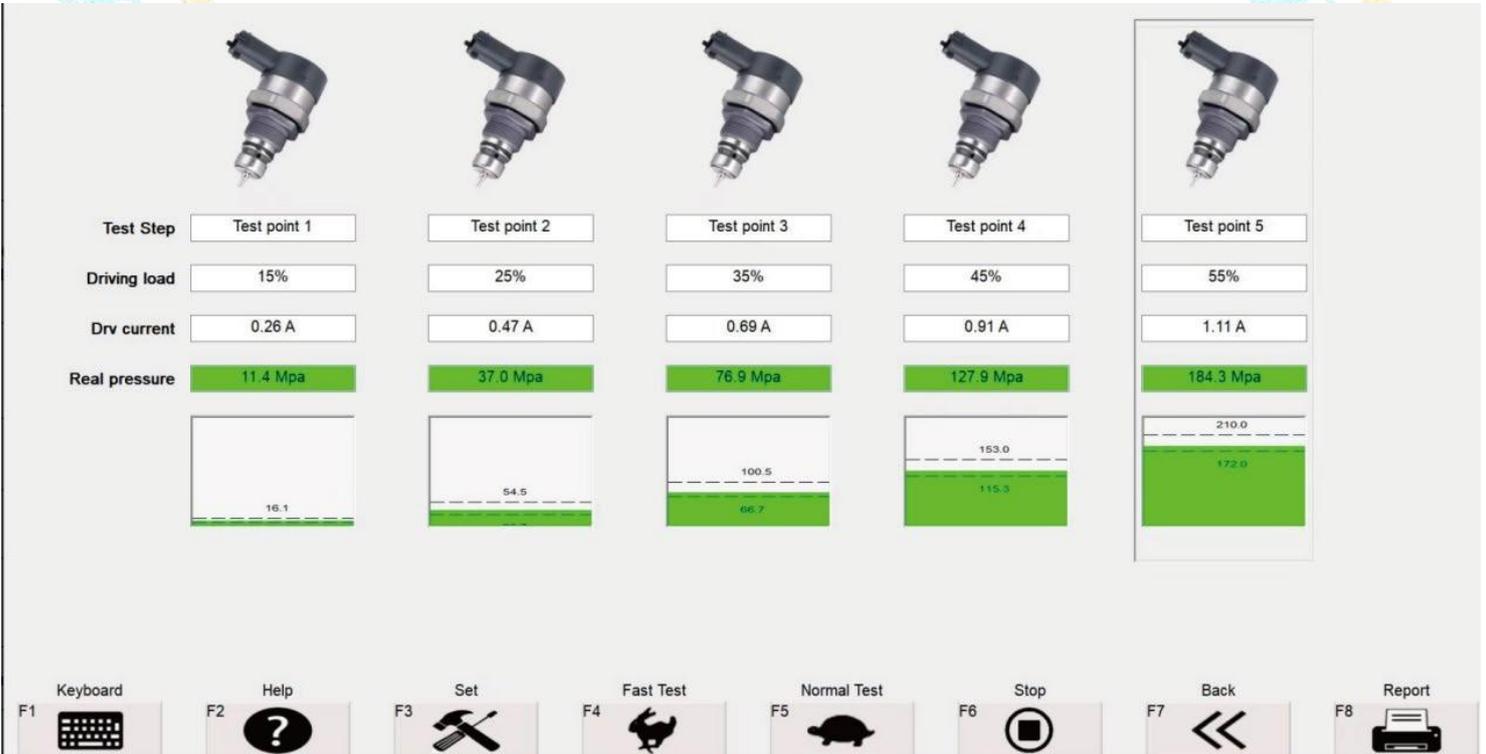


20. Test Rail pressure sensor

	Test point 1	Test point 2	Test point 3	Test point 4	Test point 5
Test Step	Test point 1	Test point 2	Test point 3	Test point 4	Test point 5
Rail pressure	20.0	65.0	110.0	155.0	200.0
Supply voltage	5.0 V				
Sensor voltage	0.73 V	1.36 V	1.99 V	2.62 V	3.24 V

F1 Keyboard	F2 Help	F3 Set	F4 Fast Test	F5 Normal Test	F6 Stop	F7 Back	F8 Report
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21. Test DRV/HPV



22. Test Solenoid valve



23. Test Bosch 4 pins injector

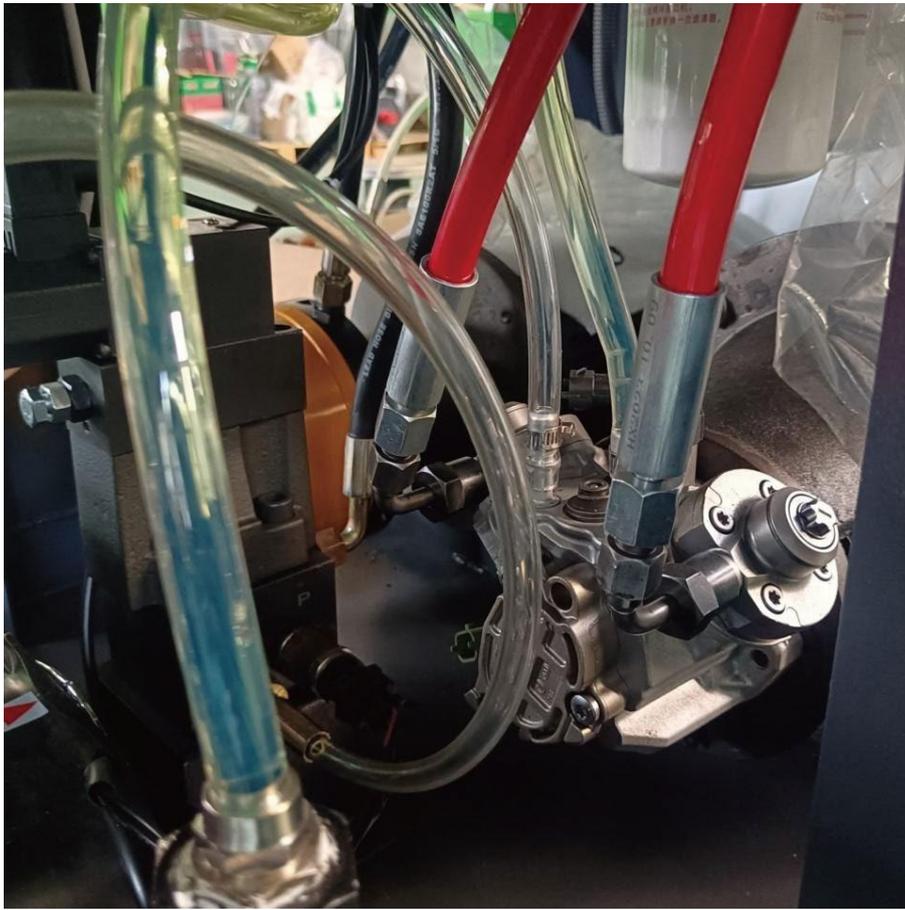


24. Test XPI Injector



Add this accessories

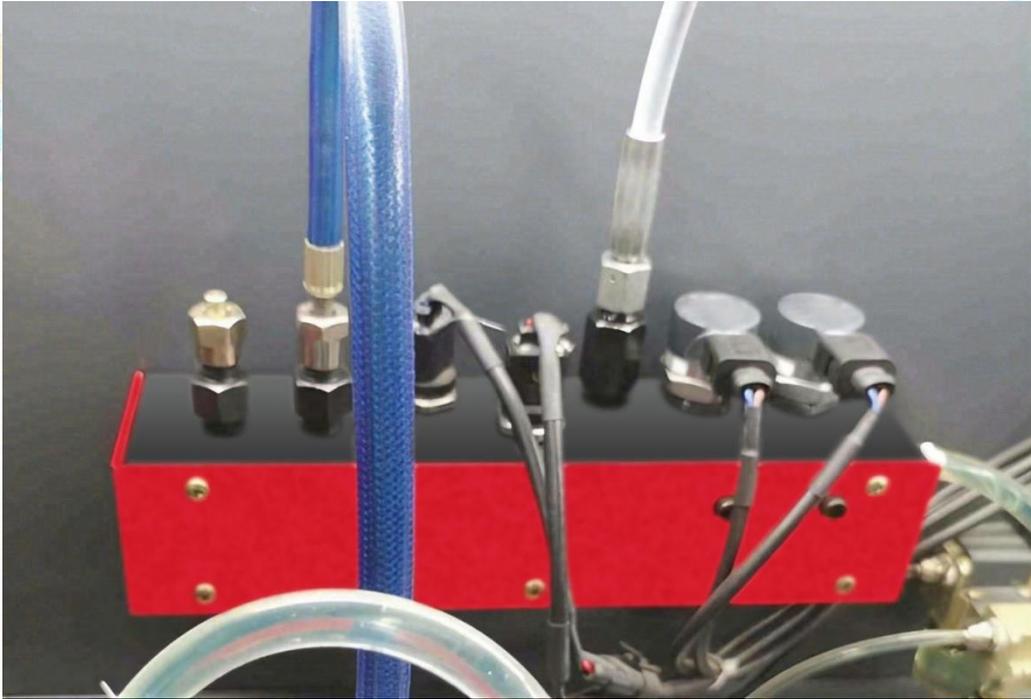
25. Replace with Bosch CP4 pump to reach 2800 bar



26. Test DENSO HP5 Pump accessories



27. Actualice 2 DRV+ 2 sensors



28. Air conditioning forced cooling



CR919 PACKING FOR DELIVERY

PLYWOOD CASE PACKAGING



Finished product



Wrapping machine



Plywood case packaging



Shipping

DELIVERY TIME WARRANTY PERIOD

1. Machine delivery time

3-4 weeks

2. Warranty period

2.1 One-year warranty + lifetime technical support.

2.2 If non-human damage occurs within one year, accessories will be replaced free of charge.

2.3 If there is any man-made damage, the accessories will be replaced at the ex-factory price.