Customer

Rob.

Customer number
Job number
Telephone
Fax
Remark

Test facility
DIESEL INJECTION PERFORMAN
PLUS LTD
UNIT 41 EDISON ROAD
RABANS LANE IND ESTATE
AYLESBURY BUCKS
01296 487400

Test user

Type number		Type designation	Revision date	Compensation
0445110049	–	CRI 1	12.10.2006	
Manufacturer	Component	Type	Control point	Temperature
Bosch	CRI	1 MV		40 °C

Complaint

Problem

Remark

	Injector A 1	Injector B 2	Injector C 3	Injector D 4	Injector E	Injector F
Serial number						
Date of manuf.						
Repair ID						
Repair res.						
Leak test	✓	✓	✓	✓	—	—
Classification	— C2	— C1	— C1	—		

4 Conditioning
Conditioning Testbench

n	/min	°C	p	MPa
→|←	2000	→|←	40.0	→|←	130.0
↓|	250	↓↑	20.0	↓↑	10.0
=	1999	=	40.4	=	130.0

t	µs
→|←	1000
n/min	----

Flow meas.

p	kPa		s
	10.0		----
	20		180
		=	180

°C
= 40

5 Warm up
Warm up Testbench

n	/min	°C	p	MPa
→|←	1000	→|←	40.0	→|←	130.0
↓|	250	↓↑	1.0	↓↑	10.0
=	1000	=	40.4	=	130.7

t	µs
→|←	1000
n/min	----

Flow meas.

p	kPa		s
	10.0		----
	20		----
		=	0

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Bosch	CRI	1 MV		40 °C

	Injector A	Injector B	Injector C	Injector D	Injector E	Injector F
	1	2	3	4		
Serial number						
Date of manuf.						

6 Stabilizing

Stabilizing Injector

n	/min		°C	p	MPa
→|	1000	→|	40.0	→|	130.0
	250	↓↑	1.0	↓↑	1.0
=	1000	=	39.8	=	130.0

t	µs
→|	1000
n/min	----

Flow meas.

p	kPa		s
	10.0		----
	20		180
		=	180

7 Conditioning

Conditioning for VL point

n	/min		°C	p	MPa
→|	1000	→|	40.0	→|	130.0
	250	↓↑	1.0	↓↑	1.0
=	1000	=	39.8	=	130.0

t	µs
→|	1000
n/min	----

Flow meas.

p	kPa		s
	10.0		----
	20		70
		=	70

9 Conditioning

Conditioning for EM point

n	/min		°C	p	MPa
→|	1000	→|	40.0	→|	60.00
	250	↓↑	1.0	↓↑	1.0
=	1000	=	40.2	=	59.7

t	µs
→|	600
n/min	----

Flow meas.

p	kPa		s
	10.0		----
	20		70
		=	70

10 EM

Measure point EM

n	/min		°C	p	MPa
→|	1000	→|	40.0	→|	60.00
	250	↓↑	1.0	↓↑	1.0
=	1000	=	40.0	=	60.0

t	µs
→|	600
n/min	----

Flow meas.

p	kPa		s
	10.0		----
	20		----
		=	58

Q/	mm³/H	Q/	mm³/H	Q/	mm³/H	Q/	mm³/H
→|	14.2	→|	14.2	→|	14.2	→|	14.2
↓↑	3.9	↓↑	3.9	↓↑	3.9	↓↑	3.9
/A=	15.6	/B=	12.7	/C=	12.2	/D=	10.6

11 Conditioning

Conditioning for LL point

n	/min		°C	p	MPa
→|	1000	→|	40.0	→|	30.00

t	µs
→|	575

Flow meas.

p	kPa		s
	10.0		----

Type number		Type designation	Revision date	Compensation
0445110049	–	CRI 1	12.10.2006	
Manufacturer	Component	Type	Control point	Temperature
Bosch	CRI	1 MV		40 °C

	Injector A	Injector B	Injector C	Injector D	Injector E	Injector F
	1	2	3	4		
Serial number						
Date of manuf.						

250 1.0 1.0 ---- 20 70
= 1000 = 39.8 = 30.0 = 70

Flow meas.

12 LL
Measure point LL

n	/min		°C	p	MPa	t	µs	p	kPa		s
	1000		40.0		30.00		575		10.0		----
	250		1.0		1.0		----		20		----
=	999	=	39.5	=	30.0					=	60

Q	mm³/H	Q	mm³/H	Q	mm³/H	Q	mm³/H
	3.9		3.9		3.9		3.9
	1.9		1.9		1.9		1.9
A=	4.8	B=	3.4	C=	2.6	D=	2.3

Flow meas.

13 Conditioning
Conditioning for VE point

n	/min		°C	p	MPa	t	µs	p	kPa		s
	1000		40.0		60.00		230		10.0		----
	250		1.0		1.0		----		20		70
=	1000	=	39.5	=	60.0					=	70

Flow meas.

14 VE
Measure point VE

n	/min		°C	p	MPa	t	µs	p	kPa		s
	1000		40.0		60.00		230		10.0		----
	250		1.0		1.0		----		20		----
=	1000	=	40.1	=	60.0					=	50

Q	mm³/H	Q	mm³/H	Q	mm³/H	Q	mm³/H
	1.1		1.1		1.1		1.1
	----		----		----		----
A=	3.2	B=	2.0	C=	1.4	D=	1.6

Flow meas.

15 Conditioning
Conditioning for VE point

n	/min		°C	p	MPa	t	µs	p	kPa		s
	1000		40.0		80.00		160		10.0		----

Type number		Type designation	Revision date	Compensation
0445110049	–	CRI 1	12.10.2006	X

Manufacturer	Component	Type	Control point	Temperature
Bosch	CRI	1 MV		40 °C

	Injector A	Injector B	Injector C	Injector D	Injector E	Injector F
Serial number	1	2	3	4		
Date of manuf.						

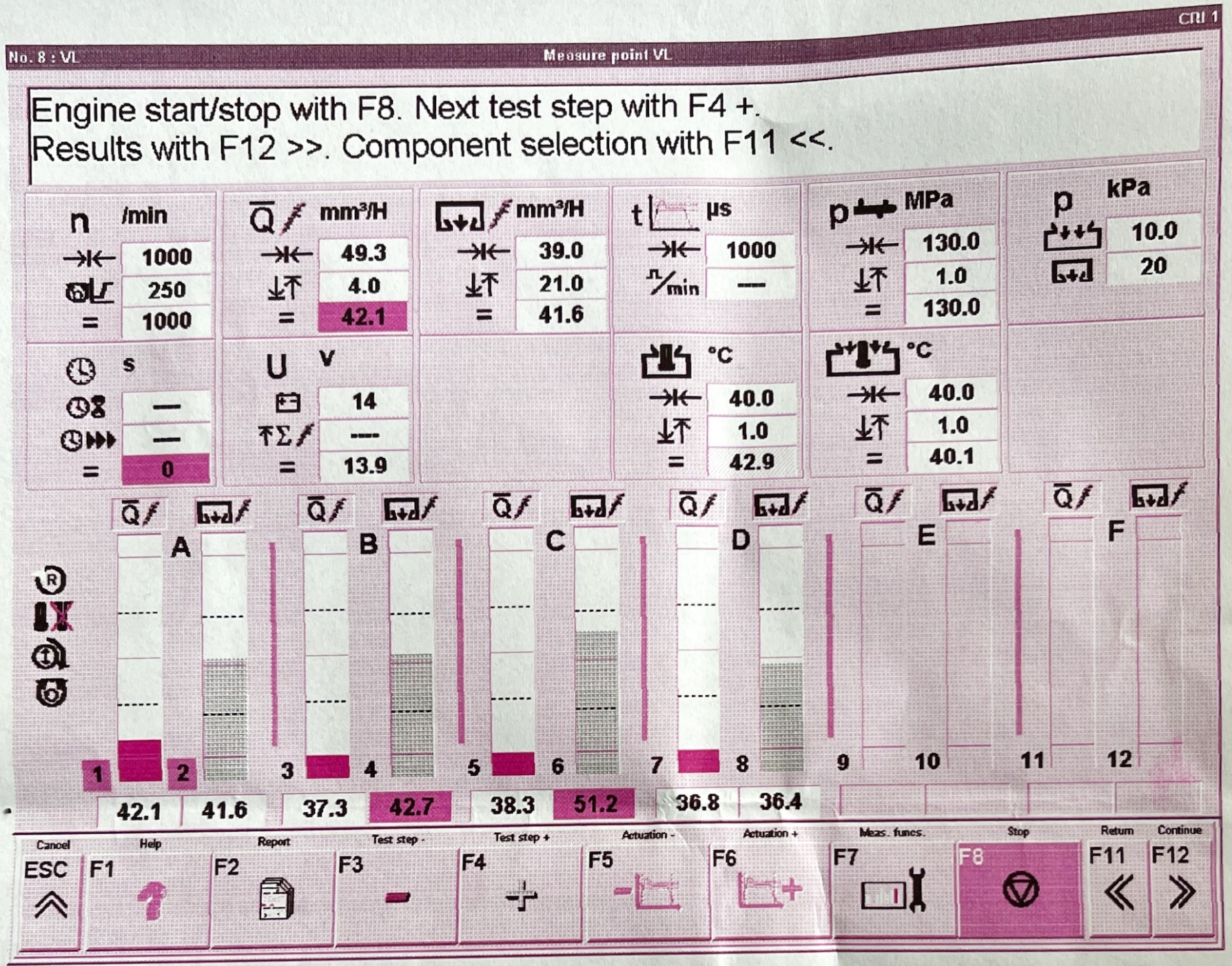
	250		1.0		1.0	n/min	----		20	70
	= 1000		= 40.6		= 80.0					= 70

#	16	VE	
	Measure point VE		

Flow meas.

n	/min		°C	p	MPa	t	µs	p	kPa		s
	1000		40.0		80.00		160		10.0		----
	250		1.0		1.0	n/min	----		20		----
	= 1000		= 40.8		= 80.0						= 50

Q/	mm³/H	Q/	mm³/H	Q/	mm³/H	Q/	mm³/H
	1.5		1.5		1.5		1.5
	1.2		1.2		1.2		1.2
/A=	3.0	/B=	1.8	/C=	1.2	/D=	1.1


No. 8 : VL
Measure point VL
CTI 1
Engine start/stop with F8. Next test step with F4 +.
Results with F12 >>. Component selection with F11 <<.
n /min
1000
250
1000
Q mm³/H
49.3
4.0
42.1
mm³/H
39.0
21.0
41.6
t µs
1000
/min
p MPa
130.0
1.0
130.0
p kPa
10.0
20
s
U V
14
13.9
°C
40.0
1.0
42.9
°C
40.0
1.0
40.1
A
B
C
D
E
F
1
2
3
4
5
6
7
8
9
10
11
12
42.1
41.6
37.3
42.7
38.3
51.2
36.8
36.4
Cancel
ESC
Help
F1
Report
F2
Test step -
F3
Test step +
F4
Actuation -
F5
Actuation +
F6
Meas. funcs.
F7
Stop
F8
Return
F11
Continue
F12