

 Volvo Powertrain		E3 Injection Test		Date & Time		Reg No Issue	
				2005-02-23 13:32:43			
				Engine Type		Test Req No	
				13		3706-0148-ALD	
Requested by (dep, name, phone loc)		Conducted by (dep, name, phone, loc)		Page		Project No	Engine No
24427 P-A Brunsten 74698 BC4		24477 Mikael Frykberg 75119 U3		1(2)		3132	13-102
Injector Art No (Volvo part No)		Injector Issue	Injector Version	Test ID		Injector Supplier	
20536901		B01	E3	IR01_2005-02-23_02		Delphi	
Prestroke (mm)	Lift (mm)	Rate(mm/deg)	Nozzle	Type of test			
0,75	17	0,42		2200 LLP			

Test 1

Speed [rpm]		Peak Pressure [Bar]	Tol ±	Nom. Fueling [mm3/inj]	Tol [%] ±	Nom Rise time	Tol ±
600		1010	0	307.5	3.0	0	0
Injector No	No	Peak Pressure [Bar]	Dev	Fueling [mm3/inj]	Dev.±%	Rise time [µs]	Dev
406062	1	1105	95	301.1	-2.1 OK	13283	13283
406063	2	1147	137	290.5	-5.5 NOK	13250	13250
406064	3	1096	86	294.9	-4.1 NOK	13276	13276
406065	4	1092	82	297.7	-3.2 NOK	13223	13223
406066	5	1087	77	292.4	-4.9 NOK	13259	13259
406067	6	1077	67	290.9	-5.4 NOK	13260	13260
Average:		1101	91	294.6	-4.2	13259	13259
Max		1147	137	301.1	-2.1	13283	13283
Min		1077	67	290.5	-5.5	13223	13223
Diff.		70	70	10.6	3.4	60	60

Test 2

Speed [rpm]	Peak Pressure [Bar]	Tol ±	Nom. Fueling [mm3/inj]	Tol [%] ±	Nom Rise time	Tol ±	
600	796	0	163.6	3.0	0	0	
Injector No	No	Peak Pressure [Bar]	Dev	Fueling [mm3/inj]	Dev.±%	Rise time [µs]	Dev
406062	1	891	95	163.3	-0.2 OK	13087	13087
406063	2	893	97	153.0	-6.5 NOK	13082	13082
406064	3	862	66	154.7	-5.4 NOK	13116	13116
406065	4	866	70	158.1	-3.4 NOK	13094	13094
406066	5	842	46	149.8	-8.4 NOK	13133	13133
406067	6	848	52	153.8	-6.0 NOK	13099	13099
Average:		867	71	155.5	-5.0	13102	13102
Max		893	97	163.3	-0.2	13133	13133
Min		842	46	149.8	-8.4	13082	13082
Diff.		51	51	13.5	8.3	51	51

Test 3

Speed [rpm]		Peak Pressure [Bar]	Tol ±	Nom. Fueling [mm3/inj]	Tol [%] ±	Nom Rise time	Tol ±
250		422	0	53.3	35.0	0	0
Injector No	No	Peak Pressure [Bar]	Dev	Fueling [mm3/inj]	Dev.±%	Rise time [µs]	Dev
406062	1	453	31	54.5	2.3 OK	38146	38146
406063	2	461	39	50.8	-4.7 OK	38128	38128
406064	3	439	17	51.6	-3.2 OK	38204	38204
406065	4	426	4	53.0	-0.6 OK	38176	38176
406066	5	405	-17	50.1	-6.0 OK	38210	38210
406067	6	411	-11	51.5	-3.4 OK	38192	38192
Average:		433	11	51.9	-2.6	38176	38176
Max		461	39	54.5	2.3	38210	38210
Min		405	-17	50.1	-6.0	38128	38128
Diff.		56	56	4.4	8.3	82	82

Test 4

Speed [rpm]		Peak Pressure [Bar]	Tol ±	Nom. Fueling [mm3/inj]	Tol [%] ±	Nom Rise time	Tol ±
850		1619	0	318.8	3.0	0	0
Injector No	No	Peak Pressure [Bar]	Dev	Fueling [mm3/inj]	Dev.±%	Rise time [µs]	Dev
406062	1	1779	160	316.4	-0.8 OK	9553	9553
406063	2	1746	127	305.1	-4.3 NOK	9543	9543
406064	3	1747	128	305.3	-4.2 NOK	9556	9556
406065	4	1725	106	307.3	-3.6 NOK	9535	9535
406066	5	1735	116	301.5	-5.4 NOK	9589	9589
406067	6	1738	119	303.1	-4.9 NOK	9533	9533
Average:		1745	126	306.4	-3.9	9552	9552
Max		1779	160	316.4	-0.8	9589	9589
Min		1725	106	301.5	-5.4	9533	9533
Diff.		54	54	14.9	4.7	56	56