



### Troubleshooting-data

Model: FH 12 380

Motor: D12A 380 / Lucas Unit Injector

Component:	From:	To:	Condition:	Value	Measured	Ref.
.	.	.	Connector seen from wire side	.		
.	.	.	Measurements taken with connector installed	.		
Battery (earth)	B9	Batt. -	Ignition on	0 V		
Battery (earth)	B10	Batt. -	Ignition on	0 V		
Accelerator pedal sensor	B34	B22	Ignition on	4,9 - 5,1 V		
Accelerator pedal sensor	B22	B10	Ignition on	0 V		
Accelerator pedal sensor	B21	B10	Ignition on, accelerator released	0 - 0,5 V		
Accelerator pedal sensor	B35	B22	Ignition on, accelerator released	0,4 - 0,65 V		
Accelerator pedal sensor	B21	B10	Ignition on, accelerator fully depressed	22 - 28 V		
Accelerator pedal sensor	B35	B22	Ignition on, accelerator fully depressed	3 - 4,2 V		
Air temperature sensor	A14	B10	Ignition on	0 V		
Air temperature sensor	A15	A14	Ignition on, 20°C air temperature	2,6 - 3,2 V		
Air temperature sensor	A15	A14	Ignition on, 40°C air temperature	1,6 - 2,5 V		
Clutch switch	B19	B10	Ignition on	22 - 28 V		
Clutch switch	B19	B10	Ignition on, pedal activated	0 - 0,5 V		
Coolant temperature sensor	A13	B10	Ignition on	0 V		
Coolant temperature sensor	A29	A13	Ignition on, 20°C	3 V		
Coolant temperature sensor	A29	A13	Ignition on, 90°C	0,6 V		
Ignition	B6	B10	Ignition on	22 - 28 V		
Ignition	B6	B10	Ignition off	0 V		
Inductive camshaft position sensor	A31	A18	Starter rpm			1007
Inductive position sensor 1	A17	A30	Starter rpm			1012
MAP-sensor	A27	B10	Ignition on	0 V		
MAP-sensor	A25	A27	Ignition on	4,9 - 5,1 V		
MAP-sensor	A28	A27	Idle	0,9 - 1,2 V		
MAP-sensor	A28	A27	Ignition on, at sea level	0,8 - 1,2 V		
MAP-sensor	A28	A27	Ignition on, at 2500 - 3000 mbar	3,5 - 4,5 V		
Relay	B3	B10	Ignition on	0 - 1 V		
Relay	B12	B10	Ignition on	22 - 28 V		
Relay	B11	B10	Ignition on	22 - 28 V		
Relay	B11	B10	Ignition off	0 V		
Relay	B12	B10	Ignition off	0 V		
Relay	B3	B10	Ignition off	22 - 28 V		

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<b>Component:</b>	<b>From:</b>	<b>To:</b>	<b>Condition:</b>	<b>Value</b>	<b>Measured</b>	<b>Ω</b>
Stop light switch	B18	B10	Ignition on, brake pedal released	22 - 28 V		
Stop light switch	B18	B10	Ignition on, brake pedal depressed	0 - 0,5 V		
Unit Injector 1	A12	A4	Idle			1079
Unit Injector 2	A10	A4	Idle			1079
Unit Injector 3	A11	A4	Idle			1079
Unit Injector 4	A6	A3	Idle			1079
Unit Injector 5	A8	A3	Idle			1079
Unit Injector 6	A7	A3	Idle			1079