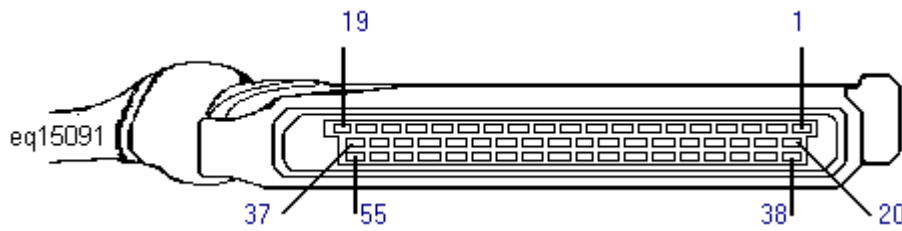


Pin Tables Copyright Equiptech

Number of ECM pins: 55



Pin	Connection	Test condition	Volts/Duty Cycle etc
1	amplifier control signal: t5 & t6, ECM : t20 (some models)	cranking/running	switching 0 to nbv
2	unused		
3	pump relay driver: t2	ignition on cranking/running	nbv 1.25 max
4	ISCV : t1	engine running cold: hot:	6.0 to 6.5 7.0 to 9.0
5	CFSV: t1	ignition on engine running	nbv 0 to nbv
6	unused		
7	AFS signal : t2	ignition on idle 2000 rpm 3000 rpm snap accelerate	0.20 to 0.30 0.75 to 1.50 2.00 to 2.50 2.00 to 3.50 3.00 to 4.50
8	unused		
9	unused		
10	OS return: t4	engine running	0.25 max
11	knock sensor signal: t2	KS active	1.0 approx (peak to peak)
12	AFS supply : t3	cranking/running	5.0 ± 0.1
13	diagnostic socket : t2	ignition on/running no faults present faults present	nbv 0.25 max 0.25 max
14	earth	ignition on/running	
15	SD connections		
16	injector pulse, cyls 1&2: t1	cranking cold running cold cranking hot running hot snap acceleration	11.0 to 12.0 ms 3.0 to 3.5 ms 4.0 to 4.5+ ms 2.5 to 3.0 ms 6.0+ ms
17	injector pulse, cyls 1&4: t1	cranking cold running cold cranking hot running hot snap acceleration	11.0 to 12.0 ms 3.0 to 3.5 ms 4.0 to 4.5+ ms 2.5 to 3.0 ms 6.0+ ms
18	battery supply: t30	ignition on/off	nbv
19	earth	ignition on/running	0.25 max
20	amplifier control signal: t5 & t6, ECM : t1 (some models)	cranking/running	switching 0 to nbv
21	unused		
22	unused		
23	AC magnetic clutch relay		
24	earth	ignition on/running	0.25 max
25	unused		
26	AFS return: t4	cranking/running	0.25 max
27	ignition switch: t15	ignition on	nbv
28	OS signal : t3	ignition key on engine running	0.4 to 0.5v 200 to 1000 mv

Pin Tables Copyright Equiptech

		throttle fully open	1.0v constant
		fuel cut off	0 volts constant
		switching frequency	1 sec intervals (approx)
29	unused		
30	sensor return, CTS,TS, KS	cranking/running	0.25 max
31	unused		
32	unused		
33	unused		
34	unused		
35	unused		
36	main relay driver : t2	ignition off	nbv
		ignition on/running	1.25 max
37	nbv supply from main relay : t5	ignition on/running	nbv
38	unused		
39	unused		
40	coolant fan relay		
41	coolant fan relay		
42	unused		
43	unused		
44	ATS (AFS: t5)	cranking/running	20°C 3.30 to 3.75
45	CTS: t2	cranking/running	20°C 3.00 to 3.75
			80°C 1.00 to 1.30
46	unused		
47	CAS signal: t1	cranking:	AC 4.0v+ (peak to peak)
		Idle:	AC 8.0v+ (peak to peak)
		cruise:	AC 14.0v+ (peak to peak)
48	CAS return: t2	cranking/running	0.25 max
49	unused		
50	unused		
51	unused		
52	TS idle contact : t1	ignition on/running	
		throttle closed	zero
		throttle part/fully open	5.0 ± 0.1
53	TS full-load contact: t3	throttle closed/part open	5.0 ± 0.1
54	unused		
55	diagnostic socket : t1		

< END >