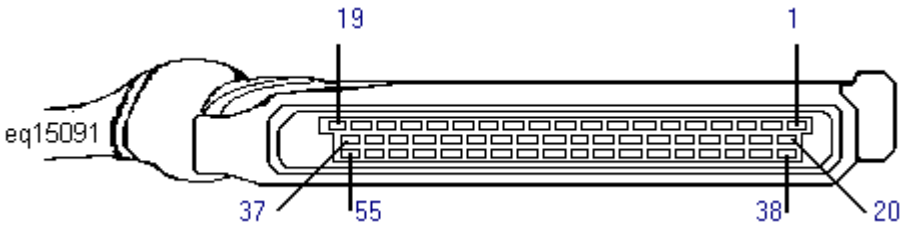
Number of ECM pins: 55



Pin	Connection	Test condition	Volts/Duty Cycle etc
1	amplifier control signal: t5 & t6	cranking/running	switching 0 to nbv
2	unused		
3	pump relay driver: t2	ignition on	nbv
		cranking/running	1.25
4	unused		
5	CFSV: t1 (cat models only)	ignition on	nbv
		engine running	0 to nbv
6	unused		
7	AFS signal: t2	ignition on	0.20 to 0.30
		Idle	0.75 to 0.30
		2000 rpm	2.00 to 2.50
		3000 rpm	2.00 to 3.50
		snap accelerate	3.00 to 4.50
8	unused		
9	unused		
10	OS return: t4	engine running	0.25 max
11	unused		
12	AFS supply: t3	cranking/running	5.0 ± 0.1
13	SD connection		
14	earth	ignition on/running	0.25 max
15	warning light: inst panel	ignition on/running	
		no faults present	nbv
		faults present	0.25 max
16	injector pulse, cyls 1&2: t1	ignition on	nbv
		cranking cold	11.0 to 12.0 ms
		running cold	3.0 to 3.5 ms
		cranking hot	4.0 to 4.5+ ms
		running hot	2.5 to 3.0 ms
		snap acceleration	6.0+ ms
17	injector pulse, cyls 1&4: t1	ignition on	nbv
		cranking cold	11.0 to 12.0 ms
		running cold	3.0 to 3.5 ms
		cranking hot	4.0 to 4.5+ ms
		running hot	2.5 to 3.0 ms
		snap acceleration	6.0+ ms
18	battery positive: t30	ignition on/off	nbv
19	earth	ignition on/running	0.25 max
20	unused		
21	unused		
22	unused		
23	AC magnetic clutch relay : t1		
24	earth	ignition on/running	0.25 max
25	unused		
26	AFS return: t	ignition on/running	0.25 max
27	ignition switch: t15	ignition on/running	nbv
28	OS signal: t3	ignition key on	0.4 to 0.5v
		engine running	200 to 1000 mv
		throttle fully open	1.0v constant
		fuel cut off	0v constant
		switching frequency	1 sec intervals (approx)

29	unused-		
30	sensor return CTS: t1, TS: t1	ignition on/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	AC mag clutch relay		
41	AC mag clutch relay		
43	CO pot (AFS: t1),	idle speed (non-cat models)	2.45v ± 0.5
44	ATS (AFS: t5)	ignition on/running	5.0 ± 0.1
45	cts signal: t2	ignition on/running	20°C 3.00 to 3.75
			80°C 1.00 to 1.30
46	unused		
47	CAS signal: t	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
		throttle fully open	zero
54	unused		
55	diagnostic socket : t1		

< END >