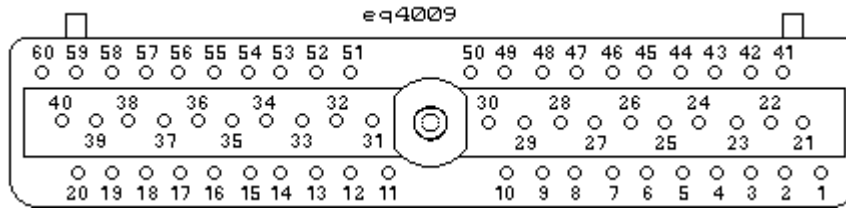


Pin Tables Copyright Equiptech

Number of ECM pins: 60



Pin	Connection	Test condition	Volts/Duty Cycle etc
1	KAM supply, battery: t30	ignition on/off	nbv
3	FTS: t2	less than 68°C greater than 87°C	nbv 0.0 to 0.1
4	VSS: t3	vehicle moving	switching 0 to nbv
5	idle speed adjustment : t5	open circuit closed circuit	5.0 ± 0.1 0.25 max
7	CTS signal: t2	ignition on/running	20°C 3.00 to 3.20 80°C 0.60 to 0.90
10	air conditioning LP switch		
15	AT		
16	earth	ignition on/running	0.25 max
17	diagnostic socket : t3	ignition on/running	12 volts
18	AT		
20	earth	ignition on/running	0.25 max
21	ISCV signal: t1	ignition on engine running cold: hot: (no load) hot: (load) ISCV (almost closed) ISCV (almost fully open)	nbv variable 5.0 to 11.0 8.0 to 14.0 5.0 to 11.0 9.0 to 12.0 1.0 to 4.0
22	pump relay driver: t85	ignition on cranking/running	nbv 1.25 max
23	octane adjustment : t23	open circuit closed circuit	5.0 ± 0.1 0.25 max
24	octane adjustment : t24	open circuit closed circuit	5.0 ± 0.1 0.25 max
25	ATS signal: t2	ignition on/running	20°C 3.00 to 3.20 40°C 2.00 to 2.20
26	MAP reference voltage: t2	ignition on/running	5.0 ± 0.1
26	CO pot reference voltage: t2	ignition on/running	5.0 ± 0.1
26	TPS reference voltage: t2	ignition on/running	5.0 ± 0.1
27	CO pot signal: t3	ignition on/running upper limit lower limit	 4.8 0.6
29	OS signal: t3	engine running throttle fully open fuel cut-off switching frequency	200 to 1000mv 1.0 volt constant 0 volt constant 1 sec intervals (approx)
30	AT Neutral switch		
31	CFSV: t1	ignition on snap accelerate	nbv zero
36	SPOUT signal: TFI: t2	engine running	switching 4.0 to 7.0
37	FI main relay: t87	ignition on/running	nbv
40	earth	ignition on/running	0.25 max
45	MAP signal: t3	ignition on/running	2.50 average
46	sensor return ATS: t1, CTS: t1		
46	MAP: t1, TPS: t1, CO pot: t1	ignition on/running	0.25 max
47	TPS signal: t3	ignition on/running throttle closed	 0.50 to 0.70

Pin Tables Copyright Equiptech

48	diagnostic socket: t2	throttle fully open	4.48+
49	OS return: t4	ignition on/running	5.0 ± 0.1
53	AT	ignition on/running	0.25 max
54	AC		
55	CAS return: t1	ignition on/running	0.25 max
56	CAS +: t2	cranking:	AC 4.0v+ (peak to peak)
		idle:	AC 8.0v+ (peak to peak)
		cruise:	AC 14.0v+ (peak to peak)
57	FI main relay: t87	ignition on/running	nbv
58	injectors 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	2.0 to 2.5 ms
		2000 rpm	2.0 to 2.5 ms
		3000 rpm	2.0 to 2.5 ms
		snap acceleration	6.0 ms
		deceleration	zero
59	injectors cyls 3, 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	2.0 to 2.5 ms
		2000 rpm	2.0 to 2.5 ms
		3000 rpm	2.0 to 2.5 ms
		snap acceleration	6.0 ms
		deceleration	zero
60	earth	ignition on/running	0.25 max

< END >