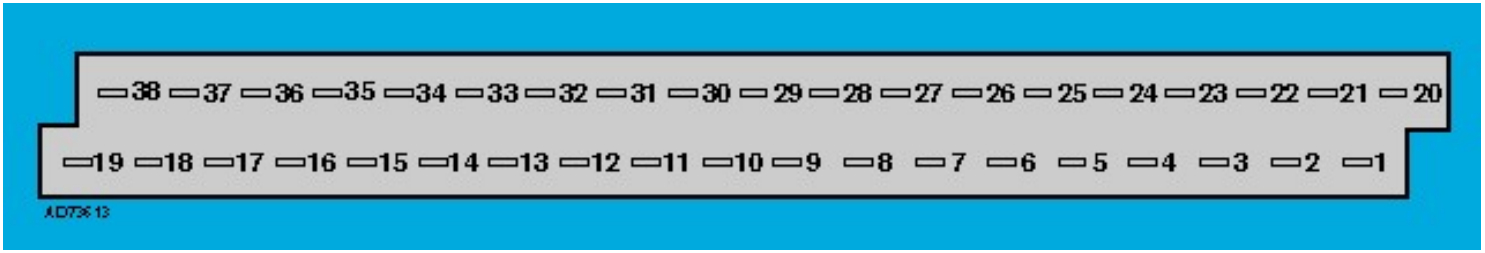
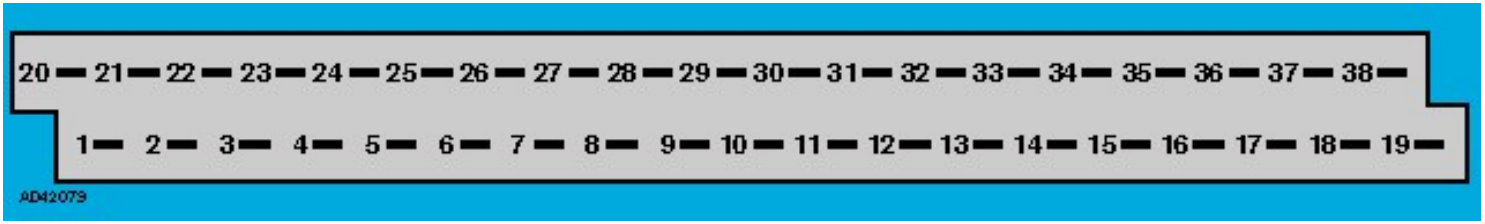
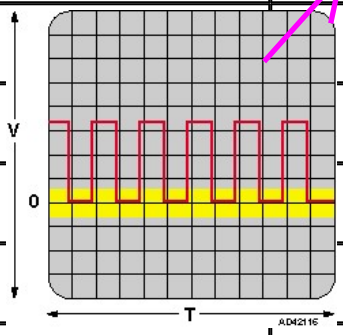
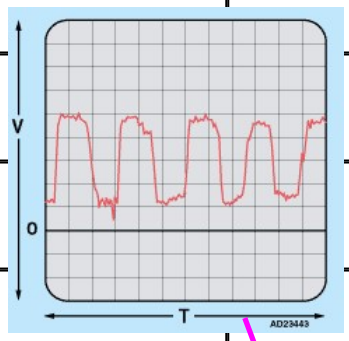
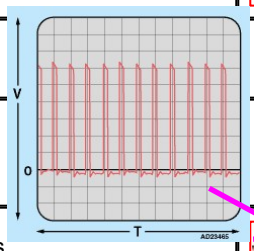
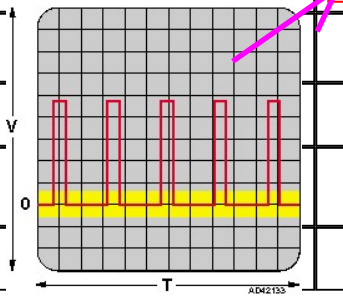
Terminal side

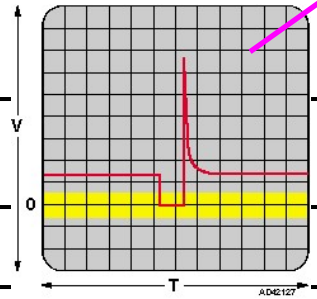
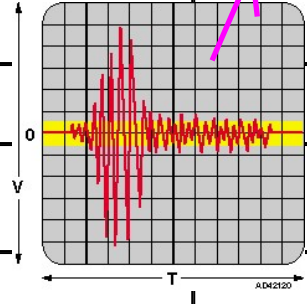


Wire side



Component/circuit description	ECM pin	Signal	Condition	Typical value	Oscilloscope setting (Suggested settings - Voltage/time per division)	Wave form
Air conditioning	37			Connected pin - no test data available or random digital signal		
Alarm system control module - if fitted 1994-95	7			Connected pin - no test data available or random digital signal		
Automatic transmission - 1991-95	31			Connected pin - no test data available or random digital signal		
CO adjustment resistor	13		Ignition ON	0 V		
CO adjustment resistor	35		Ignition ON	0-5 V - varies with CO level		
Cold start injector - 1990-93	3		Ignition ON	11-14 V		
Cold start injector	3		Engine cranking - engine cold	0-1 V briefly then 11-14 V		

Crankshaft position (CKP) sensor	11	⬅	Ignition ON - engine turned	0 V or 10-14 V		
Crankshaft position (CKP) sensor	11	⬅	Engine idling	30 Hz	5 V/20 ms	4
Crankshaft position (CKP) sensor	11	⬅	3000 rpm	100 Hz		
Crankshaft position (CKP) sensor	13	⊣	Ignition ON	0 V		
Crankshaft position (CKP) sensor	30	⇨	Ignition OFF	0 V		
Crankshaft position (CKP) sensor	30	⇨	Ignition ON	10 V min.		
Data link connector (DLC) - 1992-95	32			Connected pin - no test data available or random digital signal		
Earth	20		Ignition ON	0 V		
Earth - 1990-93	29		Ignition ON	0 V		
Engine control relay	38	⬅	Ignition OFF	0 V		
Engine control relay	38	⬅	Ignition ON	11-14 V		
Engine coolant temperature (ECT) sensor	13	⊣	Ignition ON	0 V		
Engine coolant temperature (ECT) sensor	14	⬅	Ignition ON - coolant temp. 20°C	1 V		
Engine coolant temperature (ECT) sensor	14	⬅	Ignition ON - coolant temp. 80°C	0,2 V		
Fuel pump relay - without alarm system	7	⊣▷	Ignition ON	0-1 V briefly then 11-14 V		
Fuel pump relay	7	⊣▷	Engine cranking	0-1 V		
Heated oxygen sensor (HO2S)	8	⬅	Engine idling - engine hot	0,1-1 V fluctuating	0,2 V/1 sec.	21
Heated oxygen sensor (HO2S) - 1993-95	29	⊣	Engine idling	0 V		
Heated oxygen sensor (HO2S) - shield wire - 1993-95	33	⊣	Engine idling	0 V		
Idle air control (IAC) valve	25	⊣▷	Engine idling		2 V/5 ms	64
Ignition amplifier	27	⇨	Engine cranking	10 Hz		
Ignition amplifier	27	⇨	Engine idling	30 Hz	2 V/10 ms	32
Ignition amplifier	27	⇨	3000 rpm	100 Hz		
Ignition switch	26	⬅	Engine cranking	10 V		
Ignition switch - through engine control relay	36	⬅	Ignition OFF	0 V		
Ignition switch	36	⬅	Ignition ON	11-14 V		

Injector	2		Ignition ON	11-14 V briefly then 0 V		
Injector	2		Engine idling - engine hot	2,3 ms	10 V/2 ms	35
Instrument panel	10			Connected pin - no test data available or random digital signal		
Instrument panel - 1992-95	24			Connected pin - no test data available or random digital signal		
Intake air temperature (IAT) sensor	13		Ignition ON	0 V		
Intake air temperature (IAT) sensor	15		Ignition ON - air temp. 20°C	1,4 V		
Knock sensor (KS)	16		Engine running - accelerate briefly		50 mV/1 ms	38
Knock sensor (KS)	17		Engine running	0 V		
Knock sensor (KS) - shield wire	34		Engine running	0 V		
Spare cable - 1993-95	6			Connected pin - no test data available or random digital signal		
Throttle position (TP) sensor	1		Ignition ON	5 V		
Throttle position (TP) sensor	12		Ignition ON - throttle closed	0,5-1,5 V		
Throttle position (TP) sensor	12		Ignition ON - throttle fully open	3-5 V		
Volume air flow (VAF) sensor	13		Ignition ON	0 V		
Volume air flow (VAF) sensor	19		Ignition ON - flap closed	0,3 V		
Volume air flow (VAF) sensor	19		Ignition ON - flap fully open	4,4 V		
Volume air flow (VAF) sensor	19		Engine idling - engine hot	0,8 V		
Volume air flow (VAF) sensor	28		Ignition ON	5 V		