

6C1-128 ENGINE MANAGEMENT

3.4 ECM WIRING AND CONNECTIONS

ECM CONNECTOR IDENTIFICATION

This ECM voltage chart is for use with a digital voltmeter to further aid in diagnosis. The voltages you get may vary slightly due to battery or other reasons, but they should be close.

THE FOLLOWING CONDITIONS MUST BE MET BEFORE TESTING:

- Engine at operating temperature
- Engine idling for "Engine Run" column
- ALDL Test terminal not earthed
- Tech 1 tool not installed
- Transmission in Park or Neutral

DC VOLTAGE

KEY "ON"	ENG. RUN	CIRCUIT	PIN	CKT #	WIRE COLOUR
.02	B+	FUEL PUMP RELAY CONTROL	A1	465	GREEN/WHITE
4.9	4.7	SIGNAL OUTPUT TO TRIP COMPUTER	A2	463	YELLOW/BLACK
			A3		
			A4		
.15	B+	CHECK ENGINE LIGHT CONTROL	A5	419	BROWN/WHITE
B+	B+	IGNITION VOLTAGE INPUT	A6	1439	PINK
B+	B+	TCC SOLENOID CONTROL	A7	422	GREY/RED
			A8		
5.0	5.0	DIAGNOSTIC REQUEST INPUT	A9	451	WHITE/BLACK
.1 or 10	.1 or 10	VEHICLE SPEED SIGNAL INPUT	A10	437	BROWN/YELLOW
0	0	MAP, MAT SENSOR EARTH	A11	469	BLACK
0	0	ENGINE EARTH	A12	150	BLACK



24 PIN A-B CONNECTOR

DC VOLTAGE

WIRE COLOUR	CKT #	PIN	CIRCUIT	KEY "ON"	ENG. RUN
ORANGE/BLACK	540	B1	+12V ECM SUPPLY	B+	B+
BROWN/WHITE	33	B2	CRANKING SIGNAL INPUT	B+	B+
BLACK/RED	453	B3	CRANKSHAFT REFERENCE EARTH	0	0
		B4			
WHITE/VIOLET	430	B5	CRANKSHAFT REFERENCE INPUT SIGNAL	.02 or 11	6.1
		B6			
		B7			
BROWN	449	B8	AIR CONDITIONING REQUEST INPUT	.1 or B+	.1 or B+
		B9			
GREY	434	B10	PARK/NEUTRAL SWITCH SIGNAL INPUT	0	0
WHITE/RED	815	B11	KNOCK SENSOR INPUT SIGNAL	2.5	2.5
		B12			

B+	B+	RADIATOR FAN RELAY CONTROL	C1	304	BLUE/WHITE
.02	.02	AIR CONDITIONING RELAY CONTROL	C2	366	LT GRN/BLACK
*	*	IAC (COIL B LOW)	C3	444	LT GRN/BLACK
*	*	IAC (COIL B HIGH)	C4	443	GREEN/WHITE
*	*	IAC (COIL A HIGH)	C5	441	LT BLUE
*	*	IAC (COIL A LOW)	C6	442	LT BLUE/BLACK
B+	B+	4TH GEAR / OVERTEMP SIGNAL INPUT	C7	446	LT BLUE
			C8		
			C9		
.7 to 1.5	1 to 2	COOLANT TEMP SENSOR SIGNAL INPUT	C10	410	YELLOW
4.5 to 5.0	1.2 to 1.7	MAP SENSOR SIGNAL INPUT	C11	432	LT. GREEN
1 to 2	2 to 3	MAT SENSOR SIGNAL INPUT	C12	472	BROWN
.5 to .9	.5 to .9	TPS SIGNAL INPUT +5V REFERENCE	C13	417	BLUE
5.0	5.0	VOLTAGE OUTPUT	C14	416	GREY
			C15		
B+	B+	+12V ECM SUPPLY	C16	540	ORANGE/BLACK



32 PIN C-D CONNECTOR

BLACK	151	D1	ENGINE EARTH	0	0
BLACK/YELLOW	452	D2	TPS, COOLANT SENSOR EARTH	0	0
BLACK	151	D3	ENGINE EARTH	0	0
WHITE	423	D4	EST OUTPUT	.05	1.2
TAN/BLACK	424	D5	DFI MODULE BYPASS CONTROL	.05	4.6
BLACK	150A	D6	OXYGEN SENSOR EARTH CIRCUIT	0	0
VIOLET	412	D7	OXYGEN SENSOR INPUT SIGNAL	.45	1.0
		D8			
		D9			
BLACK	150	D10	ENGINE EARTH	0	0
		D11			
		D12			
		D13			
		D14			
LIGHT BLUE	467	D15	INJECTOR CONTROL	B+	B+
LIGHT BLUE	467	D16	INJECTOR CONTROL	B+	B+

* Not Useable

- All voltages showing "B+" indicate battery or charging system voltage
- All voltages showing "0" are earth circuits, and should read less than 0.10 volts