DESMOND SEE

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 due to low battery charge or other reasons, but they should be very close.

THE FOLLOWING CONDITIONS MUST BE MET BEFORE TESTING:

- Engine at operating temperature
- Ignition "ON" or engine idling
- A/C "OFF"
- ALDL Test terminal not grounded
- Tech 1 not installed
- All voltages showing "B+" indicates battery or charging system voltage
- All voltages showing "0" are ground circuits, and should read less than 0.10 volts

VOLTAGE DC KEY "ON"	VOLTAGE DC ENG. RUN	CIRCUIT	PIN	WIRE COLOUR
*	B+	FUEL PUMP RELAY	A1	WLG
0	0	A/C CLUTCH CONTROL	A2	KG
0	0	CANISTER PURGE SOLENOID	A3	WB
B+	0.2	SEC. THROTTLES CONTROL SOLENOID	A4	WU
.1	B+	CHECK ENGINE LIGHT	A5	PLG
B+	B+	12 VOLT IGNITION	A6	RG
			A7	
5.0	5.0	SERIAL DATA OUTPUT	A8	OY
5.0	5.0	DIAGNOSTIC REQUEST	A9	WB
**	**	VSS SIGNAL INPUT	A10	BY
0	0	MAT-, CTS-, EGR-SENSOR GROUND	A11	S
0	0	ENGINE GROUND	A12	B

J1



24 PIN A-B CONNECTOR

WIRE COLOUR	PIN	CIRCUIT	VOLTAGE DC KEY "ON"	VOLTAGE DC ENG. RUN
NP	B1	12V BATTERY	B+	B+
WG	B2	FUEL PUMP INPUT	*	B+
YB	B3	REFERENCE SIGNAL GROUND	0	0
B	B4	ENGINE GROUND	0	0
YR	B5	REFERENCE INPUT SIGNAL	0	1.5
	B6			
	B7			
KU	B8	AIR CONDITIONING REQUEST INPUT	0	0
YU	B9	ENGINE POSITION INPUT	***	0.5
	B10			
UK	B11	KNOCK SENSOR INPUT	2.5	2.5
	B12	EGR SENSOR INPUT	***	4.0 to 1.0

			C1	
B+	B+	WASTEGATE SOLENOID	C2	WP
NOT VALID		IAC (COIL B LOW)	C3	NY
NOT VALID		IAC (COIL B HIGH)	C4	NR
NOT VALID		IAC (COIL A HIGH)	C5	NB
NOT VALID		IAC (COIL A LOW)	C6	NW
B+	B+	POWER STEERING SWITCH INPUT	C7	BU
			C8	
			C9	
****	2.4TO 1.0	COOLANT TEMP SENSOR SIGNAL INPUT	C10	SB
2.5	0.6TO 1.0	MAP SENSOR SIGNAL INPUT	C11	SR
****	4.0TO 1.5	MAT SENSOR SIGNAL INPUT	C12	UB
0.4 ± 0.02	0.4 ± 0.02	TPS SIGNAL INPUT	C13	UR
5.0	5.0	+5V REFERENCE VOLTAGE OUTPUT	C14	UO
B+	B+	INJECTOR 2 & 4	C15	UY
B+	B+	12V BATTERY	C16	NP

J2



32 PIN C-D CONNECTOR

B	D1	ENGINE GROUND	0	0
BW	D2	TPS-, MAT-SENSOR GROUND	0	0
KO	D3	PEAK & HOLD JUMPER	0	0
Y	D4	EST OUTPUT	.1	1.2
YG	D5	BYPASS CONTROL CIRCUIT	0	4.5
B	D6	ENGINE GROUND	0	0
SG	D7	O2-SENSOR SIGNAL INPUT	320 to 450	50 to 999
KS	D8	PEAK & HOLD JUMPER	0	0
KO	D9	PEAK & HOLD JUMPER	0	0
	D10			
	D11			
WK	D12	EGR CONTROL	B+	B+
KS	D13	PEAK & HOLD JUMPER	0	0
	D14			
UW	D15	INJECTOR 1 & 3 DRIVE	B+	B+
	D16			

* B+ for 2 seconds after key "ON", then 0 volt --- **Signal voltage alternates between 0 and 12 volts depending on drive wheel position ---

*** 0 to 5 volts depending on camshaft position --- **** depending on ambient or coolant temperature ---

Figure EMJ.4-3 - ECM Terminal End Views