

**"F" CARLINE****22 PIN ECM CONNECTOR****5.7L (VIN P)****\* USE T-100 YELLOW BREAKOUT BOX (BOB)****RPO: LT1**

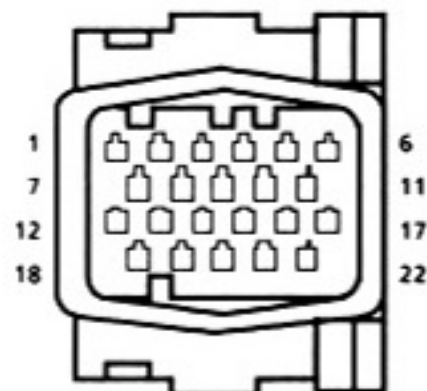
ECM PIN/FUNCTION	BOB PIN #	WIRE COLOR	CKT #	VOLTAGE		6E3 REFERENCE
				KEY "ON"	ENG "RUN"	
A1 EVAP CANISTER PURGE CONTROL	104	DK GRN/WHT	428	B +	B + (1)	SECTION C3
A2 EGR SOLENOID VALVE CONTROL	101	GRY	435	B +	B + (1)	SECTION C7
A3	112					
A4 IAC COIL "A" HIGH	109	LT BLU/WHT	1747	(3)	(3)	SECTION C2
A5 IAC COIL "B" LOW	119	LT GRN/BLK	444	(3)	(3)	SECTION C2
A6 MIL (SERVICE ENGINE SOON) CONTROL	117	BRN/WHT	419	0 *	B +	CHARTS A-1, A-2
A7	103					
A8 AIR PUMP RELAY CONTROL	102	BRN	436	B + (1)	B + (1)	SECTION C6
A9	111					
A10 IAC COIL "A" LOW	110	LT BLU/BLK	1748	(3)	(3)	SECTION C2
A11 IAC COIL "B" HIGH	118	LT GRN/WHT	1749	(3)	(3)	SECTION C2
A12 IGNITION CONTROL	108	WHT	423	0 *	1.1 (3)	SECTION C4
A13 ECT SIGNAL	105	YEL	410	1.8 (4)	1.7 (4)	DTC(s)14, 15
A14	116					
A15	113					
A16	122					
A17	120					
A18	107					
A19 PASS-Key <sup>®</sup> II	106	DK BLU	229	2.5	2.5	DTC 46
A20	115					
A21 PNP SIGNAL	114	ORN/BLK	434	0 * (5)	0 * (5)	CHART C-1A
A22 A/C REQUEST	121	DK GRN/WHT	762	0 * (6)	0 * (6)	SECTION C10

**NOTICE: DO NOT BACKPROBE ECM CONNECTORS!**

This Chart may be used in conjunction with the T-100 Yellow Breakout Box (48921) to obtain voltage present for each circuit listed. Install the BOB between the ECM harness connectors and the ECM, then probe the pin listed under "BOB PIN#". Voltage may vary due to low battery charge or other reasons, but should be very close. All voltages shown in the ENG "RUN" column are typical with engine at idle, closed throttle, normal operating temperature, park or neutral, system in "Closed Loop," all accessories "OFF," and scan tool not installed.

**DVM NEGATIVE (BLACK) LEAD MUST BE CONNECTED TO A KNOWN GOOD GROUND.**

- (1) LESS THAN .5 VOLT WHEN SYSTEM ENABLED.  
 (2) 12 VOLTS FOR FIRST TWO SECONDS WITH IGNITION "ON."  
 (3) VARIES.  
 (4) VARIES WITH TEMPERATURE.  
 (5) BATTERY VOLTAGE WHEN IN GEAR.  
 (6) BATTERY VOLTAGE WHEN SYSTEM IS ENABLED.  
 \* LESS THAN .5 VOLT.

**GRAY ECM CONNECTOR A**

**"F" CARLINE****22 PIN ECM CONNECTOR**

5.7L (VIN P)

\* USE T-100 YELLOW BREAKOUT BOX (BOB)

RPO: LT1

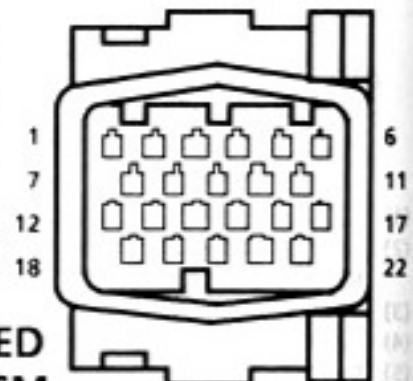
ECM PIN/FUNCTION	BOB PIN #	WIRE COLOR	CKT #	VOLTAGE		6E3 REFERENCE
				KEY "ON"	ENG "RUN"	
B1 REVERSE LOCKOUT SOLENOID CONTROL (MANUAL TRANSMISSION)	204	LT GRN	1652	0 * (2)	0 * (2)	SECTION C8
B2 TCC (AUTOMATIC TRANSMISSION)	201	TAN/BLK	422	B +	B + (1)	SECTION C8
B3 MAP, IAT, & A/C REFRIGERANT SENSOR GND	212	BLK	808	0 *	0 *	DTC(s) AFFECTED
B4 PRIMARY COOLING FAN	209	DK GRN	335	B +	B + (1)	SECTION C12
B5 A/C CLUTCH CONTROL	219	DK GRN/WHT	459	B +	B + (1)	SECTION C10
B6 ECM GROUND	217	BLK/WHT	451	0 *	0 *	SECTION B
B7	203					
B8	202					
B9	211					
B10 SECONDARY COOLING FAN (WITH C60)	210	DK BLU	473	B +	B + (1)	SECTION C12
B11	218					
B12	208					
B13	205					
B14 4 <sup>th</sup> GEAR SIGNAL	216	LT BLU	446	B +	B + (1)	SECTION C8
B15	213					
B16	222					
B17 ECM GROUND	220	BLK/WHT	451	0 *	0 *	SECTION B
B18 TP SENSOR, ECT GROUND	207	BLK	470	0 *	0 *	DTC(s) AFFECTED
B19 3 <sup>rd</sup> GEAR SIGNAL	206	DK GRN/WHT	438	0 *	0 *	SECTION C8
B20 2 <sup>nd</sup> GEAR SIGNAL	215	WHT	232	0 *	0 *	SECTION C8
B21	214					
B22 ECM GROUND	221	TAN/WHT	551	0 *	0 *	SECTION B

**NOTICE: DO NOT BACKPROBE ECM CONNECTORS!**

This Chart may be used in conjunction with the T-100 Yellow Breakout Box (48921) to obtain voltage present for each circuit listed. Install the BOB between the ECM harness connectors and the ECM, then probe the pin listed under "BOB PIN#". Voltage may vary due to low battery charge or other reasons, but should be very close. All voltages shown in the ENG "RUN" column are typical with engine at idle, closed throttle, normal operating temperature, park or neutral, system in "Closed Loop," all accessories "OFF," and scan tool not installed.

**DVM NEGATIVE (BLACK) LEAD MUST BE CONNECTED TO A KNOWN GOOD GROUND.**

- (1) LESS THAN .5 VOLT WHEN SYSTEM IS ENABLED.  
 (2) BATTERY VOLTAGE ABOVE 5 MPH.  
 \* LESS THAN .5 VOLT.



**RED  
ECM  
CONNECTOR B**

**"F" CARLINE****22 PIN ECM CONNECTOR**

5.7L (VIN P)

\* USE T-100 YELLOW BREAKOUT BOX (BOB)

RPO: LT1

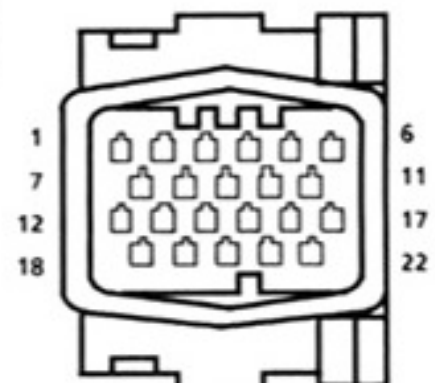
ECM PIN/FUNCTION	BOB PIN #	WIRE COLOR	CKT #	VOLTAGE		6E3 REFERENCE
				KEY "ON"	ENG "RUN"	
C1 A/C STATUS	304	DK GRN	59	0	0 (3)	SECTION C10
C2 +5 VOLTS REFERENCE	301	GRY	474	5	5	DTC(s) AFFECTED
C3 TP SENSOR SIGNAL	312	DK BLU	417	.62	.62	DTC(s) 21, 22
C4	309					
C5 LOW RESOLUTION	319	RED/BLK	453	1.0 OR 5.0	1.0(4)	DTC 16
C6 BATTERY FEED	317	ORN	340	B+	B+	CHART A-1
C7 +5 VOLTS REFERENCE	303	GRY	416	5	5	DTC(s) AFFECTED
C8 KNOCK SENSOR SIGNAL	302	DK BLU	496	2.5	2.5	DTC 43, SECTION C5
C9 REFERENCE LOW	311	PNK/BLK	632	0	0	SECTION C4
C10	310					
C11 A/C REFRIGERANT PRESSURE SENSOR SIGNAL	318	RED/BLK	380	.78	.6-1.0 (5)	DTC(s) 66, 67
C12 IGNITION FEED	308	PNK	439	B+	B+	CHART A-1
C13	305					
C14 HIGH RESOLUTION	316	LT BLU/BLK	647	0*	2.5 (4)	DTC 36
C15	313					
C16 A/C EVAPORATOR TEMPERATURE SENSOR SIGNAL	322	DK BLU	732	1.4 (2)	1.4 (2)	CHART C-10 DTC 71
C17 BATTERY FEED	320	ORN	340	B+	B+	CHART A-1
C18 DISTRIBUTOR IGNITION FEED	307	RED	631	B+	B+	SECTION C4
C19	306					
C20 FUEL PUMP SIGNAL	315	GRY	120	0* (6)	B+	
C21 MAP SIGNAL	314	LT GRN	432	4.8 (1)	1.2 (1)	DTC(s) 33, 34
C22 IAT SIGNAL	321	TAN	472	2.0 (2)	3.0 (2)	DTC(s) 23, 25

**NOTICE: DO NOT BACKPROBE ECM CONNECTORS!**

This Chart may be used in conjunction with the T-100 Yellow Breakout Box (48921) to obtain voltage present for each circuit listed. Install the BOB between the ECM harness connectors and the ECM, then probe the pin listed under "BOB PIN#". Voltage may vary due to low battery charge or other reasons, but should be very close. All voltages shown in the ENG "RUN" column are typical with engine at idle, closed throttle, normal operating temperature, park or neutral, system in "Closed Loop," all accessories "OFF," and scan tool not installed.

**DVM NEGATIVE (BLACK) LEAD MUST BE CONNECTED TO A KNOWN GOOD GROUND.**

- (1) VARIES WITH ALTITUDE.
- (2) VARIES WITH TEMPERATURE.
- (3) B+ WHEN SYSTEM IS ENABLED.
- (4) VARIES.
- (5) WITH A/C "OFF"
- (6) B+ WHEN FUEL PUMP IS ENABLED
- \* LESS THAN .5 VOLT.



**GREEN ECM CONNECTOR C**

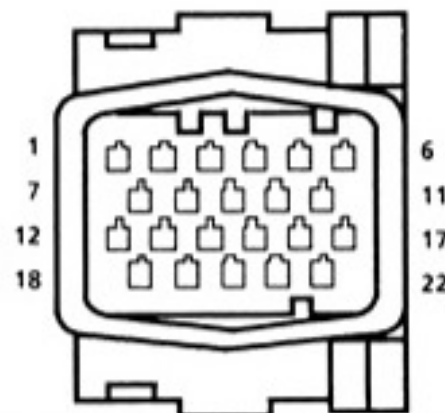
ECM PIN/FUNCTION	BOB PIN #	WIRE COLOR	CKT #	VOLTAGE		6E3 REFERENCE
				KEY "ON"	ENG "RUN"	
D1 VSS GROUND	404	PPL	401	0*	0*	DTC 24
D2	401					
D3	412					
D4 SERIAL DATA	409	TAN	800	(1)	(1)	CHART A-2
D5	419					
D6 BANK 1 (LEFT) O2S SIGNAL	417	PPL/WHT	1665	.38 (1)	.1-.9 (1)	DTC(s) 13, 44
D7 FUEL PUMP RELAY DRIVER	403	DK GRN/WHT	465	0 (2)	B+	CHART A-5
D8 VSS OUTPUT (4KPPM)	402	DK GRN/WHT	817	(3)	(3)	DTC 24
D9	411					
D10 INJECTOR DRIVER	410	DK GRN	468	B+	B+	CHART A-3
D11 INJECTOR DRIVER	418	DK BLU	467	B+	B+	CHART A-3
D12 VSS SIGNAL	408	YEL	400	(3)	(3)	DTC 24
D13	405					
D14	416					
D15	413					
D16 O2S GROUND	422	BLK/WHT	351	0*	0*	DTC(s) 13, 63
D17	420					
D18	407					
D19	406					
D20 DIAGNOSTIC ENABLE	415	WHT/BLK	448	5	5	CHART A-2
D21	414					
D22 BANK 2 (RIGHT) O2S SIGNAL	421	PPL	1666	.36	.1-.9 (1)	DTC(s) 63, 64

**NOTICE: DO NOT BACKPROBE ECM CONNECTORS!**

This Chart may be used in conjunction with the T-100 Yellow Breakout Box (48921) to obtain voltage present for each circuit listed. Install the BOB between the ECM harness connectors and the ECM, then probe the pin listed under "BOB PIN#". Voltage may vary due to low battery charge or other reasons, but should be very close. All voltages shown in the ENG "RUN" column are typical with engine at idle, closed throttle, normal operating temperature, park or neutral, system in "Closed Loop," all accessories "OFF," and scan tool not installed.

**DVM NEGATIVE (BLACK) LEAD MUST BE CONNECTED TO A KNOWN GOOD GROUND.**

**BROWN  
ECM  
CONNECTOR D**



- (1) VARIES.
- (2) B+ FOR TWO SECONDS WITH IGNITION "ON."
- (3) VARIES DEPENDING ON POSITION OF DRIVE WHEELS.
- \* LESS THAN .5 VOLT.