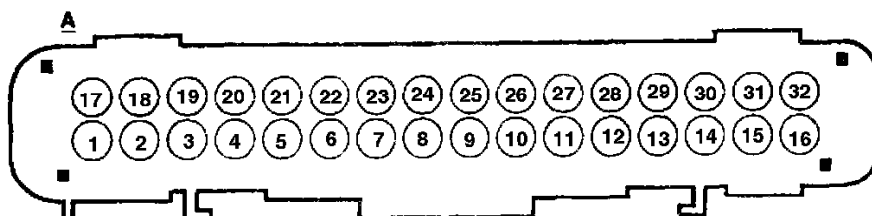


Vehicle: Connector Views

Engine Control Module

A Red



12129024

32 -- WAY F MICRO -- PACK 100 SERIES
RED

POWERTRAIN CONTROL MODULE (PCM)

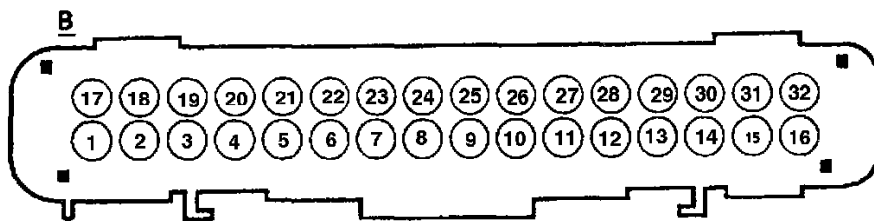
CONNECTOR ASSEMBLY BREAKDOWN	
TPA	- 12129024 (RED)
SEAL	- 12146093
STRAIN RELIEF	- 12129028
CONNECTOR	- 12129025

5-3-84
BS0108A20

CAVITY	WIRE COLOR	CKT	DESCRIPTION
2	BLK/WHT	451	PCM GROUND
3	BLK	1744	FUEL INJECTOR #1 CONTROL
4	LT BLU/BLK	844	FUEL INJECTOR #4 CONTROL
5	YEL/BLK	846	FUEL INJECTOR #6 CONTROL
6	RED/BLK	877	FUEL INJECTOR #7 CONTROL
7	DK GRN/WHT	465	FUEL PUMP RELAY CONTROL
9	GRY	435	EGR VACUUM CONTROL VALVE RELAY SOLENOID CONTROL
10	DK BLU	473	SECONDARY COOLANT FAN RELAY CONTROL
11	DK GRN	335	PRIMARY COOLANT FAN RELAY CONTROL (NOT USED WITH V08)
14	BRN	436	SECONDARY AIR INJECTION (AIR) PUMP RELAY CONTROL
18	BLK/WHT	451	PCM GROUND
19	LT GRN/BLK	1745	FUEL INJECTOR #2 CONTROL
20	BLK/WHT	845	FUEL INJECTOR #5 CONTROL
21	PNK/BLK	1746	FUEL INJECTOR #3 CONTROL
22	DK BLU/WHT	878	FUEL INJECTOR #8 CONTROL
25	DK BLU	229	FUEL ENABLE SIGNAL
31	PPL	401	VSS GROUND
32	YEL	400	VSS SIGNAL

Powertrain Control Module (PCM): A

B Black



15
12129021

32-WAY F MICRO-PACK 100 SERIES
BLK

POWERTRAIN CONTROL MODULE (PCM)

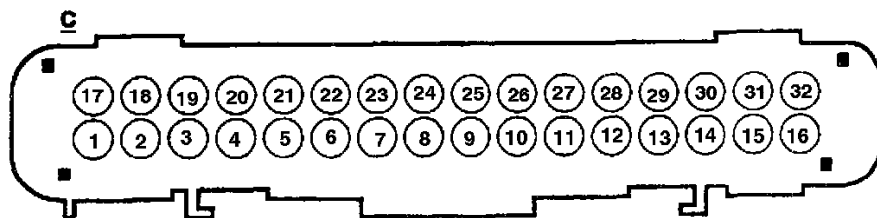
CONNECTOR ASSEMBLY BREAKDOWN	
TPA	- 12129021 (BLK)
SEAL	- 12146093
STRAIN RELIEF	- 12129028
CONNECTOR	- 12129025

5-3-94
BS0118A20

CAVITY	WIRE COLOR	CKT	DESCRIPTION
1	DK BLU	214	A/C REQUEST SIGNAL
2	RED/BLK	453	LOW RESOLUTION SIGNAL
3	PNK/BLK	632	DISTRIBUTOR REFERENCE LOW SIGNAL
5	WHT	423	IGNITION CONTROL
6	BLK	452	SENSOR GROUND
7	LT GRN	1222	TRANSMISSION 1-2 SHIFT SOLENOID
8	DK GRN/WHT	817	VSS OUTPUT (4K PPM)
11	BRN/WHT	1173	"LOW OIL LEVEL" INDICATOR
12	YEL/BLK	1223	TRANSMISSION 2-3 SHIFT SOLENOID
13	BRN	897	TRANSMISSION 3-2 CONTROL SOLENOID
14	RED	631	DISTRIBUTOR IGNITION FEED
15	ORN	440	BATTERY FEED
16	PPL	455	SENSOR GROUND
19	YEL	492	MAF SENSOR SIGNAL
20	PPL/WHT	430	HIGH RESOLUTION SIGNAL
21	DK GRN	59	A/C CLUTCH STATUS
22	TAN/WHT	585	TOC TEMPERATURE SWITCH SIGNAL
26	ORN/BLK	495	POWER STEERING PRESSURE SWITCH
27	BRN	1174	ENGINE OIL LEVEL SENSOR
28	GRY	416	+5 VOLTS REFERENCE
29	GRY	474	+5 VOLTS REFERENCE
30	PNK	539	IGNITION FEED
31	ORN	440	BATTERY FEED

Powertrain Control Module (PCM): B

C Clear



12129022

32-WAY F MICRO-PACK 100 SERIES
CLR

POWERTRAIN CONTROL MODULE (PCM)

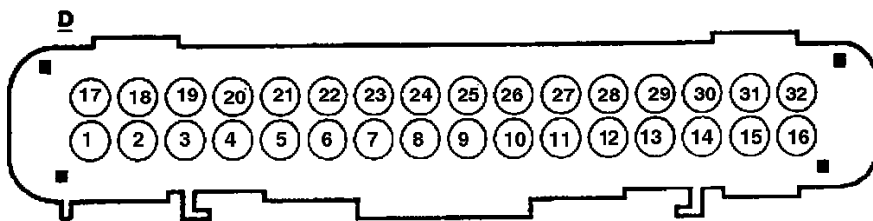
CONNECTOR ASSEMBLY BREAKDOWN	
TPA	- 12129022 (CLR)
SEAL	- 12146093
STRAIN RELIEF	- 12129030
CONNECTOR	- 12129025

5-3-94
BS0128A20

CAVITY	WIRE COLOR	CKT	DESCRIPTION
1	LT BLU/WHT	1747	IAC COIL "A" HIGH
2	LT BLU/BLK	1748	IAC COIL "A" LOW
5	LT GRN/BLK	444	IAC COIL "B" LOW
6	LT GRN/WHT	1749	IAC COIL "B" HIGH
7	TAN	1667	BANK 2 (RIGHT) HO2S LOW
8	PPL	1666	BANK 2 (RIGHT) HO2S SIGNAL
14	PPL	420	BRAKE SWITCH SIGNAL
15	ORN/BLK	434	PNP SIGNAL
16	RED/BLK	1228	TRANSMISSION PRESSURE CONTROL SOLENOID HIGH
19	TAN/WHT	1653	BANK 1 (LEFT) HO2S LOW
20	PPL/WHT	1665	BANK 1 (LEFT) HO2S SIGNAL
21	TAN	472	IAT SENSOR SIGNAL
22	DK BLU	417	TP SENSOR SIGNAL
23	LT GRN	432	MAP SENSOR SIGNAL
25	YEL	410	ECT SENSOR SIGNAL
28	PNK	1224	TRANSMISSION RANGE SIGNAL "A"
29	DK BLU	1225	TRANSMISSION RANGE SIGNAL "B"
30	RED	1226	TRANSMISSION RANGE SIGNAL "C"
32	BLK/WHT	451	PCM GROUND

Powertrain Control Module (PCM): C

D Blue



12129023

32 - WAY F MICRO - PACK 100 SERIES
BLU

POWERTRAIN CONTROL MODULE (PCM)

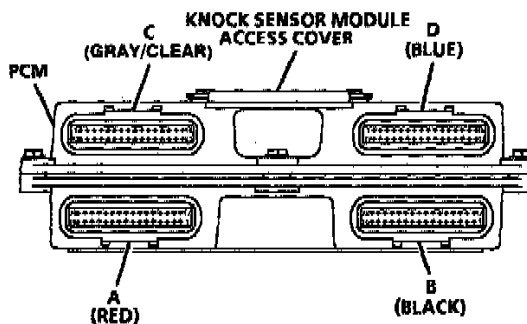
CONNECTOR ASSEMBLY BREAKDOWN	
TPA	- 12129023 (BLU)
SEAL	- 12146093
STRAIN RELIEF	- 12129030
CONNECTOR	- 12129025

5-3-94
BS0138A20

CAVITY	WIRE COLOR	CKT	DESCRIPTION
1	BLK/WHT	451	PCM GROUND
2	LT BLU/WHT	1229	TRANSMISSION PRESSURE CONTROL SOLENOID LOW
3	PNK	539	PCM IGNITION FEED
6	BRN	418	TRANSMISSION TCC CONTROL SOLENOID
8	DK GRN/WHT	459	A/C CLUTCH CONTROL
9	BRN/WHT	419	MIL (SERVICE ENGINE SOON) CONTROL
10	DK GRN/WHT	428	EVAPORATOR CANISTER PURGE SOLENOID VALVE CONTROL
11	TAN/BLK	422	TRANSMISSION TCC ENABLE SOLENOID
12	RED/BLK	380	A/C REFRIGERANT PRESSURE SENSOR SIGNAL
16	PNK	1439	"CHANGE OIL" INDICATOR CONTROL
20	WHT/BLK	448	OUTPUT/FIELD SERVICE ENABLE
22	DK BLU	496	KNOCK SENSOR (KS) SIGNAL
28	YEL/BLK	1227	TRANSMISSION FLUID TEMPERATURE SIGNAL
29	TAN	800	SERIAL DATA

Powertrain Control Module (PCM): D

PCM Pinout and Connector ID Charts



4-14-94
PB 17346 BC

PCM Connectors

CAUTION: Do not backprobe Powertrain Control Module (PCM) connectors! The connectors are sealed for operation in an underhood environment. Backprobing may damage the seal which could eventually cause the connector to fail due to corrosion.

This information applies to the PCM connector charts in the next four images. These charts may be used with the J 39700-A breakout box in conjunction with J 39700-110 and J 39700-140 cables and high impedance digital multimeter J 39200 to obtain voltage present for each circuit listed. Install the

breakout box between the PCM connectors and the PCM. The breakout box PIN numbers correspond with the PCM connector PIN numbers. Voltage may vary slightly, but should be very close. Certain exceptions are called out in the chart legend below.

The following conditions must be met before checking typical voltages:

Key "ON":

- ^ DVM negative (black) lead connected to a known good ground.
- ^ Scan tool "NOT" installed.
- ^ All accessories "OFF."
- ^ Battery fully charged.

Engine Running:

- ^ All conditions listed above.
- ^ Engine at normal operating temperature.
- ^ Engine at idle/closed throttle/operating in "Closed Loop."
- ^ In park or neutral.

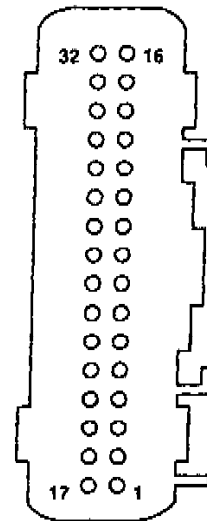
CHART LEGEND

- (1) Less than .5 volt when system enabled.
- (2) Battery voltage for first two seconds with ignition "ON."
- (3) Varies.
- (4) Varies with temperature.
- (5) Battery voltage when in gear.
- (6) Less than .5 volt with brake pedal applied.
- (7) Battery voltage with A/C "ON."
- (8) Varies with altitude.
- (9) Less than .5 volt with high power steering load.
- (*) Less than .5 volt.

pdfMachine trial version

PCM CONNECTOR "A" (RED)

PCM PIN/FUNCTION	CKT #	WIRE COLOR	VOLTAGE	
			KEY "ON"	ENG "RUN"
A1				
A2 PCM GROUND	451	BLK/WHT	0*	0*
A3 INJECTOR #1 CONTROL	1744	BLK	B+	B+
A4 INJECTOR #4 CONTROL	844	LT BLU/BLK	B+	B+
A5 INJECTOR #6 CONTROL	846	YEL/BLK	B+	B+
A6 INJECTOR #7 CONTROL	877	RED/BLK	B+	B+
A7 FP RELAY CONTROL	465	DK GRN/WHT	0 (2)	B+
A8				
A9 EGR VACUUM CONTROL SIGNAL SOLENOID VALVE CONTROL	435	GRY	B+ (1)	B+ (1)
A10 SECONDARY COOLING FAN RELAY CONTROL	473	DK BLU	B+ (1)	B+ (1)
A11 PRIMARY COOLING FAN RELAY CONTROL (NOT USED WITH V08 OPTION)	335	DK GRN	B+ (1)	B+ (1)
A12				
A13				
A14 AIR PUMP RELAY CONTROL	436	BRN	B+ (1)	B+ (1)
A15				
A16				
A17				
A18 PCM GROUND	451	BLK/WHT	0*	0*
A19 INJECTOR #2 CONTROL	1745	LT GRN/BLK	B+	B+
A20 INJECTOR #5 CONTROL	845	BLK/WHT	B+	B+
A21 INJECTOR #3 CONTROL	1746	PNK/BLK	B+	B+
A22 INJECTOR #8 CONTROL	878	DK BLU/WHT	B+	B+
A23				
A24				
A25 FUEL ENABLE SIGNAL	229	DK BLU	2.5	2.5
A26				
A27				
A28				
A29				
A30				
A31 VSS GROUND	401	PPL	0*	0*
A32 VSS SIGNAL	400	YEL	(3)	(3)



**FRONT VIEW
32 PIN
PCM CONNECTOR "A"
(RED)**

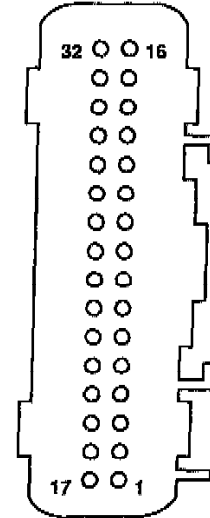
5-28-93
PS 17000

Connector "A"

RED

PCM CONNECTOR "B" (BLACK)

PCM PIN/FUNCTION	CKT #	WIRE COLOR	VOLTAGE	
			KEY "ON"	ENG "RUN"
B1 A/C REQUEST SIGNAL	214	DK BLU	0* (7)	0* (7)
B2 LOW RESOLUTION SIGNAL	463	RED/BLK	0 OR 5	(3)
B3 DISTRIBUTOR REFERENCE LOW SIGNAL	632	PNK/BLK	0*	0*
B4				
B5 IGNITION CONTROL	423	WHT	0*	(3)
B6 SENSOR GROUND	462	BLK	0*	0*
B7 TRANSMISSION 1-2 SHIFT SOLENOID	1222	LT GRN	B+	0*
B8 VSS OUTPUT	817	DK GRN/WHT	6.5	7.5
B9				
B10				
B11 LOW OIL LAMP	1173	BRN/WHT	B+ (1)	B+ (1)
B12 TRANSMISSION 2-3 SHIFT SOLENOID	1223	YEL/BLK	B+	0*
B13 TRANSMISSION 3-2 CONTROL SOLENOID	897	BRN	B+	B+
B14 DISTRIBUTOR IGNITION FEED	631	RED	B+	B+
B15 PCM BATTERY FEED	440	ORN	B+	B+
B16 SENSOR GROUND	465	PPL	0*	0*
B17				
B18				
B19 MAF SENSOR SIGNAL	492	YEL	5	4.3 (3)
B20 HIGH RESOLUTION SIGNAL	430	PPL/WHT OR LT BLU/BLK	5	2.6 (3)
B21 A/C CLUTCH STATUS	55	DK GRN	0* (7)	0* (7)
B22 TCC TEMPERATURE SWITCH SIGNAL	585	TAN/WHT	B+	B+
B23				
B24				
B25				
B26 POWER STEERING PRESSURE SWITCH	495	ORN/BLK	B+ (9)	B+ (9)
B27 ENGINE OIL LEVEL SENSOR	1174	BRN	0*	0*
B28 5 VOLT REFERENCE	416	GRY	5	5
B29 5 VOLT REFERENCE	474	GRY	5	5
B30 PCM IGNITION FEED	539	PNK	B+	B+
B31 PCM BATTERY FEED	440	ORN	B+	B+
B32				



**FRONT VIEW
32 PIN
PCM CONNECTOR
"B"
(BLACK)**

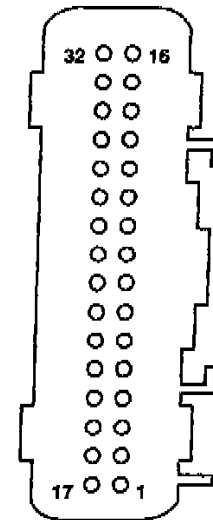
5-27-84
PS 17010

Connector "B"

BLACK

PCM CONNECTOR "C" (GRAY/CLEAR)

PCM PIN/FUNCTION	CKT #	WIRE COLOR	VOLTAGE	
			KEY "ON"	ENG "RUN"
C1 IAC COIL "A" HIGH	1747	LT BLU/WHT	(3)	(3)
C2 IAC COIL "A" LOW	1748	LT BLU/BLK	(3)	(3)
C3				
C4				
C5 IAC COIL "B" LOW	444	LT GRN/BLK	(3)	(3)
C6 IAC COIL "B" HIGH	1749	LT GRN/WHT	(3)	(3)
C7 BANK 2 (RIGHT) HO2S LOW	1667	TAN	0*	0*
C8 BANK 2 (RIGHT) HO2S HIGH	1686	PPL	(3)	.1 TO .9 (3)
C9				
C10				
C11				
C12				
C13				
C14 BRAKE SWITCH SIGNAL	420	PPL	B+ (6)	B+ (6)
C15 PNP SIGNAL	434	ORN/BLK	0* (5)	0* (5)
C16 TRANSMISSION PRESSURE CONTROL SOLENOID HIGH	1228	RED/BLK	0*	6.4
C17				
C18				
C19 BANK 1 (LEFT) HO2S LOW	1663	TAN/WHT	0*	0*
C20 BANK 1 (LEFT) HO2S HIGH	1665	PPL/WHT	(3)	.1 TO .9 (3)
C21 IAT SENSOR SIGNAL	472	TAN	3.9 (4)	3.7 (4)
C22 TP SENSOR SIGNAL	417	DK BLU	.68	.70
C23 MAP SENSOR SIGNAL	432	LT GRN	4.7 (8)	1.1 (8)
C24				
C25 ECT SENSOR SIGNAL	410	VEL	2.3 (4)	2.2 (4)
C26				
C27				
C28 TRANSMISSION RANGE SIGNAL "A"	1224	PNK	B+	B+
C29 TRANSMISSION RANGE SIGNAL "B"	1225	DK BLU	0*	0*
C30 TRANSMISSION RANGE SIGNAL "C"	1226	RED	B+	B+
C31				
C32 PCM GROUND	451	BLK/WHT	0*	0*



**FRONT VIEW
32 PIN
PCM CONNECTOR
"C"
(GRAY/CLEAR)**

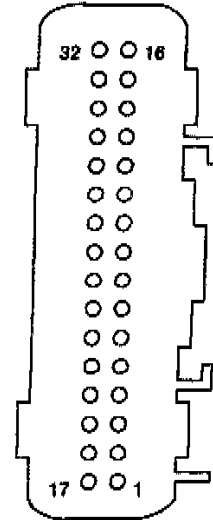
4-20-94
PS 17011

Connector "C"

GREY/CLEAR

PCM CONNECTOR "D" (BLUE)

PCM PIN/FUNCTION	CKT #	WIRE COLOR	VOLTAGE	
			KEY "ON"	ENG "RUN"
D1 PCM GROUND	461	BLK/WHT	0*	0*
D2 TRANSMISSION PRESSURE CONTROL SOLENOID LOW	1229	LT BLU/WHT	0*	1.3
D3 PCM IGNITION FEED	539	PNK	B+	B+
D4				
D5				
D6 TRANSMISSION TCC PWM SOLENOID	418	BRN	B+	B+
D7				
D8 A/C CLUTCH CONTROL	459	DK GRN/WHT	B+ (1)	B+ (1)
D9 MIL CONTROL	419	BRN/WHT	0*	B+ (1)
D10 EVAP CANISTER PURGE SOLENOID VALVE CONTROL	428	DK GRN/WHT	B+ (1)	B+ (1)
D11 TRANSMISSION TCC SOLENOID	422	TAN/BLK	B+	0
D12 A/C REFRIGERANT PRESSURE SENSOR SIGNAL	380	RED/BLK	(3)	(3)
D13				
D14				
D15				
D16 CHANGE OIL LAMP CONTROL	1439	PNK	B+ (1)	B+ (1)
D17				
D18				
D19				
D20 OUTPUT/FIELD SERVICE ENABLE	448	WHT/BLK	5	5
D21				
D22 KS SIGNAL	496	DK BLU	1.6	1.5
D23				
D24				
D25				
D26				
D27				
D28 TRANSMISSION FLUID TEMPERATURE SENSOR SIGNAL	1227	YEL/BLK	2.5 (4)	1.6 (4)
D29 SERIAL DATA	800	TAN	(3)	(3)
D30				
D31				
D32				



**FRONT VIEW
32 PIN
PCM CONNECTOR
"D"
(BLUE)**

3-3-94
PS 1701

Connector "D"

BLUE