

J - PIN VOLTAGE CHARTS

Article Text

1995 Cadillac Concours
For Ace Mechanics 123 Main Street San Diego Ca 92126
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Friday, November 28, 2003 07:09PM

ARTICLE BEGINNING

1995 ENGINE PERFORMANCE

General Motors Corp. Pin Voltage Charts

Cadillac; Concours, DeVille, Seville

INTRODUCTION

Pin voltage charts are supplied (where available) to reduce diagnostic time. Checking pin voltages at the Powertrain Control Module (PCM) determines whether the PCM is receiving and transmitting proper voltage signals. Charts may also help determine if PCM harness has shorts or opens.

NOTE: Unless stated otherwise in testing procedures, all voltage tests should be performed with a Digital Volt-Ohmmeter (DVOM) with a minimum 10-megohm input impedance.

PIN VOLTAGE CHARTS

4.6L VINS Y & 9 (CONCOURS & SEVILLE)

NOTE: This PCM voltage chart can be used with a digital voltmeter to save time in diagnosis. Voltages on vehicle being tested may vary slightly from these due to battery voltage or alternator charging level.

Following conditions must be met before testing:

- * Engine at operating temperature.
- * Engine in closed loop operation.
- * Engine idling (ENG. "RUN" column).
- * DLC "test" terminal not grounded.
- * Scan tester not installed.
- * Brake not applied.
- * B+ indicates battery voltage.

VOLTAGE					
CAVITY	KEY 'ON'	ENGINE RUNNING	WIRE COLOR	CIRCUIT NUMBER	CIRCUIT DESCRIPTION
1A1	---	---	---	---	NOT USED
1A2	B+	B+	RED/BLK	877	FUEL INJECTOR 7 CONTROL
1A3	B+	B+	PNK/BLK	1746	FUEL INJECTOR 3 CONTROL
1A4	B+	B+	GRY	435	EXHAUSTED GAS RECIRCULATION (EGR) VALVE CONTROL
1A5	B+ (1)	B+ (1)	ORN/BLK	495	POWER STEERING PRESSURE SWITCH INPUT
1A6	B+	B+	RED	1266	TRANSAXLE PRESSURE SWITCH Z INPUT
1A7	B+	0	DK BLU	1225	TRANSAXLE PRESSURE SWITCH Y INPUT
1A8	B+	B+	LT BLU/BLK	844	FUEL INJECTOR 4 CONTROL
1A9	0	0	LT GRN	205	VACUUM VALVE CONTROL (CRUISE CONTROL)
1A10	0	0	YEL	400	VEHICLE SPEED CONTROL INPUT (HI)
1A11	B+	B+	BLK/WHT	845	FUEL INJECTOR 5 CONTROL
1A12	0	0	DK BLU/WHT	403	VENT VALVE CONTROL (CRUISE CONTROL)
1A13	2.3	2.3	DK BLU	496	KNOCK SENSOR INPUT
1A14	B+	B+	YEL/BLK	846	FUEL INJECTOR 6 CONTROL
1A15	0 (2)	B+	DK GRN/WHT	465	FUEL PUMP RELAY CONTROL
1A16	B+	B+	DK BLU/WHT	878	FUEL INJECTOR 8 CONTROL
1B1	B+	B+	BLK	1744	FUEL INJECTOR 1 CONTROL
1B2	B+	B+	LT GRN/BLK	1745	FUEL INJECTOR 2 CONTROL
1B3	0	0	RED/BLK	1230	TRANSAXLE INPUT SPEED SENSOR INPUT (HI)
1B4	0	0	DK BLU/WHT	1231	TRANSAXLE INPUT SPEED SENSOR INPUT (LO)
1B5	2.5 (3)	1.8 (3)	YEL	410	ENGINE COOLANT TEMPERATURE (ECT) SENSOR INPUT
1B6	---	---	---	---	NOT USED
1B7	0	0	RED	381	VEHICLE SPEED OUTPUT TO OVER SPEED ALERT MODULE (UD4 ONLY)
1B8	B+	B+	PNK	1224	TRANSAXLE PRESSURE SWITCH X INPUT
1B9	4.8 (4)	1.5 (4)	LT GRN	432	MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR INPUT
1B10	0	0	PPL	401	VEHICLE SPEED SENSOR INPUT (LO)
1B11	0	0	DK GRN	389	VEHICLE SPEED OUTPUT TO INSTRUMENT PANEL CLUSTER
1B12	5.0	5.0	DK GRN/WHT	817	VEHICLE SPEED OUTPUT TO ROAD SENSING SUSPENSION (RSS) MODULE
1B13	0 (2)	B+	GRY	120	FUEL PUMP FEEDBACK
1B14	1.8 (3)	3.1 (3)	TAN/WHT	585	TRANSAXLE TEMPERATURE SENSOR INPUT
1B15	0.9 (5)	0.7 (5)	DK BLU	417	THROTTLE POSITION (TP) SENSOR INPUT
1B16	0 (6)	0 (6)	LT GRN	1478	COOLANT LEVEL SWITCH INPUT

B+ = BATTERY VOLTAGE ($\geq 10V$)

0 = GROUND VOLTAGE ($\leq 0.2V$)

(1) 0 VOLT WITH HIGH POWER STEERING PRESSURE

(2) B+ FOR FIRST TWO SECONDS FOLLOWING KEY 'ON'

(3) VOLTAGE VARIES WITH TEMPERATURE

(4) VOLTAGE VARIES WITH ENGINE SPEED AND LOAD

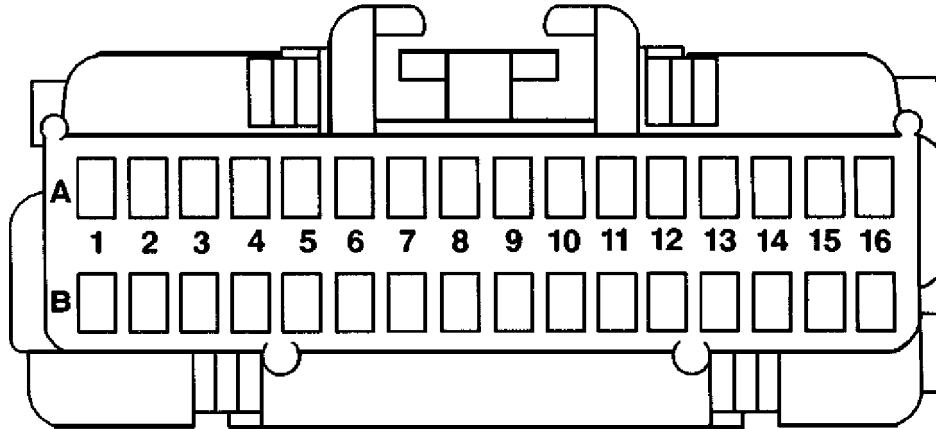
(5) VOLTAGE VARIES WITH THROTTLE POSITION

(6) B+ WHEN COOLANT LEVEL IS LOW

95F12901
Fig. 1: PCM Connector 1A/1B Pin Voltage Chart (4.6L VINS Y & 9 - Seville & Concours)

1. PIN VOLTAGE CHARTS Article Text (p. 2) 1995 Cadillac Concours For Ace Mechanics 123 Main Street San Diego CA
 courtesy of General Motors Corp.

**RED
PCM CONNECTOR
1A/1B**



95C13096 (PCM SIDE OF CONNECTOR SHOWN)

Fig. 2: PCM Connector Terminal 1A/1B ID (4.6L VINS Y & 9 - Seville & Concours)
Courtesy of General Motors Corp.

CAVITY	VOLTAGE		WIRE COLOR	CIRCUIT NUMBER	CIRCUIT DESCRIPTION
	KEY 'ON'	ENGINE RUNNING			
3E1	0	0	RED/BLK	453	REF LO INPUT
3E2	4.5-5.0	1.5-2.0	PPL/WHT	430	4X REF HI INPUT
3E3	---	---	---	---	NOT USED
3E4	0	0	LT GRN	1222	TRANSAXLE SHIFT 'A' SOLENOID CONTROL
3E5	B+	B+	YEL/BLK	1223	TRANSAXLE SHIFT 'B' SOLENOID CONTROL
3E6	B+	B+ (1)	DK GRN	1433	STARTER INHIBIT OUTPUT
3E7	---	---	---	---	NOT USED
3E8	---	---	---	---	NOT USED
3E9	0	0	DK BLU	426	IDLE SPEED CONTROL (ISC) MOTOR CONTROL
3E10	0	0	LT BLU	425	IDLE SPEED CONTROL (ISC) MOTOR CONTROL
3E11	B+	4.0	TAN/BLK	464	DELIVERED TORQUE OUTPUT
3E12	B+	B+	DK GRN/WHT	428	EVAPORATIVE EMISSION CONTROL SOLENOID CONTROL
3E13	B+ (2)	B+ (2)	TAN/BLK	422	TORQUE CONVERTER CLUTCH (TCC) SOLENOID CONTROL
3E14	---	---	---	---	NOT USED
3E15	B+ (3)	B+ (3)	DK GRN/WHT	762	A/C COMPRESSOR CLUTCH RELAY CONTROL
3E16	5.0	5.0	GRY	474	5 VOLT REFERENCE
3F1	5.0	4.5-5.0	LT BLU/BLK	647	24X REF HI INPUT

J - PIN VOLTAGE

3F2	0	2.0-3.0 (4)	BLK	630	CAM HI INPUT
3F3	0	2.0-3.0 (4)	WHT	423	IGNITION CONTROL/FEEDBACK (EST)
3F4	0	4.5-5.0	TAN/BLK	424	BYPASS SPARK OUTPUT
3F5	B+ (5)	B+ (5)	BRN/WHT	419	SERVICE ENGINE SOON MALFUNCTION INDICATOR LAMP (MIL) CONTROL
3F6	---	---	---	---	NOT USED
3F7	B+ (6)	B+ (6)	DK BLU	473	COOLING FAN HIGH SPEED CONTROL
3F8	B+ (7)	B+ (7)	DK GRN	335	COOLING FAN LOW SPEED CONTROL
3F9	0	0	TAN	398	CRUISE CONTROL SERVO POS. SENSOR INPUT (HI)
3F10	0	0	LT BLU/BLK	399	CRUISE CONTROL SERVO POS. SENSOR INPUT (LO)
3F11	B+	B+	PPL	1490	LIFT/DIVE SIGNAL OUTPUT TO ROAD SENSING SUSPENSION (RSS) MODULE
3F12	---	---	---	---	NOT USED
3F13	0	0	TAN	413	FRONT HEATED OXYGEN SENSOR INPUT (LO)
3F14	0-1.0 (4)	0-1.0 (4)	PPL	412	FRONT HEATED OXYGEN SENSOR INPUT (HI)
3F15	0	0	TAN	1671	REAR HEATED OXYGEN SENSOR INPUT (LO)
3F16	0-1.0 (4)	0-1.0 (4)	PPL	1670	REAR HEATED OXYGEN SENSOR INPUT (HI)

B+ = BATTERY VOLTAGE (> 10V)
 0 = GROUND VOLTAGE (≤ 0.2V)

(1) 0 VOLT WITH ENGINE RUNNING FOR 3 SECONDS
 (2) 0 VOLT WITH BRAKE PEDAL DEPRESSED
 (3) 0 VOLT WITH A/C CLUTCH ENGAGED

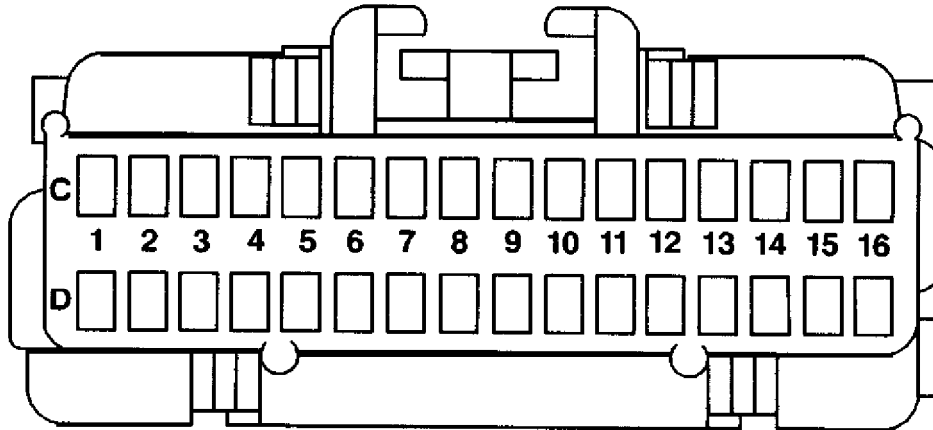
(4) VOLTAGE FLUCTUATES
 (5) 0 VOLT WITH 'SERVICE ENGINE SOON' MIL 'ON'
 (6) 0 VOLT WITH HIGH SPEED COOLING FANS 'ON'
 (7) 0 VOLT WITH COOLING FANS 'ON'

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Fig. 3: PCM Connector 2C/2D Pin Voltage Chart (4.6L VINS Y & 9 - Seville & Concours)

Courtesy of General Motors Corp.

**WHITE
PCM CONNECTOR
2C/2D**



95D13097 (PCM SIDE OF CONNECTOR SHOWN)

**Fig. 4: PCM Connector Terminal 2C/2D ID (4.6L VINS Y & 9 - Seville & Concours)
Courtesy of General Motors Corp.**

J - PIN VOLTAGE

CAVITY	VOLTAGE		WIRE COLOR	CIRCUIT NUMBER	CIRCUIT DESCRIPTION
	KEY 'ON'	ENGINE RUNNING			
2C1	0	0	BLK	808	TP, BBV, AND ECT SENSOR AND EGR RETURN
2C2	0	0	BLK/WHT	451	GROUND TO G102
2C3	0	0	BLK/WHT	451	GROUND TO G102
2C4	B+	B+	ORN	840	BATTERY FEED FROM ENGINE COMPARTMENT FUSE BLOCK FUSE B13
2C5	B+	B+	BRN	741	IGN 3 FROM ENGINE COMPARTMENT FUSE BLOCK FUSE D1
2C6	B+	B+	ORN/BLK	463	DESIRED TORQUE INPUT
2C7	B+ (1)	B+ (1)	GRY	847	EXTENDED TRAVEL BRAKE SWITCH INPUT
2C8	2.5	2.5	DK BLU	229	CRANKING FUEL ENABLE
2C9	0.5-1.0	0.5-1.0	BRN	1456	EXHAUST GAS RECIRCULATION (EGR) FEEDBACK
2C10	---	---	---	---	NOT USED
2C11	3.4 (2)	1.8 (2)	TAN	472	INTAKE AIR TEMPERATURE (IAT) SENSOR INPUT
2C12	2.0-3.5 (3)	2.0-3.5 (3)	TAN	800	DATA LINE INPUT / OUTPUT
2C13	2.0-2.5 (3)	2.0-3.5 (3)	TAN	800	DATA LINE INPUT / OUTPUT
2C14	0	B+	RED	225	GENERATOR CONTROL / FEEDBACK
2C15	0	1.2 (4)	LT BLU/WHT	1229	TRANSAXLE PRESSURE CONTROL SOLENOID ENABLE (HI)
2C16	0	7.0 (4)	RED/BLK	1228	TRANSAXLE PRESSURE CONTROL SOLENOID CONTROL (LO)
2D1	0	0	BLK	452	IAT, MAP AND TRANSAXLE TEMPERATURE SENSOR RETURN
2D2	0	0	BLK/WHT	451	GROUND TO G102
2D3	0	0	BLK/WHT	451	GROUND TO G102
2D4	B+	B+	ORN	840	BATTERY FEED FROM ENGINE COMPARTMENT FUSE BLOCK FUSE B13
2D5	B+	B+	PNK	539	IGN 1 FROM ENGINE COMPARTMENT FUSE BLOCK FUSE A9
2D6	0	0	BRN	1174	OIL LEVEL SWITCH INPUT
2D7	B+	B+	WHT	637	FAST IDLE REQUEST INPUT
2D8	0 (5)	0 (5)	PNK	427	THROTTLE POSITION (TP) SWITCH INPUT
2D9	0 (6)	0 (6)	ORN/BLK	434	PARK/NEUTRAL INPUT
2D10	3.8 (7)	3.9 (7)	YEL	1726	BRAKE BOOSTER VACUUM SENSOR INPUT
2D11	---	---	---	---	NOT USED
2D12	0 (8)	0 (8)	BRN	86	CRUISE BRAKE SWITCH INPUT
2D13	B+ (1)	B+ (1)	PPL	420	TORQUE CONVERTER CLUTCH (TCC) BRAKE SWITCH INPUT
2D14	0 (9)	0 (9)	GRY	397	CRUISE CONTROL ENABLE INPUT
2D15	0 (10)	0 (10)	DK BLU	84	CRUISE CONTROL SET/COAST INPUT
2D16	0 (11)	0 (11)	GRY/BLK	87	CRUISE CONTROL RESUME/ACCEL INPUT

B+ = BATTERY VOLTAGE ($\geq 10V$)
 0 = GROUND VOLTAGE ($\leq 0.2V$)

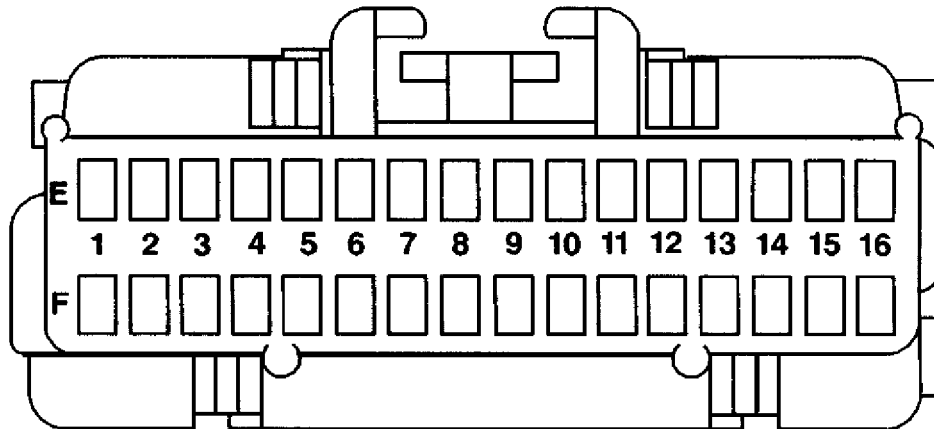
- (1) 0 VOLT WHEN BRAKE PEDAL IS DEPRESSED
- (2) VOLTAGE VARIES WITH TEMPERATURE
- (3) VOLTAGE FLUCTUATES
- (4) VOLTAGE VARIES WITH TRANSAXLE TEMP. AND PRESSURE

- (5) 5 VOLTS WHEN ACCELERATOR PEDAL IS DEPRESSED
- (6) B+ WHEN IN GEAR OTHER THAN PARK OR NEUTRAL
- (7) VOLTAGE VARIES WITH VACUUM
- (8) B+ WITH CRUISE SWITCH 'ON', BRAKE 'OFF'
- (9) B+ WITH CRUISE SWITCH 'ON'
- (10) B+ WITH CRUISE SWITCH 'ON', SET/COAST 'ON'
- (11) B+ WITH CRUISE SWITCH 'ON', RESUME/ACCEL 'ON'

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Fig. 5: PCM Connector 3E/3F Pin Voltage Chart (4.6L VINS Y & 9 - Seville & Concours)
 Courtesy of General Motors Corp.

BLUE PCM CONNECTOR 3E/3F



95E13098 (PCM SIDE OF CONNECTOR SHOWN)

Fig. 6: PCM Connector 3E/3F Pin Voltage Chart (4.6L VINS Y & 9 - Seville & Concours)
Courtesy of General Motors Corp.

4.9L VIN B (DEVILLE)

NOTE: Use Kent-Moore Universal Breakout Box (J-39700), Adapter (J-3970-110) and Cable (J-39700-140) to obtain pin voltage reading from each circuit. Ensure DVOM negative lead is connected to a known good ground. This PCM voltage chart can be used to save time in diagnosis. Voltages on vehicle being tested may vary slightly from these due to battery voltage or alternator charging level.

Following conditions must be met before testing:

- * Engine at operating temperature.
- * Engine in closed loop operation.
- * Engine idling (ENG. "RUN" column).
- * DLC "test" terminal not grounded.
- * Scan tester not installed.
- * Brake not applied.
- * B+ indicates battery voltage.

CAVITY	VOLTAGE		WIRE COLOR	CIRCUIT NUMBER	CIRCUIT DESCRIPTION
	KEY 'ON'	ENGINE RUNNING			
1C1	---	---	---	---	NOT USED
1C2	0 (1)	0 (1)	BRN	86	CRUISE BRAKE SWITCH INPUT
1C3	0 (2)	0 (2)	GRY/BLK	87	RESUME/ACCEL INPUT
1C4	B+ (3)	B+ (3)	PPL	420	TCC BRAKE SWITCH INPUT
1C5	0	1.0-2.0 (4)	BLK	630	CAM HI INPUT
1C6	---	---	---	---	NOT USED
1C7	0	4.5-5.0	TAN/BLK	424	BYPASS SPARK OUTPUT
1C8	0	1.0-1.5 (4)	WHT	423	IGNITION CONTROL
1C9	B+ (5)	B+ (5)	ORN/BLK	495	POWER STEERING PRESSURE SWITCH INPUT
1C10	---	---	---	---	NOT USED
1C11	B+	B+	BLK	1744	FUEL INJECTOR 1 CONTROL
1C12	B+	B+	DK BLU/WHT	878	FUEL INJECTOR 8 CONTROL
1C13	B+	B+	YEL/BLK	846	FUEL INJECTOR 6 CONTROL
1C14	5.0	5.0	GRY	474	MAP AND TP SENSOR 5 VOLT REFERENCE
1C15	B+	B+	LT BLU/BLK	844	FUEL INJECTOR 4 CONTROL
1C16	B+	B+	ORN	840	BATTERY FROM ENGINE COMPARTMENT FUSE BLOCK B13
1D1	0	0	BLK/WHT	451	GROUND TO G301
1D2	0 (7)	0 (7)	GRY	397	CRUISE ENABLE INPUT
1D3	0 (8)	0 (8)	DK BLU	84	SET/COAST INPUT
1D4	---	---	---	---	NOT USED
1D5	---	---	---	---	NOT USED
1D6	0	0	BLK/WHT	451	GROUND TO G301
1D7	0	0	BLK/WHT	451	GROUND TO G301
1D8	0	0	PPL/WHT	430	REF HI INPUT
1D9	0	0.9	RED/BLK	453	REF LO INPUT
1D10	---	---	---	---	NOT USED
1D11	---	---	---	---	NOT USED
1D12	B+	B+ (9)	WHT	637	FAST IDLE REQUEST INPUT
1D13	B+	B+	LT GRN/BLK	1745	FUEL INJECTOR 2 CONTROL
1D14	B+	B+	RED/BLK	877	FUEL INJECTOR 7 CONTROL
1D15	B+	B+	BLK/WHT	845	FUEL INJECTOR 5 CONTROL
1D16	B+	B+	PNK/BLK	1746	FUEL INJECTOR 3 CONTROL

B+ = BATTERY VOLTAGE (≥ 10V) (5) 0 VOLT WITH HIGH POWER STEERING PRESSURE
 0 = GROUND VOLTAGE (≤ 0.5V) (6) 0 VOLT WITH TRANSAXLE IN 'R, N, D OR 3'
 (1) B+ WITH CRUISE SWITCH 'ON' AND BRAKE RELEASED (7) B+ WITH CRUISE SWITCH 'ON'
 (3) 0 VOLT WITH BRAKE PEDAL DEPRESSED (8) B+ WITH CRUISE SWITCH 'ON' AND SET/COAST 'ON'
 (4) VOLTAGE FLUCTUATES (9) 0 VOLT WITH FAST IDLE REQUEST FROM HEATED WINDSHIELD CONTROL MODULE

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Fig. 7: PCM Connector 1C/1D Pin Voltage Chart (4.9L VIN B - DeVille)
 Courtesy of General Motors Corp.

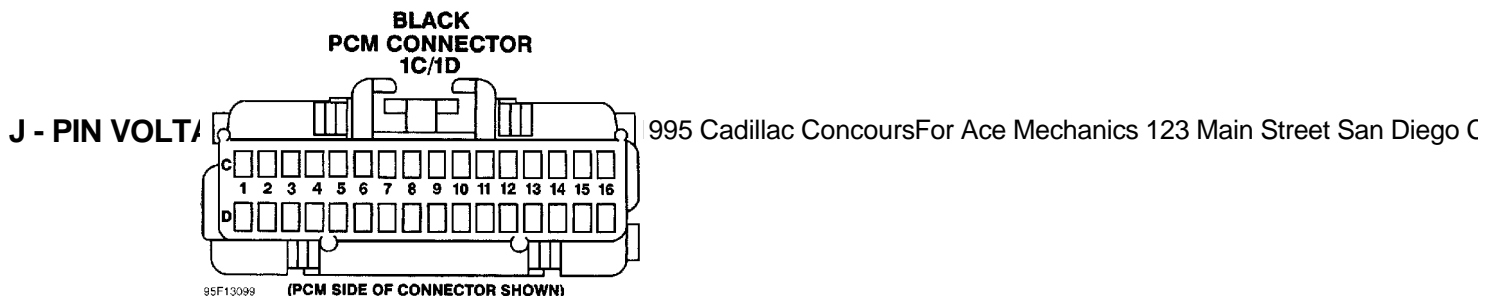


Fig. 8: PCM Connector Terminal 1C/1D ID (4.9L VIN B - DeVille)
 Courtesy of General Motors Corp.

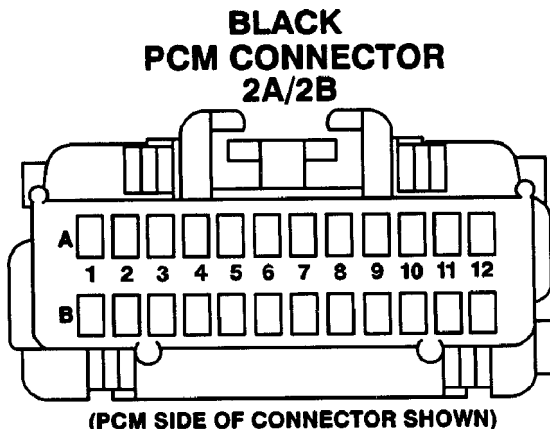
CAVITY	VOLTAGE		WIRE COLOR	CIRCUIT NUMBER	CIRCUIT DESCRIPTION
	KEY 'ON'	ENGINE RUNNING			
2A1	0	0	GRY	435	EGR SOLENOID CONTROL
2A2	0	0	ORN/BLK	434	PARK/NEUTRAL INPUT
2A3	---	---	---	---	NOT USED
2A4	---	---	---	---	NOT USED
2A5	0	0	BLK	452	IAT AND MAP SENSOR RETURN
2A6	B+	B+	PNK	539	IGN 1 FROM ENGINE COMP. FUSE BLOCK FUSE A9
2A7	0	0	PNK	427	THROTTLE POSITION (TP) SWITCH INPUT
2A8	3.0-4.5 (2)	3.0-4.5 (2)	TAN	800	DATA LINE INPUT/OUTPUT
2A9	3.0-4.5 (2)	3.0-4.5 (2)	TAN	800	DATA LINE INPUT/OUTPUT
2A10	B+ (3)	B+ (3)	BRN/WHT	419	SERVICE ENGINE SOON INDICATOR CONTROL
2A11	B+ (4)	B+ (4)	DK GRN	335	COOLING FAN LOW SPEED CONTROL
2A12	0	0	BLK/WHT	451	GROUND TO G301
2B1	B+	B+	ORN	840	BATTERY FROM ENGINE COMP. FUSE BLOCK B13
2B2	---	---	---	---	NOT USED
2B3	0	0	TAN	398	SERVO POSITION SENSOR INPUT HI
2B4	0	0	LT BLU/BLK	399	SERVO POSITION SENSOR INPUT LO
2B5	---	---	---	---	NOT USED
2B6	0	0	TAN	413	FRONT OXYGEN SENSOR INPUT LO
2B7	0-1.0 (2)	0-1.0 (2)	PPL	412	FRONT OXYGEN SENSOR INPUT HI
2B8	B+ (5)	B+ (5)	DK BLU	473	COOLING FAN HIGH SPEED CONTROL
2B9	0	0	PPL	401	VEHICLE SPEED SENSOR INPUT LO
2B10	0	0	YEL	400	VEHICLE SPEED SENSOR INPUT HI
2B11	0	0	DK GRN	389	VEHICLE SPEED OUTPUT
2B12	4.5-5.0	4.5-5.0	DK GRN/WHT	817	VEHICLE SPEED OUTPUT

B+ = BATTERY VOLTAGE ($\geq 10V$)
0 = GROUND VOLTAGE ($\leq 0.5V$)

(1) 0 VOLT WITH TRANSAXLE IN 'R, N, D' OR '3'
(2) VOLTAGE FLUCTUATES

(3) 0 VOLT WHEN 'SERVICE ENGINE SOON' MIL IS 'ON'
(4) 0 VOLT WHEN COOLING FANS ARE 'ON'
(5) 0 VOLT WHEN HIGH SPEED COOLING FANS ARE 'ON'

95J12905
Fig. 9: PCM Connector 2A/2B Pin Voltage Chart (4.9L VIN B - DeVille)
Courtesy of General Motors Corp.



95J13100
Fig. 10: PCM Connector Terminal 2A/2B ID (4.9L VIN B - DeVille)
Courtesy of General Motors Corp.

		VOLTAGE				
CAVITY	KEY 'ON'	ENGINE RUNNING	WIRE COLOR	CIRCUIT NUMBER	CIRCUIT DESCRIPTION	
3E1	0	0	LT BLU	425	IDLE SPEED CONTROL (ISC) MOTOR CONTROL	
3E2	0	0	DK BLU	426	IDLE SPEED CONTROL (ISC) MOTOR CONTROL	
3E3	---	---	---	---	NOT USED	
3E4	0	0	YEL/BLK	1223	SHIFT 'B' SOLENOID CONTROL	
3E5	---	---	---	---	NOT USED	
3E6	B+	B+	PPL	1490	LIFT/DIVE SIGNAL OUTPUT	
3E7	B+	B+	DK GRN/WHT	428	EVAPORATIVE EMISSION CONTROL SOLENOID CONTROL	
3E8	---	---	---	---	NOT USED	
3E9	---	---	---	---	NOT USED	
3E10	0	0	LT GRN	1222	SHIFT 'A' SOLENOID CONTROL	
3E11	0	0	BLK	808	ECT, TP AND TRANS. TEMPERATURE SENSOR RETURN	
3E12	5.0	5.0	PNK/BLK	462	FIXED SPARK/SET TIMING INPUT	
3E13	0 (1)	B+	GRY	120	FUEL PUMP FEEDBACK	
3E14	0-1.0 (2)	0-1.0 (2)	PPL	1670	REAR OXYGEN SENSOR INPUT HI	
3E15	0	0	TAN	1671	REAR OXYGEN SENSOR INPUT LO	
3E16	2.8 (3)	1.6 (3)	YEL	410	ENGINE COOLANT TEMPERATURE (ECT) SENSOR INPUT	
3F1	0 (1)	B+	DK GRN/WHT	465	FUEL PUMP RELAY CONTROL	
3F2	0	0	DK BLU/WHT	403	VENT VALVE CONTROL	
3F3	0	0	LT GRN	205	VACUUM VALVE CONTROL	
3F4	B+	B+ (4)	DK GRN/WHT	762	A/C COMPRESSOR CLUTCH RELAY CONTROL	
3F5	B+	B+	LT BLU/BLK	583	VISCOUS TORQUE CONVERTER CLUTCH MODULATION	
3F6	B+ (5)	B+ (5)	TAN/BLK	422	VISCOUS TORQUE CONVERTER CLUTCH SOL. CONTROL	
3F7	---	---	---	---	NOT USED	
3F8	---	---	---	---	NOT USED	
3F9	---	---	---	---	NOT USED	
3F10	2.5	2.5	DK BLU	229	CRANKING FUEL ENABLE INPUT	
3F11	---	---	---	---	NOT USED	
3F12	1.8 (3)	3.1 (3)	TAN/WHT	585	TRANSAXLE TEMPERATURE SENSOR INPUT	
3F13	0.9 (8)	0.6 (8)	DK BLU	417	THROTTLE POSITION (TP) SENSOR INPUT	
3F14	---	---	---	---	NOT USED	
3F15	4.7	1.3 (9)	LT GRN	432	MANIFOLD ABSOLUTE PRESSURE (MAP) SENSOR INPUT	
3F16	2.8 (3)	0.7 (3)	TAN	472	INTAKE AIR TEMPERATURE (IAT) SENSOR INPUT	

B+ = BATTERY VOLTAGE ($\geq 10V$)
0 = GROUND VOLTAGE ($\leq 0.5V$)

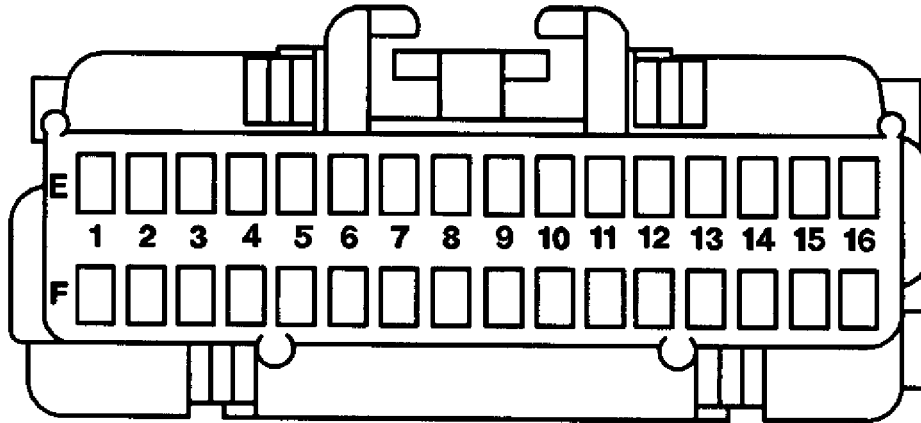
(1) B+ FOR FIRST TWO SECONDS AFTER KEY 'ON'
(2) VOLTAGE FLUCTUATES
(3) VOLTAGE VARIES WITH TEMPERATURE
(4) 0 VOLT WITH A/C CLUTCH ENGAGED

(5) 0 VOLT WITH BRAKE PEDAL DEPRESSED
(6) 0 VOLT WITH TRANSAXLE IN '3, 2, OR 1'
(7) B+ WITH TRANSAXLE IN 'N, D, OR 1'
(8) VOLTAGE VARIES WITH THROTTLE POSITION
(9) VOLTAGE VARIES WITH ENGINE SPEED AND LOAD

95A12906

Fig. 11: PCM Connector 3E/3F Pin Voltage Chart (4.9L VIN B - DeVille)
Courtesy of General Motors Corp.

**GREEN
PCM CONNECTOR
3E/3F**



95J13101 **(PCM SIDE OF CONNECTOR SHOWN)**

Fig. 12: PCM Connector Terminal 3E/3F ID (4.9L VIN B - DeVille)
Courtesy of General Motors Corp.

END OF ARTICLE