

J - PIN VOLTAGE CHARTS

Article Text

1993 Honda Prelude

For Cadi Centre Nsk CA 95051

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ARTICLE BEGINNING

1993 ENGINE PERFORMANCE

Honda Pin Voltage Charts

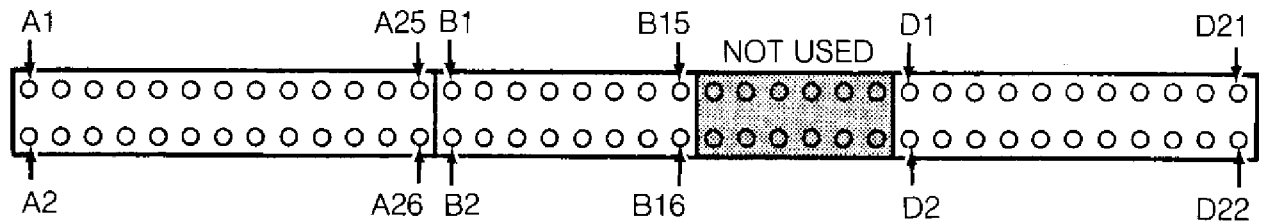
Accord, Civic, Civic Del Sol, Prelude

INTRODUCTION

Pin voltage charts are supplied to reduce diagnostic time. Checking pin voltages at the Engine Module (ACM) determines whether it is receiving and transmitting proper voltage signals. Charts may also help determine if ACM harness is shorted or opened. See Figs. 1-15.

NOTE: Unless stated otherwise in testing procedures, perform all voltage tests using a Digital Volt-Ohmmeter (DVOM) with a minimum 10-megohms input impedance. Voltage readings may vary slightly due to battery condition or charging rate.

NOTE: For terminal identification on all models, see Fig. 1.



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PCM CONNECTOR

Fig. 1: Identifying ACM Connector Terminals

Courtesy of American Honda Motor Co., Inc.

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
Brown	A1	Injector No. 1	Battery Voltage With KOEO ¹
Yellow	A2	Injector No. 4	Battery Voltage With KOEO ¹
Red	A3	Injector No. 2	Battery Voltage With KOEO ¹
	A4 & A10	BLANK	N/A
Blue	A5	Injector No. 3	Battery Voltage With KOEO ¹
Orange/Black	A6	Heated Oxygen Sensor (HO2S) Circuit	Battery Voltage With KOEO ¹
Green/Black	A7 & A8	Fuel Pump Control Circuit	Battery Voltage With KOEO ¹
Black/Blue	A9	Intake Air Control (IAC) Valve	Battery Voltage KOEO ¹ On Warm Engine
Pink	A11	EGR Control Solenoid Valve	N/A
Blue	A12	Radiator Fan & Compressor Fan Control Relay	N/A
Green/Red	A13	Malfunction Indicator Light (MIL) Circuit	N/A
	A14	BLANK	N/A
Red/Blue	A15	A/C Compressor Control Unit Signal	N/A
White/Green	A16	Alternator Control Circuit	N/A
Pink/Blue	A17	By-Pass Control Solenoid Valve	Battery Voltage With KOEO ¹
Brown/White	A18	A/T Control Unit Link (A/T Only)	N/A
White	A19	Intake Air Control (IAC) Solenoid Valve	Battery Voltage With KOEO ¹
Red/Green	A20	Purge Cut-Off Solenoid Valve Circuit	N/A
Yellow/Green	A21 & A22	Ignitor Control Circuit	About 10V KOEO ¹
Black	A23 & A24	Power Ground	Less Than 1V
Yellow/Black	A25	B + From Main Relay	Battery Voltage With KOEO ¹
Black/Red	A26	Ground	Less Than 1V

¹ - KOEO - Key on, engine off.

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Fig. 2: ACM Pin Voltage Chart For Connector Section "A" (Accord)
 Courtesy of American Honda Motor Co., Inc.

J - PIN VOLT

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
Yellow/Black	B1	B + From Main Relay	Battery Voltage With KOEO ¹
Brown/Black	B2	Ground	Less Than 1V
White/Red	B3	A/T Control Unit Link (A/T Only)	N/A
Green	B4	A/T Control Unit Link (A/T Only)	N/A
Blue/Black	B5	A/C Switch Input	About 5V KOER ² (A/C Off); Below 1V (A/C On)
	B6	BLANK	N/A
Light Green	B7	Park/Neutral Switch (A/T)	Below 1V In P/N KOEO ¹ ; 5V In Other Positions
Red	B8	Power Steering Oil Pressure Switch	0V KOER ² ; B + While Turning Wheel
Blue/Red (A/T)	B9	Start Signal Input	Battery Voltage In START Position
Black/Green (M/T)	B9	Start Signal Input	Battery Voltage In START Position
Orange	B10	Vehicle Speed Sensor	Pulses 0-5V While Turning Left Front Wheel
Orange	B11	Crank Angle Sensor (CYL) Power	N/A
White	B12	Crank Angle Sensor (CYL) Signal	N/A
Orange/Blue	B13	Crank Angle Sensor (TDC) Power	N/A
White/Blue	B14	Crank Angle Sensor (TDC) Signal	N/A
Blue/Green	B15	Crank Angle Sensor (Crank) Power	N/A
Blue/Yellow	B16	Crank Angle Sensor (Crank) Signal	N/A
White/Yellow	D1	B + From Battery Through Fuse Box	Battery Voltage At All Times
Green/White	D2	Brake Switch Input Signal	0V KOEO ¹ w/Brake Pedal Released; Battery Voltage w/Brake Pedal Depressed
	D3	BLANK	N/A
Orange/Red	D4	Service Check Connector	5V KOEO ¹
	D5 & D6	BLANK	N/A
	D7 & D8	BLANK	N/A
White/Red	D9	Alternator Charging Signal	About 5V KOEO ¹ ; Decreases Under Electrical Load (Headlights & Rear Defogger On) At Warm Idle
Green/Red	D10	Electrical Load Detector Circuit	4.5-5.0V KOEO ¹ ; 1.8-2.8V KOEO ¹ With Headlight Switch In 1st Position; .8-1.8V In 2nd Position
Red/Black	D11	Throttle Angle Sensor Signal	About 0.5V KOEO ¹ With Throttle Fully Closed; About 4.5V KOEO ¹ With Throttle Fully Open
White/Black	D12	EGR Valve Lift Sensor	About 1.2V KOER ² at Idle
Yellow/Green	D13	Coolant Temperature Sensor Signal	About 5V KOEO ¹ (Varies With Temperature)
White	D14	Heated Oxygen Sensor (HO2S) Signal	0.4-0.5V When Ignition First Turned On; Decreases To Below 0.1V In Less Than 2 Minutes
Red/Yellow	D15	Intake Air Temperature Signal	0.5-4.5V KOEO ¹ (Varies With Temperature)
	D16	BLANK	N/A
White/Blue	D17	MAP Sensor Signal	About 3V KOEO ¹ (Varies w/Manifold Vacuum)
Lt. Green/Black	D18	A/T Control Unit Link (A/T Only)	N/A
Red/White	D19	Sensor Power	About 5V KOEO ¹
Yellow/White	D20	Sensor Power	About 5V KOEO ¹
Blue/White	D21	Sensor Ground	Less Than 1V
Green/White	D22	Sensor Ground	Less Than 1V

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¹ - KOEO - Key on, engine off. ² - KOER - Key on, engine running.

Fig. 3: ECM Pin Voltage Chart For Connector Sections "B" & "D" (Accord)
 Courtesy of American Honda Motor Co., Inc.

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
Brown	A1	Injector No. 1	Battery Voltage With KOEO ¹
Yellow	A2	Injector No. 4	Battery Voltage With KOEO ¹
Red	A3	Injector No. 2	Battery Voltage With KOEO ¹
Orange/White	A4	VTEC Spool Solenoid Valve Control	N/A
Light Blue	A5	Injector No. 3	Battery Voltage With KOEO ¹
Orange/Black	A6	Heated Oxygen Sensor (HO2S) Control	Battery Voltage With KOEO ¹
Green/Yellow	A7	Fuel Pump Control No. 1	Battery Voltage With KOEO ¹
Green/Yellow	A8	Fuel Pump Control No. 2	Battery Voltage With KOEO ¹
Green/White	A9	IAC Control	Battery Voltage With KOEO ¹
	A10 & A11	BLANK	N/A
Yellow/Green	A12	Cooling Fan	N/A
Green/Orange	A13	Malfunction Indicator Light (MIL) Control	Battery Voltage With KOEO ¹
	A14	BLANK	N/A
Black/Red	A15	Compressor Clutch Relay	Battery Voltage With A/C On
White/Yellow	A16	Alternator Output Signal	N/A
Light Green	A17	A/T Lock-Up Control	Battery Voltage With KOEO ¹
	A18	BLANK	N/A
Yellow	A19	A/T Lock-Up Control	Battery Voltage With KOEO ¹
Red	A20	Purge Control Solenoid	N/A
Red/Green	A21	Ignition Output Signal No. 1	About 10V With KOEO ¹
Red/Green	A22	Ignition Output Signal No. 2	About 10V With KOEO ¹
Black	A23 & A24	Ground	Less Than 1V
Yellow/Black	A25	B + From Battery Through Fuse Box	Battery Voltage At All Times
Black/Red	A26	Ground	Less Than 1V

¹ - KOEO - Key on, engine off.

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Fig. 4: ECM Pin Voltage Chart For Conn. Sect. "A" (Civic Exc. VX 1.5L)
Courtesy of American Honda Motor Co., Inc.

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
Yellow/Black →	B1	B + From Battery Through Fuse Box	Battery Voltage At All Times
Brown/Black →	B2	Ground	Less Than 1V
Green/Blue →	B3	A/T Shift Selector Input	Battery Voltage With KOEO ¹
Green/Black →	B4	A/T Shift Selector Input	Battery Voltage With KOEO ¹
Blue/Red →	B5	A/C Request Input	Less Than 1V
	B6	BLANK	N/A
Green →	B7	Park/Neutral Input	About 5V With KOEO ¹
Brown/Red →	B8	Power Steering Switch Input	Battery Voltage (Steering Wheel Turning)
Blue/White →	B9	Start Signal Input	Battery Voltage in Start Position
Yellow/Blue →	B10	Vehicle Speed Sensor input	Pulses 0-12V (Wheels Turning)
Orange →	B11	Cylinder Sensor Input Signal	N/A
White →	B12	Cylinder Sensor Input Signal	N/A
Orange/Blue →	B13	TDC Sensor Signal	N/A
White/Blue →	B14	TDC Sensor Signal	N/A
Blue/Green →	B15	Crank Angle Sensor Signal	N/A
Blue/Yellow →	B16	Crank Angle Sensor Signal	N/A

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¹ - KOEO - Key on, engine off.

Fig. 5: ECM Pin Voltage Chart For Conn. Sect. "B" (Civic Exc. VX 1.5L)

Courtesy of American Honda Motor Co., Inc.

J - PIN VOLT

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
White/Blue	D1	B + From Battery (Input)	Battery Voltage At All Times
Green/White	D2	Brake/ight Switch Input	Battery Voltage At All Times
	D3	BLANK	N/A
Brown	D4	Test Connector (Timing Adjustment)	About 5V With KOEO ¹
	D5	BLANK	N/A
Orange/Blue	D6	VTEC Oil Pressure Switch Input	0.5-4.5V KOEO ¹ (Varies With Pressure)
Light Blue	D7	Serial Data Link	N/A
	D8	BLANK	N/A
Pink	D9	Alternator FR Signal	About 4.5V With KOEO ¹
Green/Red	D10	ELD Unit Input	2.5-3.5V ² ; 1.5-2.5V ³
Pink/Black	D11	Throttle Angle Sensor Input	.5V With Closed Throttle 4.5V With Wide Open Throttle
	D12	BLANK	N/A
Red/White	D13	Coolant Temperature Sensor Input	About 5V
Orange/Blue	D14	Sensor Input	Less Than .4V With Closed Throttle Greater Than .6V With Wide Open Throttle
Red/Yellow	D15	Intake Air Temperature Sensor Input	About 5V With KOEO ¹
	D16	BLANK	N/A
Pink/White	D17	Sensor Ground	Less Than 1V
White/Red	D18	Shift Lock Control	N/A
Yellow/Green	D19	Reference Voltage	About 5V With KOEO ¹
Yellow/White	D20	Reference Voltage	About 5V With KOEO ¹
Green/Blue ⁴	D21	MAP Sensor Input	About 3V
Green/White	D22	Sensor Ground	Less Than 1V

¹ - KOEO - Key on, engine off.

² - Headlight switch in first position.

³ - Headlight switch in second position.

⁴ - Green/Blue on CX, EX & Si Models; Green/White on DX & LX Models.

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Fig. 6: ECM Pin Voltage Chart For Conn. Sect. "D" (Civic Exc. VX 1.5L)

Courtesy of American Honda Motor Co., Inc.

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
Brown	A1	Injector No. 1	Battery Voltage With KOEO ¹
Yellow	A2	Injector No. 4	Battery Voltage With KOEO ¹
Red	A3	Injector No. 2	Battery Voltage With KOEO ¹
Orange/White	A4	VTEC Spool Solenoid Valve Control	N/A
Light Blue	A5	Injector No. 3	Battery Voltage With KOEO ¹
Orange/Black	A6	Heated Oxygen Sensor Heater (HO2S)	Battery Voltage With KOEO ¹
Green/Yellow	A7	Fuel Pump Control No. 1	Battery Voltage With KOEO ¹
Green/Yellow	A8	Fuel Pump Control No. 2	Battery Voltage With KOEO ¹
Green/White	A9	IAC Valve Control	Battery Voltage With KOEO ¹
	A10	BLANK	N/A
Orange/Blue	A11	EGR Control Solenoid Valve	Battery Voltage With KOEO ¹
Yellow/Orange	A12	Cooling Fan	N/A
Green/Orange	A13	Malfunction Indicator Light (MIL) Control	Battery Voltage With KOEO ¹
	A14	BLANK	N/A
Black/Red	A15	Compressor Clutch Relay	Battery Voltage With A/C On
White/Yellow	A16	Alternator Output Signal	N/A
	A17 & A18	BLANK	N/A
	A19	BLANK	N/A
Red	A20	Purge Control Solenoid	N/A
Red/Green	A21	Ignition Output Signal No. 1	About 10V With KOEO ¹
Red/Green	A22	Ignition Output Signal No. 2	About 10V With KOEO ¹
Black	A23 & A24	Ground	Less Than 1V
Yellow/Black	A25	B + From Battery Through Fuse Box	Battery Voltage At All Times
Black/Red	A26	Ground	Less Than 1V

¹ - KOEO - Key on, engine off.

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Fig. 7: ECM Pin Voltage Chart For Connector Sect. "A" (Civic VX 1.5L)
 Courtesy of American Honda Motor Co., Inc.

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
Yellow/Black →	B1	B + From Battery Through Fuse Box	Battery Voltage At All Times
Brown/Black →	B2	Ground	Less Than 1V
Blue/Red →	B3 & B4	BLANK	N/A
	B5	A/C Request Input	About 5V With KOEO ¹
Green →	B6	BLANK	N/A
Brown/Red →	B7	M/T Clutch Switch	About 5V With KOEO ¹
Blue/White →	B8	Power Steering Switch Input	Battery Voltage (Steering Wheel Turning)
Yellow/Blue →	B9	Start Signal Input	Battery Voltage In START Position
Orange →	B10	Vehicle Speed Sensor Input	Pulses 0-12V (Wheels Turning)
White →	B11	Cylinder Sensor Input Signal	N/A
Orange/Blue →	B12	Cylinder Sensor Input Signal	N/A
White/Blue →	B13	TDC Sensor Signal	N/A
Blue/Green →	B14	TDC Sensor Signal	N/A
Blue/Yellow →	B15	Crank Angle Sensor Signal	N/A
	B16	Crank Angle Sensor Signal	N/A

¹ - KOEO - Key on, engine off.

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Fig. 8: ECM Pin Voltage Chart For Connector Sect. "B" (Civic VX 1.5L)
 Courtesy of American Honda Motor Co., Inc.

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
White/Blue →	D1	B + From Battery (Input)	Battery Voltage At All Times
Green/White →	D2	Brakelight Switch Input	Battery Voltage At All Times
Blue/Yellow →	D3	LAF Sensor	0.3-4.9V (Engine Warm)
Brown →	D4	Test Connector (Timing Adjustment)	About 5V With KOEO ¹
	D5	BLANK	N/A
Orange/Blue →	D6	VTEC Oil Pressure Switch Input	0.5-4.5V KOEO ¹ (Varies With Pressure)
Light Blue →	D7	Serial Data Link	N/A
White/Blue →	D8	Sensor Input	Less Than 5V
Pink →	D9	Alternator FR Signal	About 4.5V With KOEO ¹
Green/Red →	D10	ELD Unit Input	2.5-3.5V ² ; 1.5-2.5V ³
Pink/Black →	D11	Throttle Angle Sensor Input	.5V With Closed Throttle 4.5V With Wide Open Throttle
White/Black →	D12	EGR Valve Lift Sensor Input	1.2V Without Vacuum Applied 4.3V With 8 In. Hg Vacuum Applied
Red/White →	D13	Coolant Temperature Sensor Input	About 5V
Orange/Blue →	D14	Sensor Input	Less Than .4V With Closed Throttle Greater Than .6V With Wide Open Throttle
Red/Yellow →	D15	Intake Air Temperature (IAT) Sensor Input	About 5V With KOEO ¹
Blue/Green →	D16	Sensor Ground	Less Than 1V
Pink/White →	D17	Sensor Ground	Less Than 1V
Pink/Green →	D18	Economy Driving Indicator Control	N/A
Yellow/Green →	D19	Reference Voltage	About 5V With KOEO ¹
Yellow/White →	D20	Reference Voltage	About 5V
Green/Blue →	D21	MAP Sensor Input	About 3V
Green/White →	D22	Sensor Ground	Less Than 1V

¹ - KOEO - Key on, engine off.
² - Headlight switch in first position.
³ - Headlight switch in second position.

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J - PIN VOLT

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Fig. 9: ECM Pin Voltage Chart For Connector Section "D" (Civic VX1.5L)

Courtesy of American Honda Motor Co., Inc.

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
Brown	A1	Injector No. 1	Battery Voltage With KOEO ¹
Yellow	A2	Injector No. 4	Battery Voltage With KOEO ¹
Red	A3	Injector No. 2	Battery Voltage With KOEO ¹
Orange/White	A4	VTEC Spool Solenoid Valve Control	N/A
Light Blue	A5	Injector No. 3	Battery Voltage With KOEO ¹
Orange/Black	A6	Heated Oxygen Sensor (HO2S) Control	Battery Voltage With KOEO ¹
Green/Yellow	A7	Fuel Pump Control No. 1	Battery Voltage With KOEO ¹
Green/Yellow	A8	Fuel Pump Control No. 2	Battery Voltage With KOEO ¹
Green/White	A9	IAC Valve Control	Battery Voltage With KOEO ¹
Yellow/Green	A10 & A11	BLANK	N/A
Green/Orange	A12	Cooling Fan	N/A
	A13	Malfunction Indicator Light (MIL) Control	Battery Voltage With KOEO ¹
Black/Red	A14	BLANK	N/A
White/Yellow	A15	Compressor Clutch Relay	Battery Voltage With A/C On
Light Green	A16	Alternator Output Signal	N/A
	A17	A/T Lock-Up Control	Battery Voltage With KOEO ¹
Yellow	A18	BLANK	N/A
Red	A19	A/T Lock-Up Control	Battery Voltage With KOEO ¹
Red/Green	A20	Purge Control Solenoid	N/A
Red/Green	A21	Ignition Output Signal No. 1	About 10V With KOEO ¹
Black	A22	Ignition Output Signal No. 2	About 10V With KOEO ¹
Yellow/Black	A23 & A24	Ground	Less Than 1V
Black/Red	A25	B + From Battery Through Fuse Box	Battery Voltage At All Times
	A26	Ground	Less Than 1V

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¹ - KOEO - Key on, engine off.

Fig. 10: ECM Pin Voltage Chart For Connector Sect. "A" (Civic Del Sol)

Courtesy of American Honda Motor Co., Inc.

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
Yellow/Black	B1	B + From Battery Through Fuse Box	Battery Voltage At All Times
Brown/Black	B2	Ground	Less Than 1V
Green/Blue	B3	A/T Shift Selector Input	Battery Voltage With KOEO ¹
Green/Black	B4	A/T Shift Selector Input	Battery Voltage With KOEO ¹
Blue/Red	B5	A/C Request Input	Less Than 1V
	B6	BLANK	N/A
Green	B7	Park/Neutral Input	About 5V With KOEO ¹
Brown/Red	B8	Power Steering Switch Input	Battery Voltage (Steering Wheel Turning)
Blue/White	B9	Start Signal Input	Battery Voltage In Start Position
Yellow/Blue	B10	Vehicle Speed Sensor input	Pulses 0-12V (Wheels Turning)
Orange	B11	Cylinder Sensor input Signal	N/A
White	B12	Cylinder Sensor Input Signal	N/A
Orange/Blue	B13	TDC Sensor Signal	N/A
White/Blue	B14	TDC Sensor Signal	N/A
Blue/Green	B15	Crank Angle Sensor Signal	N/A
Blue/Yellow	B16	Crank Angle Sensor Signal	N/A

¹ - KOEO - Key on, engine off.

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Fig. 11: ECM Pin Voltage Chart For Connector Sect. "B" (Civic Del Sol)

Courtesy of American Honda Motor Co., Inc.

J - PIN VOLT

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
White/Blue	D1	B + From Battery (Input)	Battery Voltage At All Times
Green/White	D2	Brakelight Switch Input	Battery Voltage At All Times
	D3	BLANK	N/A
Brown	D4	Test Connector (Timing Adjustment)	About 5V With KOEO ¹
	D5	BLANK	N/A
Orange/Blue	D6	VTEC Oil Pressure Switch Input	0.5-4.5V KOEO ¹ (Varies With Pressure)
Light Blue	D7	Serial Data Link	N/A
	D8	BLANK	N/A
Pink	D9	Alternator FR Signal	About 4.5V With KOEO ¹
Green/Red	D10	ELD Unit Input	2.5-3.5V ² ; 1.5-2.5V ³
Red/Blue	D11	Throttle Position (TP) Sensor Input	.5V With Closed Throttle 4.5V With Wide Open Throttle
	D12	BLANK	N/A
Red/White	D13	Coolant Temperature Sensor Input	About 5V
White	D14	Heated Oxygen Sensor (HO2S) Input	0.4-0.5V When Ignition Is Turned On; Drops To Less Than 0.1V Within 1 Minute
Red/Yellow	D15	Intake Air Temperature (IAT) Sensor Input	About 5V With KOEO ¹
	D16	BLANK	N/A
Green/Blue	D17	MAP Sensor Input	About 3V
White/Red	D18	Shift Lock Control	N/A
Yellow/Green	D19	Reference Voltage	About 5V With KOEO ¹
Yellow/White	D20	Reference Voltage	About 5V With KOEO ¹
White	D21	Sensor Ground	Less Than 1V
Green/White	D22	Sensor Ground	Less Than 1V

¹ - KOEO - Key on, engine off.

² - Headlight switch in first position.

³ - Headlight switch in second position.

⁴ - Green/Blue on CX, EX & Si Models; Green/White on DX & LX Models.

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Fig. 12: ECM Pin Voltage Chart For Connector Sect. "D" (Civic Del Sol)

Courtesy of American Honda Motor Co., Inc.

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
Brown	A1	Injector No. 1	Battery Voltage With KOEO ¹
Yellow	A2	Injector No. 4	Battery Voltage With KOEO ¹
Red	A3	Injector No. 2	Battery Voltage With KOEO ¹
Green/Yellow	A4	VTEC Solenoid Valve Control	N/A
Blue	A5	Injector No. 3	Battery Voltage With KOEO ¹
Orange/White	A6	Heated Oxygen Sensor (HO2S) Circuit	Battery Voltage With KOEO ¹
Green/Black	A7 & A8	Fuel Pump Control Circuit	Battery Voltage With KOEO ¹
Black/Blue	A9	Intake Air Control (IAC) Valve	About 10V KOEO ¹ On Warm Engine
	A10 & A14	BLANK	N/A
Red	A11	EGR Control Solenoid Valve	N/A
Blue/Red	A12	Fan Relay Control	N/A
Blue/White	A13	Malfunction Indicator Light (MIL) Circuit	N/A
Red/Blue	A15	A/C Compressor Control Unit Signal	N/A
White/Green	A16	Alternator Output Signal	N/A
Pink	A17	By-Pass Control Solenoid Valve Control	N/A
Orange/Red	A18	FAS (A/T)	N/A
White	A19	Intake Control Solenoid	Battery Voltage With KOEO ¹
Red/Green	A20	Purge Cut-Off Solenoid Valve Circuit	N/A
Yellow/Green	A21 & A22	Ignitor Control Circuit	About 10V KOEO ¹
Black	A23 & A24	Power Ground	Less Than 1V
Yellow/Black	A25	B + From Main Relay	Battery Voltage With KOEO ¹
Black/Red	A26	Ground	Less Than 1V

¹ - Key on, engine off.

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Fig. 13: ECM Pin Voltage Chart For Connector Section "A" (Prelude)
 Courtesy of American Honda Motor Co., Inc.

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
Yellow/Black →	B1	B + From Main Relay	Battery Voltage With KOEO ¹
Brown/Black →	B2	Ground	Less Than 1V
Orange →	B3	Upshift/Downshift Comparative Input	N/A
Pink →	B4	Upshift/Downshift Comparative Input	N/A
Blue/Black →	B5	A/C Switch Input	About 5V With KOEO ¹ & A/C Off; Less Than 1V KOER ² With A/C & Blower On
	B6	BLANK	N/A
Light Green →	B7	Park/Neutral Switch (A/T)	Less Than 1V In Park Or Neutral With KOEO ¹ ; 5V In Park Or Neutral With KOER ² ; Battery Voltage In All Other Positions
Red/Green →	B8	Power Steering Oil Pressure Switch	0V KOEO ¹ ; Battery Voltage KOER ² While Slowly Turning Steering Wheel
Blue/Red →	B9	Start Signal Input	Battery Voltage In START Position (Clutch Depressed On M/T Models)
Orange →	B10	Vehicle Speed Sensor	Pulses 0-12V While Turning Left Front Wheel
Orange →	B11	Crank Angle Sensor (CYL) Power	N/A
White →	B12	Crank Angle Sensor (CYL) Signal	N/A
Orange/Blue →	B13	Crank Angle Sensor (TDC) Power	N/A
White/Blue →	B14	Crank Angle Sensor (TDC) Signal	N/A
Blue/Green →	B15	Crank Angle Sensor (Crank) Power	N/A
Blue/Yellow →	B16	Crank Angle Sensor (Crank) Signal	N/A

¹ - KOEO - Key on, engine off.

² - KOER - Key on, engine running.

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Fig. 14: ECM Pin Voltage Chart For Connector Section "B" (Prelude)
 Courtesy of American Honda Motor Co., Inc.

	Terminal ID.	Function/Description	Voltage Value (DC Volts Unless Otherwise Specified)
White/Yellow →	D1	B + From Battery Through Fuse Box	Battery Voltage at All Times
Green/White →	D2	Stoplight Switch	Battery Voltage at All Times
Red/Blue →	D3	Knock Sensor	N/A
Brown/White →	D4	Service Check Connector	About 5V (M/T); About 11V (A/T)
	D5	BLANK	N/A
Lt. Blue →	D6	VTEC Pressure Switch Input	N/A
Lt. Green/Red →	D7	Data Link Connector	N/A
	D8	BLANK	N/A
White/Red →	D9	Alternator Charging Signal	About 4.5V KOEO ¹ ; Decreases Under Electrical Load (Headlights & Rear Defogger On) At Warm Idle
Lt. Green/Red →	D10	ELD Input	N/A
Red/Black →	D11	Throttle Position (TP) Sensor Signal	About 0.5V KOEO ¹ With Throttle Fully Closed; About 4.5V KOEO ¹ With Throttle Fully Open
White/Black →	D12	EGR Valve Lift Sensor	About 1.2V KOEO
Yellow/Blue →	D13	Coolant Temperature Sensor Signal	About 5V KOEO ¹ (Varies With Temperature)
White →	D14	Heated Oxygen Sensor (HO2S) Signal	0.4-0.5V When Ignition Is Turned On; Drops To Less Than 0.1V Within 2 Minutes
Red/Yellow →	D15	Intake Air Temperature (IAT) Signal	0.5-4.5V KOEO ¹ (Varies With Temperature)
	D16	BLANK	N/A
White/Blue →	D17	MAP Sensor Signal	About 3V KOEO ¹ (Varies With Manifold Vacuum)
Lt. Green/Black →	D18	A/T Control Unit Link (A/T Only)	N/A
Red/White →	D19	Reference Voltage	About 5V KOEO ¹
Yellow/White →	D20	Reference Voltage	About 5V KOEO ¹
Blue/White →	D21	Sensor Ground	Less Than 1V
Green/White →	D22	Sensor Ground	Less Than 1V

J - PIN VOLT

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¹ - KOEO - Key on, engine off.

Fig. 15: ECM Pin Voltage Chart For Connector Section "D" (Prelude)
Courtesy of American Honda Motor Co., Inc.

END OF ARTICLE