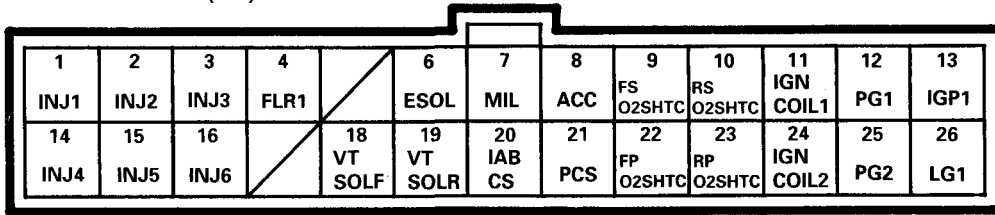


# Troubleshooting

## Engine Control Module Terminal Arrangement

ECM CONNECTOR A (26P)



TERMINAL SIDE OF MALE TERMINALS

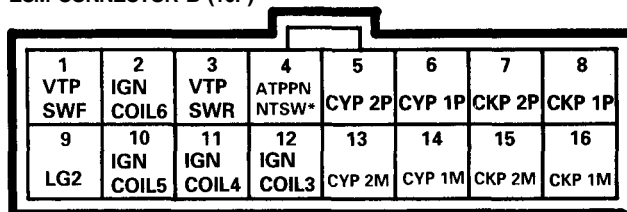
ECM CONNECTOR A (26P)

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	BRN	INJ1 (No. 1 FUEL INJECTOR)	Drives No. 1 fuel injector.	With engine running: pulse
2	RED	INJ2 (No. 2 FUEL INJECTOR)	Drives No. 2 fuel injector.	
3	BLU	INJ3 (No. 3 FUEL INJECTOR)	Drives No. 3 fuel injector.	
4	GRN/BLK	FLR1 (FUEL PUMP RELAY)	Drives fuel pump relay.	0 V for two seconds after turning ignition switch ON(II), then battery voltage
6	GRN	ESOL (EGR CONTROL SOLENOID VALVE)	Drives EGR control solenoid valve.	With EGR operating during driving with fully warmed up engine: duty controlled With EGR not operating: battery voltage
7	BLU	MIL (MALFUNCTION INDICATOR LAMP)	Drives MIL.	With MIL turned ON: 0 V With MIL turned OFF: battery voltage
8	RED/BLU	ACC (A/C CLUTCH RELAY)	Drives A/C clutch relay.	With compressor ON: 0 V With compressor OFF: battery voltage
9	GRY	FSO2SHTC (FRONT SECONDARY HEATED OXYGEN SENSOR HEATER CONTROL)	Drives front secondary heated oxygen sensor heater.	With ignition switch ON (II): battery voltage With fully warmed up engine running: 0 V
10	LT GRN	RSO2SHTC (REAR SECONDARY HEATED OXYGEN SENSOR HEATER CONTROL)	Drives rear secondary heated oxygen sensor heater.	With ignition switch ON: battery voltage With fully warmed up engine running: pulse
11	PNK	IGN COIL1 (No. 1 IGNITION COIL part of IGNITION CONTROL MODULE)	Sends ignition pulse.	With ignition switch ON (II): 0 V With engine running: pulse
12	BLK	PG1 (POWER GROUND)	Ground for the ECM power circuit.	Less than 1.0 V at all times
13	YEL/BLK	IGP1 (POWER SOURCE)	Power source for the ECM control circuit.	With ignition switch ON (II): battery voltage With ignition switch OFF: 0 V
14	YEL	INJ4 (No. 4 FUEL INJECTOR)	Drives No. 4 fuel injector.	With engine running: pulse
15	BLK/RED	INJ5 (No. 5 FUEL INJECTOR)	Drives No. 5 fuel injector.	
16	WHT/BLU	INJ6 (No. 6 FUEL INJECTOR)	Drives No. 6 fuel injector.	
18	BLU/YEL	VT SOLF (FRONT VTEC SOLENOID VALVE)	Drives front VTEC solenoid valve.	With engine at low rpm: 0 V With engine at high rpm: battery voltage
19	GRN/YEL	VT SOLR (REAR VTEC SOLENOID VALVE)	Drives rear VTEC solenoid valve.	With engine at low rpm: 0 V With engine at high rpm: battery voltage
20	PNK/BLU	IABCS (IAB CONTROL SOLENOID VALVE)	Drives IAB control solenoid valve.	With engine speed below 4,800 rpm: battery voltage With engine speed above 4,800 rpm: 0 V
21	RED	PCS (EVAP PURGE CONTROL SOLENOID VALVE)	Drives EVAP purge control solenoid valve.	With engine running, engine coolant below 153°F (67°C): battery voltage With engine running, engine coolant above 153°F (67°C): 0 V
22	GRN/RED	FPO2SHTC (FRONT PRIMARY HEATED OXYGEN SENSOR HEATER CONTROL)	Drives front primary heated oxygen sensor heater.	With ignition switch ON (II): battery voltage With fully warmed up engine running: 0 V
23	ORN/BLK	RPO2SHTC (REAR PRIMARY HEATED OXYGEN SENSOR HEATER CONTROL)	Drives rear primary heated oxygen sensor heater.	With ignition switch ON (II): battery voltage With fully warmed up engine running: 0 V
24	BRN	IGN COIL2 (No. 2 IGNITION COIL part of IGNITION CONTROL MODULE)	Sends ignition pulse.	With ignition switch ON (II): 0 V With engine running: pulse
25	BLK	PG2 (POWER GROUND)	Ground for the ECM power circuit.	Less than 1.0 V at all times
26	BRN/BLK	LG1 (LOGIC GROUND)	Ground for the ECM control circuit.	Less than 1.0 V at all times



ECM CONNECTOR B (16P)



TERMINAL SIDE OF MALE TERMINALS

ECM CONNECTOR B (16P)

NOTE: Standard battery voltage is 12 V.

\*: M/T

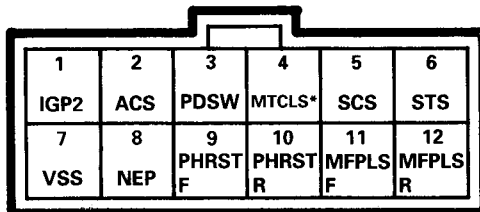
Terminal number	Wire color	Terminal name	Description	Signal
1	BLU	VTP SWR (FRONT VTEC PRESSURE SWITCH)	Detects VTEC pressure switch signal.	With engine at low rpm: 0 V With engine at high rpm: battery voltage
2	RED	IGN COIL6 (No. 6 IGNITION COIL part of IGNITION CONTROL MODULE)	Sends ignition pulse.	With ignition switch ON (II): 0 V With engine running: pulse
3	BLU/BLK	VTP SWR (REAR VTEC PRESSURE SWITCH)	Detects VTEC pressure switch signal.	With engine at low rpm: 0 V With engine at high rpm: battery voltage
4	RED	ATP PN (A/T GEAR POSITION SWITCH)	Detects A/T gear position switch signal.	In <b>N</b> or <b>P</b> position: 0 V In any other position: approx. 5 V
4*	LT GRN	NT SW (NEUTRAL SWITCH)	Detects neutral switch signal.	In neutral position: 0 V In any other position: approx. 5 V
5	ORN	CYP 2P (CYP SENSOR 2 P SIDE)	Detects CYP sensor 2.	With engine running: pulse
6	WHT	CYP 1P (CYP SENSOR 1 P SIDE)	Detects CYP sensor 1.	With engine running: pulse
7	ORN/BLU	CKP 2P (CKP SENSOR 2 P SIDE)	Detects CKP sensor 2.	With engine running: pulse
8	BLU/GRN	CKP 1P (CKP SENSOR 1 P SIDE)	Detects CKP sensor 1.	With engine running: pulse
9	BRN/BLK	LG2 (LOGIC GROUND)	Ground for the ECM control circuit.	Less than 1.0 V at all times
10	GRY	IGN COIL5 (No. 5 IGNITION COIL part of IGNITION CONTROL MODULE)	Sends ignition pulse.	With ignition switch ON (II): 0 V With engine running: pulse
11	GRN	IGN COIL4 (No. 4 IGNITION COIL part of IGNITION CONTROL MODULE)	Sends ignition pulse.	With ignition switch ON (II): 0 V With engine running: pulse
12	BLU	IGN COIL3 (No. 3 IGNITION COIL part of IGNITION CONTROL MODULE)	Sends ignition pulse.	With ignition switch ON (II): 0 V With engine running: pulse
13	ORN/BLU	CYP 2M (CYP SENSOR 2 M SIDE)	Ground for CYP sensor 2.	
14	WHT/BLU	CYP 1M (CYP SENSOR 1 M SIDE)	Ground for CYP sensor 1.	
15	WHT/BLU	CKP 2M (CKP SENSOR 2 M SIDE)	Ground for CKP sensor 2.	
16	BLU/YEL	CKP 1M (CKP SENSOR 1 M SIDE)	Ground for CKP sensor 1.	

(cont'd)

# Troubleshooting

## Engine Control Module Terminal Arrangement (cont'd)

ECM CONNECTOR C (12P)



TERMINAL SIDE OF MALE TERMINALS

ECM CONNECTOR C (12P)

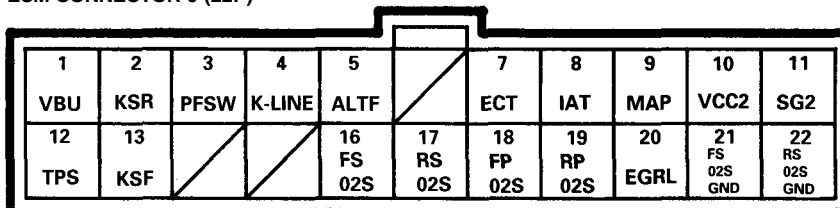
NOTE: Standard battery voltage is 12 V.

\*: M/T

Terminal number	Wire color	Terminal name	Description	Signal
1	YEL/BLK	IGP2 (POWER SOURCE)	Power source for the ECM control circuit.	With ignition switch ON (II): battery voltage With ignition switch OFF: 0 V
2	BLU/BLK	ACS (A/C SWITCH SIGNAL)	Detects A/C switch signal.	With A/C switch ON: 0 V With A/C switch OFF: approx. 10 V
3	RED/GRN	PDSW (A/C PRESSURE SWITCH B)	Detects A/C pressure switch B signal.	With A/C pressure switch B ON: 0 V With A/C pressure switch B OFF: approx. 5 V
4*	PNK	MTCLS (M/T CLUTCH SWITCH)	Detects M/T clutch switch signal.	With ignition switch ON (II) and clutch pedal depressed: approx. 5 V With ignition switch ON (II) and clutch pedal released: 0 V
5	BLU	SCS (SERVICE CHECK SIGNAL)	Detects service check connector signal (the signal causing a DTC indication)	With the connector connected: 0 V With the connector disconnected: about 5 V or battery voltage
6	BLK/WHT	STS (STARTER SWITCH SIGNAL)	Detects starter switch signal.	With starter switch ON: battery voltage With starter switch OFF: 0 V
7	ORN	VSS (VEHICLE SPEED SENSOR)	Detects VSS signal.	With ignition switch ON (II) and rear wheels turning: cycles 0 – 5 V
8	GRN	NEP (ENGINE SPEED PULSE)	Outputs engine speed pulse.	With engine running: pulse
9	GRN/YEL	PHRST F (FRONT PEAK HOLD RESET)	Sends peak hold reset signal.	With engine running: pulse
10	GRN/BLK	PHRST R (REAR PEAK HOLD RESET)	Sends peak hold reset signal.	With engine running: pulse
11	YEL/RED	MFPLS F (FRONT MISFIRE PULSE)	Detects misfire pulse.	With engine running: pulse
12	YEL	MFPLS R (REAR MISFIRE PULSE)	Detects misfire pulse.	With engine running: pulse



ECM CONNECTOR 0 (22P)



TERMINAL SIDE OF MALE TERMINALS

ECM CONNECTOR D (22P)

NOTE: Standard battery voltage is 12 V.

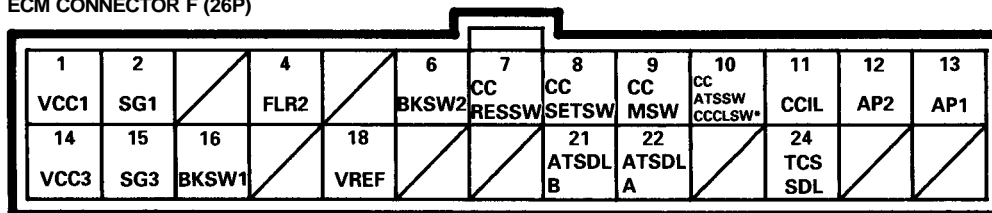
Terminal number	Wire color	Terminal name	Description	Signal
1	WHT/YEL	VBU (VOLTAGE BACK UP)	Power source for the ECM control circuit. Power source for the DTC memory	Battery voltage at all times
2	RED/BLU	KSR (REAR KNOCK SENSOR KS1)	Detects knock sensor signal.	With engine knocking: pulse
3	BRN	PFSW (EVAP PURGE FLOW SWITCH)	Detects EVAP purge flow switch signal.	With engine at 2,000 – 2,700 rpm: 0 V With engine above or below except 2,000 – 2,700 rpm: battery voltage
4	YEL/GRN	K-LINE (DLC)	Sends or detects PGM tester and OBD II scan tool signal.	With ignition switch ON (II): about 5 V
5	WHT/RED	ALTF (ALTERNATOR FR SIGNAL)	Detects alternator FR signal.	With fully warmed up engine running: 0 V – 5 V (depending on electrical load)
7	RED/WHT	ECT (ENGINE COOLANT TEMPERATURE SENSOR)	Detects ECT sensor signal.	With ignition switch ON (II): about 0.1 – 4.8 V (depending on engine coolant temperature)
8	RED/YEL	IAT (INTAKE AIR TEMPERATURE SENSOR)	Detects IAT sensor signal.	With ignition switch ON (II): about 0.1 – 4.8 V (depending on intake air temperature)
9	WHT/YEL	MAP (MANIFOLD ABSOLUTE PRESSURE SENSOR)	Detects MAP sensor signal.	With ignition switch ON (II): about 3 V During idling: about 1.0 V (depending on engine speed)
10	YEL/BLU	VCC2 (SENSOR VOLTAGE)	Provides sensor voltage.	With ignition switch ON (II): about 5 V With ignition switch OFF: 0 V
11	GRN/BLU	SG2 (SENSOR GROUND)	Sensor ground.	
12	RED/BLK	TPS (THROTTLE POSITION SENSOR)	Detects TP sensor signal.	With throttle fully open: about 4.5 V With throttle fully closed with fully warmed up engine: about 0.5 V
13	WHT	KSF (FRONT KNOCK SENSOR KS2)	Detects knock sensor signal.	With engine knocking: pulse
16	GRN	O2S FS (FRONT SECONDARY OXYGEN SENSOR)	Detects secondary oxygen sensor signal.	With throttle fully opened with fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
17	WHT/RED	O2S RS (REAR SECONDARY OXYGEN SENSOR)	Detects secondary oxygen sensor signal.	With throttle fully opened with fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
18	BLU/RED	O2S FP (FRONT PRIMARY OXYGEN SENSOR)	Detects primary oxygen sensor signal.	With throttle fully opened with fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
19	WHT	O2S RP (REAR PRIMARY OXYGEN SENSOR)	Detects primary oxygen sensor signal.	With throttle fully opened with fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
20	WHT/BLK	EGRL (EGR VALVE LIFT SENSOR)	Detects EGR valve lift sensor signal.	During idling without vacuum: about 1.2 V With 27 kPa (200 mmHg, 8 in.Hg): about 4.3 V
21	BLU/GRN	O2SGND FS (FRONT SECONDARY OXYGEN SENSOR GROUND)	Sensor ground for front secondary oxygen sensor.	
22	WHT	O2SGND RS (REAR SECONDARY OXYGEN SENSOR GROUND)	Sensor ground for rear secondary oxygen sensor.	

(cont'd)

# Troubleshooting

## Engine Control Module Terminal Arrangement (cont'd)

ECM CONNECTOR F (26P)



TERMINAL SIDE OF MALE TERMINALS

ECM CONNECTOR F (26P)

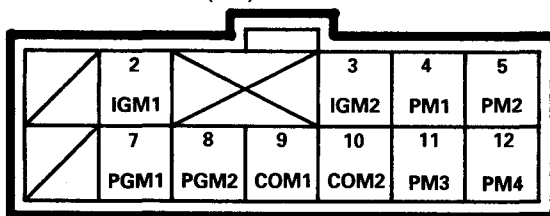
NOTE: Standard battery voltage is 12 V.

\*: M/T

Terminal number	Wire color	Terminal name	Description	Signal
1	YEL/WHT	VCC1 (SENSOR VOLTAGE)	Provides sensor voltage.	With ignition switch ON (II): about 5 V With ignition switch OFF: 0 V
2	GRN/WHT	SG1 (SENSOR GROUND)	Sensor ground.	
4	RED	FLR2 (FUEL PUMP RELAY 2)	Drives fuel pump relay.	With engine at low rpm: battery voltage With engine at high rpm: 0 V
6	GRY	BKSW2 (BRAKE SWITCH 2)	Detects brake switch 2 signal.	With brake pedal released and cruise control main switch ON: battery voltage With brake pedal depressed: 0 V
7	LT GRN/BLK	CC RESSW (CRUISE CONTROL RESUME SWITCH)	Detects resume switch signal.	With resume switch released: 0 V With resume switch depressed: battery voltage
8	LT GRN/RED	CC SETSW (CRUISE CONTROL SET SWITCH)	Detects set switch signal.	With set switch released: 0 V With set switch depressed: battery voltage
9	LT GRN	CC MSW (CRUISE CONTROL MAIN SWITCH)	Power source for the cruise control system.	With cruise control main switch ON: battery voltage With cruise control main switch OFF: 0 V
10	BLU/ORN	CC ATSSW (CRUISE CONTROL A/T GEAR POSITION SWITCH)	Detects A/T gear position switch signal.	In <b>D</b> , <b>3</b> or <b>2</b> position: 0 V In any other position: approx. 8 V
10*	BLU/ORN	CC CLSW (CRUISE CONTROL CLUTCH SWITCH)	Detects clutch switch signal.	With clutch pedal released: approx. 8 V With clutch pedal depressed: 0 V
11	BLU/BLK	CCIL (CRUISE CONTROL INDICATOR LIGHT)	Drives cruise control indicator light.	With cruise control ON: 0 V With cruise control OFF: battery voltage
12	YEL/RED	AP2 (ACCELERATOR POSITION SENSOR CIRCUIT 2)	Detects accelerator position sensor circuit 2 signal.	With accelerator fully open: about 4.5 V With accelerator fully closed: about 0.5 V
13	BLU/RED	AP1 (ACCELERATOR POSITION SENSOR CIRCUIT 1)	Detects accelerator position sensor circuit 1 signal.	With accelerator fully open: about 4.5 V With accelerator fully closed: about 0.5 V
14	YEL/WHT	VCC3 (SENSOR VOLTAGE)	Provides sensor voltage.	With ignition switch ON (II): about 5 V With ignition switch OFF: 0 V
15	GRN/WHT	SG3 (SENSOR GROUND)	Sensor ground.	
16	GRN/WHT	BKSW1 (BRAKE SWITCH 1)	Detects brake switch 1 signal.	With brake pedal released: 0 V With brake pedal depressed: battery voltage
18	BLU	VREF (REFERENCE VOLTAGE)	Provides reference voltage to TCM.	With ignition switch ON (II): about 5 V With ignition switch OFF: 0 V
21	LT GRN/YEL	ATSDL B (A/T FI DATA LINE B)	Detects data from the TCM.	With engine running: pulse
22	WHT/YEL	ATSDL (A/T FI DATA LINE A)	Sends data to the TCM.	With engine running: pulse
24	RED/BLU	TCSSDL (TCS DATA LINE)	Interface for TCS control unit.	With engine running: pulse



ECM CONNECTOR G (12P)



TERMINAL SIDE OF MALE TERMINALS

ECM CONNECTOR G (12P)

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
2	GRN/RED	IGM1 (POWER SOURCE)	Power source for throttle valve control motor.	With ignition switch ON (II): battery voltage With ignition switch OFF: 0 V
3	GRN/RED	IGM2 (POWER SOURCE)	Power source for throttle valve control motor.	With ignition switch ON (II): battery voltage With ignition switch OFF: 0 V
4	BRN	PM1 (MOTOR PHASE OUT 1)	Sends pulse to throttle valve control motor.	With ignition switch ON (II): 0 V or pulse With ignition switch OFF: 0 V
5	WHT/GRN	PM2 (MOTOR PHASE OUT 2)	Sends pulse to throttle valve control motor.	With ignition switch ON (II): 0 V or pulse With ignition switch OFF: 0 V
7	BLK	PGM1 (POWER GROUND)	Power ground for throttle valve control motor.	
8	BLK	PGM2 (POWER GROUND)	Power ground for throttle valve control motor.	
9	ORN	COM1 (COMMON POWER SOURCE FOR MOTOR PHASE 1 and 3)	Sends power source to throttle valve control motor.	With ignition switch ON (II): pulse With ignition switch OFF: 0 V
10	GRN	COM2 (COMMON POWER SOURCE FOR MOTOR PHASE 2 and 4)	Sends power source to throttle valve control motor.	With ignition switch ON (II): pulse With ignition switch OFF: 0 V
11	YEL	PM3 (MOTOR PHASE OUT 3)	Sends pulse to throttle valve control motor.	With ignition switch ON (II): 0 V or pulse With ignition switch OFF: 0 V
12	RED	PM4 (MOTOR PHASE OUT 4)	Sends pulse to throttle valve control motor.	With ignition switch ON (II): 0 V or pulse With ignition switch OFF: 0 V