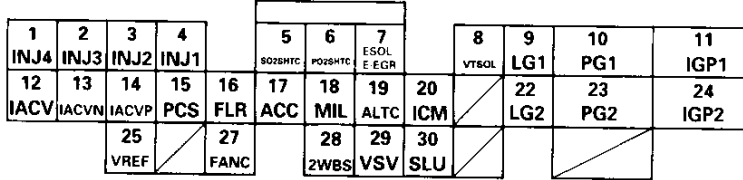


# Troubleshooting

## Engine/Powertrain Control Module Terminal Arrangement ( '96 - 98 Models, '99 - 00 D16Y5 engine with M/T)

ECM/PCM CONNECTOR A (32P)



ECM/PCM CONNECTOR A (32P)

Wire side of female terminals

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	YEL	INJ4 (No. 4 FUEL INJECTOR)	Drives No. 4 fuel injector.	With engine running: duty controlled
2	BLU	INJ3 (No. 3 FUEL INJECTOR)	Drives No. 3 fuel injector.	
3	RED	INJ2 (No. 2 FUEL INJECTOR)	Drives No. 2 fuel injector.	
4	BRN	INJ1 (No. 1 FUEL INJECTOR)	Drives No. 1 fuel injector.	
5	BLK/WHT	SO2SHTC (SECONDARY HEATED OXYGEN SENSOR HEATER CONTROL)	Drives secondary heated oxygen sensor heater.	With ignition switch ON (III): battery voltage With fully warmed up engine running: duty controlled
6	BLK/WHT	PO2SHTC (PRIMARY HEATED OXYGEN SENSOR HEATER CONTROL)	Drives primary heated oxygen sensor heater.	With ignition switch ON (III): battery voltage With fully warmed up engine running: duty controlled
7	RED*3	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: 0 V
	PNK*10	E-EGR	Drives EGR valve.	With EGR operating during driving with fully warmed up engine: duty controlled. With EGR not operating: 0 V
8*12	GRN/YEL	VTS (VTEC SOLENOID VALVE)	Drives VTEC solenoid valve.	With engine at low engine speed: 0 V With engine at high engine speed: battery voltage
9	BRN/BLK	LG1 (LOGIC GROUND)	Ground for the ECM/PCM control circuit.	Less than 1.0 V at all times
10	BLK	PG1 (POWER GROUND)	Ground for the ECM/PCM power circuit.	
11	YEL/BLK	IGP1 (POWER SOURCE)	Power source for the ECM/PCM control circuit.	With ignition switch ON (III): battery voltage With ignition switch OFF: 0 V
12*5	BLK/BLU	IACV (IDLE AIR CONTROL VALVE)	Drives IACV.	With engine running: duty controlled
13*4	ORN	IACV N (IDLE AIR CONTROL VALVE NEGATIVE SIDE)	Drives the IAC valve (negative side).	
14*4	BLK/BLU	IACV P (IDLE AIR CONTROL VALVE POSITIVE SIDE)	Drives IAC valve (positive side).	
15	RED/YEL	PCS (EVAP PURGE CONTROL SOLENOID VALVE)	Drives EVAP purge control solenoid valve.	With engine running, engine coolant below 154°F (68°C): battery voltage. With engine running, engine coolant above 154°F (68°C): duty controlled
16	GRN/YEL	FLR (FUEL PUMP RELAY)	Drives fuel pump relay.	0 V for two seconds after turning ignition switch ON (II), then battery voltage
17	BLK/RED	ACC (A/C CLUTCH RELAY)	Drives A/C clutch relay.	With compressor ON: 0 V With compressor OFF: battery voltage
18	GRN/ORN	MIL (MALFUNCTION INDICATOR LAMP)	Drives MIL.	With MIL turned ON: 0 V With MIL turned OFF: battery voltage
19*1	WHT/GRN	ALTC (ALTERNATOR CONTROL)	Sends alternator control signal.	With fully warmed-up engine running: battery voltage During driving with small electrical load: 0 V
20	YEL/GRN	ICM (IGNITION CONTROL MODULE)	Sends ignition pulse.	With ignition switch ON (II): battery voltage With engine running: about 10 V (depending on engine speed)
22	BRN/BLK	LG2 (LOGIC GROUND)	Ground for the ECM/PCM control circuit.	Less than 1.0 V at all times
23	BLK	PG2 (POWER GROUND)	Ground for the ECM/PCM power circuit.	
24	YEL/BLK	IGP2 (POWER SOURCE)	Power source for the ECM/PCM control circuit.	With ignition switch ON (III): battery voltage With ignition switch OFF: 0 V
25*6	WHT/RED	VREF (REFERENCE VOLTAGE)	Provides reference voltage to TCM.	With ignition switch ON (III): about 5 V With ignition switch OFF: 0 V
27*1	GRN	FANC (RADIATOR FAN CONTROL)	Drives radiator fan relay.	With radiator fan running: 0 V With radiator fan stopped: battery voltage
28*8, *15	BLU	ZWBS (EVAP BYPASS SOLENOID VALVE)	Drives EVAP bypass solenoid valve.	With ignition switch ON (III): battery voltage
29*8, *10	LT GRN/WHT	VSV (EVAP CONTROL CANISTER VENT SHUT VALVE)	Drives EVAP control canister vent shut valve.	With ignition switch ON (II): battery voltage
30*3	WHT/RED	SLU (INTERLOCK CONTROL UNIT)	Detects interlock control unit signal.	With ignition switch ON (III) and brake pedal depressed: battery voltage

\*1: USA model

\*2: A/T (D16Y7, D16Y8 engine)

\*3: CVT (D16Y5 engine)

\*4: A/T and D16Y7 engine

\*5: Except A/T and D16Y7 engine

\*6: A/T (D16Y8 engine)

\*7: CVT (D16Y5 engine) and D16Y8 engine

\*8: '96 D16Y8 engine (coupe), '97 D16Y8 engine (coupe: all models, sedan: KL model),

'98 D16Y5 engine, '98 D16Y8 engine, '99 - 00 D16Y5 (M/T) engine

\*9: D16Y5 engine

\*10: M/T (D16Y5 engine)

\*11: Except M/T (D16Y5 engine)

\*12: D16Y5, D16Y8 engine

\*13: D16Y8 engine

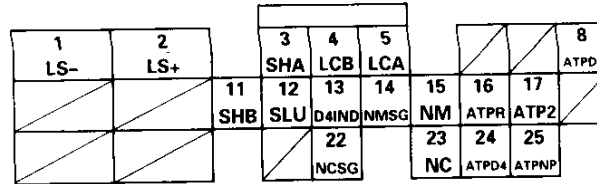
\*14: D16Y7 engine

\*15: '97 D16Y7 engine (coupe: KL model, sedan: KL (LX) model),

'98 D16Y7 engine



PCM CONNECTOR B (25P)



Wire side of female terminals

PCM CONNECTOR B (25P)\*2

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	WHT	LS- (LINEAR SOLENOID VALVE - SIDE)	Ground for linear solenoid valve.	With ignition switch ON (II): pulses
2	RED	LS+ (LINEAR SOLENOID VALVE + SIDE)	Drives linear solenoid valve.	With ignition switch ON (II): pulses
3	BLU/YEL	SHA (SHIFT CONTROL SOLENOID VALVE A)	Drives shift control solenoid valve A.	With engine running in 2nd, 3rd gears: battery voltage With engine running in 1st, 4th gears: about 0 V
4	GRN/BLK	LC B (LOCK-UP CONTROL SOLENOID VALVE B)	Drives lock-up control solenoid valve B.	With lock-up ON: battery voltage With lock-up OFF: 0 V
5	YEL	LC A (LOCK-UP CONTROL SOLENOID VALVE A)	Drives lock-up control solenoid valve A.	With lock-up ON: battery voltage With lock-up OFF: 0 V
8	PNK	ATPD3 (A/T GEAR POSITION SWITCH)	Detects A/T gear position switch signal.	In <b>[D<sub>3</sub>]</b> position: 0 V In any other position: battery voltage
11	GRN/WHT	SHB (SHIFT CONTROL SOLENOID VALVE B)	Drives shift control solenoid valve B.	With engine running in 1st, 2nd: battery voltage With engine running in 3rd, 4th: about 0 V
12	WHT/RED	SLU (INTERLOCK CONTROL UNIT)	Drives interlock control unit.	With ignition switch ON (II) and brake pedal depressed: 0 V
13	GRN/BLK	D4 IND (D4 INDICATOR LIGHT)	Drives D4 indicator light.	With <b>[D<sub>4</sub>]</b> indicator light turned ON: battery voltage With <b>[D<sub>4</sub>]</b> indicator light turned OFF: 0 V
14	WHT	NMSG (MAINSHAFT SPEED SENSOR GROUND)	Ground for mainshaft speed sensor.	
15	RED	NM (MAINSHAFT SPEED SENSOR)	Detects mainshaft speed sensor signal.	With engine running: pulses
16	WHT	ATPR (A/T GEAR POSITION SWITCH)	Detects A/T gear position switch signal.	In <b>[R]</b> position: 0 V In any other position: battery voltage
17	BLU	ATP2 (A/T GEAR POSITION SWITCH)	Detects A/T gear position switch signal.	In <b>[2]</b> position: 0 V In any other position: battery voltage
22	GRN	NCSG (COUNTERSHAFT SPEED SENSOR GROUND)	Ground for countershaft speed sensor.	
23	BLU	NC (COUNTERSHAFT SPEED SENSOR)	Detects countershaft speed sensor signal.	With ignition switch ON (II), and front wheels rotating: pulses
24	YEL	ATPD4 (A/T GEAR POSITION SWITCH)	Detects A/T gear position switch signal.	In <b>[D<sub>4</sub>]</b> position: 0 V In any other position: 5 V
25	LT GRN	ATPNP (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: battery voltage

- \*1: USA model
- \*2: A/T (D16Y7, D16Y8 engine)
- \*3: CVT (D16Y5 engine)
- \*4: A/T and D16Y7 engine
- \*5: Except A/T and D16Y7 engine
- \*6: A/T (D16Y8 engine)
- \*7: CVT (D16Y5 engine) and D16Y8 engine
- \*8: '96 D16Y8 engine (coupe), '97 D16Y8 engine (coupe: all models, sedan: KL model), '98 D16Y5 engine, '98 D16Y8 engine, '99 - 00 D16Y5 (M/T) engine

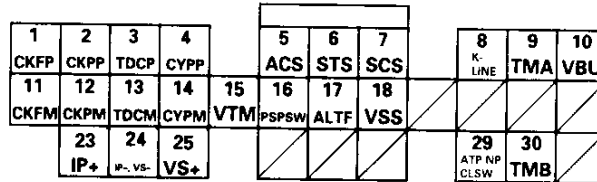
- \*9: D16Y5 engine
- \*10: M/T (D16Y5 engine)
- \*11: Except M/T (D16Y5 engine)
- \*12: D16Y5, D16Y8 engine
- \*13: D16Y8 engine
- \*14: D16Y7 engine
- \*15: '97 D16Y7 engine (coupe: KL model, sedan: KL (LX) model), '98D16Y7 engine

(cont'd)

# Troubleshooting

## Engine/Powertrain Control Module Terminal Arrangement '96 - 98 Models '99 - 00 D16Y5 engine with M/T) (cont'd)

ECM/PCM CONNECTOR C (31P)



Wire side of female terminals

ECM/PCM CONNECTOR C (31P)

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	BLU/RED	CKFP (CKF SENSOR P SIDE)	Detects CKF sensor.	With engine running: pulses
2	BLU	CKPP (CKP SENSOR P SIDE)	Detects CKP sensor.	With engine running: pulses
3	GRN	TDCP (TDC SENSOR P SIDE)	Detects TDC sensor.	With engine running: pulses
4	YEL	CYPP (CYP SENSOR P SIDE)	Detects CYP sensor.	With engine running: pulses
5	BLU/RED	ACS (A/C SWITCH SIGNAL)	Detects A/C switch signal.	With A/C switch ON: 0 V With A/C switch OFF: battery voltage
6	BLU/ORN	STS (STARTER SWITCH SIGNAL)	Detects starter switch signal.	With starter switch ON (III): battery voltage With starter switch OFF: 0 V
7	BRN	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
8	LT BLU	K-LINE (DLC)	Sends and receives scan tool signal.	With ignition switch ON (II): about 5 V
9*3	GRY	TMA	Data communication with TCM: ECM control data output	With ignition switch ON (II): pulses
10	WHT/BLU	VBU (VOLTAGE BACK UP)	Power source for the ECM/PCM control circuit. Power source for the DTC memory	Battery voltage at all times
11	WHT/RED	CKFM (CKF SENSOR M SIDE)	Ground for CKF sensor signal.	
12	WHT	CKPM (CKP SENSOR M SIDE)	Ground for CKP sensor signal.	
13	RED	TDCM (TDC SENSOR M SIDE)	Ground for TDC sensor signal.	
14	BLK	CYPM (CYP SENSOR M SIDE)	Ground for CYP sensor signal.	
15*12	BLU/BLK	VTM (VTEC PRESSURE SWITCH)	Detects VTEC pressure switch signal.	With engine at low engine speed: 0 V With engine at high engine speed: battery voltage
16	GRN	PSPSW (P/S OIL PRESSURE SWITCH)	Detects PSP switch signal.	At idle with steering wheel in straight ahead position: 0 V At idle with steering wheel at full lock: battery voltage
17	WHT/RED	ALTF (ALTERNATOR FR SIGNAL)	Detects alternator FR signal.	With fully warmed up engine running: 0 V - battery voltage (depending on electrical load)
18	BLU/WHT	VSS (VEHICLE SPEED SENSOR)	Detects VSS signal.	With ignition switch ON (II) and front wheels rotating: cycles 0 V - 5 V
23*10	BLK	IP+ (HO2S PUMP CELL +)	Controls HO2S pump cell.	With ignition switch ON (II): about 0.5 - 5.3 V
24*10	RED	IP-, VS- (HO2S COMMON)	Reference voltage supply.	With fully warmed up engine at idle: about 2.6 - 2.8 V
25*10	WHT	VS+ (VS CELL VOLTAGE)	Detects VS cell voltage.	With ignition switch ON (II): about 7 V
29	LT GRN*3	ATP NP (A/T GEAR POSITION SWITCH)	Detects A/T gear position switch signal.	In <input type="checkbox"/> or <input type="checkbox"/> position: 0 V In any other position: battery voltage
	RED*10	CLSW (CLUTCH SWITCH)	Detects clutch switch signal.	With clutch pedal released: about 5 V With clutch pedal depressed: 0 V
30	PNK*3	TMB	Data communication with TCM: ECM control data input	With ignition switch ON (II): pulses

\*1: USA model

\*2: A/T (D16Y7, D16Y8 engine)

\*3: CVT (D16Y5 engine)

\*4: A/T and D16Y7 engine

\*5: Except A/T and D16Y7 engine

\*6: A/T (D16Y8 engine)

\*7: CVT (D16Y5 engine) and D16Y8 engine

\*8: '96 D16Y8 engine (coupe), '97 D16Y8 engine (coupe: all models, sedan: KL model), '98 D16Y5 engine, '98 D16Y8 engine, '99 - 00 D16Y5 (M/T) engine

\*9: D16Y5 engine

\*10: M/T (D16Y5 engine)

\*11: Except M/T (D16Y5 engine)

\*12: D16Y5, D16Y8 engine

\*13: D16Y8 engine

\*14: D16Y7 engine

\*15: '97 D16Y7 engine (coupe: KL model, sedan: KL (LX) model), '98 D16Y7 engine



### ECM/PCM CONNECTOR D (16P)

1		2	3	4		5
TPS		ECT	MAP	VCC1		BKSW
6	7	8	9	10	11	12
KS	PHO2S/LABEL	IAT	EGRL	VCC2	SG2	SG1
13	14	15		16		
SHO2SG	SO2S	PTANK		EL		

Wire side of female terminals

### ECM/PCM CONNECTOR D (16P)

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	RED/BLK	TPS (THROTTLE POSITION SENSOR)	Detects TP sensor signal.	With throttle fully open: about 4.8 V With throttle fully closed: about 0.5 V
2	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)
3	RED/GRN	MAP (MANIFOLD ABSOLUTE PRESSURE SENSOR)	Detects MAP sensor signal.	With ignition switch ON(II): about 3 V At idle: about 1.0 V (depending on engine speed)
4	YEL/RED	VCC1 (SENSOR VOLTAGE)	Power source for MAP sensor.	With ignition switch ON (II): about 5 V With ignition switch OFF: 0 V
5	GRN/WHT	BKSW (BRAKE SWITCH)	Detects brake switch signal.	With brake pedal released: 0 V With brake pedal depressed: battery voltage
6*7	RED/BLU	KS (KNOCK SENSOR)	Detects KS signal.	With engine knocking: pulses
7	WHT*11	PHO2S (PRIMARY HEATED OXYGEN SENSOR, SENSOR 1)	Detects primary heated oxygen sensor (sensor 1) signal.	With throttle fully opened from idle with fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
	WHT*10	LABEL	Detects LABEL resistance.	With engine running: about 0.3 – 4.9 V
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*3	WHT/BLK	EGRL (EGR VALVE LIFT SENSOR)	Detects EGR valve lift sensor signal.	At idle without vacuum: about 1.2 V With 27 kPa (200 mmHg, 8 in. Hg): about 4.3 V
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/BLK	SG2 (SENSOR GROUND)	Sensor ground.	Less than 1.0 V at all times
12	GRN/WHT	SG1 (SENSOR GROUND)	Ground for MAP sensor.	Less than 1.0 V at all times
13	GRN/BLK*12 RED/YEL*14	SHO2SG (SECONDARY HEATED OXYGEN SENSOR, SENSOR 2 GROUND)	Ground for secondary heated oxygen sensor (sensor 2).	
14	WHT/RED	SHO2S (SECONDARY HEATED OXYGEN SENSOR, SENSOR 2)	Detects secondary heated oxygen sensor (sensor 2) signal.	With throttle fully opened from idle with fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
15*8, *15	LT GRN	PTANK (FUEL TANK PRESSURE SENSOR)	Detects fuel tank pressure sensor.	With fuel fill cap opened: about 2.5 V
16*1	GRN/RED	EL (ELD)	Detects ELD signal.	With parking lights turned on at idle: about 2.5 – 3.5 V With low beam headlights turned on at idle: about 1.5 – 2.5 V

\*1: USA model

\*2: A/T (D16Y7, D16Y8 engine)

\*3: CVT (D16Y5 engine)

\*4: A/T and D16Y7 engine

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\*10: M/T (D16Y5 engine)

\*11: Except M/T (D16Y5 engine)

\*12: D16Y5, D16Y8 engine

\*13: D16Y8 engine

\*14: D16Y7 engine

\*15: '97 D16Y7 engine (coupe: KL model, sedan: KL (LX) model), '98D16Y7 engine:

(cont'd)