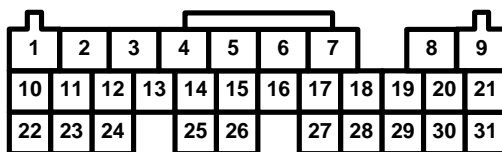


# Engine/Powertrain Control Module Terminal Arrangement



wire side of female terminals

## ECM/PCM Inputs and Outputs at Connector E (31P)

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
1	GRN/YEL	IMO FPR (IMMOBILIZER FUEL PUMP RELAY)	Drives PGM-FI main relay 2	0 V for 2 seconds after turning ignition switch ON (II), then battery voltage
2 *12	WHT/RED	SHO2S (SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S), SENSOR 2)	Detects secondary HO2S (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
2 *6	BLU	THO2S (THIRD HEATED OXYGEN (THIRD HO2S) SENSOR)	Detects third HO2S (sensor 3) signal	With throttle fully opened from idle with fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
3	BRN/YEL	LG3 (LOGIC GROUND)	Ground for the ECM/PCM control circuit	Less than 1.0 V at all times
4	PNK	SG3 (SENSOR GROUND)	Sensor ground	Less than 1.0 V at all times
5	YEL/BLU	VCC3 (SENSOR VOLTAGE)	Provides sensor voltage	With ignition switch ON (II): about 5 V With ignition switch OFF: about 0 V
6 *12	BLK/WHT	SO2SHTC (SECONDARY HEATED OXYGEN SENSOR (SECONDARY HO2S) HEATER CONTROL)	Drives secondary HO2S (sensor 2) heater	With ignition switch ON (II): battery voltage With fully warmed up engine running: duty controlled
6 *7	WHT/BLK	TO2SHTC (THIRD HEATED OXYGEN SENSOR (THIRD HO2S) HEATER CONTROL)	Drives third HO2S (sensor 3) heater	With ignition switch ON (II): battery voltage With fully warmed up engine running: duty controlled
7	RED/YEL	MRLY (PGM-FI MAIN RELAY)	Drives PGM-FI main relay 1 Power source for the DTC memory	With ignition switch ON (II): about 0 V With ignition switch OFF: battery voltage
8	ORN	AFSHTCR (AIR FUEL RATIO (A/F) SENSOR HEATER CONTROL RELAY)	Drives A/F sensor (sensor 1) heater control relay	With ignition switch ON (II): about 0 V
9	YEL/BLK	IG1 (IGNITION SIGNAL)	Detects ignition signal	With ignition switch ON (II): battery voltage With ignition switch OFF: about 0 V
12 *10	BLU/ORN	CCS (CRUISE CONTROL SIGNAL)	Detects cruise control signal	With ignition switch ON (II): pulse
13 *10	WHT/BLU	ILU (INTERLOCK CONTROL UNIT)	Drives interlock control unit	With ignition switch ON (II) and brake pedal pressed: battery voltage
14	LT GRN	FTP (FUEL TANK PRESSURE (FTP) SENSOR)	Detects FTP sensor signal	With ignition switch ON (II) and fuel fill cap open: about 2.5 V
15 *5	GRN/RED	ELD (ELECTRICAL LOAD DETECTOR (ELD))	Detects ELD signal	With ignition switch ON (II): about 0.1–4.8 V (depending on electrical load)

\*5: except Canada model

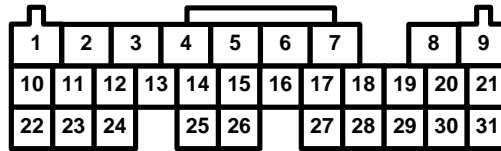
\*6: D17A6 engine and '04 model

\*7: CVT

\*10: A/T, CVT

\*12: D17A2 engine

# Engine/Powertrain Control Module Terminal Arrangement



wire side of female terminals

## ECM/PCM Inputs and Outputs at Connector E (31P)

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
16	LT GRN/BLK	PSPSW (POWER STEERING PRESSURE SWITCH SIGNAL)	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
18	RED	ACC (A/C CLUTCH RELAY)	Drives A/C clutch relay	With compressor ON: about 0 V With compressor OFF: battery voltage
20	BLU/RED	2WBS (EVAPORATIVE EMISSIONS (EVAP) BYPASS SOLENOID VALVE)	Drives EVAP bypass solenoid valve	With ignition switch ON (II): battery voltage
21	LT GRN/RED	VSV (EVAPORATIVE EMISSIONS (EVAP) CANISTER VENT SHUT VALVE)	Drives EVAP canister vent shut valve	With ignition switch ON (II): battery voltage
22	WHT/BLK	BKSW (BRAKE PEDAL POSITION SWITCH)	Detects brake pedal position switch signal	With brake pedal released: about 0 V With brake pedal pressed: battery voltage
23	LT BLU	K-LINE	Sends and receives HDS or scan tool signal	With ignition switch ON (II): pulses or battery voltage
24	YEL	SEFMJ	Communicates with multiplex control unit	With ignition switch ON (II): about 5 V With engine running under load: pulses
25 *7	BLU/WHT	VSSOUT (VEHICLE SPEED SIGNAL OUTPUT)	Sends vehicle speed signal	With ignition switch ON (II) and front wheels rotating: cycles about 0 V to 5 V or battery voltage
26	BLU	NEP (ENGINE SPEED PULSE)	Outputs engine speed pulse	With engine running: pulses
27	RED/BLU	IM OCD (IMMOBILIZER CODE)	Detects immobilizer signal	
29	BRN	SCS (SERVICE CHECK SIGNAL)	Detects service check signal	With the service check signal shorted with the HDS: about 0 V With the service check signal opened: about 5 V
30	RED/WHT	WEN (WRITE ENABLE SIGNAL)	Detects write enable signal	With ignition switch ON (II): about 0 V
31	GRN/ORN	MIL (MALFUNCTION INDICATOR LAMP)	Drives MIL	With MIL turned ON: about 0 V With MIL turned OFF: battery voltage

\*7: CVT