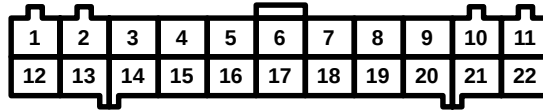




Engine/Powertrain Control Module Terminal Arrangement



wire side of female terminals

PCM Connector D (22P)

NOTE: Standard battery voltage is 12 V.

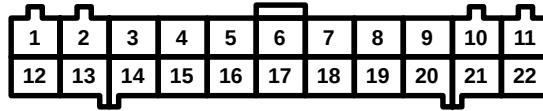
Terminal number	Wire color	Terminal name	Description	Signal
1	WHT/YEL	VBU (VOLTAGE BACKUP)	Power source for the PCM control circuit and the DTC memory.	Battery voltage at all times
2	RED/BLU	KSR (RIGHT KNOCK SENSOR (BANK 1))	Detects knock sensor signal.	With engine knocking: pulses
3*	GRN/ORN	BARO OUT (BAROMETRIC SENSOR OUTPUT SIGNAL)	Sends barometric sensor output signal.	With ignition switch ON (II): about 3 V (depending on barometric pressure)
4	LT GRN	K-LINE	Sends and received OBD II scan and PGM Tester signal.	With ignition switch ON (II): battery voltage
5	WHT/RED	ALTF (ALTERNATOR FR SIGNAL)	Detects alternator FR signal.	With fully warmed up engine running: 0–5 V (depending on electrical load)
6	RED/BLK	TPS (THROTTLE POSITION SENSOR)	Detects TP sensor signal.	With throttle fully open: approx. 4.5 V With throttle fully closed: about 0.5 V
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	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)
10	YEL/RED	VCC1 (SENSOR VOLTAGE)	Power source for MAP sensor.	With ignition switch ON (II): about 5 V With ignition switch OFF: 0 V
11	GRN/WHT	SG1 (SENSOR GROUND)	Ground for the MAP sensor.	

*: with TCS





Engine/Powertrain Control Module Terminal Arrangement



wire side of female terminals

PCM Connector D (22P)

NOTE: Standard battery voltage is 12 V.

Terminal number	Wire color	Terminal name	Description	Signal
12	BLK	CYP 1M (CYP SENSOR 1M SIDE)	Ground for CYP sensor 1.	
13	YEL	KSL (LEFT KNOCK SENSOR (BANK 2))	Detects knock sensor signal.	With engine knocking: pulses
14	BLK/RED	CYP 2M (CYP SENSOR 2M SIDE)	Ground for CYP sensor 2.	
15	GRN/YEL	PTANK (FUEL TANK PRESSURE SENSOR)	Detects fuel tank pressure sensor.	With fuel fill cap opened: about 2.5 V
17	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
18	BLU/RED	LPHO2S (LEFT PRIMARY OXYGEN SENSOR, SENSOR 1)	Detects primary oxygen sensor (sensor 1) signal.	With throttle fully opened, fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
19	WHT	RPHO2S (RIGHT PRIMARY OXYGEN SENSOR, SENSOR 1)	Detects primary oxygen sensor (sensor 1) signal.	With throttle fully opened, fully warmed up engine: above 0.6 V With throttle quickly closed: below 0.4 V
20*1	BLU/WHT	VREF (REFERENCE VOLTAGE)	Provides reference voltage to TCS control unit (VSA converter unit)*1	With ignition switch ON (II): about 5 V With ignition switch OFF: 0 V
21	YEL/BLU	VCC2 (SENSOR VOLTAGE)	Provides sensor voltage.	With ignition switch ON (II): about 5 V With ignition switch OFF: 0 V
22	GRN/BLK	SG2 (SENSOR GROUND)	Sensor ground.	

*1: with VSA

