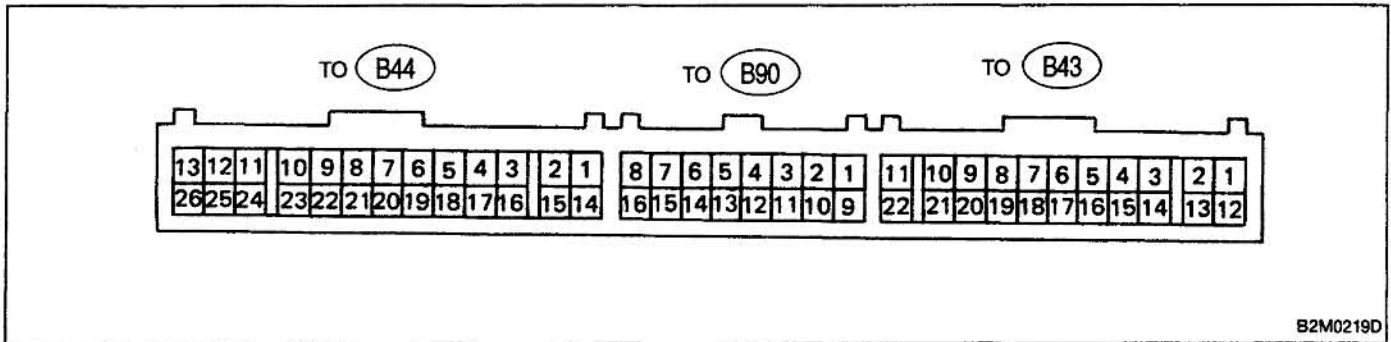


6. Control Module I/O Signal

B: 2000 cc MODEL



B2M0219D

Content	Connector No.	Terminal No.	Signal (V)			Note	
			Ignition SW		Engine ON (Idling)		
			OFF	ON (Engine OFF)			
Crankshaft position sensor	Signal (+)	B43	8	—	0	±6	Sensor output waveform
	Signal (-)	B43	7	—	0	0	—
	Shield	B43	19	—	0	0	—
Camshaft position sensor	Signal (+)	B43	10	—	0	±6	Sensor output waveform
	Signal (-)	B43	9	—	0	0	—
	Shield	B43	19	—	0	0	—
Mass air flow sensor	Signal	B43	6	—	0 — 0.3	0.8 — 1.4	—
	Shield	B43	18	—	0	0	—
	GND	B43	14	—	0	0	—
Throttle position sensor	Signal	B43	16	—	Fully closed: 0.2 — 1.0 Fully opened: 4.2 — 4.5		—
	Power supply	B43	15	—	5	5	—
	GND	B43	14	—	0	0	—
Oxygen sensor	Signal	B43	5	—	0	Rich mixture: 0.7 Lean mixture: 0	
	Shield	B43	18	—	0	0	—
Engine coolant temperature sensor	B43	3	0	0	0.7 — 1.0	0.7 — 1.0	After warm-up
CO resistor	Signal	B43	17	—	0.3 — 4.9	0.3 — 4.9	General model only
	GND	B43	14	—	0	0	
Vehicle speed sensor 2	B90	1	—	0 or 5	0 or 5	"5" and "0" are repeatedly displayed when vehicle is driven.	
Starter switch	B90	10	—	0	0	Cranking: 10 to 14	
A/C switch	B90	9	—	ON: 10 — 13 OFF: 0	ON: 13 — 14 OFF: 0	—	
Ignition switch	B90	15	0	10 — 13	13 — 14	—	
Neutral position switch (MT)	B90	3	—	ON: 5 OFF: 0		On MT model; switch is ON when gear is in neutral position.	
Park/Neutral position switch (AT)				ON: 0 OFF: 5		On AT model; switch is ON when shift is in "P" or "N" position.	
Test mode connector	B90	13	—	5	5	When connected: 0	

Content	Connector No.	Terminal No.	Signal (V)			Note	
			Ignition SW		Engine ON (Idling)		
			OFF	ON (Engine OFF)			
Read memory connector	B90	12	—	5	5	When connected: 0	
AT/MT identification	B90	11	—	(AT) 5 (MT) 0	(AT) 5 (MT) 0	When measuring voltage between ECM and body.	
Knock sensor	Signal	B43	4	—	2 — 3	2 — 3	—
	Shield	B43	18	—	0	0	—
Back-up power supply	B43	1	10 — 13	10 — 13	13 — 14	—	
Control unit power supply	B43	2	0	10 — 13	13 — 14	—	
		13					
Ignition control	# 1, # 2	B44	10	—	0	3.4, max.	—
	# 3, # 4	B44	9	—	0	3.4, max.	—
Fuel injector	# 1	B44	13	10 — 13	10 — 13	13 — 14	Waveform
	# 2	B44	12	10 — 13	10 — 13	13 — 14	Waveform
	# 3	B44	11	10 — 13	10 — 13	13 — 14	Waveform
	# 4	B44	26	10 — 13	10 — 13	13 — 14	Waveform
Idle air control solenoid valve	OPEN end	B44	2	—	—	1, max. — 13, min.	Waveform
	CLOSE end	B44	1	—	—	13, min. — 1, max.	Waveform
Fuel pump relay control	B44	23	—	ON: 0 OFF: 10 — 13	0	—	
A/C relay control	B44	18	—	ON: 0 Off: 10 — 13	ON: 0 OFF: 13 — 14	—	
Radiator fan relay 1 control	B44	17	—	ON: 0 OFF: 10 — 13	ON: 0 OFF: 13 — 14	—	
Radiator fan relay 2 control	B44	16	—	ON: 0 OFF: 10 — 13	ON: 0 OFF: 13 — 14	—	
Self-shutoff control	B44	5	—	10 — 13	13 — 14	—	
Malfunction indicator lamp	B44	22	—	—	—	Light "ON": 1, max. Light "OFF": 10 — 14	
Engine speed output	B90	16	—	—	0 — 13, min.	Waveform	
Torque control signal	B90	6	—	5	5	—	
Mass air flow signal	B90	5	—	0	1	—	
Purge control solenoid valve	B44	3	—	ON: 0 OFF: 10 — 13	ON: 0 OF: 13 — 14	—	
GND (sensors)	B43	14	—	0	0	—	
		24	—	0	0	—	
GND (injectors)	B44	25	—	0	0	—	
		15	—	0	0	—	
GND (ignition system)	B44	14	—	0	0	—	
GND (power supply)	B44	14	—	0	0	—	
GND (control systems)	B43	11	—	0	0	—	
		22	—	0	0	—	
Select monitor signal	B90	7	—	—	—	—	
		8	—	—	—	—	