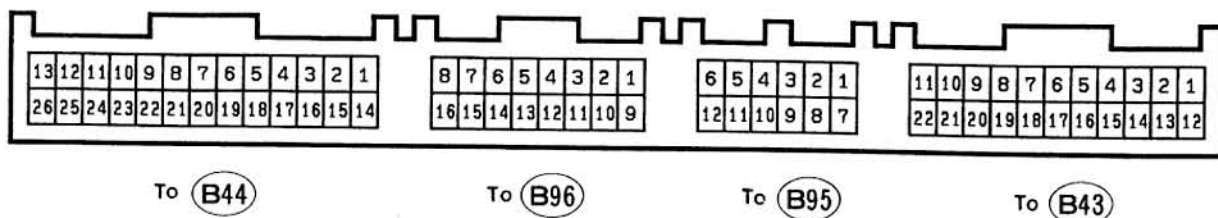


7. Control Module I/O Signal



G2M1012

Content		Connector No.	Terminal No.	Signal (V)			Note
				Ig SW		Engine ON (Idling)	
				OFF	ON (Engine OFF)		
Crankshaft position sensor	Signal (+)	B95	4	—	0	*	*Sensor output waveform
	Signal (-)	B95	5	—	0	0	—
	Shield	B95	6	—	0	0	—
Camshaft position sensor	Signal (+)	B96	1	—	0	*	*Sensor output waveform
	Signal (-)	B96	2	—	0	0	—
	Shield	B96	3	—	0	0	—
Mass air flow sensor	Power supply	B43	8	—	10 — 13	13 — 14	—
	Signal	B43	9	—	0 — 0.3	0.8 — 1.2	—
	GND	B43	10	—	0	0	—
Throttle position sensor	Signal	B95	2	—	Fully closed: 4.7 Fully opened: 0.9	Fully closed: 4.7 Fully opened: 0.9	—
	Power supply	B95	3	—	5	5	—
	GND	B95	1	—	0	0	—
Oxygen sensor	Signal	B43	6	—	0.6	Rich mixture: 0.7 — 1.0 Lean mixture: 0 — 0.2	
	Shield	B43	17	—	0	0	—
Knock sensor	Signal	B96	5	—	3 — 4	3 — 4	—
	Shield	B96	4	—	0	0	—
Engine coolant temperature sensor		B43	7	0	0.7 — 1.5	0.7 — 1.5	*After warm-up
Vehicle speed sensor 2		B95	11	—	0 or 5	0 or 5	"5" and "0" are repeatedly displayed when vehicle is driven.
Pressure sensor	Signal	B43	4	—	2.4 ↔ 2.7	1.4 — 1.6	—
	Power supply	B43	3	—	5	5	—
	GND	B43	21	—	0	0	—
Idle switch		B96	6	—	ON:0, OFF:5	ON:0, OFF:5	—
Starter switch		B96	10	—	0	0	Cranking: 10 to 14
Air conditioner switch		B96	9	—	ON:10 — 13, OFF:0	ON:13 — 14, OFF:0	—
Ignition switch		B95	12	0	10 — 13	13 — 14	—

Content	Connector No.	Terminal No.	Signal (V)			Note	
			Ig SW		Engine ON (Idling)		
			OFF	ON (Engine OFF)			
Neutral position switch	B95	10	—	N Position: 7 Other: 0	N Position: 7 Other: 0	—	
Test mode connector	B96	13	—	7	7	When connected: 0	
Read memory connector	B96	12	—	7	7	When connected: 0	
Back-up power supply	B43	15	10 — 13	10 — 13	13 — 14	—	
Control module power supply	B43	2	0	10 — 13	13 — 14	—	
	B43	13	0	10 — 13	13 — 14	—	
Ignition control	#1	B44	10	—	0	—	—
	#2	B44	9	—	0	—	—
	#3	B44	8	—	0	—	—
	#4	B44	7	—	0	—	—
Fuel injector	#1	B44	13	10 — 13	10 — 13	13 — 14	—
	#2	B44	12	10 — 13	10 — 13	13 — 14	—
	#3	B44	11	10 — 13	10 — 13	13 — 14	—
	#4	B44	26	10 — 13	10 — 13	13 — 14	—
Idle air control solenoid valve	OPEN end	B44	2	—	8 — 9	9 — 10	—
	CLOSE end	B44	1	—	6 — 7	6 — 7	—
Fuel pump relay control	B44	23	—	ON: 0 OFF: 10 — 13	0	—	
Air conditioner cut relay control	B44	22	—	ON: 0 OFF: 10 — 13	ON: 0 OFF: 13 — 14	—	
Radiator fan 1 control	B44	17	—	ON: 0 OFF: 10 — 13	ON: 0 OFF: 13 — 14	—	
Radiator fan 2 control	B44	4	—	ON: 0 OFF: 10 — 13	ON: 0 OFF: 13 — 14	—	
Self-shutoff control	B44	5	—	10 — 13	13 — 14	—	
Wastegate control	B44	3	—	10 — 13	13 — 14	—	
Malfunction indicator lamp	B44	19	—	1, max.	—	Light "ON": 1, max. Light "OFF": 10 — 14	
Pressure exchange solenoid valve	B44	20	—	ON: 0 OFF: 10 — 13	ON: 0 OFF: 13 — 14	—	
Engine tachometer output	B96	16	—	—	—	—	
Purge control solenoid valve	B44	6	—	ON: 0 OFF: 10 — 13	ON: 0 OFF: 13 — 14	—	
GND (sensors)	B43	21	—	0	0	—	
GND (injectors)	B44	24	—	0	0	—	
	B44	25	—	0	0	—	
Ignition system	B44	15	—	0	0	—	
GND (power supply)	B44	14	—	0	0	—	
GND (control systems)	B43	11	—	0	0	—	
	B43	22	—	0	0	—	
Select Monitor Signal	B96	8	—	—	—	—	
	B96	7	—	—	—	—	