B+: Battery positive voltage

Terminal	Input	Output	Connection to	Test condition		Correct voltage	Remarks
1A	○		Battery	Constant		B+	For backup
1B	○		Main relay (FUEL INJ relay)	Ignition switch	OFF	0V	—
					ON	B+	
1C	○		Ignition switch (START)	While cranking		10V	—
				Ignition switch ON		Below 1.0V	
1D		○	Data link connector (MEN terminal)	Test switch at "SELF-TEST" Lamp illuminated for 3 sec. after ignition switch OFF→ ON		4.5–5.5V	With Self-Diagnosis Checker and System Selector
				Lamp not illuminated after 3 sec.		B+	
				Test switch at "O2 MONITOR" at idle Monitor lamp illuminated		4.5–5.5V	
				Test switch at "O2 MONITOR" at idle Monitor lamp not illuminated		B+	
1E		○	Malfunction indicator light (MIL)	Light illuminated for 3 sec. after ignition switch OFF→ON		Below 2.5V	With System selector test Switch at "SELF-TEST"
				Light not illuminated after 3 sec.		B+	
				Light illuminated		Below 2.5V	
				Light not illuminated B+		B+	
			Data link connector (FEN terminal)	Buzzer sounded for 3 sec. after ignition switch OFF→ON		Below 2.5V	• With Self-Diagnosis Checker and System Selector • With System Selector test switch at "SELF-TEST"
				Buzzer not sounded after 3 sec.		B+	
				Buzzer sounded		Below 2.5V	
				Buzzer not sounded		B+	
1G		○	Igniter	Ignition switch ON		Approx. 0V	—
				Idle		Below 1.0V	
1H	○		Headlight switch	Head light ON		B+	—
				Head light OFF		0V	
1I	○		Data link connector (TEN terminal)	System Selector test switch at "O_2 MONITOR"		B+	• With Self-Diagnosis Checker and System Selector • Ignition switch ON
				System Selector test switch at "SELF-TEST"		Below 1.0V	
1J	○		Rear window defroster relay	Rear window defroster switch OFF		B+	Ignition switch ON
				Rear window defroster switch ON		Below 1.5V	
1K		○	PCMT	Engine coolant temperature below 60°C {140°F}		Below 1.0V	Ignition switch ON
				Engine coolant temperature above 60°C {140°F}		B+	
1L		○	A/C relay	Air conditioning sensor ON		Below 2.5V	Ignition switch ON
				Air conditioning sensor OFF		B+	

Terminal	Incorrect voltage		Possible cause
1A	Always 0V		• ROOM 15A fuse burned • Open circuit in wiring from ROOM 15A fuse to PCME terminal 1A
1B	Always 0V		• Main relay malfunction • Open or short circuit in wiring from main relay to PCME terminal 1B
1C	Always 0V (starter turns)		• Open or short circuit in wiring from ignition switch to PCME terminal 1C
1D	Always 0V		• Main relay (FUEL INJ relay) malfunction • Open circuit in wiring from ignition switch to data link connector terminal B+ • Open or short circuit in wiring from data link connector terminal MEN to PCME terminal 1D
	Always approx. B+		• Poor connection at PCME connector • PCME malfunction
	Always approx. 5V		• PCME malfunction
1E	Always below 2.5V	MIL always ON	• Short circuit in wiring from instrument cluster to PCME terminal 1E • PCME malfunction
		MIL never ON	• Open circuit in wiring from instrument cluster to PCME terminal 1E
	Always approx. B+		• Poor connection at PCME connector • PCME malfunction
	Always below 2.5V	No display on Self-Diagnosis Checker	• Main relay (FUEL INJ relay) malfunction • Open circuit in wiring from ignition switch to data link connector terminal B+
		"88" displayed and buzzer sounds continuously	• Open or short circuit in wiring from data link connector terminal FEN to PCME terminal 1E
	Always approx. B+		• Poor connection at PCME connector • PCME malfunction
1G	Always 0V		• Short circuit in wiring from igniter to PCME terminal 1G
1H	Always below 1.0 (Headlights OK)		• Open or short circuit in wiring from headlight relay to PCME terminal 1H
1I	Always below 1.0V		• Short circuit in wiring from data link connector terminal TEN to PCME terminal 1I
	Always approx B+		• Open circuit in wiring from data link connector terminal TEN to PCME terminal 1I • Open circuit in wiring from data link connector terminal GND to ground
1J	Always 0V		• Short circuit in wiring from rear window defroster switch to PCME terminal 1J
	Always B+		• Open circuit in wiring from rear window defroster switch to PCME terminal 1J
1K	Always below 1.0V		• Open or short circuit in wiring from PCME terminal 1K to PCMT terminal 1N
1L	Always below 2.5V	A/C does not operate	• A/C relay malfunction • Open circuit in wiring from ignition switch to A/C relay • Open circuit in wiring from A/C relay to PCME terminal 1L
		Air conditioning sensor OFF but A/C operates	• Short circuit in wiring from A/C relay to PCME terminal 1L • PCME malfunction
	Always B+		• Poor connection at PCME connector • PCME malfunction

B+: Battery positive voltage

Terminal	Input	Output	Connection to	Test condition	Correct voltage	Remarks
1M	O		Vehicle speed sensor	Ignition switch ON	0V or approx. 5.0V	—
				Driving	Approx. 2.5V	
1N	O		Steering pressure sensor	Ignition switch ON	B+	—
				P/S ON at idle	Below 1.0V	
				P/S OFF at idle	B+	
1O	O		Air conditioning sensor	Air conditioning sensor ON	1.5–3.5V	Ignition switch ON and blower motor ON
				Air conditioning sensor OFF	4.5–5.5V	
1P	O		Blower switch	Fan speed control 2nd–4th position	Below 1.0V	Ignition switch ON and blower Motor ON
				Fan speed control 1st position or blower switch OFF	B+	
1Q	O		Stoplight switch	Brake pedal released	Below 1.0v	—
				Brake pedal depressed	B+	
1R	O		Neutral/Clutch switch (MTX)	Neutral position or clutch pedal depressed	Below 1.0V	Ignition switch ON
				Others	B+	
			PCMT (ATX)	N or P range	Below 1.0V	—
				Others	B+	
1S	O		PCMT (ATX)	At shifting	Approx. 2.5V	—
				Others	B+	
1T	O		Throttle position sensor (Idle switch)	Accelerator pedal released	Below 1.0V	Ignition switch ON
				Accelerator pedal depressed	B+	
1U	O		Ground (MTX)	Constant	0V	—
1V	O		PCMT	At shifting	0V	—
				Others	B+	
2A	—	—	—	—	—	—
2B	O		Volume airflow sensor	Ignition switch ON	Approx. 4V	—
				Idle	Approx. 2.6V	
2C	O		Heated oxygen sensor (Right side)	Ignition switch ON	0V	—
				Idle (Cold engine)	0V	
				Idle (After warm-up)	0–1.0V	
2D	O		Heated oxygen sensor (Left side)	Increasing engine speed (After warm-up)	0.5–1.0V	
				Deceleration	0–0.4V	
2E	O		Engine coolant temperature sensor	Engine coolant temperature 20°C {68°F}	Approx. 3.1V	Ignition switch ON
				After warm-up	Approx. 0.9V	
2F	O		Throttle position sensor	Closed throttle position	0.1—1.1V	Ignition switch ON
				Wide open throttle	2.8—4.5V	

Terminal	Incorrect voltage	Possible cause
1M	Always 0V	• Open or short circuit in wiring from speedometer to PCME terminal 1M
1N	Always below 1.0V	• Steering pressure sensor malfunction • Short circuit in wiring from Steering pressure sensor to PCME terminal 1N • PCME malfunction
	Always B+	• Steering pressure sensor malfunction • Open circuit in wiring from Steering pressure sensor to PCME terminal 1N • Open circuit in wiring from Steering pressure sensor to ground
1O	Always below 1.5V	• Short circuit in wiring from A/C amplifier to PCME terminal 10 • A/C amplifier malfunction • PCME malfunction
	Always 4.5–5.5V	• Open circuit in wiring from A/C amplifier to PCME terminal 1 • A/C amplifier malfunction
1P	Always below 1.0V	• Short circuit in wiring from A/C amplifier to PCME terminal 1P • A/c amplifier malfunction • PCME malfunction
	Always B+	• Open circuit in wiring from A/C amplifier to PCME terminal 1P • A/C amplifier malfunction
1Q	Always below 1.0V (Stoplight OK)	• Open circuit in wiring from stoplight switch to PCME terminal 1Q
1R	Always below 1.0V (Neutral/clutch switch OK)	• Short circuit in wiring from Neutral/clutch switch to PCME terminal 1R
	Always B+	• Open circuit in wiring from Neutral/clutch switch to PCME terminal 1R
	Always below 1.0V (Park/neutral switch OK)	• Short circuit in wiring from PCME terminal 1R to PCMT terminal 1D
	Always B+	• Open circuit in wiring from PCME terminal 1R to PCMT terminal 1D
1S	Always 0V	• Open or short circuit in wiring from PCME terminal 1S to PCMT terminal 2M
1T	Always below 1.0 V	• Short circuit in wiring from throttle position sensor to PCME terminal 1S • PCME malfunction • Throttle position sensor misadjusted
	Always B+	• Open circuit in wiring from throttle position sensor to PCME terminal 1S • PCME malfunction
1U	—	—
1V	Always B+	• Open circuit in wiring from PCME terminal 1V to PCMT terminal 1A
	Always 0V	• Short circuit in wiring from PCME terminal IV to PCMT terminal IA
2A	—	—
2B	Always below 2.0 V or Approx. 4V	• Refer to Code No. 08 Troubleshooting
2C	0V after warm-up	• Refer to Code No. 23 Troubleshooting
	Always approx. 1V after warm-up	• Refer to Code No. 24 Troubleshooting
2D	0V after warm-up	• Refer to Code No. 15 Troubleshooting
	Always approx. 1V after warm-up	• Refer to Code No. 17 Troubleshooting
2E	Always approx. 0V or approx. 5V	• Refer to Code No. 09 Troubleshooting
2F	Always constant	• Open circuit in wiring from PCME terminal to throttle position sensor
	Always above IV	• Throttle position sensor misadjusted

B+: Battery positive voltage

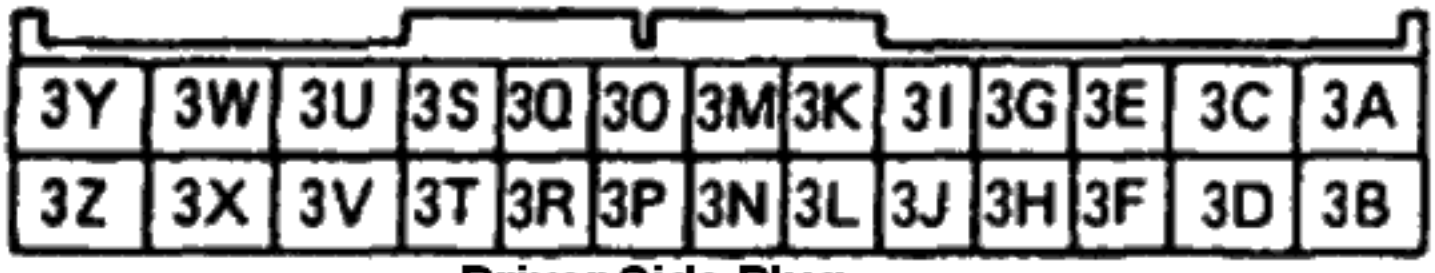
Terminal	Input	Output	Connection to	Test condition		Correct voltage	Remarks
2H	○		—	Constant		APPROX. 5V	—
			Ground (California)	Constant		0V	—
2I	○		Throttle position sensor	Constant		5V	
2J	○		EGR function sensor	Ignition switch ON		Approx. 0.8V	—
				Engine running		Approx. 0.8–4.5V	
2K	○		Intake air temperature sensor (Volume airflow sensor)	Ambient air temperature 20°C (68°F)		Approx. 2.5V	Ignition switch ON
2L	○		DRL relay (Canada)	Parking brake pulled with ignition switch ON (DRL OFF)		B+	DRL: Daytime Running Lights
				Idle (DRL ON)		Below 2.5V	
2M*	○		Knock sensor	Ignition switch ON		Approx. 2.4V	Measure terminal voltage by using digital type voltmeter
				Idle		Approx. 2.4V	
2N	—	—	—	—		—	—
2O		○	Purge solenoid valve	Ignition switch ON or idle		B+	
2P		○	Coolant fan relay (ATX)	Engine coolant temp. 108°C (226°F)		Below 2V	—
				Others		B+	
3A	—	—	Ground (Output)	Constant		0V	—
3B	—	—	Ground (Fuel injector)	Constant		0V	—
3C	—	—	Ground (CPU)	Constant		0V	—
3D	—	—	Ground (Input)	Constant		0V	—
3E	○		Crankshaft position sensor 1 (in distributor) (SGT signal)	Ignition switch ON		Approx. 0V or 5V	—
				Idle		Approx. 2.5 V	
3F	○		Crankshaft position sensor 2 (Crankshaft pulley) (Ground)	Constant		0V	—
3G	○		Crankshaft position sensor 1 (in distributor) (SGC signal)	Ignition switch ON		Approx. 0V or 5V	—
				Idle		Approx. 2.5V	
3H	○		Crankshaft position sensor 2 (Crankshaft pulley) (NE signal)	Ignition switch ON		0V	
				Idle		Approx. 0V	
3I		○	VRIS solenoid valve No.1	Engine speed 3,900–6,300 rpm		Approx. 1.2V	—
				Others		B+	
3J		○	VRIS solenoid valve No.2	Engine speed 4,700–6,300 rpm		Approx. 1.2V	—
				Others		B+	
3K	—	—	—	—		—	—
3L		○	Coolant fan relay	Engine coolant temp. 100°C (212°F)		Below 1.0V	—
				Others		B+	
3M		○	PRC solenoid valve	Hot condition: Engine coolant temp. above 70°C and intake air temp. above 75°C for 120 sec. after engine starting		Approx. 1.2V	—
				Others		B+	
3N		○	Condenser fan relay	Ignition switch ON		B+	—
				Idle	Engine coolant temp. 108°C (226°F)	Below 2.0V	
					Others	B+	

*: Diagnostic Trouble Code No. 05 may be memorized by PCME when the Engine Signal Monitor is set to position 2M.

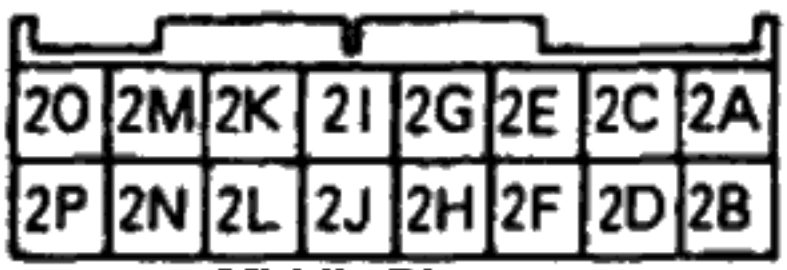
B+: Battery positive voltage

Terminal	Incorrect voltage	Possible cause
2H	—	—
2I	Always approx. 0V or approx. 5V	• Refer to Code No. 12 Troubleshooting
2J	Always approx. 0V or approx. 5V	• Refer to Code No. 16 Troubleshooting
2K	Always 0V	• Refer to Code No. 10 Troubleshooting
2L	Always 0V (DRL system OK)	• Open or short circuit in wiring from DRL relay to PCME terminal 2L
2M*	Always 0V or B+	• Refer to Code No. 05 Troubleshooting
2N	—	—
2O	Always 0V or approx. 5V	• Refer to Code No. 26 Troubleshooting
2P	Always below 2V or B+	• Open or short circuit in wiring from coolant fan relay to PCME terminal 2P • PCME malfunction
3A 3B 3C 3D	Above 0V	• Poor connection at ground terminal • Open circuit in wiring from PCME
3E	Always approx. 0V or approx. 2V	• Refer to Code No. 04 Troubleshooting
3F	Above 0V	• Poor connection at ground terminal • Open circuit in wiring from PCME
3G	Always approx. 0V or approx. 5V	• Refer to Code No. 03 Troubleshooting
3H	Always approx. 0V or approx. 2V	• Refer to Code No. 02 Troubleshooting
3I	Always approx. 0V or B+	• Refer to Code No. 41Troubleshooting
3J	Always approx. 0V or B+	• Refer to Code No. 46 Troubleshooting
3K	—	—
3L	Always below 1.0V or B+	• Open or short circuit in wiring from Coolant fan relay to PCME terminal 3L • PCME malfunction
3M	Always below 1.0V or B+	• Refer to Code No. 26 Troubleshooting
3N	Always below 2.0V	• Open or short circuit in wiring from condenser fan relay to PCME terminal 3N • PCME malfunction

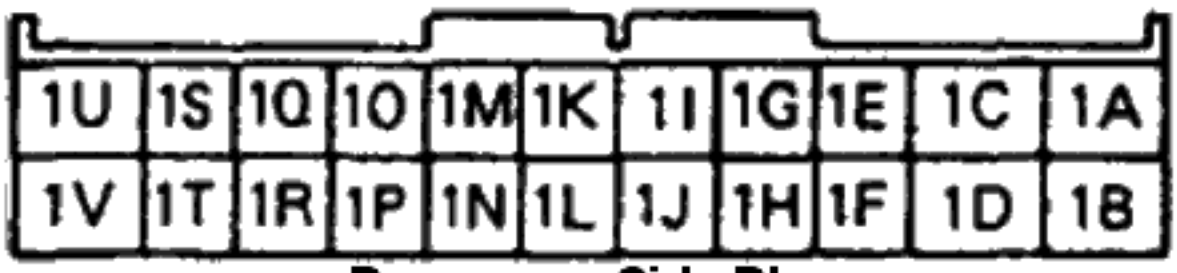
Terminal	Input	Output	Connection to	Test condition	Correct voltage	Remarks
3O		O	EGR solenoid Valve (vent)	Idle	B+	* Engine Signal Monitor: Green and red light flash
				Initial acceleration *	B+	
3P		O	EGR solenoid valve (vacuum)	Idle	B+	
				Initial acceleration*	B+	
3Q		O	Idle air control valve	Ignition switch ON	Approx. 7V	—
				Idle	Approx. 9V	
3R	—	—	—	—	—	—
3S	—	—	—	—	—	—
3T		O	Fuel pump relay	Ignition switch ON	B+	—
				Idle	Below 1.0V	
3U		O	Fuel injector No.1	Ignition switch ON or Idle*	B+	* Engine Signal Monitor: Green and red lights flash
3V		O	Fuel injector No.2			
3W		O	Fuel injector No.3			
3X		O	Fuel injector No.4			
3Y		O	Fuel injector No.5			
3Z		O	Fuel injector No.6			



Driver Side Plug



Middle Plug



Passenger Side Plug

B+: Battery positive voltage

Terminal	Incorrect voltage	Possible cause
3O	Always 0V	• Refer to Code No. 28 Troubleshooting
3P	Always 0V	• Refer to Code No. 29 Troubleshooting
3Q	Always approx. 0V or B+	• Refer to Code No. 34 Troubleshooting
3R	—	—
3S	—	—
3T	Always below 1.0V	• Open or short circuit in wiring from fuel pump relay to PCME terminal 3T
3U	Always 0V	• Open or short circuit in wiring from fuel injector to PCME terminal 3U, 3V, 3W, 3X, 3Y or 3Z • Main relay malfunction (Refer to page F2–157).
3V		
3W		
3X		
3Y		
3Z		