

J - PIN VOLTAGE CHARTS

1994 Mitsubishi 3000GT

1994 ENGINE PERFORMANCE
Chrysler Corp./Mitsubishi Pin Voltage Charts

Dodge; Stealth
Mitsubishi; 3000GT

INTRODUCTION

NOTE: Unless stated otherwise in testing procedures, perform all voltage tests using a Digital Volt-Ohmmeter (DVOM) with a minimum 10-megohm input impedance. Voltage readings may vary slightly due to battery condition or charging rate.

Pin voltage charts are supplied to reduce diagnostic time. Checking pin voltages at the ECM connector determines whether it is receiving and transmitting proper voltage signals. Diagnostic charts may also help determine if ECM harness is shorted or open.

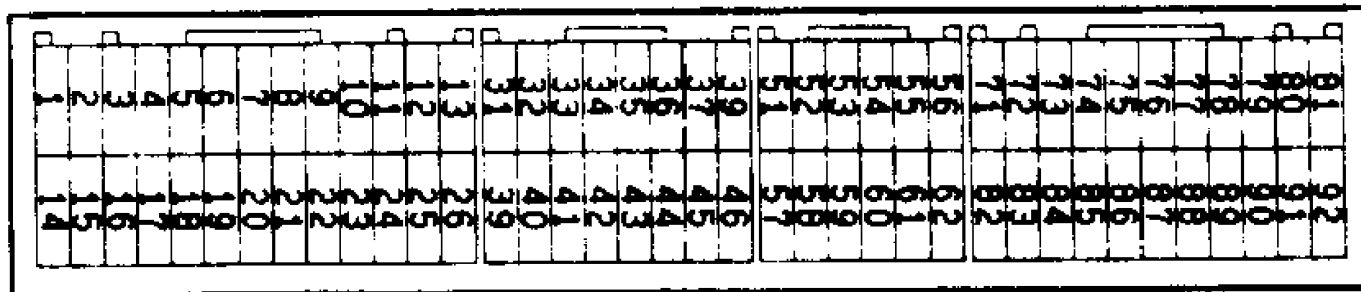
TEST PROCEDURE

CAUTION: Shorting positive DVOM lead between connector terminal and ground could damage vehicle wiring, sensor and ECM.

1) If necessary, remove module to access harness connector. Using DVOM, backprobe terminals with positive lead. Connect negative lead to ECM ground terminal. See chart of ground terminal. See Figs. 1 and 2.

2) All measurements are applicable to vehicle at normal operating temperature at sea level. Unless otherwise noted, engine is idling when specification requires engine running. Ensure transmission shift selector is in Neutral or Park (as applicable). If DVOM displays measurement that is not within specification, see G - TESTS W/CODES or I - SYSTEM/COMPONENT TESTS article in the ENGINE PERFORMANCE Section.

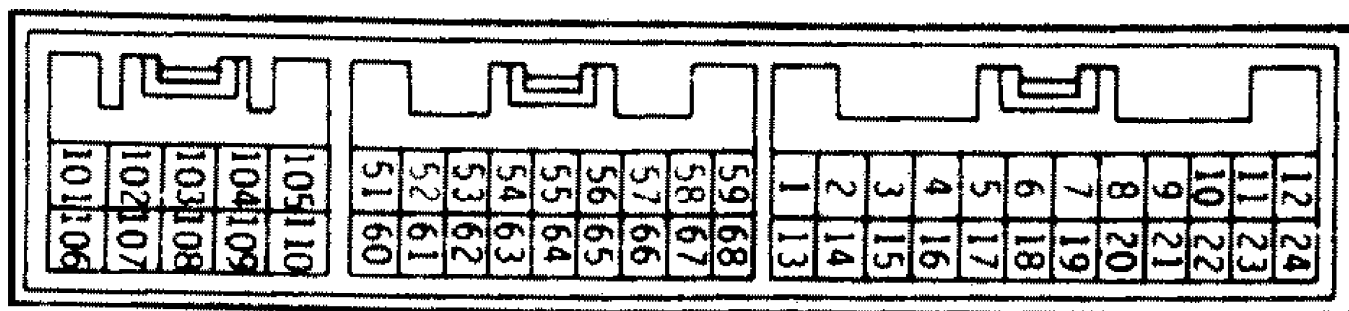
SOHC & DOHC-FED.



DOHC-CALIF.

94F44292

Fig. 1: Identifying ECM Connectors
Courtesy of Mitsubishi Motor Sales of America.



93J78252

Fig. 2: Identifying ECM Connectors
Courtesy of Mitsubishi Motor Sales of America.

PIN VOLTAGE CHARTS - STEALTH (SOHC & DOHC NON-TURBO - FEDERAL) &
3000GT (NON-TURBO - FEDERAL)

Terminal ID No./Wire Color	Function/ Description	Voltage Value (DC Volts, Unless Specified)
1 Green	Injector No. 1	Battery Voltage With KOER (1)
2 Green/Yellow	Injector No. 3	Battery Voltage With KOER (1)
3 Green/Black	Injector No. 5	Battery Voltage With KOER (1)
4 Green/Black	Idle Air Control Motor	Battery Voltage/0-3 Volts (Load Controlled)
5 Gray/Blue	Idle Air Control Motor	Battery Voltage/0-3 Volts (Load Controlled)
6 Lt. Green/Red	EGR Solenoid (Calif.)	Battery Voltage With KOE0 (2)
6 Green/Yellow	Radiator Fan Motor Relay-Lo (DOHC)	Battery Voltage With KOER (1) (Fan Off)
7 Blue/White	Transaxle Control Module	1-4 Volts With KOER (1)
8 White/Red	Multi-port Fuel Injection Relay	Battery Voltage With KOE0 (2)
9 Black/Red	Purge Control Solenoid	Battery Voltage With KOE0 (2)
10 Black/Blue	Ignition Power Transistor	0.3-3.0 Volts With Engine @ 3000 RPM
11 Brown/Red	Ignition Power Transistor (DOHC)	0.3-3.0 Volts With Engine @ 3000 RPM
12 Black/Red	Power Supply	Battery Voltage With KOE0 (2)
13 Black	Ground Circuit	Not Applicable

14 Yellow/Black	Injector No. 2	Battery Voltage With KOER (1)
15 Green/Red	Injector No. 4	Battery Voltage With KOER (1)
16 Green/White	Injector No. 6	Battery Voltage With KOER (1)
17 Green/Black	Idle Air Control Motor	Battery Voltage/0-3 Volts (Load Controlled)
18 Green/Yellow	Idle Air Control Motor	Battery Voltage/0-3 Volts (Load Controlled)
19 Red/White	Airflow Sensor Reset Signal	0-1 Volt With KOER (1)
20 Green/Yellow	Radiator Fan Motor Relay-Lo (SOHC)	Battery Voltage With KOER (1) (Fan Off)
20 Blue/Orange	Air Conditioning Switch No. 2 (DOHC)	0-3 Volts (A/C Off)
21 Blue/Red (3)	Radiator Fan Motor Relay-Hi	Battery Voltage With KOER (1) (Fan Off)
22 Green	Air Conditioning Clutch Relay	Battery Voltage With KOER (1) (A/C Off)
23 Black/White	Ignition Power Transistor (DOHC)	0.3-3.0 Volts With Engine @ 3000 RPM
24 Red/Green	Electrical Load Switch	0-3 Volts With KOER (1) (Accessories Off)
25 Black/Red	Power Supply	Battery Voltage With KOEO (2)
26 Black	Ground Circuit	Not Applicable
51 Black/White (4)	Ignition Switch	8 Volts Or More With Engine Cranking
52 Red/Blue	Intake Air Temperature Sensor	0.4-1.0 Volt With KOEO (2) (Sensor @ 176°F)
53 Blue/Red	Radiator Fan Motor Relay-Hi	Battery Voltage With KOER (1) (Fan Off)
54	BLANK	N/A
55 White	Heated Oxygen Sensor	0-.8 Volt (Pulse) KOER (1)
56 White	Heated Oxygen Sensor	0-.8 Volt (Pulse) KOER (1)
57	BLANK	N/A
58 White	Knock Sensor (DOHC)	Not Available

59 White/Red	Transaxle Control Module	0-1 Volt With KOER (1)
60 Red/Black	Back-Up Power Supply	Battery Voltage With Ignition Off
61 Green/Yellow	Throttle Position Sensor	4.5-5.5 Volts With KOEO (2)
62 Black/White	Ignition Supply Voltage	Battery Voltage With KOEO (2)
63 Black/White	Coolant Temperature Sensor	.3-.9 Volt With KOEO (2) (Sensor @ 176°F)
64 Brown/Red	Throttle Position Sensor	0.3-1.0 Volt With KOEO (2)
65 Orange	Barometric Pressure Sensor	3.7-4.3 Volts With KOER (1) (Sea Level)
66 Yellow/White	Vehicle Speed Sensor	0-5 Volts (Pulse) With KOEO (2), Sensor Rotating
67 Yellow/Red	Closed Throttle Position Sensor	0-1 Volt With KOEO (2)
68 Blue/Red	Camshaft Position Sensor	0.2-3.0 Volts With KOER (1)
69 Blue/Red	Crankshaft Position Sensor	0.2-3.0 Volts With KOER (1)
70 Blue/Yellow	Airflow Sensor	2.2-3.2 Volts With KOER (1)
71 Black/Yellow	Park/Neutral Position Switch	0-3 Volts With KOEO (2) In Park
72 Black	Throttle Position Switch	Not Available
101 Blue/Orange	Air Conditioning Switch (SOHC)	0-3 Volts (A/C Off)
101 White	Ignition Signal (DOHC)	0.3-3.0 Volts With Engine @ 3000 RPM
102 White	Heated Oxygen Sensor (Calif.)	0.6-1.0 Volts With KOER (1) (WOT-Low Gear)
103 Black/blue	Induction Control Valve Position Sensor (DOHC)	0-1 Or 4.5-5.5 Volts With KOEO (2)
104 Black/Green	Ignition Timing Adjustment Terminal	4.0-5.5 Volts With KOEO (2) (GND Disconnected)
105 White	Heated Oxygen Sensor (Calif.)	0.6-1.0 Volts With KOER (1) (WOT-Low Gear)
106 Green/Red	Malfunction Indicator Light	0-3 Volts With KOEO (2) (Initially)

107 Blue/White	Power Steering Pressure Switch	Battery Voltage With KOER (1)
108 Blue/Green	MFI Relay Supply Voltage	Battery Voltage With Ignition Off
109 Green/Black	Variable Induction Control Motor (Closed)	0-1 Volt With KOER (1) (Decelerating)
110 Green/White	Variable Induction Control Motor (Open)	0-1 Volt With KOER (1) (Accelerating)
111 Red/White	Variable Induction Control Motor Position Sensor (3)	0-1 Volt Or 4.5-5.5 Volts With KOEO (2)
112 Yellow	Data Link Connector	Not Available
113 Pink	Data Link Connector	Not Available
114	Blank	N/A
115 Blue/Red	Air Conditioning Switch	0-3 Volts With KOER (1) (A/C Off)
116 White/Blue	Transaxle Control Module	4.5-5.5 Volts With KOER (1) (DOHC)
(1) - KOER - Key On, Engine Running. (2) - KOEO - Key On, Engine Off. (3) - Wire color is Green/Yellow on DOHC. (4) - On M/T models, wire color is Black/Yellow.		

PIN VOLTAGE CHARTS - STEALTH (DOHC - CALIF. & DOHC TURBO FEDERAL)
& 3000GT (CALIF. & TURBO - FEDERAL)

Terminal ID No./Wire Color	Function/ Description	Voltage Value (DC Volts, Unless Specified)
1 Green	Injector No. 1	Battery Voltage With KOER (1)
2 Green/Yellow	Injector No. 3	Battery Voltage With KOER (1)
3 Green/Black	Injector No. 5	Battery Voltage With KOER (1)
4 Gray	Idle Air Control Motor	Battery Voltage/0-3 Volts (Load Controlled)
5 Gray/Blue	Idle Air Control Motor	Battery Voltage/0-3 Volts (Load Controlled)
6 Lt. Green/Red	EGR Solenoid	Battery Voltage With KOEO (2)
7 Blue/Red	Transmission Control Module	1-4 Volts With KOER (1)

8 White/Red	Multi-Port Fuel Injection Pump Relay	0-3 Volts With KOER (1)
9 Lt. Green/Red	Purge Control Solenoid	Battery Voltage With KOEO (2)
10 Black/Blue	Ignition Power Transistor	0.3-3.0 Volts With Engine @ 3000 RPM
11 Brown/Red	Ignition Power Transistor	0.3-3.0 Volts With Engine @ 3000 RPM
12 Black/Red	Power Supply	Battery Voltage With KOEO (2)
13 Black	Ground Circuit	Not Applicable
14 Yellow/Black	Injector No. 2	Battery Voltage With KOER (1)
15 Green/Red	Injector No. 4	Battery Voltage With KOER (1)
16 Green/White	Injector No. 6	Battery Voltage With KOER (1)
17 Green/Black	Idle Air Control Motor	Battery Voltage/0-3 Volts (Load Controlled)
18 Green/Yellow	Idle Air Control Motor	Battery Voltage/0-3 Volts (Load Controlled)
19 Red/White	Airflow Sensor Reset Signal	0-1 Volt With KOER (1)
20 Blue/Red	Radiator Fan Motor Relay-Hi	Battery Voltage With KOEO (2) (Fan Off)
21 Green/Yellow	Radiator Fan Motor Relay-Lo	Battery Voltage With KOEO (2) (Fan Off)
22 Green	Air Conditioning Clutch Relay (A/C On)	Battery Voltage With KOER (1)
23 Black/White	Ignition Power Transistor	0.3-3.0 Volts With Engine @ 3000 RPM
24 Red/Green	Electrical Load Switch	0-3 Volts With KOER (1) (Accessories Off)
25 Black/Red	Power Supply	Battery Voltage With KOEO (2)
26 Black	Ground Circuit	Not Applicable
31 Black/White	Fuel Pump Relay No. 2	0-3 Volts With KOER (1) (Snap Throttle)
32 Red/Yellow	Turbo Wastegate Solenoid	Battery Voltage With KOEO (2)
33	BLANK	N/A

34 Red	Exhaust Mode Switch	0-3 Volts With KOEO (2) (Switch On)
35 Red/White	Exhaust Mode Indicator Signal	0-3 Volts With KOER (1) (Switch On)
36 Green	Check Engine Light	0-3 Volts With KOEO (2) (Initially)
37 Blue/White	Power Steering Pressure Switch	Battery Voltage With KOER (1)
38 Blue/Green	MFI Relay Supply Voltage	Battery Voltage With Ignition Off
39 Green/Black	Variable Induction Control Motor	0-1 Volt With KOER (1) (Decelerating)
40 Green/White	Variable Induction Control Motor	0-1 Volt With KOER (1) (Accelerating)
41 Red/White	Variable Induction Control Position Sensor	0-1 Volt Or 4.5-5.5 Volts With KOEO (2)
N/A	42	BLANK
43 White/Red	Transmission Control Module	0-1 Volt With KOER (1)
44 Red/Blue	ABS Signal	Battery Voltage With KOER (1)
45 Green/Red	Air Conditioning Switch	0-3 Volts With KOER (1) (A/C Off)
46 White/Blue	Traction Control Module	4.5-5.5 Volts With KOER (1)
51	BLANK	N/A
52 Blue/Green	Ignition Timing Adjustment Terminal	4.0-5.5 Volts With KOEO (2) (GND Disconnected)
53	BLANK	N/A
54	BLANK	N/A
55	BLANK	N/A
56 Pink	Data Link Connector	Not Available
57	BLANK	N/A
58 White	Engine Ignition Signal	.3-3.0 Volt With KOER (1) (3000 RPM)
59 Blue/Orange	Air Conditioning Switch	0-3 Volts With KOER (1) (A/C Off)
60 White	Heated Oxygen Sensor R.R.	.6-1.0 Volt In 2nd Gear Or "L" @ WOT

61	BLANK	N/A
62 Yellow	Data Link Connector	Not Available
71 Black/Yellow	Ignition Switch	8 Volts Or More With Engine Cranking
72 Red/Blue	Intake Air Temperature Sensor	0.4-1.0 Volt With KOEO (2) (Sensor @ 176°F)
73 Yellow	EGR Temperature Sensor	2.2-3.0 Volts With KOEO (2) (Sensor @ 212°F)
74 Black	Oxygen Sensor Heater	0-3 Volts With KOER (1)
75 White	Heated Oxygen Sensor R.F.	0-.8 Volt (Pulse) With KOER (1) (2000 RPM)
76 White	Heated Oxygen Sensor L.F.	0-.8 Volt (Pulse) With KOER (1) (2000 RPM)
77 Black	Oxygen Sensor Heater	0-3 Volts With KOER (1)
78 Black	Knock Sensor	Not Available
79 White	Heated Oxygen Sensor L.R.	.6-1.0 Volt In 2nd Gear Or "L" @ WOT
80 Red/Black	Back-Up Power Supply	Battery Voltage With Ignition Off
81 Green/Yellow	Throttle Position Sensor	4.5-5.5 Volts With KOEO (2)
82 Black/White	Ignition Supply Voltage	Battery Voltage With KOEO (2)
83 Black/White	Coolant Temperature Sensor	.3-.9 Volt With KOEO (2) (Sensor @ 176°F)
84 Brown/Red	Throttle Position Sensor	0.3-1.0 Volt With KOEO (2)
85 Orange	Barometric Pressure Sensor	3.7-4.3 Volts With KOER (1) (Sea Level)
86 Yellow/White	Vehicle Speed Sensor	0-5 Volts (Pulse) With KOEO (2), Sensor Rotating
87 Yellow/Red	Closed Throttle Position Switch	0-1 Volt With KOEO (2)
88 Blue/Red	Camshaft Position Sensor	0.2-3.0 Volts With KOER (1)
89 Blue/White	Crankshaft Position Sensor	0.2-3.0 Volts With KOER (1)
90 Blue/Yellow	Airflow Sensor	2.2-3.2 Volts With KOER (1)
91 Black/Yellow	Park/Neutral Position Switch	0-3 Volts With KOEO (2) In Park

92 Black	Coolant Temperature Sensor	Not Applicable
(1) - KOER - Key On, Engine Running. (2) - KOEO - Key On, Engine Off.		