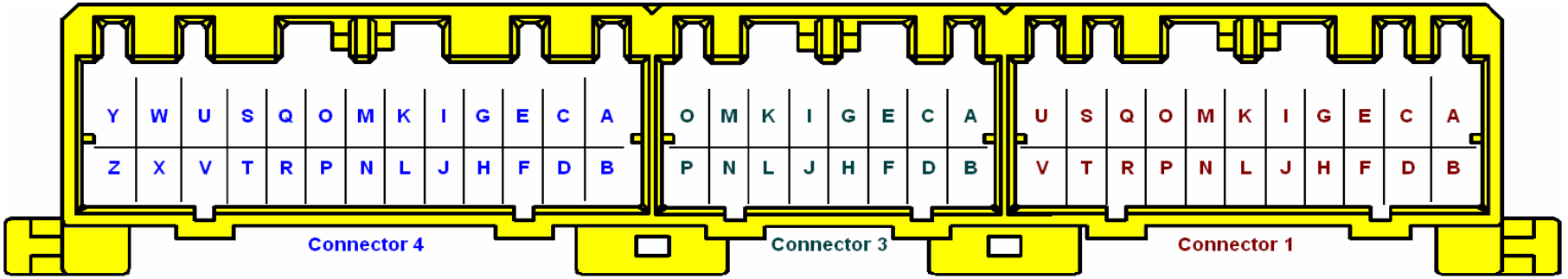
Megasquirt Harness Layout for 1996/1997 Miata

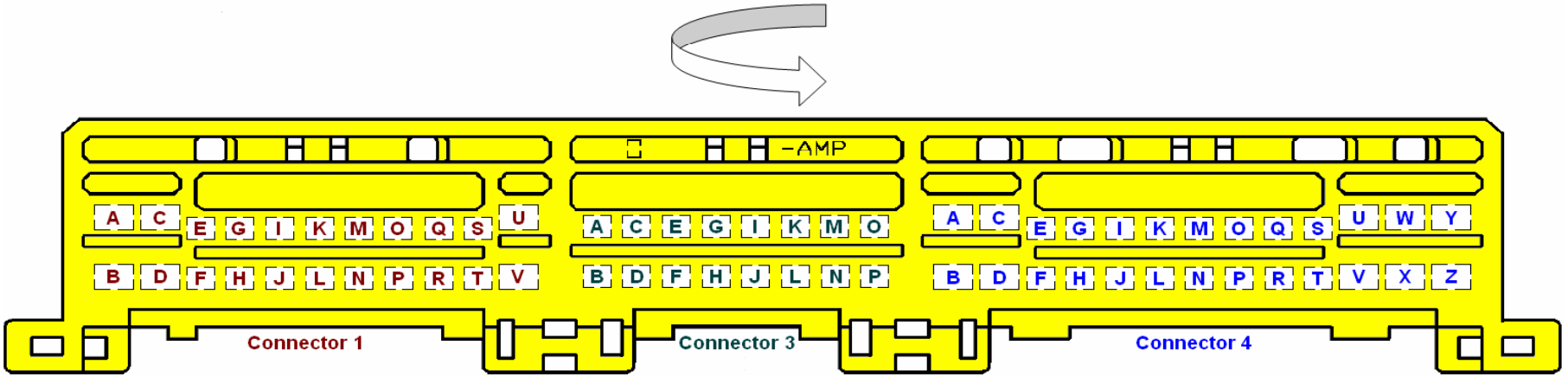
For running parallel with stock ECU

AMP/Tyco Female 64-pin Multi-Lock Connector

Matching P/N(s): 174518-7 776189-6 178764-1 174518-6 174518-7 2-177609-6

front view



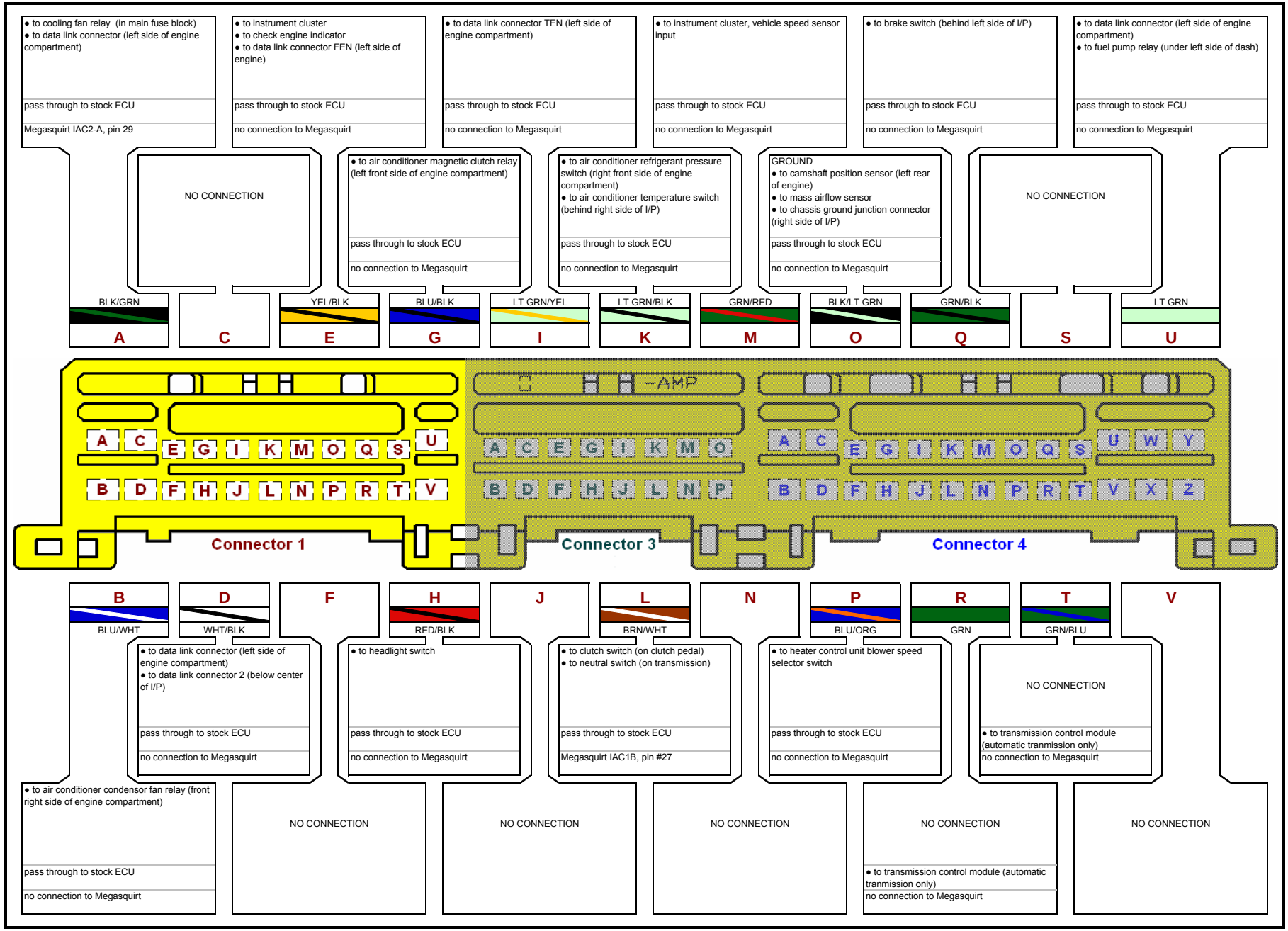


rear view

Notes

ECU Pinout Connections for 1996/1997 Miata using Megasquirt in Parallel Configuration

Assumes: manual transmission, wideband O2 sensor separate from Miata harness, AIT sensor separate from Miata harness, spark output 1 on MS pin #36, spark output 2 @ IAC2B (output on MS pin #31), idle mod (PWM output on MS pin #30), relay/fan control mod @ IAC2A (output on MS pin #29), launch control mod with clutch switch @ IAC1B (low input on MS pin #27)



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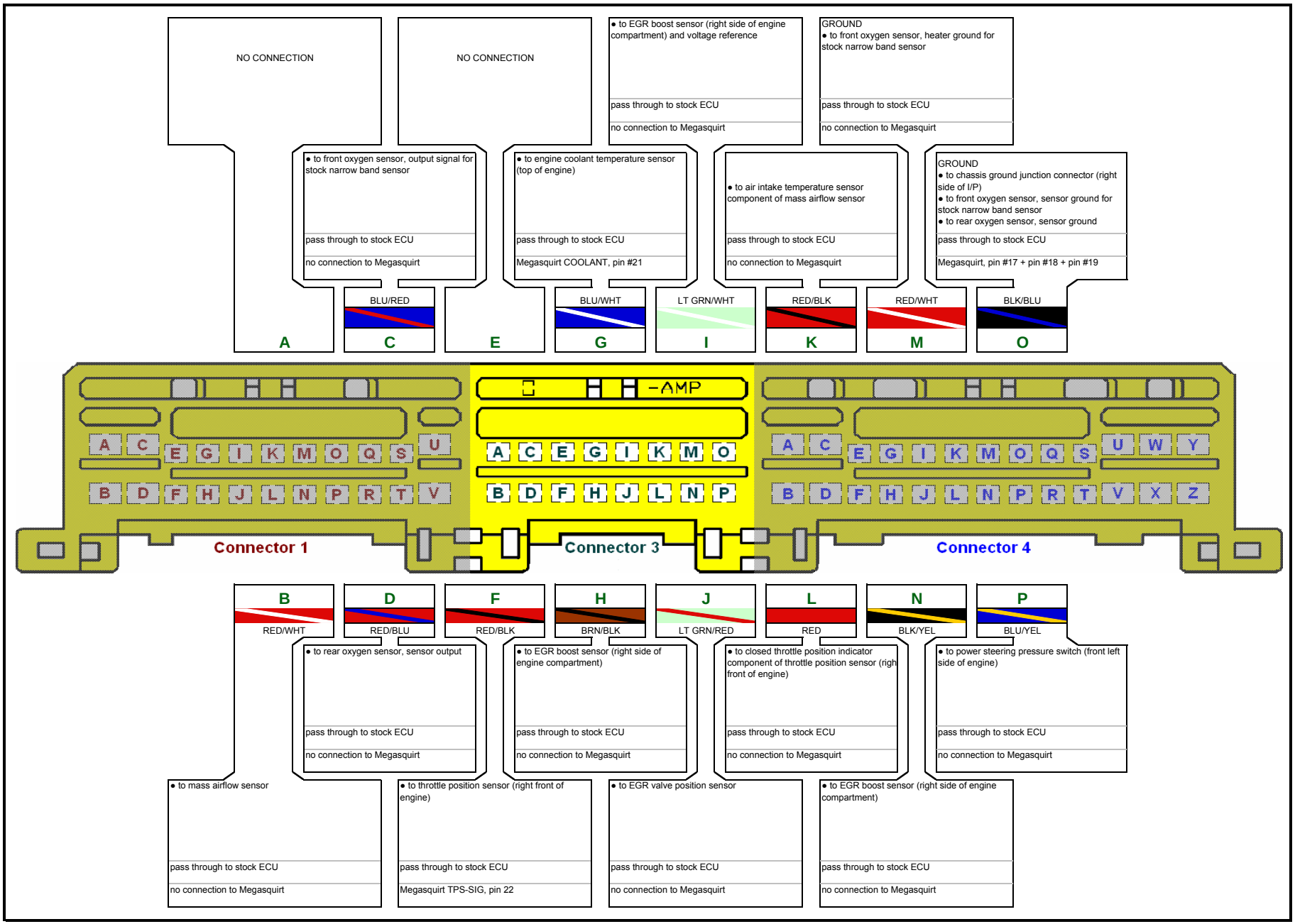

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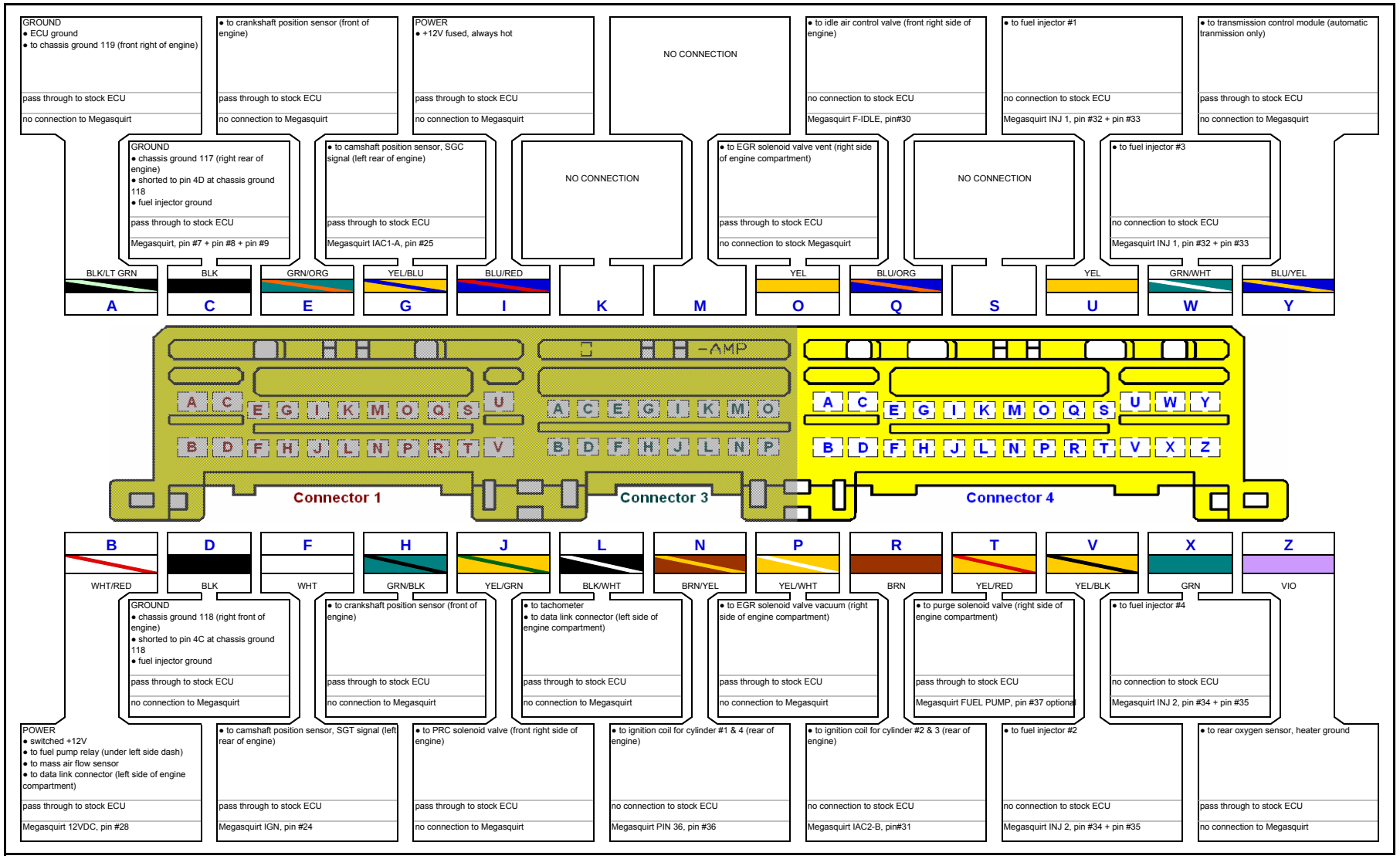

DB37 and Megasquirt Pinout Connections for 1996/1997 Miata using Megasquirt in Parallel Configuration

Assumes: manual transmission, wideband O2 sensor separate from Miata harness, AIT sensor separate from Miata harness, spark output 1 on MS pin #36, spark output 2 @ IAC2B (output on MS pin #31), idle mod (PWM output on MS pin #30), relay/fan control mod @ IAC2A (output on MS pin #29), launch control mod with clutch switch @ IAC1B (low input on MS pin #27)

DIY Autotune Pre-built Harness		DB37 Pin #	Megasquirt		ECU
Wire color	Wire Label				
none	none	1	none		none
bare sheild	none	2	leave unconnected (sheild for pin 24)		none
none	none	3	none		none
none	none	4	none		none
none	none	5	none		none
none	none	6	none		none
BLK	none	7	ground, combined with pin 8 and pin 9		4C
BLK	none	8	ground, combined with pin 7 and pin 9		4C
BLK	none	9	ground, combined with pin 7 and pin 8		4C
none	none	10	none		none
none	none	11	none		none
none	none	12	none		none
none	none	13	none		none
none	none	14	none		none
none	none	15	none		none
none	none	16	none		none
BLK	none	17	2nd ground, for sensors, combined with pin 18 and pin 19		3O
BLK	none	18	2nd ground, for sensors, combined with pin 17 and pin 19		3O
BLK	none	19	2nd ground, for sensors, combined with pin 17 and pin 18		3O
ORG	IAT	20	intake air temp		N/A
YEL	COOLANT	21	coolant		3G
BLU	TPS-SIG	22	throttle position sensor		3F
PNK	O2	23	O2		N/A
GRY	IGN	24	tach signal (sheild on pin #2)		4F
BLU/WHT	IAC1-A	25	Tach Input, IAC1A on MS board		4G
WHT	TPS VREF	26	leave unconnected		none
BLU/WHT	IAC1-B	27	Clutch switch (for launch control)		1L
RED	12VDC	28	power 12VDC		4B
GRN/WHT	IAC2-A	29	Cooling fan, IAC2A on MS board		1A
GRN	F-IDLE	30	Idle control valve		4Q
GRN/WHT	IAC2-B	31	Spark Output #2, IAC2B on MS board		4R
GRN	INJ 1	32	Injector bank #1, combined with pin 33	!! Wire colors swapped from Miataturbo.net writeup !!	4U
GRN	INJ 1	33	Injector bank #1, combined with pin 32	!! Wire colors swapped from Miataturbo.net writeup !!	4W
BLU	INJ 2	34	Injector bank #2, combined with pin 35	!! Wire colors swapped from Miataturbo.net writeup !!	4V
BLU	INJ 2	35	Injector bank #2, combined with pin 34	!! Wire colors swapped from Miataturbo.net writeup !!	4X
BRN	PIN 36	36	Spark Output #1, IGN on MS board		4N
VIO	FUEL PUMP	37	fuel pump, connection not necessary in parallel configuratior		4T or none