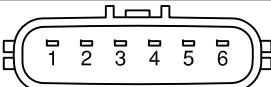
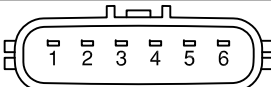
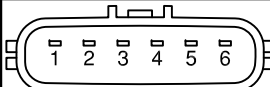
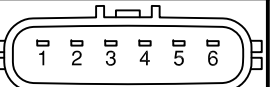
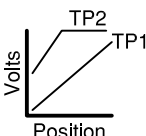
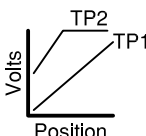
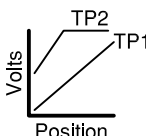
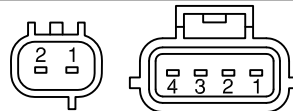
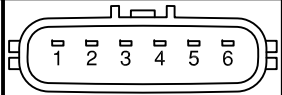
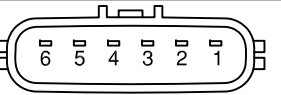
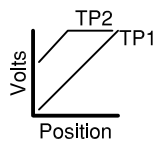
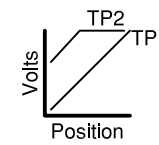
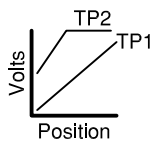


Column No.	A	B	C	C1	D	E	F
Part No.s							
Applications							
Part No.s		22030-36010	22030-38010				
Applications		2ZR-FE engine	Toyota				
Part No.s	22030-75020 7A19 02119 12H28	22030-0M010 7A22 00478 10H18	22030-31010 7K28 00154 11J15H		22030-31030 6K01 04546 10H19		
Applications	Unknown	Unknown	Toyota Landcruiser V6		Aurion 2GR-FE		
Part No.s	22030-50170 7E29 0360 00049 7E17	22030-50180 10G07 0590 00429 9G26	22030-21030 5B07 00023 2G03		22030-28070 6E09 B1094 03H08-	22030-37020 8603 81570 K25H	22030-22030 5J04 3737 9G20
Applications	Toyota Landcruiser	3UZ (Engine)	Vitz		2AZ (Engine)	Toyota Yaris (China)	2ZZGE (Lotus)
TP2 Linear Limit	65%	62.5%	60%		62.5%	60%	62.5%
Pin Function							
Motor-	5		5		5		5
Motor+	6		6		6		6
Throttle Position1	1		1		1		1
Throttle Position2	3		3		3		3
0V (TP1/TP2)	4		4		4		4
5V (TP1/TP2)	2		2		2		2
Calibration							
Proportional Gain	120		120		120		110
Integral Gain	60		60		100		60
Derivative Gain	160		180		180		145
Period	1		1		1		1
Dead Band	0.3		0.3		0.2		0.3
Feed Forward	10		10		15		10
Neg. Integral Clamp	-25		-25		-18		-25
Frequency	8000		8000		8000		8000
Motor Volts	14		14		14		14
							
Notes	TP2 must use manual calibration						

Note, refer to:-
 "DAD0001 Electronic Throttle Setup for MoTeC 'hundred series' ECUs" or
 "DAD0002 Electronic Throttle Setup for MoTeC 'M1 series' ECUs"
 for additional information.



Title				Toyota Electronic Throttle Motors		Sheet No	Drawing No
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Column No.	G	H	J
Part No.s			
Applications			
Part No.s			
Applications			
Part No.s	22030-50160	22030-37050	22030-0S010 12J11 1160 00948:.. 11J12
Applications	Assam Lexus V8	Toyota 3ZR-FE 56mm	Toyota Tundra '06 3UR-FE
TP2 Linear Limit	61.5%	61.5%	60%
Pin Function	 <p>Motor Conn. TP Connector</p> <p>Motor- 2 Motor+ 1</p> <p>Throttle Position1 2 Throttle Position2 3 0V (TP1/TP2) 4 5V (TP1/TP2) 1</p>	 <p>5 6 1 3 4 2</p>	 <p>2 1 6 4 3 5</p>
Calibration	<p>Proportional Gain 90 Integral Gain 70 Derivative Gain 120 Period 1 Dead Band 0.2 Feed Forward 5 Neg. Integral Clamp -20 Frequency 8000 Motor Volts 14</p> 	<p>90 70 120 1 0.2 5 -20 8000 14</p> 	<p>120 60 180 1 0.3 10 -25 8000 14</p> 
Notes	TP2 must use manual calibration		

Note, refer to:-
 "DAD0001 Electronic Throttle Setup for MoTeC 'hundred series' ECUs" or
 "DAD0002 Electronic Throttle Setup for MoTeC 'M1 series' ECUs"
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							DAD0050