

Connection Diagram for EMS P/N 30-1100

1993-1998 Toyota Supra

	PnP	The Plug and Play system comes with this configured for proper operation of this device. Is still available for reassignment by the end user.
	Available	The function is not currently allocated and is available for use
	Dedicated	The location is fixed and can not be changed

Pin #	93-98 Supra 2JZGTE	AEM P/N 30-1100 Name	I/O	Availability
1A	Switched 12v at key on	SWITCHED 12V	Input	Dedicated
2A	Vehicle Speed Sensor	Vehicle Speed	Input	Dedicated
3A	Kickdown switch (Not Used)	N/U	N/U	Not used
4A	Brake switch input (12V) Not Used	N/U	N/U	Not used
5A	NOT USED	N/U	N/U	Not used
6A	Malfunction Indicator Lamp (LS10)	LS10	Output	PNP for Check Engine light
7A	Reverse indicator input (ADR13)	GEAR	Input	PNP reverse input (Auto Only)
8A	HS1 Output	HS1	Output	Available +12v switched
9A	2nd gear indicator input (ADR13) Auto only	GEAR	Input	PNP 2nd gear indicator (auto only)
10A	1st gear indicator input (ADR13) Auto only	GEAR	Input	PNP 1st gear indicator (auto only)
11A	NOT USED	N/U	N/U	Not used
12A	NOT USED	N/U	N/U	Not used
13A	NOT USED	N/U	N/U	Not used
14A	NOT USED	N/U	N/U	Not used
15A	NOT USED	N/U	N/U	Not used
16A	LS7 (USED FOR CLIMATE CONTROL)	LS7	Output	PNP for climate control
17A	TT For DATALINK connector(Injector 10i)	INJECTOR 10I	Output	available injector 10
18A	Manual trans mode selector switch (Switch #5)	Swtich #5	Input	Manual trans mode (auto only)
19A	TE2 to DATALINK connector (Injector 9i)	INJECTOR 9I	Output	available injector 9
20A	TE1 For DATALINK connector (PW1)	PW 1	Output	available pw1

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 Instruction Part Number: 10-1100
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21A	NOT USED	N/U	N/U	Not used
22A	Fuel pump control (Coil 4))	Coil 4	Output	PNP fuel pump activation
23A	ACMG to A/C Magnetic clutch (LS6)	LS6	Output	PNP A/C compressor relay
24A	Activates Main Relay with 12V signal at key on	COIL 5	Output	Dedicated Main relay
25A	Manual indicator mode light output (FM) Auto only	FM	Output	PNP manual mode indicator (auto only)
26A	NOT USED	N/U	N/U	Not used
27A	NOT USED	N/U	N/U	Not used
28A	Over Drive Switch input (Switch #4)	Switch #4	Input	PNP Overdrive input (auto only)
29A	NOT USED	N/U	N/U	Not used
30A	HS2	HS2	Output	Available +12v switched
31A	12V constant battery (heavy guage)	POWER	Input	Dedicated
32A	NOT USED	N/U	N/U	Not used
33A	12V constant battery	12V CONSTANT	Input	Dedicated
34A	A/C to a/c amplifier(ADR11 set to pin # -9 for a/c control)	PR Press	Input	PNP input for a/c request
35A	NOT USED	N/U	N/U	Not used
36A	NOT USED	N/U	N/U	Not used
37A	NOT USED	PW2	N/U	Not used
38A	NOT USED	N/U	N/U	Not used
39A	NOT USED	N/U	N/U	Not used
40A	NOT USED	N/U	N/U	Not used
1B	Timing (speed sensor) ground	TGND	Output	Dedicated
2B	EGT # 1 (+) (ADR 17)	EGT #1	Input	Available EGT input
3B	SP2 - Timed Speed input ground Vehicle speed sensor	TGND	Output	Dedicated
4B	EGT # 2 (+) (ADR18)	EGT #2	Input	Available EGT input
5B	Cam Sensor 2 (G2) Ground	TGND	Output	Not used
6B	Cam Sensor 1 (G1) Ground	TGND	Output	Dedicated
7B	Crank Sensor (NE) Ground	TGND	Output	Dedicated
8B	EGT # 3 (+) (ADR15)	EGT #3	Input	Available EGT input
9B	Auto Trans Sol No2 (HS3)S2	HS3	Output	PNP Auto Trans sol #2
10B	Auto Trans Sol No1 (HS4)S1	HS4	Output	PNP Auto Trans sol #1
11B	O2 Sensor ground	oxgnd2	Output	Dedicated
12B	Auto Trans Sol No5 (Line Pressure) (Idle 7)	IDLE7	Output	PNP Auto line pressure
13B	Auto Trans Sol No4 (Engagement Speed) (Injector 8)	INJECTOR 8	Output	PNP Auto gear engagement speed
14B	Auto Trans Sol No3 (Converter Lock up) (Idle 5))	IDLE5	Output	PNP Auto Converter Lockup
15B	Injector 6	INJECTOR 6	Output	Dedicated
16B	Injector 5	INJECTOR 5	Output	Dedicated
17B	Injector 4	INJECTOR 4	Output	Dedicated

18B	Injector 3	INJECTOR 3	Output	Dedicated
19B	Injector 2	INJECTOR 2	Output	Dedicated
20B	Injector 1	INJECTOR 1	Output	Dedicated
21B	Input Shaft Speed sensor signal (Switch #3)	Swich #3	Input	Available Switch input
22B	Switch #6 input	Switch #6	Input	Available Switch input
23B	Tail Shaft Speed sensor (Switch #2)	Switch #2	Input	Available Switch input
24B	Auto Trans Fluid Temp or spare temp Sensor input (ADR14)	FTEMP	Input	PNP trans temp sensor
25B	Cam Sensor 2 (G2) Input	Spare Speed	Input	Available spare speed
26B	Cam Sensor 1 (G1) input	CAM	Input	Dedicated
27B	Crank Sensor (NE) input	CRANK	Input	Dedicated
28B	Sensor Ground	SENSOR GROUND	Output	Dedicated
29B	(PW1i) ran through VF1 for DATALINK connector	pw1outi	Output	Available Pulse width
30B	NOT USED	N/U	N/U	Not used
31B	Auto Trans Sol No5 (SLT+) (Idle 8)	IDLE8	Output	PNP Auto trans line pressure
32B	Idle 4	IDLE4	Output	PNP Idle control motor
33B	Idle 1	IDLE1	Output	PNP Idle control motor
34B	Idle 3	IDLE3	Output	PNP Idle control motor
35B	Idle 2	IDLE2	Output	PNP Idle control motor
36B	NOT USED	N/U	N/U	Not used
37B	Not available on automatic	IDLE 6	Output	Available idle driver
38B	VSV For exhaust bypass valve (LS4) Spare output if Single Turbo	LS4	Output	PNP for EBP on stock twins
39B	VSV For Exhaust gas control valve (LS5) Spare output if single Turbo	LS5	Output	PNP for EGC on stock twins
40B	VSV For intake air control (LS3) Spare output if single Turbo	LS3	Output	PNP for IAC for stock twins
41B	5V Reference	5V REFERENCE	Output	Dedicated
42B	NOT USED	N/U	N/U	Not used
43B	TPS signal input	TPS	Input	Dedicated
44B	Coolant Sensor Input	COOLANT	Input	Dedicated
45B	Air Temp Sensor (ADR6)	Air Temp	Input	Dedicated
46B	NOT USED	N/U	N/U	Not used
47B	AFR#1	LAMBDA1	Input	Dedicated
48B	AFR#2	LAMBDA2	Input	Dedicated
49B	Knock 2 input (Rear Knock Sensor)	KNOCK2	Input	Dedicated
50B	Knock 1 input (Front Knock Sensor)	KNOCK1	Input	Dedicated
51B	NOT USED	N/U	N/U	Not used
52B	Ignitor 6 (Coil 1)	COIL1	Output	Dedicated
53B	Ignitor 5 (Coil 2)	COIL2	Output	Dedicated

54B	Ignitor 4 (Coil 3)	COIL3	Output	Dedicated
55B	Ignitor 3 (Coil 3)	COIL3	Output	Dedicated
56B	Ignitor 2 (Coil 2)	COIL2	Output	Dedicated
57B	Ignitor 1 (Coil 1)	COIL1	Output	Dedicated
58B	NOT USED	N/U	N/U	Not used
59B	LS11	LS11	Output	Available Switched Ground 1.5amp max
60B	Boost Control (PW2)	PW2OUT	Output	PNP for boost control
61B	LS8	LS8	Output	Available Switched Ground 1.5amp max
62B	Map Sensor Input	MAP	Input	Dedicated
63B	NOT USED	N/U	N/U	Not used
64B	NOT USED	N/U	N/U	Not used
65B	Sensor Ground	SENSOR GROUND	Output	Dedicated
66B	Spare 0 to 5v input (was MAF sensor input)	MAF	Input	Available 0to5v
67B	EGT 4 (+) (ADR16)	EGT #4	Input	Available EGT
68B	LS9	LS9	Output	Available Switched Ground 1.5amp max
69B	Chassis Ground	RTN	Output	Dedicated
70B	Injector 7	INJECTOR 7	Output	Available Inj driver 1.5 amp max
71B	Ox 1 Heater Ground (LS12) or Spare output if wideband used	LS12	Output	PNP O2#1 Heater
72B	Ox 2 Heater Ground (LS2) or spare output if Wideband used	LS2	Output	PNP O2#2 Heater
73B	Fuel Pressure up VSV or Spare output (LS1)	LS1	Output	PNP fuel pressure up VSV
74B	EVAP or Secondary injector or spare switched output (Injector 9)	INJECTOR 9	Output	PNP for EVAP control
75B	EGR or Secondary injector or switched output (Injector 10)	INJECTOR 10	Output	PNP for EGR control
76B	Neutral Starting switch (ADR13)	Gear	Input	PNP for Neutral indicator
77B	NOT USED	N/U	N/U	Not used
78B	Ground	RTN	Output	Dedicated
79B	Chassis Ground	RTN	Output	Dedicated
80B	Chassis Ground	RTN	Output	Dedicated



