



Pin	Name	Description	Notes
1	VBATT	Battery Voltage Direct	Direct Battery Power 6-15V
2	VKEY	Ignition Key Input	Switched Ignition Feed
3	GROUND	Power Ground	
4	INJ1	Injector 1	5A Protected Output
5	INJ2	Injector 2	5A Protected Output
6	INJ3	Injector 3	5A Protected Output
7	INJ4	Injector 4	5A Protected Output
8	DIG_GND	Crank/Cam Sensor Ground	Digital Ground
9	CRANK	Crank Sensor	Hall effect or Variable Reluctance input
10	CAM1	Inlet Camshaft Sensor Bank 1	Hall effect or Variable Reluctance input
11	TCOOL	Coolant Temp Input	0-5V Analog Input
12	TAIR	Air Temp Input	0-5V Analog Input
13	IGN1	Power or TTL Ignition Coil 1	Software selected output type
14	IGN2	Power or TTL Ignition Coil 2	Software selected output type
15	IGN3	Power or TTL Ignition Coil 3	Software selected output type
16	IGN4	Power or TTL Ignition Coil 4	Software selected output type
17	LINEAR1	Analogue Input 1	User Configurable 0-5V Analog Input
18	CAM2	Inlet Camshaft Sensor Bank 2	Hall effect or Variable Reluctance input
19	NTC_GND1	Temp Sensors Ground	Analog Ground
20	LAMBDA1	Lambda Sensor Bank 1	0-5V Analog Input
21	CANH	CAN High	To PC comms DB9
22	CANL	CAN Low	To PC comms DB9
23	AUX1	Auxiliary Output 1	5A Protected Output
24	RELAY1	Relay Output	User Programmable Relay Function
25	RELAY2	Fuel Pump Relay Output	Relay Output (Fuel Pump & O2 Heater Relay)
26	PWM1	Pulse Width Modulated Output 1	User Configurable Output Function, 5A Protected Output
27	PWM2	Pulse Width Modulated Output 2	User Configurable Output Function, 5A Protected Output
28	TACHO	Tacho Output	5A Protected Output with 1k pull-up to 12V
29	AUX2	Auxiliary Output 2	5A Protected Output
30	LINEAR_GND1	TPS & MAP Ground	Analog Ground
31	NTC_1	NTC Sensor Input 1	Temperature Sensor Input
32	TPS1	Throttle Position Sensor Input 1	0-5V Analog Input
33	MAP	Manifold Pressure Sensor Input	0-5V Analog Input
34	VREF1	TPS & MAP Reference Voltage	5V Reference
35	GROUND	Power Ground	

AMPSeal Plug Assembly 776164-1, Terminal Pins 770520-3 (available from [www.mouser.com](http://www.mouser.com))

**PC Comms DB9 Female Connector**

Pin	Name
1	Ground
6	CAN High
7	CAN Low
8	Battery Voltage