



## Delta 700 - ECU Pinout

Connector A: AMPSeal 776163-1

Connector B: AMPSeal 776163-4

Terminal Pins 770520-3

CAN Connector: Female DB9/Female DTM

Connector A			
Pin	Name	Description	Notes
A1	Battery	Power Supply input 6-18V	12V Permanent Battery Supply (Fuse 15A)
A2	Ignition	Ignition Switch input	Ignition Switch Input (Fuse 5A)
A3	Power Ground 1	Power Ground	Power Ground (to Battery negative)
A4	Low Side Output 1	1.5A Open Collector	Injector Output 1
A5	Low Side Output 2	1.5A Open Collector	Injector Output 2
A6	Low Side Output 3	1.5A Open Collector	Injector Output 3
A7	Low Side Output 4	1.5A Open Collector	Injector Output 4
A8	Crank/Cam Ground	Digital Ground	Digital Sensor Ground
A9	Crank Input	VR/Hall - Software Selectable	Crankshaft sensor input
A10	Cam Input 1	VR/Hall - Software Selectable	Camshaft sensor input 1
A11	NTC Input 1	3.16K pull-up to VREF	Inlet Air Temperature Sensor Input
A12	NTC Input 2	3.16K pull-up to VREF	Coolant Temperature Sensor Input
A13	Ignition 1	TTL/Power Ignition Output	Ignition Coil Output 1
A14	Ignition 2	TTL/Power Ignition Output	Ignition Coil Output 2
A15	Ignition 3	TTL/Power Ignition Output	Ignition Coil Output 3
A16	Ignition 4	TTL/Power Ignition Output	Ignition Coil Output 4
A17	Analog Input 1	47k pull-up to VREF	User Defined Analogue Input 1
A18	Cam Input 2	VR/Hall - Software Selectable	Camshaft sensor input 2
A19	Analog Ground 1	Analog Ground	Analogue Sensor Ground
A20	Narrowband Lambda	Weak bias to 450mV	Narrowband Lambda Sensor Input
A21	CAN 1H		CAN bus 1 High
A22	CAN 1L	120 Ohm Terminated	CAN bus 1 Low
A23	Low Side Output 5	1.5A Open Collector	User Defined / Injector Output 5
A24	Low Side Output 7	0.75A Open Collector with recirc diode	Main Relay/PWM3 Output
A25	Low Side Output 8	1.7A Open Collector with recirc diode	Fuel Pump Relay/PWM4 Output
A26	Low Side Output 9	1.7A Open Collector with recirc diode	User Defined PWM1 Output
A27	Low Side Output 10	1.7A Open Collector with recirc diode	User Defined PWM2 Output
A28	Low Side Output 11	0.75A Open Collector with pull up and	Tacho Output
A29	Low Side Output 6	1.5A Open Collector	User Defined / Injector Output 6
A30	Analog Ground 2	Analog Ground	Analogue Sensor Ground
A31	NTC Input 3	3.16K pull-up to VREF	User Defined Temperature Sensor Input 1
A32	Analog Input 2	47k pull-up to VREF	Throttle Position Sensor 1 Input
A33	Analog Input 3	47k pull-up to VREF	Manifold Pressure Sensor Input
A34	VREF1	200mA 5V supply to sensors	5V Sensor Supply output
A35	Power Ground 2		Power Ground (to Battery negative)

Connector B			
Pin	Name	Description	Notes
B1	H Bridge M+	8.6A H-Bridge +	Throttle Motor +
B2	H Bridge M-	8.6A H-Bridge -	Throttle Motor -
B3	Wideband Lambda Ip	LSU Pin 1	Wideband Lambda Sensor Ip
B4	Wideband Lambda Ia	LSU Pin 5	Wideband Lambda Sensor Ia
B5	Bipolar Output 1	2.5A Hi Side/Lo Side Drive	User Defined PWM5 Output
B6	Bipolar Output 2	2.5A Hi Side/Lo Side Drive	User Defined PWM6 Output
B7	Bipolar Output 3	2.5A Hi Side/Lo Side Drive	User Defined PWM7 Output
B8	Bipolar Output 4	2.5A Hi Side/Lo Side Drive	User Defined PWM8 Output
B9	Low Side Output 12	1.5A Open Collector	User Defined / Injector Output 7
B10	Low Side Output 13	1.5A Open Collector	User Defined / Injector Output 8
B11	Cam Input 3	Hall Effect Input (2k7 Pull-up to 5V)	Camshaft sensor input 3
B12	Cam Input 4	Hall Effect Input (2k7 Pull-up to 5V)	Camshaft sensor input 4
B13	Ignition 5	TTL/Power Ignition Output	Ignition Coil Output 5
B14	Ignition 6	TTL/Power Ignition Output	Ignition Coil Output 6
B15	Wideband Lambda Heater	1.7A Open collector with recirc diode	Wideband Lambda Sensor Heater Output
B16	WB Lambda Virtual Ground (Vm)	LSU Pin 2	Wideband Lambda Sensor Vm
B17	Hall Input 1	Hall Effect Input (2k7 Pull-up to 5V)	Digital Input 1 / Wheel Speed LR
B18	Hall Input 2	Hall Effect Input (2k7 Pull-up to 5V)	Digital Input 2 / Wheel Speed RR
B19	Hall Input 3	Hall Effect Input (2k7 Pull-up to 5V)	Digital Input 3 / Wheel Speed LF
B20	Hall Input 4	Hall Effect Input (2k7 Pull-up to 5V)	Digital Input 4 / Wheel Speed RF
B21	Knock 1 +	Knock Input	Dedicated DSP Knock Input 1
B22	Knock 2 +	Knock Input	Dedicated DSP Knock Input 2
B23	Knock Ground	Digital Ground	Analogue Sensor Ground
B24	Wideband Lambda Nernst (Un)	LSU Pin 6	Wideband Lambda Sensor Un
B25	Analog Input 4	47k pull-up to VREF	Throttle Position Sensor 2 Input
B26	Analog Input 5	47k pull-up to VREF	Pedal Position Sensor 1 Input
B27	Analog Input 6	47k pull-up to VREF	Pedal Position Sensor 2 Input
B28	NTC Input 4	3.16k pull-up to VREF	User Defined Temperature Sensor Input 2
B29	NTC Input 5	3.16k pull-up to VREF	User Defined Temperature Sensor Input 3
B30	Analog Input 7	47k pull-up to VREF (optional pull-down)	User Defined Analogue Input 5
B31	Analog Input 8	47k pull-up to VREF (optional pull-down)	User Defined Analogue Input 6
B32	Analog Input 9	47k pull-up to VREF (optional pull-down)	User Defined Analogue Input 7
B33	Analog Input 10	47k pull-up to VREF (optional pull-down)	User Defined Analogue Input 8
B34	CAN 2L		CAN bus 2 Low
B35	CAN 2H	120 Ohm Terminated	CAN bus 2 High

PC Comms DB9 Female Connector	
Pin	Name
1	Ground
6	CAN High
7	CAN Low
8	Battery Voltage
DTM Connector	
1	Battery Voltage
2	Ground
3	CAN High
4	CAN Low