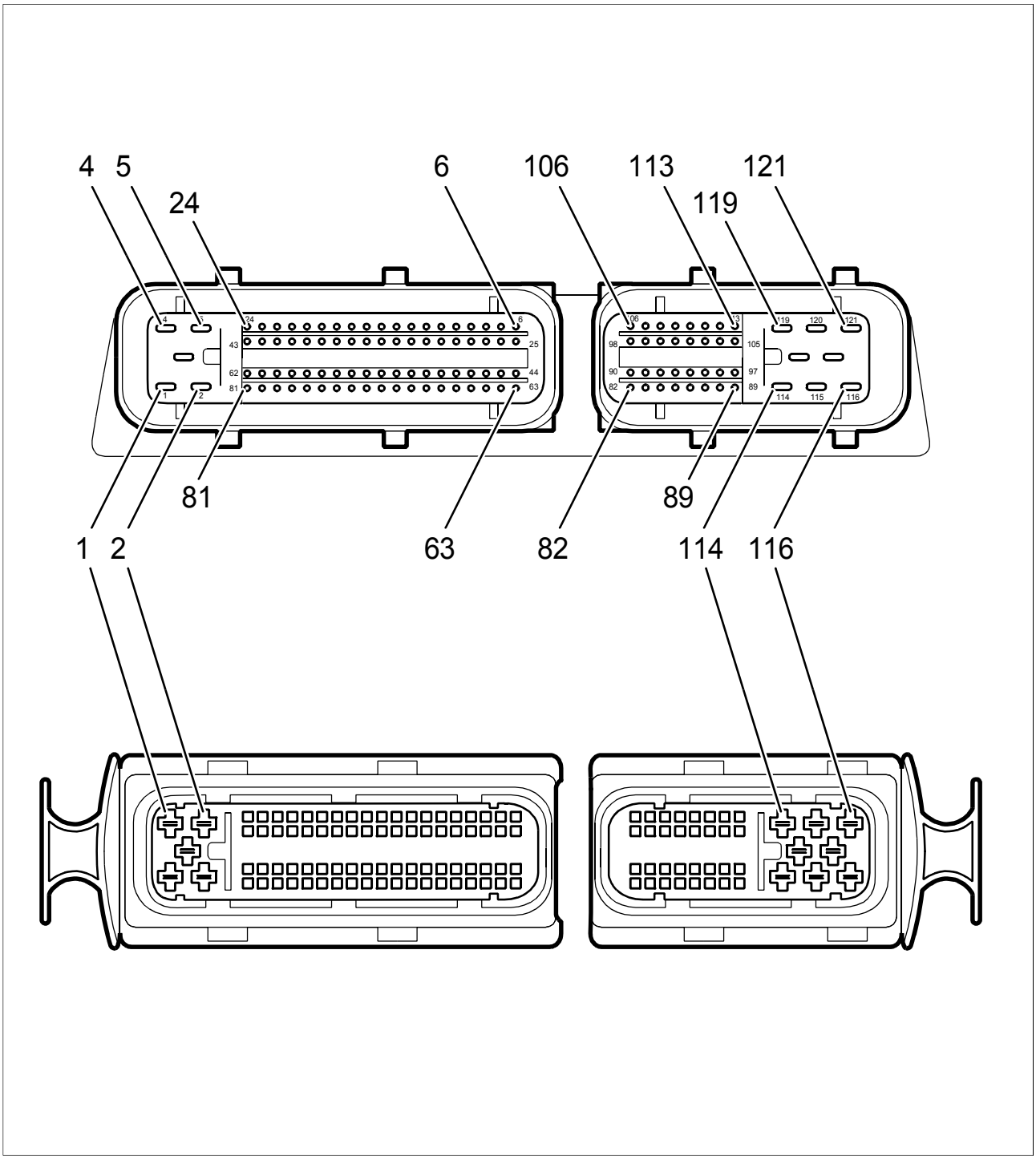
Connector pin assignment of DME 7.1.1

Control module and connectors



Connector assignment – Cayenne V8

Connector A on control module DME 7.1.1 – 81-pole

Connector	Pin	Designation	V8	V8T	Signal (I) = input (O) = output
A	1	Terminal 31	X	X	(A) Ground, electronics
A	2	Terminal 31	X	X	(A) Ground, electronics
A	3	Terminal 15 via relay	X	X	(E) Main power supply via DME relay
A	4	Oxygen sensor heater 2 ahead of catalytic converter	X	X	(A) PWM ground
A	5	Oxygen sensor heater 1 ahead of catalytic converter	X	X	(A) PWM ground
A	6	Oxygen sensor heater 2 behind catalytic converter	X	X	(A) PWM ground
A	7	Ignition bar module, cylinder 8	X	X	(A) 12 V pulses
A	8	Ignition bar module, cylinder 4	X	X	(A) 12 V pulses
A	9	Overrun recirculating air solenoid valve		X	(A) Ground signal for activating recirculating air solenoid valve
A	10	Oxygen sensor 2 behind catalytic converter	X	X	(A) Nernst cell ground
A	11	Oxygen sensor 2 behind catalytic converter	X	X	(E) Nernst cell signal
A	12	Oxygen sensor 2 ahead of catalytic converter	X	X	(A) virtual ground
A	13	Oxygen sensor 2 ahead of catalytic converter	X	X	(E) Nernst cell signal
A	14	Oxygen sensor 2 ahead of catalytic converter	X	X	Comensating current
A	15	Oxygen sensor 2 ahead of catalytic converter	X	X	Pump current
A	16	not used			
A	17	not used			
A	18	Secondary air pump 2 relay, terminal 86	X	X	(A) Ground
A	19	Fuel injector, cylinder 8	X	X	(A) Ground, pulses
A	20	not used			
A	21	Ignition lock terminal 15 and MAF 1 and 2	X	X	Terminal 15

Connec-tor	Pin	Designation	V8	V8T	Signal (I) = input (O) = output
A	22	Vacuum pump (brake) relay		X	(A) Ground, pulses
A	23	DME main relay terminal 85	X	X	(A) Ground signal for activation
A	24	Fuel injector, cylinder 4	X	X	(A) Ground, pulses
A	25	Valve, tank leakage diagnosis LDP	X	X	(A) Ground signal for activating the LDP sole-noid valve, only USA
A	26	Intake air temperature from MAF	X		(E) NTC
		Intake air temperature from boost pressure sensor		X	
A	27	Sensor ground, MAF	X	X	(A) Ground for 5V and 12 V
A	28	not used			
A	29	Load signal, MAF 1	X	X	(E) Signal voltage between 0V and 5V
A	30	not used			
A	31	not used			
A	32	not used			
A	33	Accelerator module potentiometer 2	X	X	(A) Ground
A	34	Accelerator module potentiometer 2	X	X	(E) Signal voltage between 0V and 5V
A	35	Accelerator module potentiometer 1	X	X	(E) Signal voltage between 0V and 5V
A	36	Accelerator module potentiometer 1	X	X	(A) Ground
A	37	Electrical fuel pump relay 2	X	X	(A) Ground
A	38	Cruise control	X	X	(E) Signal
A	39	Clutch switch 1 (NO contact)	X		(E) Term. 15 via switch
A	40	not used			
A	41	not used			
A	42	Ignition lock terminal 50	X	X	Start signal
A	43	Diagnosis K-line	X	X	K - Line for immobiliser and diagnostic box con-trol unit
A	44	not used			
A	45	Carbon canister shutoff valve	X	X	Only USA, (A) ground
A	46	Secondary air pump 1 relay, terminal 86	X	X	(A) Ground
A	47	not used			

Connector	Pin	Designation	V8	V8T	Signal (I) = input (O) = output
A	48	Coolant afterrun pump relay		X	(A) Ground
A	49	not used			
A	50	not used			
A	51	Oxygen sensor 1 ahead of catalytic converter	X	X	(A) virtual ground
A	52	Oxygen sensor 1 ahead of catalytic converter	X	X	Pump current
A	53	Sensor voltage, MAF	X	X	(A) 5 V
A	54	not used			
A	55	Brake light test switch	X	X	(E) make contact, term. 15
A	56	Stop Light Switch	X	X	(E) Break contact, term. 15
A	57	not used			
A	58	CAN bus	X	X	Low
A	59	not used			
A	60	CAN bus	X	X	High
A	61	not used			
A	62	Terminal 30	X	X	(E) Permanent positive
A	63	Oxygen sensor heater 1 behind catalytic converter	X	X	(A) PWM ground
A	64	Tank vent valve	X	X	(A) PWM ground
A	65	Electrical fuel pump relay 1	X	X	(A) Ground
A	66	Fan control 1	X	X	(A) PWM ground
A	67	not used			
A	68	Oxygen sensor 1 behind catalytic converter	X	X	(A) Nernst cell ground
A	69	Oxygen sensor 1 behind catalytic converter	X	X	(E) Nernst cell signal
A	70	Oxygen sensor 1 ahead of catalytic converter	X	X	(E) Nernst cell signal
A	71	Oxygen sensor 1 ahead of catalytic converter	X	X	Comensating current
A	72	Potentiometer 2 accelerator module sensor voltage	X	X	(A) 5 V
A	73	Potentiometer 1 accelerator module sensor voltage	X	X	(A) 5 V
A	74	not used			

Connector	Pin	Designation	V8	V8T	Signal (I) = input (O) = output
A	75	not used			
A	76	not used			
A	77	not used			
A	78	not used			
A	79	not used			
A	80	Response, tank leakage diagnosis	X	X	(E) Term. 15 via reed switch, only USA
A	81	not used			

Connector B on control module DME 7.1.1 – 40-pole

Connector	Pin	Signal	V8	V8T	Remark
B	82	Speed sensor KW	X	X	(E) Hall signal
B	83	Voltage supply, throttle adjusting unit potentionmeters 1 and 2	X	X	(A) 5 V
B	84	Throttle adjusting unit actual value potentiometer 2	X	X	(E) Signal voltage between 0V and 5V
B	85	Brake Booster Pressure Sensor		X	(E) Signal voltage between 0V and 5V
B	86	Inlet camshaft sensor bank 1	X	X	(E) Hall signal
B	87	Inlet camshaft sensor bank 2	X	X	(E) Hall signal
B	88	Fuel injector, cylinder 7	X	X	(A) Ground, pulses
B	89	Fuel injector, cylinder 2	X	X	(A) Ground, pulses
B	90	Crankshaft speed sensor	X	X	(A) Ground
B	91	Throttle adjusting unit potentiometers 1 and 2	X	X	(A) Ground
B	92	Throttle adjusting unit actual value potentiometer 1	X	X	(E) Signal
B	93	Coolant temperature sensor	X	X	(E) Signal
B	94	Ignition bar module, cylinder 7	X	X	(A) 12 V pulses
B	95	Ignition bar module, cylinder 2	X	X	(A) 12 V pulses
B	96	Fuel injector, cylinder 1	X	X	(A) Ground, pulses
B	97	Fuel injector, cylinder 3	X	X	(A) Ground, pulses
B	98	Hall sensor voltage, camshaft position sensor and intake air sensor	X	X	(A) 5 V

Connec-tor	Pin	Signal	V8	V8T	Remark
B	99	Knock sensors 1 and 2	X	X	(A) Ground
B	100	not used			
B	101	Boost pressure		X	(E) Signal voltage between 0V and 5V
B	102	Ignition bar module, cylinder 1	X	X	(A) 12 V pulses
B	103	Ignition bar module, cylinder 3	X	X	(A) 12 V pulses
B	104	Fan control 2	X	X	(A) PWM signal
B	105	not used			
B	106	Knock Sensor 1	X	X	(E) Signal
B	107	Knock Sensor 2	X	X	(E) Signal
B	108	Sensor shield and ground	X	X	(A) Ground
B	109	Load signal, MAF 2	X	X	(E) Signal voltage between 0V and 5V
B	110	Ignition bar module, cylinder 6	X	X	(A) 12 V pulses
B	111	Ignition bar module, cylinder 5	X	X	(A) 12 V pulses
B	112	Injector circuit, cylinder 6	X	X	(A) Ground, pulses
B	113	Fuel injector, cylinder 5	X	X	(A) Ground, pulses
B	114	not used			
B	115	Inlet camshaft adjuster bank 1	X	X	(A) PWM ground
B	116	Boost pressure control valve		X	(A) PWM ground
B	117	Throttle Adjusting Unit	X	X	(A) 12 V positive
B	118	Throttle Adjusting Unit	X	X	(A) Ground
B	119	not used			
B	120	Inlet camshaft adjuster bank 2	X	X	(A) PWM ground
B	121	Positive crankcase ventilation heater	X	X	(A) Ground

Connector assignment – Cayenne V6

Connector A on control module DME 7.1.1 – 81-pole

Connector	Pin	Designation	Signal (I) = input (O) = output
A	1	Terminal 31	(A) Ground, electronics
A	2	Terminal 31	(A) Ground, electronics

Connector	Pin	Designation	Signal (I) = input (O) = output
A	3	Terminal 15 via relay	(E) Main power supply via DME relay
A	4	Oxygen sensor heater 2 ahead of catalytic converter	(A) PWM ground
A	5	Oxygen sensor heater 1 ahead of catalytic converter	(A) PWM ground
A	6	Oxygen sensor heater 2 behind catalytic converter	(A) PWM ground
A	7	not used	
A	8	not used	
A	9	not used	
A	10	Oxygen sensor 2 behind catalytic converter	(A) Nernst cell ground
A	11	Oxygen sensor 2 behind catalytic converter	(E) Nernst cell signal
A	12	Oxygen sensor 2 ahead of catalytic converter	(A) virtual ground
A	13	Oxygen sensor 2 ahead of catalytic converter	(E) Nernst cell signal
A	14	Oxygen sensor 2 ahead of catalytic converter	Comensating current
A	15	Oxygen sensor 2 ahead of catalytic converter	Pump current
A	16	not used	
A	17	not used	
A	18	not used	
A	19	not used	
A	20	not used	
A	21	Ignition lock terminal 15 and MAF 1 and 2	Terminal 15
A	22	not used	
A	23	DME main relay terminal 85	(A) Ground signal for activation
A	24	not used	
A	25	Valve, tank leakage diagnosis LDP	(A) Ground signal for activating the LDP solenoid valve, only USA
A	26	Intake air temperature from MAF	(E) NTC
A	27	Sensor ground, MAF	(A) Ground for 5V and 12 V
A	28	Generator signal	(E) Signal
A	29	Load signal, MAF 1	(E) Signal voltage between 0V and 5V
A	30	not used	
A	31	not used	
A	32	not used	

Connector	Pin	Designation	Signal (I) = input (O) = output
A	33	Accelerator module potentiometer 2	(A) Ground
A	34	Accelerator module potentiometer 2	(E) Signal voltage between 0V and 5V
A	35	Accelerator module potentiometer 1	(E) Signal voltage between 0V and 5V
A	36	Accelerator module potentiometer 1	(A) Ground
A	37	Electrical fuel pump relay 2	(A) Ground
A	38	Cruise control	(E) Signal - status
A	39	Clutch switch 1 (NO contact)	(E) Term. 15 via switch
A	40	not used	
A	41	not used	
A	42	not used	
A	43	Diagnosis K-line	K - Line for immobiliser control unit and diagnostic box
A	44	Secondary air valve	(A) Ground, pulses
A	45	Carbon canister shutoff valve	only USA, (A) ground
A	46	Secondary air pump 1 relay, terminal 86	(A) Ground
A	47	not used	
A	48	Coolant afterrun pump relay	(A) Ground
A	49	not used	
A	50	not used	
A	51	Oxygen sensor 1 ahead of catalytic converter	(A) virtual ground
A	52	Oxygen sensor 1 ahead of catalytic converter	Pump current
A	53	Sensor voltage, MAF	(A) 5 V
A	54	not used	
A	55	Brake light test switch	(E) make contact, term. 15
A	56	Stop Light Switch	(E) Break contact, term. 15
A	57	not used	
A	58	CAN bus	Low
A	59	not used	
A	60	CAN bus	High
A	61	not used	
A	62	Terminal 30	(E) Permanent positive
A	63	Oxygen sensor heater 1 behind catalytic converter	(A) PWM ground
A	64	Tank vent valve	(A) PWM ground

Connector	Pin	Designation	Signal (I) = input (O) = output
A	65	Electrical fuel pump relay 1	(A) Ground
A	66	Fan control 1	(A) PWM ground
A	67	not used	
A	68	Oxygen sensor 1 behind catalytic converter	(A) Nernst cell ground
A	69	Oxygen sensor 1 behind catalytic converter	(E) Nernst cell signal
A	70	Oxygen sensor 1 ahead of catalytic converter	(E) Nernst cell signal
A	71	Oxygen sensor 1 ahead of catalytic converter	Comensating current
A	72	Potentiometer 2 accelerator module sensor voltage	(A) 5 V
A	73	Potentiometer 1 accelerator module sensor voltage	(A) 5 V
A	74	not used	
A	75	not used	
A	76	not used	
A	77	not used	
A	78	not used	
A	79	not used	
A	80	Response, tank leakage diagnosis	(E) Term. 15 via reed switch, only USA
A	81	not used	

Connector B on control module DME 7.1.1 – 40-pole

Connector	Pin	Signal	Remark
B	82	Speed sensor KW	(E) Hall signal
B	83	Voltage supply, throttle adjusting unit potentiometers 1 and 2	(A) 5 V
B	84	Throttle adjusting unit actual value potentiometer 2	(E) Signal voltage between 0V and 5V
B	85	not used	
B	86	Inlet camshaft sensor	(E) Hall signal
B	87	Exhaust camshaft sensor	(E) Hall signal
B	88	Fuel injector, cylinder 3	(A) Ground, pulses
B	89	Fuel injector, cylinder 4	(A) Ground, pulses
B	90	Crankshaft speed sensor	(A) Ground

Connector	Pin	Signal	Remark
B	91	Throttle adjusting unit potentiometers 1 and 2	(A) Ground
B	92	Throttle adjusting unit actual value potentiometer 1	(E) Signal
B	93	Coolant temperature sensor	(E) Signal
B	94	Ignition bar module, cylinder 3	(A) 12 V pulses
B	95	Ignition bar module, cylinder 4	(A) 12 V pulses
B	96	Fuel injector, cylinder 1	(A) Ground, pulses
B	97	Fuel injector, cylinder 2	(A) Ground, pulses
B	98	Hall sensor voltage, camshaft position sensor and intake air sensor	(A) 5 V
B	99	Knock sensors 1 and 2	(A) Ground
B	100	not used	
B	101	not used	
B	102	Ignition bar module, cylinder 1	(A) 12 V pulses
B	103	Ignition bar module, cylinder 2	(A) 12 V pulses
B	104	Fan control 2	(A) PWM signal
B	105	not used	
B	106	Knock Sensor 1	(E) Signal
B	107	Knock Sensor 2	(E) Signal
B	108	Sensor shield and ground	(A) Ground
B	109	not used	
B	110	Ignition bar module, cylinder 5	(A) 12 V pulses
B	111	Ignition bar module, cylinder 6	(A) 12 V pulses
B	112	Fuel injector, cylinder 5	(A) Ground, pulses
B	113	Injector circuit, cylinder 6	(A) Ground, pulses
B	114	Intake pipe switch-over valve	(A) Ground, pulses
B	115	Inlet camshaft adjuster	(A) PWM ground
B	116	not used	
B	117	Throttle Adjusting Unit	(A) 12 V positive
B	118	Throttle Adjusting Unit	(A) Ground
B	119	not used	
B	120	Outlet camshaft adjuster	(A) PWM ground
B	121	Positive crankcase ventilation heater	(A) Ground