

Truck 2003-2007 ECM Connector C1 Blue

Pin	Wire Color	Circuit #	Function	Pin	Wire Color	Circuit #	Function
1	BLK/WHT	451	Ground	41			
2	LT GRN	1867	12 Volt Reference	42			Fan 1 Relay Control (12-), present on most 2005+
3	PNK/BLK	1746	Fuel Injector 3 Control	43	RED/BLK	877	Fuel Injector 7 Control
4	LT GRN/BLK	1745	Fuel Injector 2 Control	44	LT BLU/BLK	844	Fuel Injector 4 Control
5				45	GRY	2700	5 Volt Reference - A/C
6				46	GRY	474	5 Volt Reference - EVA
7	GRY	2705	5 Volt Reference - Oil Pressure	47			
8	GRY		5 Volt Reference - Throttle Position Sensor Pin A - Cable Throttle Only	48	GRY	597	5 Volt Reference - MAP
9				49			
10				50			
11	LT BLU	1876	Knock Sensor 2 Signal	51	DK BLU	496	Knock Sensor 1 Signal
12	DK BLU/WHT	1869	CKP Sensor Signal	52			
13	ORN/BLK	463	Requested Torque Signal	53	GRY	720	Low Reference - Transmission
14	ORN/BLK	1061	UART Serial Data - Drive By Wire Only	54	ORN/BLK	469	Low Reference - Map
15	DK BLU/WHT	774	UART Serial Data - Drive By Wire Only	55			
16				56	WHT	1579	FLEX Fuel Sensor - - See Notes Below
17	DK BLU	1225	Transmission Fluid Pressure Switch Signal B (A/T)	57	ORN	440	Battery Voltage 12+
18	RED	1226	Transmission Fluid Pressure Switch Signal C (A/T)	58	DK GRN	1049	Class 2 Serial Data
19	PNK/BLK	439	Ignition 1 Voltage	59	YEL	710	Class 2 Serial Data
20	ORN/BLK	440	Battery Positive Voltage	60	BLK		Low Reference - Throttle Position Sensor Pin B - Cable Throttle Only
21	YEL/BLK	1868	Crankshaft Position Sensor Ground	61	PNK/BLK	632	Low Reference - CMP
22				62			
23	BLK	470	Low Reference	63	BLK	2755	Low Reference - Oil Pressure Sensor
24	BLK/WHT	451	Ground	64	BLK/WHT	451	ECM Ground
25	TAN	1671	HO2S Low Signal - Bank 2, Sensor 2	65	PPL	1670	HO2S High Signal - Bank 2, Sensor 2
26	TAN	1667	HO2S Low Signal - Bank 2, Sensor 1	66	PPL	1666	HO2S High Signal - Bank 2, Sensor 1
27	BLK/WHT	451	Ground	67	BLK/WHT	451	ECM Ground
28	TAN/WHT	1669	HO2S Low Signal - Bank 1, Sensor 2	68	PPL/WHT	1668	HO2S High Signal - Bank 1, Sensor 2
29	TAN	1664	HO2S Low Signal - Bank 1, Sensor 1	69	PPL/WHT	1665	HO2S High Signal - Bank 1, Sensor 1
30	LT GRN	1478	Coolant Level Switch Signal (Empty 2006+)	70	BRN	1174	Oil Level Sensor Signal
31				71			Performance Mode Switch - Tow/Haul Switch - Programing Required
32	BLK/WHT	771	Transmission Fluid Pressure Switch Signal A (A/T)	72	YEL	772	Transmission Range Switch Signal B
33	PPL	420	TCC Brake Switch/Cruise Control Release Switch Signal	73	BRN/WHT	633	CMP Sensor Signal
34	WHT	776	Transmission Fluid Pressure Switch Signal P (A/T) - See Notes Below	74	YEL	410	ECT Sensor Signal
35	GRY	48	CPP Switch Signal (M/T)	75	PNK	1020	Off/Run/Crank Voltage 12+
36	BLK	1744	Fuel Injector 1 Control	76	BLK/WHT	845	Fuel Injector 5 Control
37	YEL/BLK	846	Fuel Injector 6 Control	77	DK BLU/WHT	878	Fuel Injector 8 Control
38	PNK/WHT	1101	Damping Lift/Dive Signal	78			
39	YEL/BLK	625	Starter Enabel Relay Control	79	WHT	687	3-2 Shift Solenoid Valve Control (M30/M32)
40	BLK/WHT	451	Ground	80	BLK	407	Low Reference - ECT

NOTES:

- Pin 34 - ECM can be programmed to accept single wire park/neutral signal on this pin, if no transmission mounted range switch is present
- Pin 56 - ECM should programmed to remove FLEX Fuel Function or FLEX Fuel Sensors must be installed

Truck 2003-2007 ECM Connector C2 Green

Pin	Wire Color	Circuit #	Function	Pin	Wire Color	Circuit #	Function
1	BLK/WHT	451	ECM Ground	41			
2	BRN	418	TCC PWM Solenoid Valve Control (A/T)	42	TAN/BLK	422	TCC Solenoid Valve Control (M30/M32)
3	TAN	1465	Fuel Pump Relay Control - Secondary (Dual Tanks)	43	DK GRN/WHT	459	A/C Compressor Clutch Relay Control
4				44			
5	TAN/BLK	464	Delivered Torque Signal	45	WHT	1310	EVAP Canister Vent Solenoid Control - EVA
6	RED/BLK	1228	PC Solenoid Valve High Control (A/T)	46	BRN/WHT	419	MIL Control - (12-)
7				47	YEL/BLK	1223	2-3 Shift Solenoid Valve Control (A/T)
8	LT BLU/WHT	1229	PC Solenoid Valve Low Control (A/T)	48	LT GRN	1222	1-2 Shift Solenoid Valve Control (A/T)
9	DK GRN/WHT	465	Fuel Pump Relay Control - Primary	49	YEL/BLK	1827	VSS - Speed Signal OUT 129k/mile
10	WHT	121	Engine Speed Signal - Tachometer Signal	50	DK GRN/WHT	817	VSS - Speed Signal OUT 4k/mile
11				51	YEL/BLK	1227	TFT Sensor Signal (A/T)
12				52	BRN	2391	HO2S Heater Low Control Bank 1, Sensor 2
13				53	RED/WHT	3223	HO2S Heater Low Control Bank 2, Sensor 2
14	RED/BLK	380	A/C Refrigerant Pressure Sensor Signal (A/C)	54	PPL	1589	Fuel Level Sensor Signal - Primary
15	BRN	25	Charge Indicator Control - See Notes Below	55			
16	GRY/BLK	1694	4WD Low Signal - See Notes Below	56			
17				57	BLK	552	Low Reference (IAT)
18	DK GRN	1433	Clutch Start Swich Signal (M/T)	58	TAN/WHT	332	Oil Pressure Sensor Signal
19	BLK/WHT	1695	Axle Switch Signal	59	PPL	806	Crank Voltage
20	LT GRN/BLK	822	VSS Low Signal	60	BRN	2129	Ignition Control Reference Low Bank 1
21	PPL/WHT	821	VSS High Signal	61	BRN/WHT	2130	ignition Control Reference Low Bank 2
22	RED/BLK	1230	AT ISS High Signal (4WD w/ MT1)	62	GRY	773	Transmission Range Switch Signal C (A/T)
23	DK BLU/WHT	123	AT ISS Low Signal (4WD w/ MT1)	63	PNK	1224	Transmission Fluid Pressure Switch Signal (A/T)
24	DK BLU		Throttle Position Sensor Signal - TPS Pin C - Cable Throttle Only	64	DK GRN	890	Fuel Tank Pressure Sensor Signal (EVA)
25	TAN	472	IAT Sensor Signal	65			
26	PPL	2121	IC 1 Control	66	PPL/WHT	2128	IC 8 Control
27	RED	2127	IC 7 Control	67	RED/WHT	2122	IC 2 Control
28	LT BLU/WHT	2126	IC 6 Control	68	DK GRN	2125	IC 5 Control
29	DK GRN/WHT	2124	IC 4 Control	69	LT BLU	2123	IC 3 Control
30				70			
31	YEL	492	MAF Sensor Signal	71			
32	LT GRN	432	MAP Sensor Signal	72	BLK/WHT	3113	HO2S Heater Low Control Bank 1, Sensor 1
33			Fan 2 Relay Control	73	DK BLU	1936	Fuel Level Sensor Signal - Secondary
34	DK GRN/WHT	428	EVAP Canister Purge Solenoid Control	74	LT GRN	3212	HO2S Heater Low Control Bank 2, Sensor 1
35				75	GRY	23	Generator Field Duty Cycle Signal - See notes below
36				76			IAC Valve - IAC Pin B - Cable Throttle Only
37				77			IAC Valve - IAC Pin A - Cable Throttle Only
38				78			IAC Valve - IAC Pin C - Cable Throttle Only
39	RED	631	12 Volt Reference - CMP	79			IAC Valve - IAC Pin D - Cable Throttle Only
40	BLK/WHT	451	ECM Ground	80	BLK	2751	Low Reference (A/C)

NOTES:

- Pin 15 - Models with Generator Battery Control Module - Add Pin from Alternator Brown wire to remove GBCM
- Pin 16 - Keep if using Stock Transfer Case 4WD application, with VSS on Output of Transfer Case
- Pin 75 - Models with Generator Battery Control Module - Add Pin from Alternator Gray wire to remove GBCM