

Truck 1999 5.3L Connector C1 BLUE				Truck 1999 5.3L Connector C1 BLUE			
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	Function
1	BLK/WHT	451	PCM Ground	41	BLK	407	Sensor Ground (TRANS & CTS) with isolate ground o2 (8.1L PPL - 719 EGR Low Reference)
2	LT GRN	1867	Crankshaft Position Sensor B+ Supply	42	--	--	Low Speed Cooling Fan Relay Control
3	PNK/BLK	1746	Injector 3 Control	43	RED/BLK	877	Injector 7 Control
4	LT GRN/BLK	1745	Injector 2 Control	44	LT BLU/BLK	844	Injector 4 Control
5	--	--	Not Used	45	GRA	474	Fuel Tank Pressure Sensor 5V Reference
6	--	--	Not Used	46	GRA	416	TP Sensor 5V Reference (8.1L Fuel Tank Pressure Sensor)
7	--	--	Not Used	47	GRA	597	MAP Sensor 5V Reference (8.1L EGR 5V Reference)
8	--	--	Not Used	48	GRA	596	EGR Pintle Position Sensor 5V Reference (8.1L MAP)
9	--	--	Not Used	49	--	--	Not Used
10	--	--	Not Used	50	--	--	Not Used
11	LT BLU	1876	Knock Sensor Signal Rear	51	DK BLU	496	Knock Sensor Signal Front
12	DK BLU/WHT	1869	Crankshaft Position Sensor Signal	52	--	--	PTO STATUS SIGNAL
13	ORN/BLK	463	Requested Torque Signal (NW7)	53	BLK	470	Fuel Tank Pressure Sensor Ground
14	ORN/BLK	1061	UART Serial Data (drive by wire only)	54	BLK	452	TP Sensor Ground (8.1L MAP)
15	DK BLU/WHT	774	UART Serial Data (drive by wire only)	55	BRN	1456	EGR Pintle Position Sensor Signal
16	--	--	Not Used	56	WHT	1579	Fuel Temperature/Composition Signal (L59 Flex Fuel)
17	DK BLU	1225	Transmission Fluid Pressure Switch Signal B (A/T)	57	ORN	440	PCM Battery Supply
18	RED	1226	Transmission Fluid Pressure Switch Signal C (A/T)	58	DK GRN	1049	Serial Data to OBD2 Port
19	PNK	439	PCM Ignition Supply	59	YEL	710	Serial Data to BCM
20	ORN	440	PCM Battery Supply	60	ORN/BLK	469	MAP Sensor Ground
21	YEL/BLK	1868	Crankshaft Position Sensor Ground	61	PNK/BLK	632	CMP Sensor Ground
22	--	--	PTO SWITCH ENABLE SIGNAL	62	--	--	Not Used
23	PPL	719	Sensor Ground EGR (8.1L BLK - 470 Ground to C2 Connector)	63	GRA or TAN	720	GRA - Engine Coolant Temperature (ECT) Sensor Ground TAN - O2 Sensor Low Ref Ground
24	--	--	Not Used	64	--	--	Not Used
25	TAN	1671	HO2S Signal Low Bank 2 Sensor 2	65	PPL	1670	HO2S Signal High Bank 2 Sensor 2
26	TAN	1667	HO2S Signal Low Bank 2 Sensor 1	66	PPL	1666	HO2S Signal High Bank 2 Sensor 1
27	--	--	Not Used	67	--	--	Not Used
28	TAN/WH T	1669	HO2S Signal Low Bank 1 Sensor 2	68	PPL/WH T	1668	HO2S Signal High Bank 1 Sensor 2
29	TAN/WHT	1653	HO2S Signal Low Bank 1 Sensor 1	69	PPL/WHT	1665	HO2S Signal High Bank 1 Sensor 1
30	LT GRN	1478	Engine Coolant Level Switch	70	BRN	1174	Low Oil Level Switch
31	--	--	Not Used	71	--	--	PERFORMANCE MODE SWITCH
32	BLK/WHT	771	PRND A Input (may need grounded as well for CKP relearn)	72	YEL	772	PRND B Input
33	PPL	420	TCC Brake Switch	73	BRN/WH T	633	Camshaft Position (CMP) Sensor Signal
34	WHT	776	PRND P Input	74	YEL	410	Engine Coolant Temperature (ECT) Sensor Signal
35	GRA	48	Clutch Switch Signal	75	PNK	1020	PCM Ignition Supply
36	BLK	1744	Injector 1 Control	76	BLK/WHT	845	Injector 5 Control
37	YEL/BLK	846	Injector 6 Control	77	DK BLU/WHT	878	Injector 8 Control
38	PNK/BLK	1101	Damping Lift/Drive Signal	78	--	--	PTO ENGAGED SIGNAL
39	--	--	Not Used	79	WHT	687	3-2 Shift Solenoid Control
40	BLK/WHT	451	PCM Ground	80	ORN/BL K	510	Fuel Level Sensor Ground (8.1L CTS)

Truck 1999 5.3L Connector C2 RED				Truck 1999 5.3L Connector C2 RED			
Pin	Wire Color	Circuit No.	Function	Pin	Wire Color	Circuit No.	Function
1	BLK/WHT	451	PCM Ground	41	WHT	257	EGR Solenoid Ground
2	BRN	418	TCC Control Solenoid	42	TAN/BLK	422	TCC Enable Circuit (4L60-E only)
3	TAN	1465	Fuel Pump Relay Control - Secondary	43	DK GRN/WH T	459	A/C Clutch Relay Control
4	--	--	Not Used	44	--	--	Not Used
5	TAN/BLK	464	Delivered Torque Signal	45	WHT	1310	EVAP Canister Vent Valve Control
6	RED/BLK	1228	Transmission Fluid Pressure Control Solenoid High	46	BRN/WH T	419	Malfunction Indicator Lamp (MIL) Control
7	RED	1676	EGR Solenoid Supply	47	YEL/BLK	1223	Transmission Shift Solenoid B
8	LT BLU/WHT	1229	Transmission Fluid Pressure Control Solenoid Low	48	LT GRN	1222	Transmission Shift Solenoid A
9	DK GRN/WH T	465	Fuel Pump Relay Control	49	YEL/BLK	1827	Vehicle Speed Output Circuit 128K
10	WHT	121	Engine Speed (Tach) Output Signal	50	DK GRN/WH T	817	Vehicle Speed Output Circuit 4K
11	DK BLU	604	Secondary A/C High Pressure Switch	51	YEL/BLK	1227	Transmission Temperature Sensor Signal
12	--	--	Not Used	52	GRY	23	Generator Field Duty Cycle Signal
13	LT BLU/BLK	396	Cruise Control Engage Signal	53	--	--	Not Used
14	--	--	Not Used	54	PPL	1589	Fuel Level Sensor Signal
15	BRN	25	Generator L Terminal	55	DK GRN	603	A/C Compressor Cycling Switch Signal
16	GRA/BL K	1694	4 Wheel Drive Switch Signal Low	56	--	--	Not Used
17	DK GRN/WH T	762	A/C Request Signal	57	BLK	552	IAT Sensor Ground
18	--	--	Not Used	58	--	--	Not Used
19	BLK/WH T	1695	4 Wheel Drive Front Axle Switch	59	--	--	Not Used
20	LT GRN/BLK	822	Vehicle Speed Sensor (VSS) Reference Low	60	BRN	2129	Ignition Control Reference Low Bank 1
21	PPL/WHT	821	Vehicle Speed Sensor (VSS) Signal	61	BRN/WH T	2130	Ignition Control Reference Low Bank 2
22	RED/BLK	1230	Vehicle Speed Sensor (VSS) Signal (6.0L Only)	62	GRA	773	PRND C
23	DK BLU/WHT	1231	Vehicle Speed Sensor (VSS) Reference Low (6.0L Only)	63	PNK	1224	Transmission Fluid Pressure Switch Signal A (A/T)
24	DK BLU	417	TP Sensor Signal	64	DK GRN	890	Fuel Tank Pressure Sensor Signal
25	TAN	472	IAT Sensor Signal	65	--	--	Not Used
26	PPL	2121	Ignition Control 1	66	PPL/WHT	2128	Ignition Control 8
27	RED	2127	Ignition Control 7	67	RED/WH T	2122	Ignition Control 2
28	LT BLU/WHT	2126	Ignition Control 6	68	DK GRN	2125	Ignition Control 5
29	DK GRN/WH T	2124	Ignition Control 4	69	LT BLU	2123	Ignition Control 3
30	--	--	Not Used	70	--	--	Not Used
31	YEL	492	MAF Sensor Signal	71	--	--	Not Used
32	LT GRN	432	MAP Sensor Signal	72	--	--	Not Used
33	DK GRN	1614	HVAC Recirculation Door Control (or use this pin for FAN 2 Contrl)	73	DK BLU	1936	Fuel Level Sensor Signal - Secondary
34	DK GRN/WH T	428	EVAP Canister Purge Solenoid Control	74	LT GRN/WH T	3213	HO2S Heater Control (w/isolated grounded o2 sensors 2001-02 6.0L ONLY)
35	--	--	CHARGE INDICATOR CONTROL GMT400 8.1L	75	--	--	Not Used
36	BRN	436	AIR Pump Relay Control (w/NC1)	76	LT GRN/WH T	1749	IAC Coil B High - IAC BIN B
37	--	--	REDUCED ENGIEN POWER LAMP CONTROL GMT400 8.1L	77	LT GRN/BLK	444	IAC Coil B Low - IAC PIN A
38	--	--	(express fuel level sensor PWM output	78	LT BLU/BLK	1748	IAC Coil A Low - IAC PIN C
39	RED	631	CMP Sensor B+ Supply	79	LT BLU/WHT	1747	IAC Coil A High - IAC PIN D
40	BLK/WHT	451	PCM Ground	80	LT GRN	3212	HO2S Heater Low Reference (w/isolated grounded