

These are the BLUE & RED PCM connector pinouts that will cover 1999-2002 F-Body **ONLY** . Your harness MAY NOT have a pin in a location I have listed having a wire. I have tried to list all possible wires that will show up 99-02. If I show a wire, and your harness does not have it, you probably don't need it anyway. You can use this info for a Corvette harness, should be very close, pay attention to location of 5v references and ground references. Corvette will also have some extra wires for drive by wire stuff, and won't have throttle position sensor.

BLOCKS HIGHLIGHTED LIKE THIS, ARE WIRES THAT ARE NEEDED, AND GO TO EXTERNAL CONNECTION FOR STAND ALONE

BLOCKS HIGHLIGHTED LIKE THIS, ARE WIRES THAT CAN BE REMOVED FROM PCM CONNECTORS, NOT NEEDED. Note: Removing all of these will result in a non-emissions friendly harness. If requirements are for 4 oxygen sensors, EVAP system, and EGR, then you will not want to remove those components.

Any wire NOT highlighted does not get touched, its required for proper engine/transmission control.

When you are removing wires from the harness, for instance pin 70 of blue connector, oil level switch. This brown wire will lead you to a connector that will have another wire on it. This other wire can be removed as well. In this instance, it will be a black wire, that will go to a ground splice. Simply snip this black wire from the ground splice, and you can remove the connector with its two wires together. Same rules apply to other connectors you will get to that may have other wires once you get to it, rear oxygen sensors when you remove the two wires from the PCM, you will have a PINK and BLACK remaining, those two are again, traced back to their origin, and removed.

F Body 99-02 LS1 Connector C1 BLUE			
Pin	Wire Color	Circuit No.	Function
1	BLK	451	PCM Ground
2	LT GRN	1867	12 Volt Reference
3	PNK/BLK	1746	Fuel Injector 3 Control
4	LT GRN/BLK	1745	Fuel Injector 2 Control
5	--	--	Not Used
6	--	--	Not Used
7	--	--	Not Used
8	GRA	596	5 Volt Reference (TPS)
9	--	--	Not Used
10	--	--	Not Used
11	LT BLU	1876	KS [2] Signal
12	DK BLU/WHT	1869	CKP Sensor Signal
13	--	--	Not Used
14	--	--	Not Used
15	--	--	Not Used
16	--	--	Not Used
17	DK BLU	1225	Transmission Fluid Pressure Switch Signal B
18	RED	1226	Transmission Fluid Pressure Switch Signal C
19	PNK	439	Ignition 1 Voltage
20	ORN	340	Battery Positive Voltage
21	YEL/BLK	1868	Low Reference CKP
22	--	--	Not Used
23	GRA	720	Low Reference not needed (C2xx Plug)
24	--	--	Not Used
25	TAN	1671	HO2S Low Signal [Bank 2 Sensor 2]
26	TAN	1667	HO2S Low Signal [Bank 2 Sensor 1]
27	--	--	Not Used
28	TAN/WHT	1669	HO2S Low Signal [Bank 1 Sensor 2]
29	TAN/WHT	1653	HO2S Low Signal [Bank 1 Sensor 1]
30	--	--	Not Used
31	--	--	Not Used
32	GRY	48	CPP Switch Signal (clutch switch)
33	PPL	420	TCC Brake Switch Signal
34	ORN/BLK	434	Neutral Safety Switch Signal
35	--	--	Not Used
36	BLK	1744	Fuel Injector 1 Control
37	YEL/BLK	846	Fuel Injector 6 Control
39	--	--	Not Used
39	--	--	Not Used
40	BLK	451	Ground

F Body 99-02 LS1 Connector C1 BLUE			
Pin	Wire Color	Circuit No.	Function
41	--	--	Not Used
42	DK GRN	335	Low Speed Cooling Fan Relay Control
43	RED/BLK	877	Fuel Injector 7 Control
44	LT BLU/BLK	844	Fuel Injector 4 Control
45	GRA	474	5 Volt Reference (A/C Refrigerant Pressure Sensor)
46	GRA	474	5 Volt Reference (Fuel Tank Pressure Sensor)
47	GRA	--	5 Volt Reference (EGR) 99-00
48	GRA	416	5 Volt Reference (MAP Sensor)
49	--	--	Not Used
50	--	--	Not Used
51	DK BLU	496	KS [1] Signal
52	--	--	Not Used
53	BLK	407	Low Reference (Transmission Temperature Sensor)
54	BLK	407	Low Reference (MAP Sensor Ground)
55	BRN	1456	EGR Pintle Position Sensor Signal
56	--	--	Not Used
57	ORN	340	Battery Positive Voltage
58	DK GRN	1049	ECM/PCM/VCM Class 2 Serial Data
59	--	--	Not Used
60	BLK	452	Low Reference TPS
61	PNK/BLK	632	Low Reference (Camshaft Position Sensor)
62	--	--	Not Used
63	--	--	Not Used
64	--	--	Not Used
65	PPL	1670	HO2S High Signal [Bank 2 Sensor 2]
66	PPL	1666	HO2S High Signal [Bank 2 Sensor 1]
67	--	--	Not Used
68	PPL/WHT	1668	HO2S High Signal [Bank 1 Sensor 2]
69	PPL/WHT	1665	HO2S High Signal [Bank 1 Sensor 1]
70	BRN	1174	Oil Level Switch Signal
71	--	--	Not Used
72	--	--	Not Used
73	BRN/WHT	633	CMP Sensor Signal
74	YEL	410	ECT Sensor Signal
75	--	--	Not Used
76	BLK/WHT	845	Fuel Injector 5 Control
77	DK BLU/WHT	878	Fuel Injector 8 Control
78	--	--	Not Used
79	GRA or WHT	587 or 687	Skip Shift Solenoid Control (M/T) or 3-2 Shift Solenoid Control (A/T)
80	BLK	407	Low Reference ECT

Tip: If you plan to run headers, you will need your oxygen sensor wires more rearward than stock harness has them. The FRONT and REAR sensors are the same plug, so, what you can do, is REMOVE the FRONT connectors, and then MOVE the pins for the REAR Sensor back into the location for the FRONTS at the PCM. You now have enough wire to reach any location for the oxygen sensors. You will remove the Tan & Purple for Bank 1 Sensor 1 completely. Then MOVE the Tan & Purple for Bank 1 Sensor 2, into the location you just removed B1S1's pins. Do the same for Bank 2. The picture of the wiring harness above on the right shows this done in finished form. The modified LS1 harness has the rear oxygen sensors re-pinned for the front sensors, the front O2's connectors were removed. You can also leave these in stock location, if using stock manifolds.

F Body 99-02 LS1 Connector C2 RED			
Pin	Wire Color	Circuit No.	Function
1	BLK	451	Ground
2	BRN	418	TCC Solenoid - Output - PWM
3	--	--	Not Used
4	PNK/BLK	429	Air Injection Reaction Solenoid Relay - Coil - Control
5	--	--	Not Used
6	RED/BLK	1228	PC Solenoid Valve High Control (Sol.A)
7	--	--	Not Used
8	LT BLU/WHT	1229	PC Solenoid Valve Low Control (Sol.A)
9	DK GRN/WHT	465	Fuel Pump Relay Control [Primary]
10	WHT	121	Engine Speed Signal
11	--	--	Not Used
12	--	--	Not Used
13	WHT	85	Cruise Control Engage Signal
14	RED/BLK	380	A/C Refrigerant Pressure Sensor Signal
15	RED	225	Generator Turn ON Signal
16	--	--	Not Used
17	DK GRN/WHT	762	A/C Request Signal
18	DK GRN	59	A/C Compressor Clutch Supply Voltage
19	--	--	Not Used
20	LT GRN/BLK	822	VSS Low Signal
21	PPL/WHT	821	VSS High Signal
22	--	--	Not Used
23	--	--	Not Used
24	DK BLU	417	TP Sensor Signal
25	TAN	472	IAT Sensor Signal
26	PPL	2121	IC 1 Control
27	RED	2127	IC 7 Control
28	LT BLU/WHT	2126	IC 6 Control
29	DK GRN/WHT	2124	IC 4 Control
30	DK BLU	229	Fuel Enable Control
31	YEL	492	MAF Sensor Signal
32	LT GRN	432	MAP Sensor Signal
33	DK BLU	473	High Speed Cooling Fan Relay Control
34	DK GRN/WHT	428	EVAP Canister Purge Solenoid Control
35	--	--	Not Used
36	BRN	436	AIR Pump Relay Control
37	DK GRN	83	Cruise Control Inhibit Signal
38	--	--	Not Used
39	RED	631	12 Volt Reference CMP
40	BLK	451	Ground

F Body 99-02 LS1 Connector C2 RED			
Pin	Wire Color	Circuit No.	Function
41	GRY	--	EGR Solenoid Ground 99-00
42	TAN/BLK	422	TCC Solenoid Valve Control
43	DK GRN/WHT	459	A/C Clutch Relay Control
44	WHT	1652	Reverse Lock Out Solenoid Control (MANUAL TRANS T56 ONLY)
45	WHT	1310	EVAP Canister Vent Solenoid Control
46	BRN/WHT	419	MIL Control (CHECK ENGINE LIGHT)
47	YEL/BLK	1223	2 - 3 Shift Solenoid Valve Control
48	LT GRN	1222	1 - 2 Shift Solenoid Valve Control
49	--	--	Not Used
50	DK GRN/WHT	817	VSS Signal
51	YEL/BLK	1227	TFT Sensor Signal
52	--	--	Not Used
53	GRA/BLK	1687	Ignition Retard Signal
54	PPL	1589	Fuel Level Sensor Signal
55	--	--	Not Used
56	--	--	Not Used
57	PPL	719	Low Reference IAT
58	--	--	Not Used
59	--	--	Not Used
60	BRN	2129	Ignition Control Low Reference
61	BRN/WHT	2130	Ignition Control Low Reference
62	--	--	Not Used
63	PNK	1224	Transmission Fluid Pressure Switch Signal A
64	DK GRN	890	Fuel Tank Pressure Sensor Signal
65	--	--	Not Used
66	PPL/WHT	2128	IC 8 Control
67	RED/WHT	2122	IC 2 Control
68	DK GRN	2125	IC 5 Control
69	LT BLU	2123	IC 3 Control
70	--	--	Not Used
71	--	--	Not Used
72	--	--	Not Used
73	--	--	Not Used
74	--	--	Not Used
75	--	--	Not Used
76	LT GRN/WHT	1749	IAC Coil B High Control
77	LT GRN/BLK	444	IAC Coil B Low Control
78	LT BLU/BLK	1748	IAC Coil A Low Control
79	LT BLU/WHT	1747	IAC Coil A High Control
80	--	--	Not Used