

2003 3800 Series 2 OBD2 PCM wiring instructions for L36/L67 Fiero swaps
using 2003-newer 4T65-E transmissions only

2003 OBD2 3800 SC PCM C1 BLUE Connector			Connection		
Pin	Wire Color	Circuit Description	Action	Pin	Additional Info
3	orn	fuel level output control circuit	delete		
4	lt grn	shift solenoid A control (1-2 shift sol)	connect to	A	of 4T65-E transmission connector
5	dk blu	high speed fan control	connect to		high speed fan relay (if used)
6	dk grn	low speed fan control	connect to	D1	of Fiero C500 connector; should be dk grn/wht wire
7	blk	cam position input	connect to	F	of ignition control module harness (also pin F of ICM)
8	ppl/wht	3x reference signal (low res / fuel control)	connect to	D	of ignition control module harness (also pin D of ICM)
9	lt blu/blk	18x reference signal (hi resolution)	connect to	C	of ignition control module harness (also pin C of ICM)
12	blk	eng coolant temp sensor ground	connect to	A	of coolant temp sensor
13	orn/blk	MAP sensor ground	connect to	A	of MAP sensor
15	tan	Serial Data (UART)	connect to	9	of OBD2 Data Link Connector (DLC)
16	blk/wht	PCM ground	connect to		engine block ground
17	blk	Intake Air Temp sensor ground	connect to	A	of intake air temp sensor
19	pnk	Ignition Positive Voltage (hot in run)	connect to	F	of Fiero C203 connector, share with MAF sensor power feed
20	org	Battery Positive Voltage (hot at all times)	connect to		fused (10amp) battery power feed
28	tan/wht	HO2S Sensor 2 (post cat) signal low	connect to	A	*OPTIONAL* of HO2S Sensor 2 (post cat) - if present
29	tan	HO2S Sensor 1 (pre cat) signal low	connect to	A	of HO2S sensor 1 (pre cat)
30	ppl	TCC Brake Switch Input	connect to	P	of Fiero C203 connector
31	brn or blk	EGR pintle position sensor ground	connect to	B	of EGR valve (if used)
32	red or wht	EGR valve control	connect to	A	of EGR valve (if used)
33	dk blu	Bank 1 Knock Sensor signal	connect to		knock sensor installed in block next to starter
34	lt blu	Bank 2 Knock Sensor signal	connect to		knock sensor installed in block facing rear of car
36	brn	Alternator charge warning lamp control	connect to	B3	of Fiero C500 connector, should be a brown wire
38	lt grn/wht	IAC Valve B high	connect to	B	of IAC valve
39	lt grn	fuel pump speed control relay	delete		
43	yel/blk	fuel injector #6 control	connect to	B	of fuel injector for cylinder #6
44	yel/blk	Shift solenoid B control (2-3 shift sol)	connect to	B	of 4T65-E transmission connector
46	lt blu/blk	fuel injector #4 control	connect to	B	of fuel injector for cylinder #4
47	blk/wht	fuel injector #5 control	connect to	B	of fuel injector for cylinder #5
48	red/blk	reference low (ignition module ground)	connect to	G	of ignition control module harness (pin L of ICM)
53	tan/blk	ignition control BYPASS	connect to	B	of ignition control module harness (also pin B of ICM)
54	wht	ignition control	connect to	A	of ignition control module harness (also pin A of ICM)
55	dk grn	4,000 ppm vehicle speed signal output	connect to		any device needing a 4000ppm VSS signal
56	blk/wht	PCM ground	connect to		engine block ground
57	blk/wht	PCM ground	connect to		engine block ground
59	ppl	Class 2 Serial Data	connect to	2	of OBD2 Data Link Connector (DLC)
60	blk/wht	PCM ground	connect to		engine block ground
61	blk	Throttle Position Sensor ground	connect to	A	of the Throttle Position Sensor
62	dk blu/wht	AT Input Shaft Speed Sensor low	connect to	V	of 4T65-E transmission connector
63	red/blk	AT Input Shaft Speed Sensor high	connect to	S	of 4T65-E transmission connector
64	yel	Vehicle Speed Sensor signal high	connect to	B	of the Vehicle Speed Sensor
65	ppl	Vehicle Speed Sensor signal low	connect to	A	of the Vehicle Speed Sensor
68	yel	Transaxle Range Position Switch B	connect to	G	of the 2003-newer 4T65-E transmission
69	yel	MAF sensor signal	connect to	A	of the MAF sensor
70	dk blu	Theft Deterrent Fuel Enable	delete		not needed with Sinister Performance programming
71	orn/blk	Traction Control Desired Torque Input	delete		
72	dk grn	Cruise Inhibit control	connect to	H	*OPTIONAL* of Electronic Cruise Control unit
73	lt grn/blk	Fuel injector #2 control	connect to	B	of fuel injector for cylinder #2
75	dk grn	Engine Hot Warning Lamp control	connect to	D3	of Fiero C500 connector; should be dk grn wire
76	dk grn/wht	EVAP Canister Purge Solenoid control	connect to	B	of the EVAP purge valve solenoid (if used)
79	blk	fuel injector #1 control	connect to	B	of fuel injector for cylinder #1

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2003 OBD2 3800 SC PCM C2 CLEAR Connector			Connection		
Pin	Wire Color	Circuit Description	Action	Pin	Additional Info
2	wht	EVAP Canister Vent Solenoid control	delete		
3	dk grn/wht	Fuel Pump relay control	connect to	A	Fiero fuel pump relay
4	gry	EGR valve control	connect to	E	of the EGR valve (if used)
5	brn/wht	Malfunction Indicator Lamp control	connect to	C	of the Fiero C203 connector (check engine lamp circuit)
6	brn/wht	low oil lamp control	delete		
7	lt blu/wht	IAC valve A high	connect to	D	of the IAC valve
8	wht	Tachometer output signal	delete		
9	tan/blk	Traction Control delivered torque control	delete		
10	ppl	HO2S Sensor 1 signal high	connect to	B	of the HO2S Sensor 1 (pre cat)
11	ppl/wht	HO2S Sensor 2 signal high	connect to	B	*OPTIONAL* of the HO2S Sensor 2 (post cat, if used)
16	wht	transaxle range switch P	connect to	J	of the 2003-newer 4T65-E transmission
18	blk/wht	transaxle range switch A	connect to	F	of the 2003-newer 4T65-E transmission
22	dk grn/wht	A/C Request	connect to	D	of Fiero C203 connector (if A/C is hooked up)
25	lt grn	MAP sensor signal	connect to	B	of MAP sensor
26	yel	Engine Coolant Temp Sensor signal	connect to	B	of the coolant temp sensor
27	red/blk	A/C refrigerant pressure sensor signal	connect to	C	of the A/C pressure sensor
28	brn	EGR pintle position sensor signal	connect to	C	of the EGR valve (if used)
33	gry	5 volt reference A (for EGR, TPS, MAP)	connect to		term C of MAP and TPS, term D of EGR (if used)
34	gry	5 volt reference B (A/C pressure sensor)	connect to	B	of A/C pressure sensor
35	blk	sensor ground (A/C press, Trans Temp)	connect to		term A of A/C press sensor, term M of transmission
36	gry	change oil lamp control	delete		
39	dk grn/wht	a/c compressor clutch relay control	connect to	C	of Fiero A/C clutch relay (if used)
42	pnk/blk	fuel injector #3 control	connect to	B	of fuel injector for cylinder #3
44	lt blu/blk	IAC valve A low	connect to	C	of the IAC valve
45	red/blk	AT Pressure Control Solenoid High	connect to	C	of the 4T65-E transmission connector
46	lt blu/wht	AT Pressure Control Solenoid Low	connect to	D	of the 4T65-E transmission connector
49	lt grn/blk	IAC valve B low	connect to	A	of the IAC valve
50	tan	Intake Air Temp sensor signal	connect to	B	of the IAT sensor
55	dk grn	fuel tank pressure sensor signal	delete		
56	gry	transaxle range switch C	connect to	H	of the 2003-newer 4T65-E transmission
58	brn	engine oil level switch input	delete		
59	wht	cruise control status	connect to	J	*OPTIONAL* of the Electronic Cruise Control unit
61	red	Generator L terminal	connect to	B or L	of the alternator
63	yel	AT TCC release switch input	connect to	U	of the 4T65-E transmission connector
66	dk blu	Throttle Position Sensor signal	connect to	B	of the TPS
68	yel/blk	Transmission fluid temp sensor signal	connect to	L	of the 4T65-E transmission connector
69	ppl	fuel level sensor input	delete		
77	gry	boost control solenoid control circuit	connect to	B	*OPTIONAL* of the boost control solenoid
78	brn	AT TCC PWM solenoid control	connect to	T	of the 4T65-E transmission connector

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Engine/Transmission Component electrical interface to Fiero

Component	Component Pin	Action	Description
All Injectors	A	connect to	Pin J of Fiero C203 Connector, change INJ1 fuse to 10amp
MAF sensor Ignition Power	C	connect to	Pin F of Fiero C203 connector, share with PCM IGN power feed circuit
MAF sensor ground	B	connect to	engine block ground
4T65E transmission power	E	connect to	Pin K of Fiero C203 connector, share with other components; change INJ2 fuse to 20amp
EVAP purge solenoid power	A	connect to	Pin K of Fiero C203 connector, share with other components; change INJ2 fuse to 20amp
HO2S Sensor 1 heater	D	connect to	Pin K of Fiero C203 connector, share with other components; change INJ2 fuse to 20amp
HO2S Sensor 1 heater	C	connect to	engine block ground
Boost Control Solenoid	A	connect to	Pin K of Fiero C203 connector, share with other components; change INJ2 fuse to 20amp
Ignition Control Module Power Input	P	connect to	Pin E3 of Fiero C500 connector
Ignition Control Module Tach Signal	E	connect to	Pin C3 of Fiero C500 connector (omit Fiero tach filter - if present)
Data Link Connector	4	connect to	engine block ground
Data Link Connector	5	connect to	engine block ground
Data Link Connector	16	connect to	Fused (10amp) Battery 12v + power feed (hot at all times)

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