

3400 LA1 OBD2 PCM wiring instructions for Fiero swaps using 4T65-E transmissions

1999 OBD2 3400 LA1 PCM C1 BLUE Connector			Connection		
Pin	Wire Color	Circuit Description	Action	Pin	Additional Info
1	blk	4T65-E trans fluid temp sensor ground	connect to	M	of the 4T65-E transmission connector
3	orn	fuel level output control circuit	delete		
4	lt grn	shift solenoid A control (1-2 shift sol)	connect to	A	of the 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	B	of the camshaft position sensor
8	ppl/wht	3x reference signal (low res / fuel control)	connect to	E	of the ignition control module's 6-pin connector
9	lt blu/blk	24x reference signal (hi resolution)	connect to	B	of the 24x crankshaft position sensor (located behind crank pulley)
10	gry	MAP sensor 5v reference	connect to	C	of MAP sensor
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 & crank)	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
22	pnk	Trans fluid pressure switch A	connect to	N	of the 4T65-E transmission connector
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	blk	EGR pintle position sensor ground	connect to	B	of EGR valve (if used)
32	gry	EGR valve control	connect to	A	of EGR valve (if used)
33	dk blu	Knock Sensor signal	connect to		knock sensor
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
43	blk	fuel injector #1 control	connect to	B	of fuel injector for cylinder #1
44	yel/blk	Shift solenoid B control (2-3 shift sol)	connect to	B	of the 4T65-E transmission connector
46	pnk/blk	fuel injector #3 control	connect to	B	of fuel injector for cylinder #3
47	lt grn/blk	fuel injector #2 control	connect to	B	of fuel injector for cylinder #2
48	red/blk	reference low (ignition module ground)	connect to	F	of the ignition control module's 6-pin connector
53	tan/blk	ignition control BYPASS	connect to	A	of the ignition control module's 6-pin connector
54	wht	ignition control	connect to	B	of the ignition control module's 6-pin connector
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	blu/wht	AT Input Speed Sensor Low	connect to	V	of the 4T65-E transmission connector
63	red/blk	AT Input Speed Sensor Hi	connect to	S	of the 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	B	of the transmission gear selector position switch
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	blk/wht	Fuel injector #5 control	connect to	B	of fuel injector for cylinder #5
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	yel/blk	fuel injector #6 control	connect to	B	of fuel injector for cylinder #6
80	blk	A/C pressure sensor ground	connect to	A	of the A/C pressure sensor (if used)

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1999 OBD2 3400 LA1 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	red	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	A	of the transmission gear selector position switch
17	red	AT Fluid Pressure Switch C Input	connect to	P	of the 4T65-E transmission connector
18	blk/wht	transaxle range switch A	connect to	D	of the transmission gear selector position switch
22	dk grn/wht	A/C Request	connect to	D	of Fiero C203 connector (if A/C is hooked up)
24	???	Ignition Positive Voltage (hot in run & crank)	NOTE →	SOME applications require this 2nd key-on IGN power input. Check with your programmer.	
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)
30	gry	EGR position 5 volt reference	connect to	D	of the EGR valve (if used)
33	gry	Throttle Position Sensor 5 volt reference	connect to	C	of the throttle position sensor
34	gry	A/C pressure sensor 5 volt reference	connect to	B	of A/C pressure sensor (if used)
35	blk	fuel tank pressure and level sensor grounds	delete		
39	dk grn/wht	a/c compressor clutch relay control	connect to	C	of Fiero A/C clutch relay (if used)
42	lt blu/blk	fuel injector #4 control	connect to	B	of fuel injector for cylinder #4
44	lt blu/blk	IAC valve A low	connect to	C	of the IAC valve
45	red/blk	AT pressure control solenoid hi	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	C	of the transmission gear selector position switch (if used)
57	dk blu	AT fluid Pressure Switch B Input	connect to	R	of the 4T65-E transmission connector
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	pnk	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		
70	lt grn	24x crankshaft position sensor ground	connect to	A	of the 24x crankshaft position sensor (located behind crank balancer)
72	red/wht	camshaft position sensor power supply	connect to	A	camshaft position sensor
73	blk	camshaft position sensor ground	connect to	C	camshaft position sensor
74	yel/blk	24x crankshaft position sensor power supply	connect to	C	of the 24x crankshaft position sensor (located behind crank balancer)
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
Ignition Control Module Ground Input	A (2-pin ICM conn)	connect to	engine block ground
Ignition Control Module Power Input	B (2-pin ICM conn)	connect to	Pin E3 of Fiero C500 connector
Ignition Control Module Tach Signal	C (6-pin ICM conn)	connect to	Pin C3 of Fiero C500 connector (omit Fiero tach filter - if present)
ICM 7x crank (CKP) sensor hi input	A (3-pin ICM conn)	connect to	pin A of the 7x crankshaft position sensor (located in block - twist together with 7x low CKP wire)
ICM 7x crank (CKP) sensor low input	C (3-pin ICM conn)	connect to	pin B of the 7x crankshaft position sensor (located in block - twist together with 7x hi CKP wire)
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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