

1994-95 Regal 3800 PCM wiring instructions for L67/L27 3800 Series 1 Fiero swaps

16183428 PCM BLACK Connector			Connection		
Pin	Wire Color	Circuit Description	Action	Pin	Additional Info
A1	gry	EGR control output	connect to	A	*OPTIONAL* of the EGR valve
A2	pnk	EGR ignition positive voltage filter	connect to	→	EGR pin E & Pin K of Fiero C203 connector, share with other components
A4	brn	TCC PWM Solenoid control output	connect to	C	of 4T60-E Transmission (if used)
A5	dk grn	Cruise Inhibit output	delete		
A7	lt blu/blk	fuel injector #4 control	connect to	B	of fuel injector for cylinder #4
A8	blk/wht	fuel injector #5 control	connect to	B	of fuel injector for cylinder #5
A9	blk	fuel injector #1 control	connect to	B	of fuel injector for cylinder #1
A10	yel/blk	fuel injector #6 control	connect to	B	of fuel injector for cylinder #6
A11	lt grn/wht	IAC B high control	connect to	A	of the IAC connector
A12	lt grn/blk	IAC B low control	connect to	B	of the IAC connector
A13	lt blu/blk	IAC A low control	connect to	D	of the IAC connector
A14	lt blu/wht	IAC A high control	connect to	C	of the IAC connector
A15	lt grn/blk	Fuel injector #2 control	connect to	B	of fuel injector for cylinder #2
A16	pnk/blk	fuel injector #3 control	connect to	B	of fuel injector for cylinder #3
A17	wht	ignition control	connect to	A	of ignition control module harness (also pin A of ICM)
A18	tan/blk	ignition control BYPASS	connect to	B	of ignition control module harness (also pin B of ICM)
A19	tan/wht	PCM ground	connect to		engine block ground
A20	tan/wht	PCM ground	connect to		engine block ground
A21	blk/wht	PCM ground	connect to		engine block ground
A22	blk/wht	PCM ground	connect to		engine block ground
A23	dk grn	Engine Hot Warning Lamp control	connect to	D3	of Fiero C500 connector; should be dk grn wire
A24	blk	camshaft position input	connect to	F	of ignition control module harness (also pin F of ICM)
A25	ppl/wht	3x reference signal (low resolution)	connect to	D	of ignition control module harness (also pin D of the ICM)
A26	red/blk	reference low (ignition module ground)	connect to	G	of ignition control module harness (pin L of ICM)
A27	lt blu/blk	18x reference signal (hi resolution)	connect to	C	of ignition control module harness (also pin C of ICM)
A28	yel	MAF sensor signal	connect to	A	of the MAF sensor
A30	yel	vehicle speed sensor (VSS) high input	connect to	B	of VSS connector
A31	ppl	VSS low	connect to	A	of VSS connector

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16183428 PCM CLEAR Connector			Connection		
Pin	Wire Color	Circuit Description	Action	Pin	Additional Info
B1	dk blu	A/C Request	connect to	D	of Fiero C203 connector (if A/C is hooked up)
B3	wht	Cruise Engaged Signal Input	delete		
B7	gry	5v Reference output for EGR valve	connect to	D	of the EGR valve (if used)
B8	pnk	Ignition Positive Voltage (hot in run)	connect to	F	of Fiero C203 connector, share with MAF sensor power feed
B10	red or org	Battery Positive Voltage (hot at all times)	connect to		fused (20amp) battery power feed
B11	blk	Sensor Ground Output	connect to	→	Pin A of IAT; Pin G of 4T60E (if used); Pin B of EGR (if used)
B17	dk grn/wht	fuel pump relay control output	connect to	A	of the Fiero fuel pump relay
B18	dk grn/wht	4000ppm VSS output for speedometer	connect to		any device needing a 4000ppm VSS signal
B19	dk blu	Theft Deterrent Fuel Enable	delete		(not needed with Sinister Performance programming)
B20	brn/wht	Malfunction Indicator Lamp control	connect to	C	of the Fiero C203 connector (check engine lamp circuit)
B21	dk grn/wht	a/c compressor clutch relay control	connect to	C	of Fiero A/C clutch relay (if used)
B22	dk grn	low speed fan control	connect to	D1	of Fiero C500 connector; should be dk grn/wht wire
B23	dk blu	high speed fan control	connect to		high speed fan relay (if used)
B26	lt blu	Performance shift switch input	connect to		*OPTIONAL* toggle switch to activate AT performance shift
B30	red/blk	A/C Refrigerant Hi Pressure Switch	connect to	A	of the A/C Hi pressure sw; connect term B of sw to ground
B32	tan	UART serial data	connect to	→	Pin M of OBD1 ALDL -OR- Pin 9 of OBD2 DLC

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16183428 PCM BLUE Connector			Connection		
Pin	Wire Color	Circuit Description	Action	Pin	Additional Info
C2	yel/blk	auto trans shift solenoid B output	connect to	B	of 4T60E transmission connector (if used)
C3	lt grn	auto trans shift solenoid A output	connect to	A	of 4T60E transmission connector (if used)
C5	tan/blk	TCC enable output	connect to	D	of 4T60E transmission connector (if used)
C7	gry	boost control solenoid control circuit	connect to	B	*OPTIONAL* of the boost control solenoid
C8	dk grn/wht	EVAP Purge Solenoid control output	connect to	B	*OPTIONAL* of the EVAP purge solenoid
C9	blk/wht	transaxle range switch A	connect to	D	of the transmission gear selector position switch (if used)
C10	yel	Transaxle Range Position Switch B	connect to	B	of the transmission gear selector position switch (if used)
C11	gry	5v reference output for TPS	connect to	A	of the Throttle Position Sensor
C12	blk	Sensor Ground Output	connect to	→	pin A of the ECT Sensor & pin C of the Throttle Position Sensor
C14	wht	transaxle range switch P	connect to	A	of the transmission gear selector position switch (if used)
C15	gry	transaxle range switch C	connect to	C	of the transmission gear selector position switch (if used)
C18	dk blu	Knock Sensor Signal	connect to		Knock Sensor(s) [no. of sensors needed depends on mem-call]
C19	yel/blk	auto trans fluid temp sensor signal	connect to	F	of 4T60-E transmission (if used)
C20	yel	Engine Coolant Temp Sensor signal	connect to	B	of the Engine Coolant Temperature sensor
C21	brn	EGR pintle position sensor signal	connect to	C	of the EGR valve (if used)
C22	dk blu	Throttle Position Sensor signal	connect to	B	of the TPS
C23	tan	HO2S Sensor 1 signal low	connect to		engine block ground
C24	ppl	HO2S Sensor 1 signal high	connect to	B	of the HO2S Sensor 1 (pre CAT)
C26	tan	Intake Air Temp sensor signal	connect to	B	of the IAT sensor
C30	ppl	TCC Brake Switch Input	connect to	P	of Fiero C203 connector, only if 4T60-E transmission is used
C31	tan/wht	HO2S Sensor 2 signal low	delete		
C32	ppl/wht	HO2S Sensor 2 signal high	delete		

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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
4T60E transmission power	E	connect to	Pin K of Fiero C203 conn, share w/ other components; chg INJ2 fuse to 20a
EGR ignition voltage input	E	connect to	Pin K of Fiero C203 conn, share w/ other components; chg INJ2 fuse to 20a
PCM EGR Ignition Voltage Input Filter	A2	connect to	Pin K of Fiero C203 conn, share w/ other components; chg INJ2 fuse to 20a
EVAP purge solenoid power	A	connect to	Pin K of Fiero C203 conn, share w/ other components; chg INJ2 fuse to 20a
HO2S Sensor 1 heater	D	connect to	Pin K of Fiero C203 conn, share w/ other components; chg INJ2 fuse to 20a
HO2S Sensor 1 heater	C	connect to	engine block ground
HO2S Sensor 1 signal low (ground)	A	connect to	engine block ground (separate from HO2S heater ground)
Boost Control Solenoid (if used)	A	connect to	Pin K of Fiero C203 conn, share w/ other components; chg INJ2 fuse to 20a
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)
OBD-1 ALDL Connector (if used)	A	connect to	engine block ground
OBD-2 Data Link Connector (if used)	4	connect to	engine block ground
OBD-2 Data Link Connector (if used)	5	connect to	engine block ground
OBD-2 Data Link Connector (if used)	16	connect to	Fused (10amp) Battery 12v + power feed (hot at all times)
Performance Shift Toggle Switch		connect to	chassis ground thru 348 ohm resistor

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