

1994-95 C/H/G/U Body 3800 PCM wiring instructions for L67/L36 3800 Series 2 Fiero swaps

16183247 / 16197428 PCM RED Connector			Connection		
Pin	Wire Color	Circuit Description	Action	Pin	Additional Info
RA1	pnk/blk	fuel injector #3 control	connect to	B	of fuel injector for cylinder #3
RA2	lt grn/blk	Fuel injector #2 control	connect to	B	of fuel injector for cylinder #2
RA3	lt blu/wht	IAC A high control	connect to	C	of the IAC connector
RA4	lt blu/blk	IAC A low control	connect to	D	of the IAC connector
RA5	lt grn/blk	IAC B low control	connect to	B	of the IAC connector
RA6	lt grn/wht	IAC B high control	connect to	A	of the IAC connector
RA7	yel/blk	fuel injector #6 control	connect to	B	of fuel injector for cylinder #6
RA8	blk	fuel injector #1 control	connect to	B	of fuel injector for cylinder #1
RA9	blk/wht	fuel injector #5 control	connect to	B	of fuel injector for cylinder #5
RA10	lt blu/blk	fuel injector #4 control	connect to	B	of fuel injector for cylinder #4
RA11	gry	change oil lamp control	delete		
RA12	wht	cruise control status lamp output	delete		
RA13	brn	TCC PWM Solenoid control output	connect to	C	of 4T60-E Transmission (if used)
RA14	tan/blk	Traction control delivered torque	delete		
RA15	pnk	EGR ignition positive voltage filter	connect to	→	EGR pin E & Pin K of Fiero C203 connector, share with other components
RA16	gry	EGR control output	connect to	A	*OPTIONAL* of the EGR valve
RB1	brn	Alternator charge warning lamp control	connect to	B3	of Fiero C500 connector, should be a brown wire
RB2	ppl	VSS low	connect to	A	of VSS connector
RB3	yel	vehicle speed sensor (VSS) high input	connect to	B	of VSS connector
RB3	red	Generator L terminal	connect to	B or L	of the alternator
RB5	yel	MAF sensor signal	connect to	A	of the MAF sensor
RB6	lt blu/blk	18x reference signal (hi resolution)	connect to	C	of ignition control module harness (also pin C of ICM)
RB7	red/blk	reference low (ignition module ground)	connect to	G	of ignition control module harness (pin L of ICM)
RB8	ppl/wht	3x reference signal (low resolution)	connect to	D	of ignition control module harness (also pin D of the ICM)
RB9	blk	camshaft position input	connect to	F	of ignition control module harness (also pin F of ICM)
RB10	dk grn	Engine Hot Warning Lamp control	connect to	D3	of Fiero C500 connector; should be dk grn wire
RB11	blk/wht	PCM ground	connect to		engine block ground
RB12	tan/wht	Injector Driver PCM ground	connect to		engine block ground
RB13	blk/wht	PCM ground	connect to		engine block ground
RB14	tan/wht	Injector Driver PCM ground	connect to		engine block ground
RB15	tan/blk	ignition control BYPASS	connect to	B	of ignition control module harness (also pin B of ICM)
RB16	wht	ignition control	connect to	A	of ignition control module harness (also pin A of ICM)

Part 1 of 4

Copyright 2010 Sinister Performance, LLC. www.gmtuners.com USE AT YOUR OWN RISK!

16183247 / 16197428 PCM WHITE Connector			Connection		
Pin	Wire Color	Circuit Description	Action	Pin	Additional Info
WC3	ppl	Command / Auto Ride Control Brake/Throt	delete		
WC5	dk blu	Cruise Set/Coast input	delete		
WC6	blk	Sensor Ground Output	connect to	→	Pin A of IAT; Pin G of 4T60E (if used); Pin B of EGR (if used)
WC7	red or org	Battery Positive Voltage (hot at all times)	connect to		fused (20amp) battery power feed, share with WC8
WC8	red or org	Battery Positive Voltage (hot at all times)	connect to		fused (20amp) battery power feed, share with WC7
WC9	pnk	Ignition Positive Voltage (hot in run)	connect to	F	of Fiero C203 connector, share with MAF sensor power feed
WC10	gry	5v Reference output for EGR valve	connect to	D	of the EGR valve (if used)
WC11	gry/blk	Cruise Resume/Accel input	delete		
WC12	gry	Cruise On/Off input	delete		
WC13	org/blk	traction control desired torque	delete		
WC14	brn	Cruise Brake Switch Input	delete		
WC16	dk blu	A/C Request	connect to	D	of Fiero C203 connector (if A/C is hooked up)
WD1	tan	UART serial data	connect to	→	Pin M of OBD1 ALDL -OR- Pin 9 of OBD2 DLC
WD2	tan	UART serial data	connect to	→	Pin M of OBD1 ALDL -OR- Pin 9 of OBD2 DLC
WD3	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
WD4	pnk/blk	Oil Life Monitor Reset Switch Input	delete		
WD7	lt blu	Performance shift switch input	connect to		*OPTIONAL* toggle switch to activate AT performance shift
WD10	dk blu	high speed fan control	connect to		high speed fan relay (if used)
WD11	dk grn	low speed fan control	connect to	D1	of Fiero C500 connector; should be dk grn/wht wire
WD12	dk grn/wht	a/c compressor clutch relay control	connect to	C	of Fiero A/C clutch relay (if used)
WD13	brn/wht	Malfunction Indicator Lamp control	connect to	C	of the Fiero C203 connector (check engine lamp circuit)
WD14	dk blu	Theft Deterrent Fuel Enable	delete		(not needed with Sinister Performance programming)
WD15	dk grn/wht	4000ppm VSS output for speedometer	connect to		any device needing a 4000ppm VSS signal
WD16	dk grn/wht	fuel pump relay control output	connect to	A	of the Fiero fuel pump relay

Part 2 of 4

Copyright 2010 Sinister Performance, LLC. www.gmtuners.com USE AT YOUR OWN RISK!

1994-95 C/H/G/U Body 3800 PCM wiring instructions for L67/L36 3800 Series 2 Fiero swaps

16183247 / 16197428 PCM BLUE Connector			Connection		
Pin	Wire Color	Circuit Description	Action	Pin	Additional Info
BE1	dk blu/wht	Cruise Vent Solenoid Control	delete		
BE2	gry	transaxle range switch C	connect to	C	of the transmission gear selector position switch (if used)
BE3	wht	transaxle range switch P	connect to	A	of the transmission gear selector position switch (if used)
BE4	lt grn	Cruise Vacuum Solenoid Control	delete		
BE5	blk	Sensor Ground Output	connect to	A	of the ECT sensor and TPS
BE6	gry	5v reference output for TPS	connect to	C	of the Throttle Position Sensor
BE7	yel	Transaxle Range Position Switch B	connect to	B	of the transmission gear selector position switch (if used)
BE8	blk/wht	transaxle range switch A	connect to	D	of the transmission gear selector position switch (if used)
BE9	dk grn/wht	EVAP Purge Solenoid control output	connect to	B	*OPTIONAL* of the EVAP purge solenoid
BE10	gry	boost control solenoid control circuit	connect to	B	*OPTIONAL* of the boost control solenoid
BE12	tan/blk	TCC enable output	connect to	D	of 4T60E transmission connector (if used)
BE14	lt grn	auto trans shift solenoid A output	connect to	A	of 4T60E transmission connector (if used)
BE15	yel/blk	auto trans shift solenoid B output	connect to	B	of 4T60E transmission connector (if used)
BF3	ppl	TCC Brake Switch Input	connect to	P	of Fiero C203 connector, only if 4T60-E transmission is used
BF4	tan	Cruise Servo Position Sensor Hi Input	delete		
BF7	tan	Intake Air Temp sensor signal	connect to	B	of the IAT sensor
BF9	ppl	Heated O2 Sensor (HO2S) signal high	connect to	B	of the HO2S
BF10	tan	HO2S signal low	connect to	A	of the HO2S
BF11	dk blu	Throttle Position Sensor signal	connect to	B	of the TPS
BF12	brn	EGR pintle position sensor signal	connect to	C	of the EGR valve (if used)
BF13	yel	Engine Coolant Temp Sensor signal	connect to	B	of the Engine Coolant Temperature sensor
BF14	yel/blk	auto trans fluid temp sensor signal	connect to	F	of 4T60-E transmission (if used)
BF15	dk blu	Knock Sensor Signal	connect to		Knock Sensor(s) [no. of sensors needed depends on mem-cal]
BF16	lt blu/blk	Cruise Servo Position Sensor Low Input	delete		

Part 3 of 4

Copyright 2010 Sinister Performance, LLC. www.gmtuners.com USE AT YOUR OWN RISK!

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	RA15	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
Boost Control Solenoid	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

Part 4 of 4

Copyright 2010 Sinister Performance, LLC. www.gmtuners.com USE AT YOUR OWN RISK!