

Courtesy of George Dodworth www.sevenspeed.com

General Wiring information for the use of the PowerFC as a standalone computer for engine swaps.

Use the info? Email me pics of your project to info@sevenspeed.com !!

X = REMOVE O=OPTIONAL XS = REMOVE FOR SINGLE TURBO XM = REMOVE FOR NO OMP

PIN	REMOVE?	Function	Connect to Recipient Vehicle:
1A		Constant +12V Input	Battery Constant +12V
1B		Switched +12V Input	Source of switched +12V, IGN
1C		Ign Start Switch Input	+12V only when cranking
1D	O	Warn lamp Output	
1E	X	A/C Sw Input	
1F	O	Diagnostic Buzzer Output	
1G		Front Trail Igniter Output	IGNITER Brown
1H		Leading Igniter Output	IGNITER Light Green
1I	X	Diagnostic TEN terminal	
1J		Trailing Rear Igniter Output	IGNITER Brown / Black
1K	X	Fuel pump Relay Output (if pump re-wired with no resistor)	
1L	X	A/C Relay Output	
1M	O	Speedometer Input	
1N	X	P/S Pressure Switch Input	
1O		Boost sensor Input	Boost Sensor (sensor also needs +/- Vref from X-05)
1P	X	No Connection	
1Q	O	Clutch Switch Input	
1R	O	Neutral Switch Input	
1S	O	Brake light Input	
1T	O	Main Fuel pump relay Output	
1U	X	Fuel thermosensor Input (Set all settings to Zero)	
1V	X	No Connection	
2A	X	No Connection	Delete this plug!
2B	X	Diagnostic IG terminal RPM diagnostic terminal	
2C	X	Automatic Transmission	
2D	X	Automatic Transmission	
2E	X	Automatic Transmission	
2F	X	Canada	
2G	X	Automatic Transmission	
2H	X	No Connection	
2I	X	Heat Hazard Input	
2J	X	Air Pump Relay Output	
2K	X	1-2 Switch	
2L	X	1-2 Switch	

3A	XM	MOP Position sensor Input
3B	X	Elec Load Input
3C		O2 Sensor Input
3D	O	Cooling Fan relay Output
3E		H2O Thermosensor Input
3F		TPS narrow Input
3G		TPS full range Input
3H	XS	Purge Control Valve Output
3I		Throttle Sensor Input
3J	X	EGR Input (Cali only)/DRL (Canada only)
3K	XS	Charge relief Valve
3L		Intake Air Thermosensor
3M		Knock Sensor
3N	XS	Air Bypass Valve
3O	XS	Double throttle Valve
3P	XS	Relief Valve

Clean up Plug 3 & 4 as desired, or just leave un-used plugs empty.

4A		Ground
4B		Ground
4C		Ground
4D		Ground
4E		Crank Angle Input
4F	XS	Split Air Bypass
4G		Crank Angle Input
4H		Crank Angle Input
4I	XM	MOP Output
4J	XM	MOP Output
4K	XM	MOP Output
4L	XM	MOP Output
4M	XS	Fuel Pressure solenoid Output
4N	XS	Switch Valve Output
4O	XS	EGR Solenoid Output
4P	XS	AWS Solenoid Output
4Q	XS	ISC Output
4R	XS	Turbo Control Valve Sol Output
4S	XS	Charge relief Valve Output
4T	XS	Charge Control Valve Output
4U		WasteGate Valve Output
4V	XS	Pre-Control Valve Output
4W		Front Pri Inj Output
4X		Front Sec Inj Output
4Y		Rear Pri Inj Output
4Z		Rear Sec Inj Output

Clean up Plug 3 & 4 as desired, or just leave un-used plugs empty.

X-05 Blue Male Connector on Engine Harness

- Brown / White + Vref to Pressure Sensor
- Brown / Black Gnd to Pressure Sensor (signal ground -- not chassis ground)

- Black / Yellow Injector +12V Input. Connect to switched +12V source, along with Igniter Black/White and ECU 1B.
- Black Ground
- Black / White Solenoid +12V. Connect if solenoids in use. Required for wastegate control with single turbo / nonsequential
- White / Blue ECU output for cooling fan. Use with relay for ECU controlled fan.

X-14 White Conector on Engine Harness

- Black / Red Water thermo switch on water pump
Use with relay to control cooling fan without ECU control.

Looking at ECU, Pins are as follows:

4	3	2	1
Y W . . . C A	O M C A	K I . . . C A	U S . . C A
Z X D B	P N D B	L J . . . D B	V T . . D B

Other Igniter Notes:

- Need to make harness from igniter outputs to coil input harness
- Make sure to use condensor, mounted on igniter and connected to black / white