

PROSTAR SQ EFI SERIES Installation and Operating Instructions Series Model MP-4101, 02, 03

Introduction:

The accompanying *MagnaFuel* fuel pump is designed for vehicles <u>NOT</u> subject to emission controls. The ProStar SQ EFI Pump is a precision assembly designed for maximum performance. The following instruction should be followed carefully.

Description of Operation:

This pump, like all *MagnaFuel* pumps, is compatible with all racing gasolines and alcohol fuels. The ProStar SQ EFI series have enough flow capacity to support in excess of 2500 HP on gasoline or 1250 HP on alcohol. **ProStar SQ EFI Series is a RACE ONLY pump and should not be run more than 30 to 45 minutes continuously.** ProStar SQ EFI fuel pumps HP ratings are as follows:

- MP-4101 2000 hp @ 45psi*
- MP-4102 1500 hp @ 45psi*
- MP-4103 2500 hp @ 45psi*

*Horsepower ratings are for naturally aspirated engines running gasoline. E85 requires approximately 30% more fuel per horsepower.

Installation:

We suggest installing the ProStar SQ EFI fuel pump like the plumbing diagram on reverse. The pump can be mounted in any position as close to the fuel cell as possible and away from any heat source. An in-line filter of 75 to 150 micron is required before the pump. We recommend MagnaFuel Part # MP-7006, our 150 micron in-line filter. Downstream from the pump a finer micron filter can be used, such as MagnaFuel Part # MP-7008, our 25 micron in-line filter. Post filter should be mounted as far downstream as possible to filter as much of system as possible.

Plumbing:

For maximum performance the ProStar SQ EFI series pump should be feed with a -12 line from the fuel cell to the pump. Fuel cells with two -8 outlets can be "Y'd" into one -12 for the inlet of the pump. Run -10 line from the pump to the engine compartment, at this point the line can be spilt via a Y-Fitting (MP-6208) into two -8 lines to feed the fuel rails. From the rails to the regulator -6 line is recommended, and -8 line for the return to the fuel cell.

All *MagnaFuel* high volume fuel pumps also require a **-8 or ½" vent** and a -8 bulkhead fitting for the return line in the top of the fuel tank. **The venting on stock tanks is not adequate.** The return should be located in the top of the fuel cell as far away from the outlet as possible and should **not** have a tube protruding into the fuel. Any fuel cell foam should be cut back 4" in all directions from the outlet.

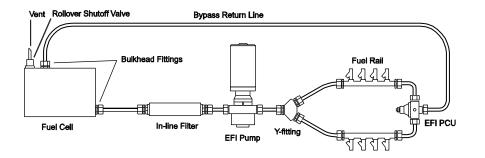
Regulator:

The ProStar SQ EFI series pumps do not by-pass internally and must be accompanied by a return style fuel pressure regulator. *MagnaFuel* EFI regulators are adjustable form 35 to 85psi. Boost reference is 1:1. The MP-9950-C is adjustable from 18 to 50psi.

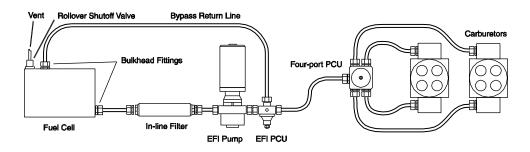
Recommend MagnaFuel Regulator Part#'s:

For EFI applications:MP-9950For Boosted EFI applications:MP-9950-BFor Carbureted conversion:MP-9950-C

Standard EFI configuration



Carbureted conversion configuration



Note: To convert the ProStar SQ EFI Series pumps for carbureted application two regulators are necessary. A return style at the pump (MP-9950-C) which controls the pump pressure and a deadhead style at the carburetor to control pressure to the needle and seats.