

RECOMMENDED PSI PRESSURES		
Gas	3-6 lbs. Idle	7-9 lbs. at Full Throttle
Alky	3-6 lbs. Idle	9-11 lbs. at Full Throttle

PRIMING THE PUMP

To prime a dry fuel system jack the rear of the car up. Remove the pump from the mounting bracket but leave the inlet line hooked up. Hold the pump and lower it as far as you can then turn the pump clockwise by hand to prime. After you see fuel coming out of the outlet side, then mount the pump and install the belt. If for some reason you run the engine out of fuel or the engine sets a long time you can use this same method to prime the pump.

CAUTION: Do not spin the pump without some fuel or a little synthetic oil in the pump.

FUEL PRESSURE

It is very important to use a fuel pressure gauge. If your racing sanctioning body does not let you run a gauge in the cockpit then Autometer makes an electric fuel pressure gauge that is accurate and dependable. When you are using large jets especially in the .180 to .200 range and you make a large jet change it can actually raise or lower your fuel pressure. This is something that you need to be aware of and check.

PRESSURE SETTING FOR INTERNAL BY PASS FUEL PUMPS

The pressure is preset when we assemble and test the pump and it should be very close. **Always set your pressure for the top end. Do not be concerned about the idle pressure.** If it is a Drag car then read the pressure at the top of low gear or near the finish line. If it is a Circle Track car then read the pressure at the end of the straight-away. If the idle falls within 2-6 pounds don't be concerned. To raise the pressure loosen the lock nut on the pump adjuster and turn the adjuster in to raise the pressure and back the adjuster out to lower the pressure. Adjust 1/4 of a turn until finish line pressure is set.

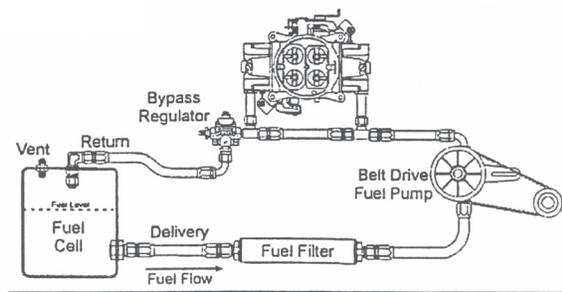


Figure 1

PRESSURE SETTING WHEN USING A BLP NON BY-PASS FUEL PUMP AND A 7491 RETURN LINE REGULATOR

HIGH SPEED ADJUSTMENT

Top end pressure adjustment is set by loosening the lock-nut and turning the adjustment set screw. Turn in for increased fuel pressure and out for less. After setting screw, be sure to retighten lock-nut.

TOP OIL

When using alcohol for fuel we recommend you mix a synthetic top oil with the alcohol. This keeps the pump lubricated as well as the valve guides and helps keep corrosion down in all the rubber hoses. Our part number KL107 Top Oil works very well.

WARNING: Never mix petroleum base oil with alcohol.

STORING THE PUMP

If you do not use the pump every week then remove the inlet and outlet line and drain the pump. Install the inlet line first. Pour a small amount of synthetic oil in the outlet fitting, rotate the pump a few revolutions by hand and install the outlet line. To start the engine refer to the priming procedure.

MAINTENANCE

If you are going to leave the engine idle for a long period of time or store the pump, take the outlet line off and pour a small amount of synthetic oil in the pump and rotate the pump by hand.

On the internal bypass pump about every six months you need to service the pressure bypass poppet valve. Remove the pump from the engine. Remove the adjuster and pressure spring; note how the spring goes in. The spring is a progressive wound spring and the "tight end wound" end always goes in first.

Position the pump so the hole in the side of the pump that houses the poppet will be pointed down toward the palm of your hand. The poppet will then fall out into your hand. Clean the brass bushing in the pump housing with brake clean or alcohol. Polish the poppet with scotch bright or 600 grit sandpaper and clean with alcohol. Make sure the poppet is free in the bore. Install the poppet with the window pointed down toward the bottom of the pump. Install the spring on the adjuster with the "tight end wound" of the spring going into the pump. The poppet has a recess machined into the spring end to locate the spring. Check spring length with dial calipers. If the spring is short then stretch to the proper length.



Spring lengths using alcohol spring:

.500 wide gear pump	1.800
.600 and .700 wide gear pump	1.670

Spring lengths using gas spring:

.400 wide gear pumps	1.600
.500 wide gear pumps	1.600

Make sure when you install the adjuster and spring assembly that the spring goes inside the recess of the poppet.

NOTE: Never use a petroleum based lube in the pump. Always use a synthetic based lube when you work on the pump. The KL107 Top Lube makes an excellent assembly lube.

INSTALLATION TIPS

- **Size the pump correctly and do not use any larger pump than necessary. Bigger is not better.**
- **Turn the pump the right RPM for your engine combination. BLP offers several different ratios.**