Instructions for all Professional Products Fuel Pressure Regulators

The following applies to the these regulator part numbers:
10650/10651/10654/10655/10656/10657/10660/10661 10662/10663 • The port on the bottom of the regulator is the inlet. The ports on the sides are outlets. 2-port models have two outlet ports and 4-port models have four outlet ports. If you don't need all of the outlet ports you can plug the ones you don't want to use with a 3/8-NPT pipe plug.

The following applies to these regulator part numbers:
10652/10653/10658/10659 • The port on the bottom is the return (or bypass) port. Any of the 3 or 5 ports on the sides can be either an inlet or outlet. If you do not need all of the ports, you can plug the ones you don't want to use with a 3/8-NPT pipe plug.

The following applies to these regulator part numbers:
10670/10671/10672/10673 • The port on the bottom is the return (or bypass) port. Any of the 2 or 4 ports on the sides of the regulator can be used for either inlet or outlet ports. If you do not need all of the ports, you can plug any unused port with a 3/8-NPT pipe plug.

The following applies to these regulator part numbers:
10678/10679/10680/10681 • These regulators replace the stock regulator on a wide range of Ford products. This style regulator bolts directly to the stock fuel rail and most aftermarket fuel rails.

Adjusting your fuel pressure:
These instructions apply to all above listed regulators. Fuel pressure should be adjusted with vehicle at idle. All regulators, except 10678/10679/10680/10681 have a 1/8-NPT port in the side of the main body. You can thread one of our Fuel Pressure Gauges directly into this port. Use our part number 11112 for carbureted applications and 11113 for fuel injected applications.

To adjust pressure, put a 5MM Allen wrench into threaded screw at top of regulator. Holding it in a fixed position, loosen the lock nut with 17MM wrench. To increase pressure, turn the screw clockwise. To decrease pressure, turn the screw counter clockwise. Once desired pressure is achieved, lock down the nut while holding the screw in a fixed position.

Our carbureted regulators are adjustable from about 4.5 PSI to 9 PSI. Most carburetors will operate in this range. Note that if you want maximum fuel flow, you are better off running a lower pressure. This is because turning the screw down to increase the pressure actually reduces the size of the orifice that the fuel flows through. Recommended pressure for a carburetor is in the 5.5 to 6 PSI range.

Regulators 10662 and 10663 are adjustable from 2 to 4 PSI. These regulators are typically used on imports with side draft carburetors which operate on lower fuel pressure than standard downdraft carburetors.

Our injected regulators are adjustable from 25 to 75 PSI. Most fuel injection systems operate on 40 to 45 PSI. Note that if you want maximum fuel flow you are better off running the lowest pressure recommended for your system. This is because the adjusting screw reduces the size of the orifice that the fuel flows through as it is screwed in to increase the pressure. We do not recommend any specific pressure that you should run. This is dependent upon the injectors you are using and your overall fuel system. In most instances, you should run whatever pressure (PSI) is recommended by the manufacturer for your particular fuel injection system.

Vacuum Fitting on EFI Fuel Pressure Regulators
Certain applications require that this fitting be connected to manifold vacuum with a vacuum hose as follows:
1. When running a throttle body system where the injectors are above the throttle butterflies, do not connect to engine vacuum.
2. When running port injectors that are below the throttle body butterflies, connect to engine vacuum.
3. When running a blow-through supercharger or turbocharger into the throttle body inlet, connect to engine vacuum.
4. When running a supercharger where injectors are above or ahead of the supercharger, do not connect to engine vacuum.

Fuels that can be used with these regulators.
Our early production regulators were not compatible with methanol. We marked these regulators with a sticker that says not to use it with alcohol fuels. We have subsequently developed a diaphragm and seals that are compatible with methanol. All of our regulators are compatible with gasoline and gasoline with ethanol added as is found with most current pump gas being sold.

Regulator Rebuild Kits
We now offer rebuild kits. Over time, the diaphragm and seals may deteriorate or rupture. The spring tension may change. The rebuild kits include a new diapragm and spring and are very inexpensive. These parts are also easy to change. We have three rebuild kits that cover all of the regulators that we offer.

Rebuild Kit #10690 - Use for regulators 10650, 10651, 10654, 10655,10656 and 10657.

Rebuild Kit #10691 - Use for regulators 10652, 10653, 10658, 10659, 10670, 10671, 10672, 10673, 10678, 10679, 10680, and 10681.

Rebuild Kit #10692 - Use for regulators 10660, 10661, 10662, and 10663.

As a general rule of thumb, you might consider rebuilding your regulator about every five years. This is preventative maintenance only.

Our four port carbureted regulator is also available in a version that uses 0-ring seal type fittings. The part numbers for this model are 10654 (blue) and 10655 (aluminum). Fittings are included with -6 outlets and a -8 inlet.