

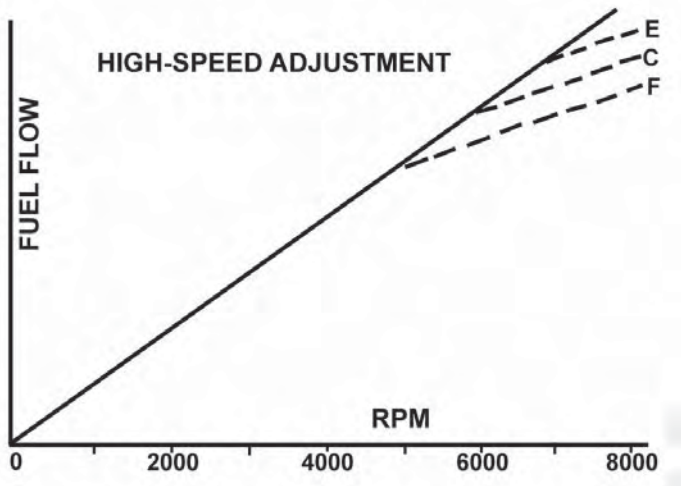
HIGH SPEED BYPASS VALVE

FIRST TIME INSTALLATION OR FUEL SYSTEM NOT CALIBRATED BY KINSLER

When installing a high speed bypass in the system for the first time, or on a system that presently has one but it is not tuned properly:

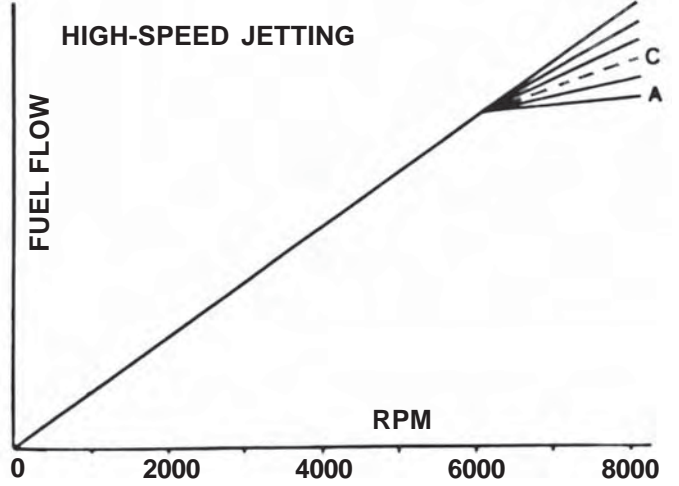
- 1) Block off the high speed by capping off the hose, DO NOT INSTALL VALVE BACKWARDS, the valve may leak fuel which will cause inaccuracy in the following test.
- 2) Using only the main jet bypass valve, find the main jet that produces the best performance up to approximately 500-1000 RPM beyond the peak torque of the engine.
- 3) Go .004" richer on the main jet (.002" to .008" is the range we see), and put the high speed bypass back in the system.
- 4) Adjust the high speed pressure higher (richer) and lower (leaner) to find the setting for best performance. If using a restrictor jet, try larger or smaller ones in increments of .004" to .010". As a larger restrictor jet is used, the pressure setting of the valve may have to be readjusted.
- 5) Try richer main jets.... adjust the high speed with each one to find the best overall performance.

We can pressure test and set your high speed bypass valve or provide you with a New Kinsler valve that is set for your system.



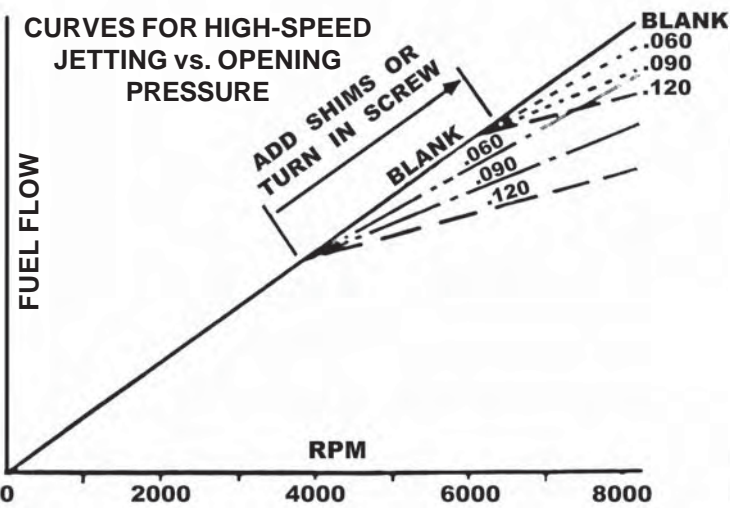
HIGH SPEED ADJUSTMENT

The RPM at which the high speed bypass opens is determined by the pressure setting of the valve. Curve "F" is the lowest setting; the valve opens at 5000 RPM. Raising the pressure will give curve "C", opening at 6000 RPM. Curve "E" opens at 7000 RPM. Raising the RPM at which the new curve starts doesn't change it's slope.



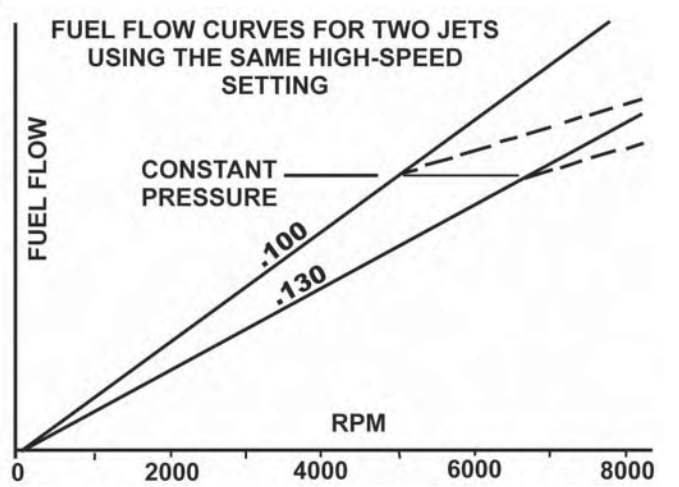
HIGH SPEED RESTRICTOR JETTING

With a blank jet (no orifice- not allowing the bypass to flow), the pressure and flow keep on going as though the high speed bypass wasn't there. Without any jet, the flow levels out as in curve "A", because the high speed lets a lot of fuel bypass back to the tank on the top end. Curve "C"; adding a restrictor jet gives some intermediate fuel curve. The smaller the jet, the closer the curve comes to the original one. Even without a jet, the bypass offers some internal restriction, which makes curve "A" slope up slightly.



CURVES FOR HIGH SPEED JETTING VERSUS HIGH SPEED SHIMMING OR SCREW ADJUSTMENT

The RPM at which the high speed bypass opens can be raised by adding shims (jet can type). Then the top end can be leaned out further by using a larger restrictor jet in the valve.



CURVES FOR TWO DIFFERENT MAIN JETS USING THE SAME HIGH SPEED SETTING

Fuel pressure is what opens the high speed bypass. With a larger main jet, the opening pressure will not be reached until a higher RPM. To retain the same high speed opening RPM with a larger main jet, you must lower the pressure setting of the high speed valve.

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