Technical Preview

Thunder PowerJet

Quick-Adjust Fuel Delivery

Do you have a carbureted sled? Are you sick of changing main jets in the carbs? How would you like a quick-adjust fuel delivery system that not only lets you change the amount of fuel in seconds, but also gives you increased precision of the amount of fuel provided?

Anyone who knows carb tuning knows they have to select a main jet big enough to provide enough fuel for peak horsepower, peak torque, peak pipe temperature and peak engine temperature. This is one of the main drawbacks of a carbed fuel delivery system. By the time you get the main jet size big enough to cover the bases and keep the engine alive, you are over-fueling the low end and midrange. Pretty much anything below 3/4 to 1/2 throttle is going to be over-fueled.

Enter the Thunder PowerJet. From the mind of fuel delivery master Lonn Peterson at Thunder Products Carburetion, this is a new twist on the good old power jet system. Where the old-style power jet would add a secondary fuel delivery system to your carburetor with a removable fixed orifice jet inside, the Thunder PowerJet gives you an adjustable needle and seat metering system instead of a fixed size jet. This gives you incredible precision and infinite adjustability, all done with the simple twist of a knob on top of the assembly. Rather than fiddle with changing main jets you simply twist the knob on each carb, which should take you maybe a couple of seconds.

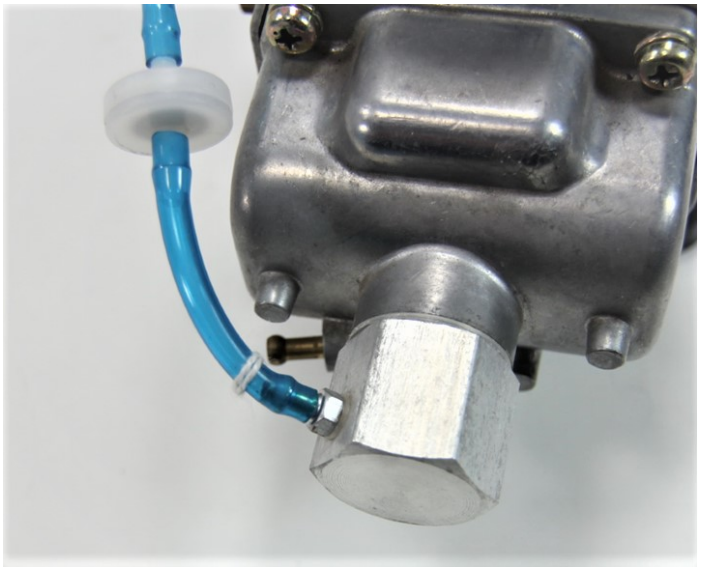
This not only gives you the added capacity to delivery more fuel (great for big engines that suck a lot of fuel) but by virtue of reducing the main jet size (typically down to 75-80% of what you started with) the fuel delivery at all of the partial throttle settings is now better matched to the needs of the engine. This results in crisper acceleration, better throttle response and improved fuel economy. Your sled flat out will run better, faster and stronger. And, it's quick and easy.

Fuel distribution throughout the incoming air column is also improved by adding fuel through two sources instead of just one. Where the fuel from the main jet is coming up from the floor of the carburetor, the Thunder PowerJet is injecting the fuel right in the middle of the carb bore where the airspeed is the highest and the fuel signal is the strongest. This means better and more complete mixing of the fuel and air which provides more horsepower and torque at any temperature or altitude.

So you install smaller main jets into your carbs and let the Thunder PowerJet come on line at the higher throttle openings, supplying added fuel when the engine needs it. Start rich and work your way down, just like doing the main jets. When you get to your desired exhaust gas temps, plug color or piston wash you will be amazed at how quick and easy it is to keep your sled running crisp and clean with a simple twist. Be it between heat races, as the temperature changes or going up or down in elevation, the Thunder PowerJet gives you the ability to change the fuel delivery quick and easy. You have an adjustment range of 10 to 12 main jet sizes with precision external adjustment. The top of the knob is marked for index purposes so you can be sure each carb is adjusted the same.

The adjustment range of 10-12 main jet sizes is across about

four and one-half rotations of the knob. This means you have incredible resolution and adjustability by simply adjusting the knob – one half rotation of the knob is (roughly) one main jet size, so a quarter turn is close to a half-jet size change. The precision is by design, and the adjustability is infinite. The applications for the Thunder PowerJet are many. Maybe you want precise quick-adjust jetting to compensate for changes in temperature or elevation. Maybe you want to clean up the fuel delivery on the low end and midrange and let the PowerJet fill the gap on the big end. Maybe you have a mod sled that needs more fuel than what big mains typically provide. Where the main jet affects fuel delivery across the entire throttle range, the Thunder Powerjet is adding fuel when the engine is pulling hard and needs it, typically above 1/2 to 3/4 throttle. Think of it as a power



jet with an adjustable needle and seat and you start to realize the benefits and performance potential. This fits any and all carb sizes and styles, but you should install a deep well float bowl nut to give you the space to install the fitting into the bottom of the carb as well as give you the fuel needed to supply the power jet. This helps make sure both the main jet in the carb and the power jet have plenty of fuel to work with, even on those wide-open throttle high-horsepower pulls across the lake or down the drag strip. The Thunder PowerJet is so helpful that every carbureted snowmobile should have this installed. The ability to adjust the fuel delivery, quickly, with added precision, is reason enough, but when combined with the improvement in power delivery from top to bottom and improved fuel economy it becomes a no-brainer. You could actually install it, set it and forget it, just like your plain old main jets, and still benefit from the improved performance of having more ac□curate fuel delivery across the board. But those who do pay attention to their exhaust gas temps, spark plug color and piston wash are going to benefit the most as they will be able to keep this edge all of the time, quicker and easier than ever before. You can get the Thunder PowerJet system for singles ($64.95), twins ($124.95) and triples ($189.95). You'll also want to get the deep well float bowl nut for each carb as well, ranging from $9.95 to $24.95 each. Each kit comes complete with everything you need for installation and complete instructions for installation and adjust□ment, along with expert tech support. Contact Thunder Products Carburetion at 320-597- 2700 or visit www.ThunderProducts.com