

Now *That's* a *Spicy* Cylinder!

By Chilly White



Specifications

ATK 700

Engine:	Single cylinder, two-stroke
Displacement:	700 cc
Cooling:	Liquid
Starting:	Kick
Carburetion:	Keihin PWK 39mm
Ignition:	SEM 130 watt
Transmission:	Five-speed, wide ratio
Clutch:	Magura hydraulic
Front suspension:	Paioli inverted fork
Rear suspension:	WP shock, w/linkage
Front brake:	Brembo
Rear brake:	Brembo
Claimed dry weight (lbs.):	240
MSRP:	TBA

So you think there is nothing new in the world of dirt bikes? Of course, it's easy to believe that, as today's bikes seem so similar. Along with homogenizing comes the seemingly inevitable death of the open-class two-stroke. However, some manufacturers are not letting the big-bore ring-dingers go without a fight.

We recently got a call from Frank White at ATK in Utah, inviting us to test his latest project. You can imagine our reaction when he asked if we would like to ride his 700cc two-stroke! Well, we considered it our duty, albeit with a little fear, to visit scenic Utah to ride and get the scoop on this mythical-sounding machine.

After the death of Cannondale, ATK is arguably the only dirt bike manufacturer in the United States. Mostly known for its line of off-road products based around proven, but aging, Rotax motors, ATK is exploring various avenues to the future.

By the 2006 model year, we could see all two-strokes disappear from manufacturer lineups. The coming EPA regulations combined with a manufacturer commitment to four-stroke technology could spell the end of the two-stroke trail bike. But there is hope for small, two-stroke-only manufacturers like ATK that look at the regulations as an advantage on the majors. Loopholes in the rules exempt small manufacturers from the EPA regulations; written to prevent the small guys from being put out of business.

Not only is ATK looking at the regulations as an advantage, but it also sees the lack of commitment by the majors to the open-class bike as another key opportunity.

Following this theme, ATK went looking for a new source for motors and came across some unique, large-displacement, two-stroke engines from Maico of Germany. This provided

the basic engine package for the project and ATK developed, or is in the process of developing, the rest of the components. The bike is an R&D exercise in progress and is expected to debut as a 2004 model.

Our first impression of the machine — the cylinder is of a proportion hard to fathom! Visually, it dominates the picture. Beyond that, things start to look very familiar. Our test bike featured an array of components: Paioli inverted fork, WP shock, Magura hydraulic clutch, Brembo brakes and wave rotors, Talon hubs, Excel rims, Magura Bulge bars, Domino throttle and Keihin PWK carb — all good stuff.

FMF just completed the design for a Turbine Core spark arrestor. These familiar names mean that parts availability should not be an issue; many replacement parts will be found from multiple sources.

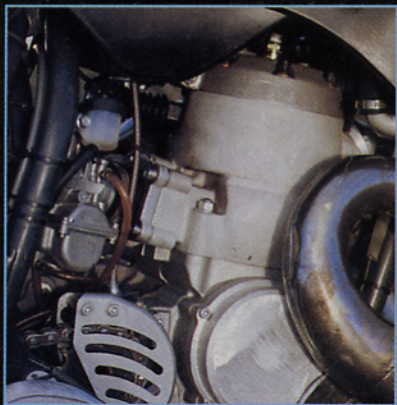
White tells us that ATK has new sales strategies that will be more responsive to customer's desires. As a small-volume builder, he sees a unique position where ATK can offer each buyer a custom bike. To this end, he intends to implement a "design-a-bike" service that will allow each owner to decide on specifications and options before each bike is built. Potential upgrades might include: wheels, silencer, lighting, tires, plastic color, as well as accessories such as skid plate, handguards, steering stabilizer and custom tool kit.

Enough Of This, It Is Time To Ride

The question on everyone's mind — including our own — is what is this thing like to ride? It is so large it must be an absolute beast, right? Climbing aboard presents a mixture of the familiar and the strange. The handlebar layout is identical to current four-stroke KTMs, including the compression release lever mounted on the clutch perch.



Ever since Cannondale went bankrupt, ATK is arguably the only dirt-bike manufacturer in the U.S.



The huge cylinder dominates the view of the bike. After riding the bike, we have more respect for open-class, two-stroke power.



ATK plans on making these bikes readily available to the buying public soon.



Lofting the front wheel out of corners was commonplace.

The seat is firm and flat and the gas tank narrow. All the plastic, except the shrouds, comes from a Yamaha YZ. The shrouds are unique because they are at least twice as thick as anything we have seen before — great for protecting the radiator.

Soon, however, things get strange. The kickstarter is located on the left side and the starting procedure requires the use of the compression release lever. The combination of an oddly shaped kickstarter and long stroke cause some difficulty in consistently starting the big ATK. After some work, we were able to find a technique that brought the lump of a motor to life.

This is one area that definitely needs to be corrected before production. Once started, though, things get pleasant quickly.

There is a guilty pleasure in riding a big, open-class bike. Both shifting and clutch use

become afterthoughts, just turn the throttle and go; there is power everywhere.

Any rider of a large-displacement two- or four-stroke will feel comfortable on the bike. As part of the R&D process, ATK is experimenting with different displacements.

With such mammoth piston size, it is not a high-revving motor. Peak power comes at what would be considered mid-range on most motors. What it does have is a wide sweet spot with plenty of torque.

Throttle response is predictable and the engine puts power to the ground smoothly. This lazy feel can be deceiving; it deadens the sensation of speed. Get on the gas and the terrain starts moving by at startling speed. Clutch actuation is light and precise and allows the bike to be started in gear. The five-speed, wide-ratio transmission shifts well, too. Neutral is also easy to find, though it did balk some at hard downshifts while under power, such as hill climbing.

Chassis

Our test bike was very much set up for open terrain. The Paioli inverted fork is relatively unknown in the States and has a mixed reputation. We can offer up no complaints here; the fork seemed to absorb everything in its path, including whoops and high-speed, square-edged road crossings.

The WP shock works on a linkage system and was suited to the conditions. We didn't get to put the suspension through a wide range of abuse, but it would be up to racing a National Hare & Hound race. The Brembo brakes offer strong stopping power.

As the terrain gets tighter, the 700 requires more attention. The front-end feel was

somewhat vague and turning required some planning. Sliding forward to get body weight over the front wheel helped to carve around the turns. Smooth riding is the key to making good progress in the tight stuff. We feel ATK could consider offering different offset triple clamps. These have become so common in the aftermarket now and really do seem to help in both front-end feel and turning effort in the woods.

This bike proved enjoyable to ride, and the large displacement shouldn't scare riders. After all, a 700cc two-stroke is a large, capable engine. Don't let the size fool you, however. Compared to, say, a WR450F or KTM525, the ATK feels right in the ball park — but with more power if you need it.

After the initial acclimation period, the bike feels normal. The seating position is natural. The pegs sit high, which gives good clearance over rocks and logs. This large motor is bound to have some vibration, but it is low frequency and not particularly bothersome.

ATK is experimenting with various motor displacements from 370cc to 700cc. Expect that it will offer at least two different sizes based around the same basic chassis. As our test bike was very much in the prototype stage, there is very little hard information that we can pass on, as specifications are bound to change. Final pricing has yet to be established.

Where Did We Ride?

The Little Sahara Recreation area in Utah gave us the unique chance to ride some true sand dunes. This is an experience that everyone should try once; the dunes make an average rider feel like a hero. It is also where large motors rule the terrain. **R**

A Little Bit About ATK

We had the opportunity to visit the ATK factory in Centerville, Utah, while testing the new bike. CEO Frank White was kind enough to give us a tour and a little background about ATK as well as its future plans.

Founded in 1984 by Horst Leitner, ATK will soon be celebrating its 20th anniversary. The company's name comes from its first patented product, the "Anti-tension Kettenantrieb," hence ATK. This system eliminated the effect of chain torque on the rear suspension.

Later came custom frame kits for Honda XR600s. ATK produced its first bike in 1988, powered by Rotax two- and four-stroke engines. The Rotax motors provided a proven and reliable platform to build around.

White, a life-long off-road enthusiast, first started working with the company in 1992. He and his father then went on to purchase ATK and made the move from Southern California to Centerville, Utah — just north of Salt Lake City.

White sold his interest in 1995. When the new ownership and

management ran into difficulties, White was called back to consult in the late '90s. He eventually repurchased the firm in 2001 and is now the sole owner.

Through all this, the company has seen a steady progression. Never a stranger to technological innovation, ATK was the first to put into production such exotic things as fuel injection, a countershaft-mounted rear disc brake and no-link rear suspension.

ATK motorcycles have won national championships in motocross, off-road and dirt track. It recently adapted the dirt-track model into a popular super-motard bike, the DTM. Variations of this model are being developed for police and government use.

