# **GALLERY OF THUMPERS**

WHAT YOU CAN BUY & WHAT YOU CAN'T

• The Four-Stroke World Championship provides a showcase for thumper technology. You can find everything from production bikes in the Pro class to wildly modified minis and hybrid, handmade machines. Then there are the vintage bikes, restored to full glory. Here is a look at the hardware, some more obtainable than others.



Honda XR600R: For \$3799, the XR600R provides the sweetest motor on the market, decent suspension, great brakes and agile handling. The bike starts easily, shifts well and has a light, strong clutch. However, the motor could use some more punch for motocross, and the

suspension is too soft for warp speeds. Also, the bike is one of the heaviest thumpers available.

Race mods: Punch comes in the form of the HRC 628cc big-bore kit, which includes the piston, new primary gears, cam, clutch parts, valve springs, jets and gaskets. This costs \$998 and doesn't include a K&N filter (\$36.25) or Super-Trapp silencer (\$149.95). Total cost, as it sits, is \$4983.24.



Husqvarna WXC610: Pete Murray's Husky 610 cost \$4890 before he modified it. Stock, the Hoosk has a very fast motor, decent starting, a smooth gearbox, a weak clutch, light weight (266 pounds) and weak brakes. The Showa suspension is decent and has a lot more potential than in the past. Handling is very slow, with a good mix of cornering and stability. The throttle is hard to turn, too.

Race mods: For more power, Pete added a Cycle Service Racing ([310] 548-6874) pipe (rear section only, \$200), cut holes in the airbox and rejetted the carb (190-200 main and raised the needle one position). He also installed a carb spring from a Bing for a lighter pull. AMP 25-pound springs (\$69.95) and raising the oil level to 130mm shape the fork, while CSR revalves the shock (\$130). Pedro prefers wider footpegs (\$45) and he lowered the gearing slightly for Perris (going from 14/48 to 13/49). Race cost is around \$5350.



Husaberg MC501: Gordon Ward's 501 is the most motocross-ready of all available thumpers. It has a full-race motor much like the potent Husqvarna (being designed by the same engineers) but has much less flywheel for quicker acceleration. It has a close-ratio, six-speed transmission for off-road/enduro work, and shifting is good. The clutch has a long actuating arm for a light feel at the lever. Power is incredible off the bottom, and it revs out nicely, but it feels like it's going to fly apart at top revs. Suspension is as good as production White Power



Former four-stroke World Champ Ty Davis rode an ATK with a trick mixture of old and new parts. Those jumbo 46mm conventional forks are Suzuki works units from his old Suzuki ride. The dual (countershaft and rear wheel) rear brakes are '93 ATK items.



The word "awesome" gets used so often that it has all but lost its meaning. Check out this White Bros. Yamaha TT640 and its handmade aluminum tank and swingarm. Now THAT'S awesome. This bike has earned more four-stroke titles than any other and it's still going strong. Don't you wish your '83 looked like this?

components can be. Brakes are weak, and the bike is so compact that it's hard to wrench on it. It handles well, though, like a Husky. Cost is \$6599.

Race mods: "I took the lights off of it." (The FE stands for Four-Stroke Enduro. The 499 Cross goes for \$6499 and a new 600 Cross, which will be available soon, costs \$6999.)



KTM 600LC4 DXC: Regional Marketing Manager Scot Harden built this ultra-trick LC4 at KTM West. The 600 DXC sells for \$4995, stock. For that, you get a bike that feels a lot heavier than it really is. The Muller air fork defies tuning and the fork offset is different (not better) than the two-strokes. Starting is inconsistent. Clutch pull is light, but shifting is on the heavy side. The 560cc motor is weak compared to the Hoosk and Husaberg. Handling is very slow, much like a Husky with seized head bearings. Parts prices are astronomical.

Race mods: A White Bros, big-bore kit bumps displacement to 612cc and compression to 11:1. It comes with an Arias 100mm piston (\$149.50), copper head gasket (\$33.25) and sleeve (\$76.95). Labor is \$150. A hard-faced W.B. cam costs \$150 with your core. The Megalloy SuperTrapp megaphone goes for \$174.95. Scot slipped on 500/550 forks, which would cost \$1149.50, and Answer Pro-Taper handlebars (\$140). White Bros. wide pegs (\$24.95) and seat cover (\$35.95) aid control. Tom Moen revalved the suspension. Renthal sprockets and a Regina Pro Series chain complete the rather costly package (just under \$7300).



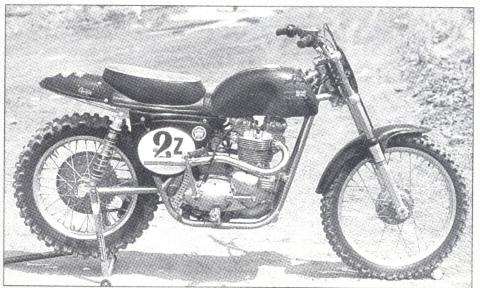
ATK 604EFI: ATK's Willy Musgrave rode a wild-yet-available project bike at Perris. The standard 604 EFI (Electronic Fuel Injection) costs \$6295 and the bike weighs in around 275 pounds. The advantages of electronic fuel injection are numerous, the biggest being that you have two carbs in none. Sensors meter fuel and air at small throttle openings, getting rid



Look at this bike and you are looking into the future of four-strokes—from XRs Only. This 630 is a test bed for their 630 kit. The pipe is special, the cam is secret and the 630 kit is all XRs Only parts. Its White Power suspension is part of an experimental XRs kit.



Development work on ATK's frame kits for Honda XR engines continues. Fine Line Racing, in a cooperative effort with the ATK factory, has updated the kit to include White Power suspension, a rear disc and a group of modifications for the XR engine. The built-to-order kits cost less than a new XR. They weigh less, too. Would you like to lose 35 lb.? Call ATK.



If you are tired of fooling around with little 630s and 640s, you might want to test your skill aboard a full-sized dirt bike, like the '71 Rickman Triumph 750. Vintage Iron uses this museum-quality machine as a race bike!

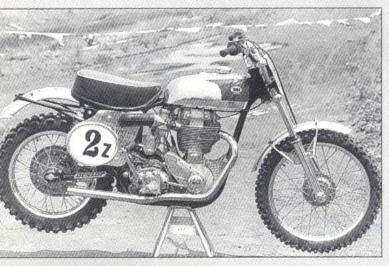
### **GALLERY OF THUMPERS**

of the infamous ATK camminess, yet you have immense flow at high revs. The 604 shifts on par with the Husky and Husa-

berg, and ATK trickery yields a light clutch pull at the expense of some feel. Suspension is good, and the bike handles well, as long as you are hammering. This is a race bike, pure and simple.

Race mods: Willy used a trick half-

pound sealed battery to power the EFI and save weight. The EFI throttle body is an astonishing 44mm, and the 604 has been punched out to 620cc, in-house. Suspension is stone stock, and ATK's dual-rear-brake setup is used.



This '60 BSA Gold Star Catalina, named after the famous Catalina GP, looks very stock at a glance but it's full of carefully selected, vintage class-legal updates like the light, strong, powerful Yamaha front brake, the CZ rear brake, a Mikuni carb and Works Performance shocks.



The business world has its Fortune 500. The vintage racing world has its fortune 500. This ESO 500 was built in Czecho-slovakia by Jawa, though CZ parts were used extensively by the factory to improve performance. Power is provided by Jawa's 500 speedway single with a gearbox grafted on. Why the fortune 500 nickname? The bike has a \$12,000 price tag.

## RIDING THE CHAMP'S MACHINE

MIKE YOUNG LETS US WRING OUT HIS WXC

• Cagiva Italy made huge improvements on the Husqvarna line for '92 but did not export motocross (WMX) models to the United States, feeling the machines would not be competitive in the market-place. Cagiva North America wanted Husqvarnas back on American MX tracks, so two riders were contracted to develop the WXC.

Cagiva North America wanted a Pro and a Vet to do development, so Mark Muller of La Habra (California) Suzuki/Husqvarna stepped up to the plate with Mike Young (Pro) and Pete Murray (Vet Pro), both *Dirt Bike* test regulars. The two riders would develop the 610 WXC separately. For the year, Mike receives two 610s from Cagiva, \$3000 in expense money, \$3000 in hard parts and a possible \$3000 in contingencies, which La Habra Husky matched. Mike's job is to develop and promote the bike, and to win races.

#### NOT TOO TWEAKED

Remember the ancient saying, "To finish first, first you must finish"? Young does, so he modified the bike slightly to fit his riding style instead of tweaking it until the bike became unreliable.

The motor is plenty fast, but it could rev a bit quicker and hit harder. Young milled a pound off of the flywheel and had Yoshimura mill the head 0.020". An Up-Tite Husqvarna pipe (\$289 w/SA) freed the motor up even more, along with cutting nine pounds of high-placed heft. With these mods, Mike was able to hammer third-gear starts and holeshot more radical machinery. It comes out of corners much harder, too.

Paul Thede's Race Tech did the suspension. Thede said, "The stock suspension felt pretty mushy and didn't handle small bumps well. All damping was pretty slow, especially rebound, which caused packing and loss of traction. We revalved both ends to give a more progressive feel on small stuff yet still resist bottoming. Spring rates are considerably stiffer, with .425 kg front and 6.4 kg rear springs."

With a faster motor and better hookup, the brakes became a weak point on the WXC. Mike overheated them, so the brake fluid was replaced with high-temp Motul fluid. Pads are replaced frequently, because the thicker the pad, the more insulation you have between the disc and caliper.

That's about the size of it. Young is operating on a tight budget, so he doesn't get to replace clutch plates as often as he would like. He has found that you can shim the springs 0.020" and get longer use out of a set of plates.

#### SO, HOW DOES IT WORK?

"I love this bike," beamed Young after winning both Open Pro motos at Perris. "We worked a lot on the suspension—the bike has a front-end bias, so it was pretty hard to dial it in. It hooks up well now, so With a shaved flywheel and heavily modified suspension, Mike Young's Husky 610 explodes berms like an Open-class two-stroke, except it doesn't stall like one.

I can go as fast as it was designed to go. I can hold it on longer and dive into corners deeper. It rails ruts and turns on a dime. It jumps great, too. I can jump anything on the 610 that I can jump on my RM250.

"The motor is great. I can get on it and pin the throttle, and it runs killer. It hits much harder out of corners and revs quicker, and it revs out further, so I don't have to shift as much. Just hold it on and shift up for long straights and it hooks up perfectly.

"The brakes are the biggest improvement, though. It has great brakes now. I can go into corners much harder and outbrake people. When I was chasing Ty Davis, we were about even out of corners and down the long straights, but I made time on him going into corners. Ty crashed trying to keep from getting passed in the corners."

While more radical machines were breaking, Young won both Open Pro motos with his slightly modified Husky. Mike tweaked the motor just enough to gain quickness, not mega-horsepower. The key was proper suspension settings and killer brakes to better put the available power to the ground. The WXC still has that long Husqvarna feel, but the lighter weight and better hookup make it much more pleasurable to ride—and much easier to ride fast.