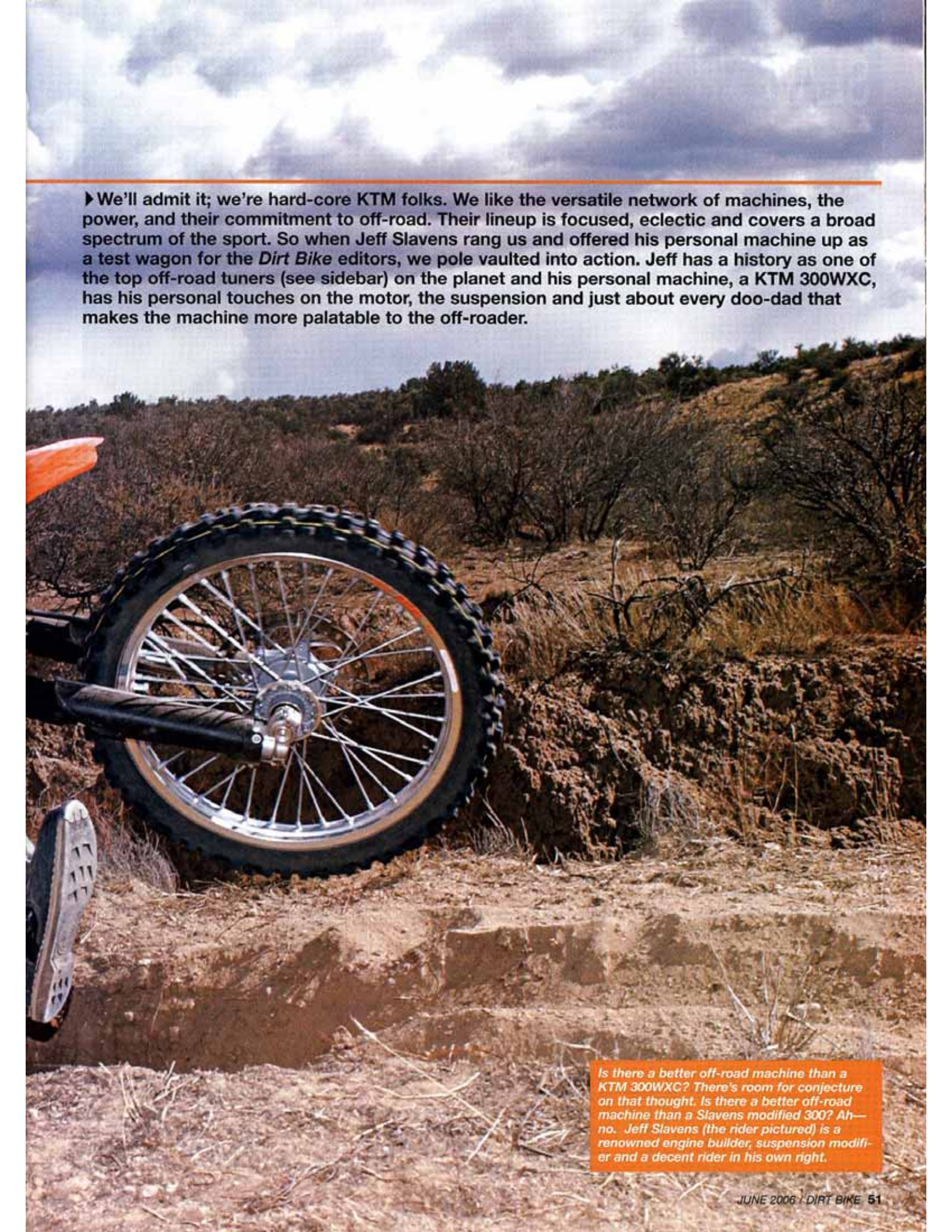


THE SLAVENS MULE

Quite simply...stunning.





► We'll admit it; we're hard-core KTM folks. We like the versatile network of machines, the power, and their commitment to off-road. Their lineup is focused, eclectic and covers a broad spectrum of the sport. So when Jeff Slavens rang us and offered his personal machine up as a test wagon for the *Dirt Bike* editors, we pole vaulted into action. Jeff has a history as one of the top off-road tuners (see sidebar) on the planet and his personal machine, a KTM 300WXC, has his personal touches on the motor, the suspension and just about every doo-dad that makes the machine more palatable to the off-roader.

Is there a better off-road machine than a KTM 300WXC? There's room for conjecture on that thought. Is there a better off-road machine than a Slavens modified 300? Ah—no. Jeff Slavens (the rider pictured) is a renowned engine builder, suspension modifier and a decent rider in his own right.

SLAVENS MULE

Slavens spends considerable effort fine-tuning aspects of the KTM 300, which he feels is the best off-road bike going. Suspension, rock handling and power improvements highlight his surgery.



HOW I MAKE IT WORK FOR ME—JEFF SLAVENS

In Jeff's words, "I chose the 300 over the four strokes primarily because the lighter weight enables me to enjoy 100 mile days of tight single track and matches my slice and dice riding style, not the plan-way-ahead style needed for the heavier four strokes. My first 300EXC was a 1990 model and I have purchased a new one every couple of years since.

"Here's what I like about the stock '06 300: it has improved low-end power, a steeper steering-head angle (which makes the steering more planted), it's quicker and lighter (only after the suspension balance has been corrected), has improved clutch feel, a slightly larger fuel cell, and much improved fluid flow in the WP shock. My dislikes are poor suspension balance, the front end rides high and deflects while the rear end is harsh (kicks) and mushy, with a low chopper ride height that compromises steering precision."

Because Jeff lives at 6000-foot elevation (Colorado) and his typical ride is between 7500 and 13,000, power and jetting are critical. The trails he enjoys are tight, rocky, gnarly, single track trails with switchbacks and steep uphill with gnarly downhill (he hates whooped-out ATV-wide girly man trails). At 6000 feet in elevation the engine has approxi-

mately 20 percent less compression than they do at sea level, and with each gain in elevation the compression ratio becomes lower. This, according to Jeff, has a dramatic effect on the powerband, making the low-end weaker and the powerband narrower. Because the high altitude robs low-end power and because bottom-end torque-monster engines excel in rocky, rooty alpine terrain, he focuses all of his engine mods in that area.

THE MOTOR

With the sole goal of coaxing more bottom power out of the 300, Slavens performs some pretty dramatic surgery on the top end. The cylinder is decked, which means that he machines the bottom (to lower it); this raises the compression and retards the port timing. At the same time the head is milled to increase the compression. The exhaust boost ports get raised (the same amount that the cylinder is decked) and the transfer ports get re-shaped and textured for proper fuel atomization. All of these mods target increased bottom to mid power and complement each other (meaning that you can't deck the cylinder and not reshape the port timing). He installs an 11-ounce Steahly flywheel weight (smoothes the transition from bottom to mid power and increases traction), fits a Power Now intake wing (decreases carburetor bore turbulence, which improves throttle response



The cylinder gets decked (lowered), all porting is re-massaged, the head gets milled, the jetting highly tuned, a Power Now intake wing is used and Jeff equips his machine with an FMF Gnarly pipe. E-Line provides a carbon/Kevlar skid plate which Jeff says is critical for his Rocky Mountain rides.

and allows for leaner jetting that improves fuel mileage) and jets the carburetor to work at high altitude (6000-13,000 feet: 35 pilot, 7.0 slide, G-2 needle, 145 main).



Slavens completely revalves the rear end and then fits it with a progressive spring. The combination of the two make for a traction improvement, better braking, improved cornering and enhanced bump absorption.

THE SUSPENSION

According to the Slavens camp, with the suspension issues are multi-tiered. The fork is soft, harsh and deflects, while the shock sags, deflects, limits traction and affects the steering precision on the machine. Jeff totally reworks the fork, stiffening the spring (a .42 WP coil) but fitting it with lighter, far more progressive valving. His goal is to make it work in the rocks, yet take a big load without falling through the stroke. Deflection in boulder litter is his pet peeve. With the rear end, he also revalves the WP unit and uses a progressive Race Tech spring. Because the machine lacks any rising rate to the suspension, the spring helps gloss over the lack of linkage. His valving provides a more fluid action, absorbs the hack, and doesn't fall through the stroke and bottom harshly on low speed g-outs.

ODDS AND ENDS

Jeff runs a BRP top triple clamp and a Scotts steering damper. The BRP unit is ergonomically friendly and the Scotts damper is a must for any machine that rides in the rocks. Cycra Pro bend handguards are attached to the stock bulge bar (Jeff craves the roomy feel and their inherent strength) and mount to the triple clamps via AM billet mounts. Dunlop tires, a 756 front and a new 742 rear offer up superb bite, and Enduro Engineering's Odo guard and rear shark fin protect both the rear rotor

Slavens is a big boy, and he had issues with the standard suspension. He felt that the fork was way too harsh, the front end wouldn't track, and the rear end lacked compliance and would blow through the stroke too easily. After riding with his mods we can say that it rates as the best KTM silverware that we've ridden with.



and the odometer. Because his machine snorts harder down low, Jeff alters the gearing from a 13/50 to a 13/48. Two less teeth make for a longer spread of power and a better cruising speed for two-track sections.

THE ACID TEST

Juha Salminen would hate this bike. The Finnish rider likes thick jetting and the Slavens wagon is flat gnarly! It's crisp, it's nasty and it rips out of the hole. Frankly, we were stunned and had issues with the potent juice factor until we got away from the "slam it and rev mode" and switched to the "shift quick and use the meaty portion of the power." With the additional bottom and mid power, this machine craves a tall gear and pulls enormously hard. This translates into max traction, and things happen with very little coaxing out of the pilot. The more trail time we got on

the machine, the faster and more controlled we got on the trail. According to Jeff, "It's really good in Colorado where the elevation makes for skimpy air. In the mountains the normal 300 runs like a choked chicken; mine hauls the mail."

Equally as impressive were the Slavens' suspension mods. It feels stiff, rides up high and we tended to think that he's blown it and set it up for Supercross. But on the trail the action is incredibly smooth, the fork no longer deflects on glancing blows and the cornering has improved dramatically over stock. Both ends absorb the trash that infects your ride; the stutter, hack and half dome rocks. Add this newfound stiff, yet fluid action to the Scotts damper and the manners on the 300 went from vague, bouncy and a bit hard to hold a line, to smooth, don't stress over the small uglies and attack.

SLAVENS MULE



Overall, we were about as pleasantly surprised as a recent lotto winner. Great mods in a stunning machine and, unfortunately for us, a bike that we had to give back. Jeff is too big to irritate.

Jeff runs Cycra handguards, an SDG tall saddle, fork skins (to protect the tubes) and this machine was fitted with Dunlop rubber fore and aft.



With the additional bottom power of the decked, ported and massaged cylinder, Slavens drops the rear sprocket two-teeth. This keeps the power smooth and gives him more top speed for transport sections. The T.M. Designworks chain guide is brutally tough.



The Cycra hand system is a clean mount-up and provides super ergos. You hardly notice that they're on.



A BRP top clamp, and bars in the forward position mate to a Scotts Steering damper. Jeff likes the ergo enhancements that the BRP unit gives and flat won't ride in Colorado without the Scotts damper. An Enduro Engineering odometer guard protects the nifty little mileage device.



"Quiet power is the key to off-road's future" claims Jeff. He runs an FMF two-stroke Q (which is longer and quieter than the standard Turbine Core II) which may dampen the standard bottom power a bit, but on the Slavens scoot it works great with the abundance of low to mid power that it breathes out.

MOTOR

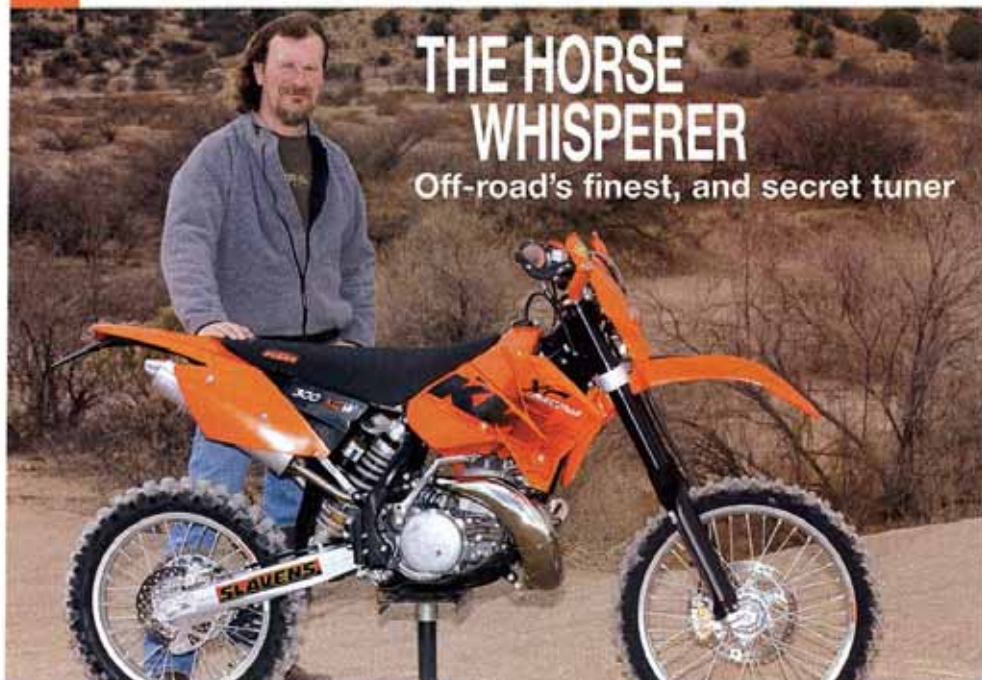
Porting: \$300
Cylinder deck: \$50
Head machining: \$50
Power Now: \$99

SUSPENSION

Re-valve forks w/0.42kg/mm WP springs (\$300)
Re-valve shock w/Race Tech P25 spring (\$355) (The Race Tech spring is very heavy and ugly primer grey. Within 3 weeks I will have my own brand that will be lighter and orange.)

BOLT ON ITEMS

Cycra hand guards: \$100 with Am Pro billet mounts: \$55
BRP Top Triple Clamp with Scotts mount: \$229
Scotts Damper Kit: \$425
EE Odo guard: \$65
Black fork guards: \$29
Stealthy Flywheel: \$99.00
Scotts Damper: \$425.00
BRP Triple clamp: \$219.95
E-line skid plate: \$159.95
Fastway pegs: \$125
TM chain guide: \$69
SDG tall seat: \$110
Front brake cable guide: \$10
Flatland Racing rear shark fin: \$89
Trail Tech cylinder flange guard: \$40
FMF Gnarly Pipe: \$229
FMF Q silencer/spark arrestor: \$169
www.slavensracing.com



THE HORSE WHISPERER

Off-road's finest, and secret tuner

Jeff Slavens is the owner/operator of Slavens Racing. He's a one-man doctor who has a long and storied past of building engines for many off-road champions. From Terry Cunningham to Barry Hawk, Slavens works when and for whom he wants to.

► We sat down with Jeff Slavens at a fine Flagstaff establishment, sucking on a good bottle of cab following an epic ride in the mountains around Sedona. What follows are his thoughts on off-road, problems within the sport and his history within our world.

HISTORY

"I worked for a Suzuki/Maico dealer in Illinois in '73/'74 then moved to Colorado in '75. I worked for a dealer for a short time, and then opened a Maico shop that grew into a large multi line dealership. After that I took a two-year vacation then opened a race shop. Now I have downsized to an extremely small one-man operation and work when I feel like it. I'm very selective about the type of jobs that I will do. Much of my time is spent with real

estate investments, travel, product development/testing, and trail riding.

RIDERS I'VE WORKED WITH

Terry Cunningham, Husky—1985-86 National Enduro Champion (In 1986, the top six enduro riders all used Slavens ported Husky's)

Rodney Smith—I met Rodney at the Washougal MX National in 1984, ported his MX bikes, and taught him how to split cases and re-jet carbs. I sent him carburetor specs, cylinders and heads to Brazil for five years, traveled to Brazil twice for international MX events, tried to train his mechanics (at a World GP the mechanics disappeared and I found them in an old school bus drinking a home brew that could have been used for race fuel), tuned his bikes for the events, and ported his RMs for GNCCs



Complete motors come to the Slavens race shop from Team Am-Pro Yamaha. Jeff dissects, massages and fine tunes every aspect of the engine.

until 1999. We cruised the Brazilian countryside on Cagiva 125 street bikes and checked out the hot chicks in Rio.

Kevin Hines—KTM 1987 National Enduro Champion

Dave Bertram—Husky, Suzuki-ISDE Golds

Mark Hyde—Husky 1986 National HS Champion

Jeff Russell—KTM 1991 National Champion

Fritz Kadlec—Husky ISDE Gold

Malcolm Smith—Malcolm uses my jetting specs/kits when he comes to Colorado every year.

Currently—Tunes for Team Am Pro Barry Hawk, 2004 GNCC Champion, Charlie (Hot Rod) Mullins Jason Raines and Randy Hawkins (He used my porting for every championship win and I've worked with him since he joined the Husky team in 1985 or 86?)



At six feet four inches tall and the look of a testy mountain man, Jeff Slavens is outspoken about off-road, the future of the sport, and his peeves with certain aspects of riders.



Dirt bikes are just one of Jeff's passions. An avid horse person, Jeff has run the gamut from cowboy to Dressage (horse dancing) and is a familiar face in that world. He's known for his teaching and travels to Germany every year for classes.

Jeff had his own Maico shop in the mid seventies and tried to spend as much time riding the machines as working at the dealership.



Slavens not only built the motors for Terry Cunningham and Fritz Kadlec, he performed all of his own testing and R&D. Randy Hawkins has used Slavens motors from his Husky days, through Suzuki and currently with Team Yamaha.

PROBLEMS

The top two problems facing trail riders and effecting land closures are loud four-strokes and ATVs damaging motorcycle-only trails and making new trails. In Colorado these two issues dominate complaints received by the Forest Service concerning OHV use. I am very aggressive about educating motorcycle and ATV riders that I meet on the trail and more people need to do the same. I refuse to ride with people who have loud bikes and customers who bring loud bikes in for work are quickly informed about the problem and I refuse to work on their bike unless the exhaust system is changed to a quiet model. So far all of them have purchased a quiet system.

The only way to slow down the noise and ATV problems is through education. OEM and aftermarket manufacturers, dealers, clubs and lobbying groups need to make this a priority. Most dealers and manufacturers are part of the problem, not part of the solution. The dealers should give brochures to all dirt bike and ATV buyers and host classes about proper trail etiquette and noise control.

THE AVERAGE JOE

The largest demographic group of trail riders seems to be 35 to 60-year-old B&C riders, many of whom have wrist and knee issues. They need plush suspensions and torquey engines. Too many of these riders often buy MX bikes with narrow powerbands that easily stall and have extremely harsh suspension. Unfortunately, few suspension tuners ride tough trails and therefore don't understand what it takes to set up bikes for those riders.

WORKS IN PROGRESS

I do engine and carburetion development for Team Am Pro Yamaha and joint ventures with Gizmo Dave. The stock engines are fast enough to be

competitive; my job is to make them more user friendly and to improve the fuel mileage for less frequent fuel stops. Barry and Hot Rod like bottom-end short shift engines, Jason likes an all around engine, and Randy wants them to have more bottom, mid, and rev to the moon. I'm also on call for consulting.

PET PEEVES

Four-stroke riders who just don't get it when it comes to noise, girly men (what ever happened to the guys who trail rode BSAs?), chat room guru losers, whiney lazy schmoes, racists, and people who won't donate money to Blue Ribbon and COHVCO.

2-STROKE vs. 4-STROKES

I am a hard core two-stroke guy. Although the majority of my customers ride four strokes and I'm an experienced four stroke builder/tuner, I have to admit that I am a two-stroke snob. I love the light weight, instant boost, ease of and lower cost of maintenance, precise handling, lower center of gravity, and the KTM 300 is the most reliable dirt bike on the planet, period!



Hard-core and tough pretty much highlights one of the best tuners in the off-road world.

THE FUTURE OF OFF-ROAD

It's going to take some changes in the way that we think. Off-road riders need to become pro-active versus reactive in land closure issues and they need to get out their wallets. Motorcyclists in general are very independent and this may be our Achilles heel. The greenies are better funded, better organized, and pro-active.

We are also going to have to make a big push to police and educate our own. As Americans become more affluent, the improper trail use and noise issues will become more prevalent, because more dirt bikes and ATV's will be purchased. □