

EXCLUSIVE 2005 450 SHOOTOUT

DIRT BIKE

WPS 34355

DIRT BIKE

NOVEMBER 2004

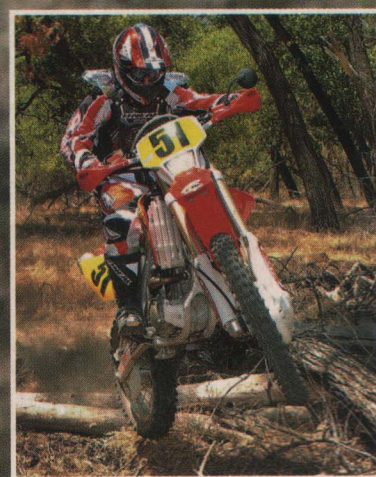


MX & OFF-ROAD RATED

- ALUMINUM YZ250
- SUPER LIGHT CRF450
- STUNNING KX250F
- BRUTAL YZ450
- FAST KTM 125
- INTENSE KX125

BIG TEETH FOR THE HONDA CRF250X

SECRET TRAILS EXPOSED! DAVIS, ROESLER, KIEDROWSKI, ABBOTT CAUGHT IN THE ACT




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2005 YAMAHA YZ450F

Soothed, but not smoothed

▶ Let's see, Yamaha pretty much single-handedly primed the four-stroke revolution. They owned the market with their potent YZ400, the steroided 426 and the brutally efficient 250F. Then Honda clawed their way into the fracas and pushed the 426 into the corner with a more powerful, lighter and easier to swallow open class beast. Yamaha's response came in a bigger muscled, full 450, which drew mixed reviews. Glitchy jetting glued to too much throb had altered the status of the easy to ride, properly powered open class four stroke. For 2005, the third generation of the bulked-up YZ450F has received another dose of technology and its sole focus is to upstage the CRF450, which has been sitting at the top of the mountain ever since the birth of the four-speed 450.



TELL ME HOW

One of the main goals with the '05 YZ450 was to instill some manners in the beast. Racers howled for smoother power, less jolt and a softer bite when the throttle slammed open. Yamaha changed the cylinder head, the combustion chamber, dinked with the carburetion, altered the flow rates in the airbox and updated the ignition mapping with the sole goal of making the powerband more controllable. The powerplant retains its dual overhead cams, counterbalanced flywheels and the often-ridiculed four-speed transmission. The titanium five-valve head mates to light valve springs in an effort

HIGH POINTS

- Improved fork
- Smoother power
- Perfect carburetion/jetting
- Easier clutch action
- Strong cornering habits
- Renthal bars

LOW POINTS

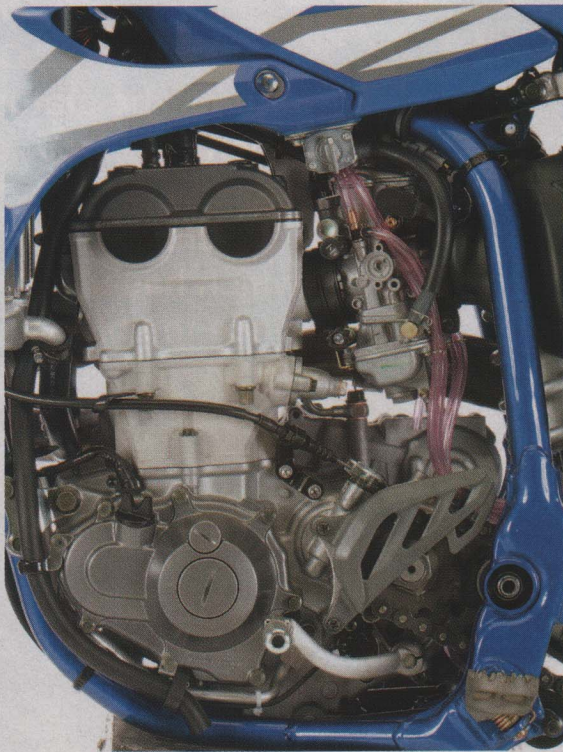
- Excess vibration
- Powerband could be longer
- Four-speed felt like it had gaps

Strong bottom power, softer and more controllable than past efforts, is joined to new suspension that makes for a more competitive open class moto machine.



The new 48mm KYB fork is Showa-like in that it separates the oil and air. The new TCV valve is the key and makes for a better action in the fork. It's not as plush as the Showa, but craves jump faces and nasty landings.

Large amounts of work went into refining the flow into the cylinder, new carburetion and head specs. The goal: a smoother, less abrupt flow of power.



2005 YAMAHA YZ450F

Refined is the name of the game with the '05 YZ450F. New suspension mates to smoother power, which targets faster lap times.



Further lightening was accomplished via a full Ti header (heat shield and flange included) and Ti footpegs. Excellent guards protect the engine and assorted pumping parts.

TYPICAL TEST CONDITIONS & SETUP

- 96°
- 1500'-2,300'
- 165 main, NFLR-4, 45 pilot
- 3 turns on fuel screw
- Fork: 8c, 13r
- Shock: 105mm sag, 13c, 11/2 hsc

been equipped with a new square tubed aluminum subframe, a stronger swingarm, and weight has been carved in areas that do not affect durability. The big news comes in the suspension and the all-new 48mm KYB fork. The fork isolates the air and oil (like the Showa Twin Chamber) separating them with TCV (transfer control valves). And like the Showa, the compression adjustment is now on the top of the fork. All new circuitry is found in the rear shock, along with strengthened linkage with multi-adjustable compression damping. Yamaha updated other areas, Renthal bars come stock (and are 90 grams lighter), there's a shorter CR style front brake hose for increased

to minimize the monkey motion in the head. Remember, less reciprocating mass equals faster revs. A new 39mm Keihin FCR carburetor features a throttle position sensor and the leak jet, which is said to deliver more precise fuel/air mixture ratios. They've shaved some weight out of the motor by shrinking the cam tensioner, going to a

full Ti header, flange and heatshield plus a lighter CDI unit. The kick-start system still hooks to an automatic decompression and has a handlebar mounted hot-start lever.

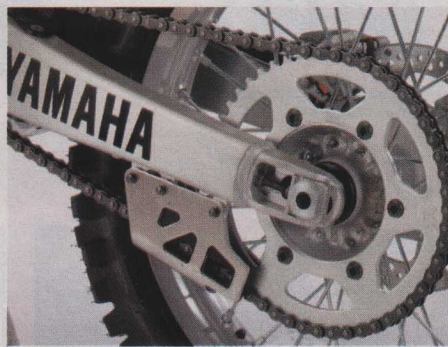
With the chassis, Yamaha did not choose to fit the beast with the new aluminum frame technology. Maybe next year? Instead, the steel frame has

2005 **YAMAHA YZ450F**

Good trackside manners are one of the benefits of positive suspension. We tweaked with the clickers, going stiffer on the fork for some tracks, softer for others. In the end, Yamaha's settings were very close to ideal though the fork is not super plush.



A Renthal bar is not only lighter, but stronger too. Good half waffle grips and an adjustable clutch perch high-light the cockpit.



A new swingarm graces the machine, as does a lighter, stronger chain guide. The stock gearing is quite good; the stock chain is a ten-ride tear off.



power, titanium footpegs, Dunlop 739 baloneys, and larger front fork guards protect the tubes.

HOOKIN' UP

Three things are very apparent after just one stint on the YZ450. She's smoother, almost calm compared to older 450s. The fork is substantially improved and the clutch action is easier. But that doesn't mean that she's docile. Bringing life requires a good kick (no throttle, just choke when cold). The clutch action requires less pull and has good feel, bringing immediate relief to the pilot. Also, the clutch lever features an AOF adjuster along with a hot start mounted on the perch. Ergo-wise the machine is slim, the bars comfy and the grips a nice combination of half waffle. The saddle is lowish (good height for riders up to 5'10"), the pegs high with all pointing towards shorter-legged jockeys. The saddle has a good gripper styled cover, but lacks absorbable foam in the back and rewards the pilot's glutes with a hard plastic smack on seated impacts.

YAMAHA YZ450F

Engine Type	liquid-cooled, 5-valve, DOHC, 4-stroke w/titanium valves
Displacement	449cc
Bore x Stroke95 x 63.4mm
Carburetion39mm Keihin FCR flat-slide w/throttle position sensor
Fuel tank capacity	1.8 gal
Gearing	14/51
Lighting coil	No
Spark arrestor	No
EPA Legal	No
Running weight	No
Wheelbase	58.5"
Rake/trail	27.2/4.7"
Ground clearance	14.6"
Seat height	39.2"
Tire size and type	
Front	80/100-21 739 Dunlop
Rear	110/90-19 739 Dunlop
Suspension	
Front	48mm Kayaba inverted telescopic fork w/adjustable compression and rebound damping; 11.8" travel
Rear	Kayaba single shock w/adjustable preload, compression & rebound damping & separate hi/lo-speed compression adjuster; 12.4" travel
Country of origin	Japan
Suggested Retail price	\$6,399
Distributor/manufacturer	Yamaha Motor Corp. USA P. O. Box 6555 Cypress, CA 90630; (714) 651-6300

2005 YAMAHA YZ450F

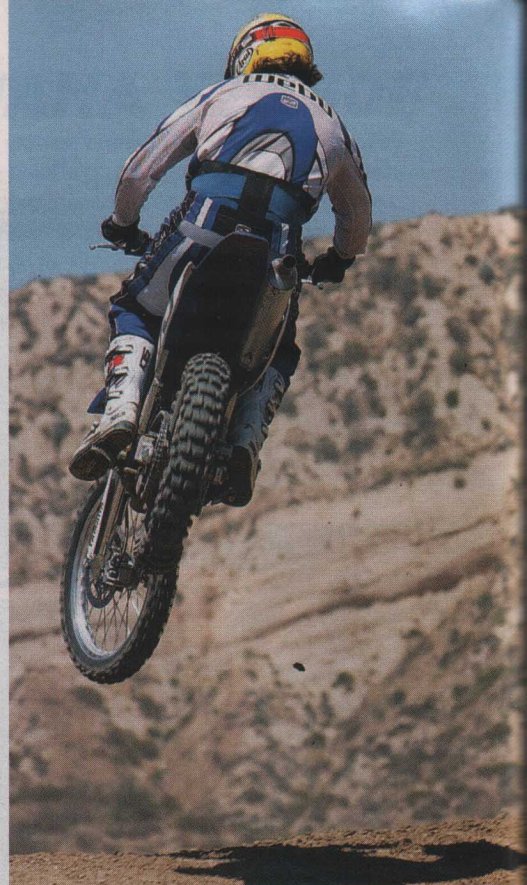
Power is smoother, but not any less tame. It lacks the snarl of older 450s and rewards the rider with a smart blend of juice from off idle and into the middle meat of the powerband. The benefits are more controlled thrust from corner to corner and less backlash when the throttle is chopped. With less seesaw-induced violence, the pilot can focus on staying sharp and polished with his acceleration, form and braking points. It doesn't particularly rev out and when combined with the four-speed gearbox you spend excess time hunting for possible gear selections that simply aren't available. We found that third and fourth gear pretty well sum up what we use, but felt a hole at rev-points where more upper hit would let you stay in it until the turn. And while the buzzword this year is smoother, the YZF still suffers from excess vibration, a habit that every test rider complained about.

The YZ shines in the corners and rewards the rider with a confidence-inspiring 'stick'. Pick a line and it sticks; hard pack inside, outside loose loam and slimy goo get chewed on with no glitches, lightness or tucking. Up front,

the new fork is not only much better on big impacts, it likes steep faced jumps and tedious whoops far better than the older units. One area where it's not overly happy is small chop and hack. The fork feels like there's substantial damping and it snaps back at the rider's hands when the track gets sinister. Overall tracking in rough terrain is methodical and focused. The YZF doesn't do anything weird; it craves the big jumps and loves to carve, slide or hunt for any line on the circuit.

AND IN THE END

Here's the skinny; the '05 YZ450F is a dramatically improved machine. The lack of throttle violence helps the rider stay smoother from corner to corner, the suspension's ability to absorb track nasties flattens out the scenery, and overall, less jurisprudence is required from the jockey, which means he can dwell on putting consistent laps together. Two out of three test riders felt that it needed more of a hit that flows into a longer pull. They don't want the vicious blow of last year's, just the ability to weasel the clutch and makes things happen. Kind of like the CRF450. Interesting. □



The Wolfster felt that the power didn't lack meat; it needed more of a hit. But overall it was smooth, easy to make fast times with though excess vibration could be felt through the bars.

THE QUICKER FIXER UPPER

Just what the doctor ordered

● One side of the YZ450F that our testers sniveled about was the lack of snap and rev. They did not complain about power, or the lack of it. At the end of one of the test days we bolted on a new Doctor D oval exhaust and were rewarded with the Holy Grail. This one modification let the machine snap to attention quicker and let it pull farther in the rpm range. Overall, the addition of a smartly focused mid-range blip seemed to smooth out the power even more and, with the additional rev, the lengthened powerband was even more controlled. While it sounds like we tried to undo Yamaha's smooth-out repertoire, we actually craved a channel into the lane that let the big guy breathe. The result? The same well coordinated roll-on, a livelier middle mated to the ability to yank longer made life in the YZ lane more palatable. The Doctor D system features a lengthened droop header and the D shaped aluminum rear can. The fit was perfect,



The Doctor D exhaust system not only lengthened the powerband, it sparked up the middle. Overall it made the 450 easier to ride. A taller SDG saddle is necessary for the long-legged crowd; it comes complete and is a stellar ergonomic mod.

the noise level identical to stock and it carved two ounces of weight from the steed.

We toyed with other odd and ends, mainly fitting into the machine. Most of our test riders and staff are over six feet, and felt cramped. SDG provided

us with a taller (10mm) saddle and this helped hugely. But that made the bars feel low and no amount of rotating them would cure their height. A switch to a taller Renthal bar helped to air out the ergos and makes all of our bigger guys smile. ●