

Yamaha's New YZ-C 125 Monocrosser

Every year it seems that a different classification of bikes gets special attention from the manufacturers. In 1973 it was the big-bore machines. They got all the trick suspension mods and super handling changes. Then last year the 250 machines got the work over. The Elsinore showed up, the Montesa VR came out, and Husky's new Mag machine appeared.

Now it's the year of the 125. Big corporate types are finding out that the most money seems to be spent on 125 machines. Monocross in particular is getting all the attention. Younger riders are looking for something that is quick, is going to last, and can be supported by a paper route.

Yamaha's introduction might just fit that bill. It's new, it's fast, and it combines the monoshock rear end that is found on the bigger machines. And it's no surprise. Yamaha got smoked into the weeds last year by its neighbor Honda, in the 125 class. Sometimes it looked like there were at least twice as many Elsinores sold as Yamahas, YZ or otherwise.

So the big top execs at Yamaha sent out a memo to designers that probably went something like "Don't produce it unless it will beat the other guys." The final product of that memo is the 125 YZ-C Monocrosser.

If you were to stand back and look at the new Yamaha, you would easily see the attention to detail and race-oriented work done to the machine. Most of the fancy chrome and pretty colors are gone. They're sticking to the yellow with black stripe, but all the frills have been discarded. They threw away the chrome kickstarter, and just painted the new one black. All the extra garbage that you would normally take off is either already gone or modified so that it works properly. The upswept pipe runs from the cylinder, around the left of the frame, over the head and out the rear on the right, behind the number plate. It's noisy, and won't please your neighbors a bit, but it can get the job done. It will also darken your left leg at about the kneecap, if you move up on the tank to corner the bike.

Reed induction is standard on just about all the Yamahas now, the 125 motocross machine included. It's coupled up to a 30mm carb, with the good choke lever, instead of that frustrating pull rod. The carb helps the machine in starting, but it still takes at least five to eight prods of the starter lever to get it fired. The 125s seem to be more hesitant to start than most machines.

The only thing we could find on the

From Second Gear On, It's a Winner. Below That, It Runs a Very Poor Third.

bike that wasn't totally motocross oriented was the shift lever. It's the same one found on the enduro machines, just unchromed and painted black to match the rest of the engine. The cover over the countershaft sprocket is gone, a note of warning to anyone who likes to test out a bike in blue jeans. The chain and sprocket will suck them right off you. The oil injection system has been tossed out in favor of the proven pre-mix method.

lot quicker than traditional Yamaha motors. The new bike appears to have gotten the weight off the crank and added *mucho* throttle response. Instead of waiting for the revs to build up, it delivers them instantly when the carb slide is open. You'd almost think that it had a trick ignition inside, it responds so quickly.

Out on the track the bike comes on very well and is obviously the recipient of some new internal combustion chamber designs. The machine is no longer sluggish and gives you the impression that it's burning a lot "cleaner" than last year's machine. It's also a lot quicker. The little 125 seems to have picked up at least two horsepower, quite a step in an engine that only has 7.5 cubic inches.



In a 40-minute moto, the gas tank will hold enough fuel to get you through, with just a tad left over. The front forks hint of a lot of travel and can extend a good three inches over the top triple clamps. Both brakes are black anodized and look like scaled-down versions of those found on the 250 and 400.

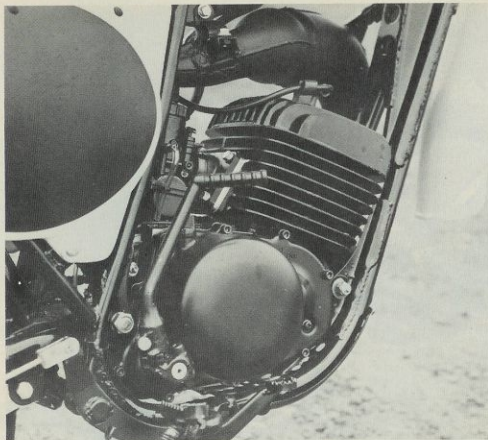
After we were done picking our way through the bike, it was time to fire it up and see if everything worked as well as it looked. Once started, the first major difference was noted. It will build up revs a

The entire package looks like a serious racer. The engine has a much racier appearance than last year's machine.

The suspension is also vastly improved. If you remember our 400 Yamaha test, we had problems with the rear suspension. It bounced too much going into a corner with the gas off. The 125 apparently wasn't taught this trick. If you're an average rider you shouldn't have to make any modifications to the



Tim Hart came out and helped us test the Yamaha. Jumping over lakes is not a prerequisite for getting on a factory team.



The kickstarter and six-speed gearbox are new, brake pedal and footpegs are too small, and the new carb is painted black.

Here's the 4.10 knobby that everyone will try to talk you out of. Brake rod can be bent for easier stopping.



The front tire could be replaced. It likes to wash around at any pressure and folds under during hard cornering. A Bridgestone just like the one found on the 125 Elsinore was substituted and the front end problem went away instantly.

Brakes on both ends work as good as they look. The rear is a bit sensitive, but it isn't a toggle switch like that found on the bigger Yamaha. It will still operate normally when the back of the bike is twitching over bumps (which it does rarely) and should give you positive feel. If it turns out to be too sensitive, merely loosen the adjustment, and with a heavy foot, step directly on the brake rod. This will put a bit of a bend on the rod, allowing it to flex a little more and not be quite as precise.

The front brake works just like a Yamaha brake should, provided you do a little modifying. The cable has a protective housing that runs about three feet long, to keep the retaining clips from wearing through the plastic of the cable. The result is that the brake isn't always going to react the same way every time you pull on the lever. The protective housing allows the cable to move around, up, down, sideways, and generally everywhere, adjusting the tension and play in your cable as you're riding. If you disconnect the brake cable at the bottom, you can fight the protective covering off. Otherwise, be careful with it until you understand how it works and why. It could be dangerous doing swan dives over the bars.

Even with the forks pulled up the triple clamps very far, allowing the front of the machine to drop down, the bike is light from the gas-tank filler cap forward. Wheelies are easily achieved by a mere wick of the throttle in the right



Sliding the bike was accomplished by getting up on the front and adjusting your weight from side to side to pull it straight again. Toe dragging is optional, and not recommended for the non-pro rider.

rear end. It tracks well with the throttle either on or off, and doesn't give cause to great alarm.

The front forks deliver almost as much travel as we suspected. They've got quite a bit of good shock absorbing characteristics built in and you shouldn't really need a fork lift. For the top-notch rider, the fork kit is going to do some good, but for the local expert rider, the simple fork oil change should do the trick.

Tim Hart helped us test the 125 for a

couple of days, and felt that both the front and rear suspension were right up to snuff with what he practices on. As a matter of fact, the only thing Tim wanted to change on the test bike was the length and angle of the handlebars. Otherwise, he was very happy with the machine.

The rear tire is going to be one of those tires that comes along once in a while that everyone wants to steal from you. It's a 4.10 by 18-incher and has got more sidewall tread than many tires we've seen on much bigger machines. You should note, however, that the pressure must be set down low (about 12 lbs.) before you go ride the bike, or else you'll take big chunks of knobs off it almost immediately.

gear. If you're riding down a straight-away and it seems to suddenly get smoother, it's usually because the front wheel is skimming the surface of the ground. It's not exactly in a wheelie, but it gets the front end so light that the wheel is barely touching the ground.

Now to answer the question that you're all wondering about. Is it faster than the Elsinore and the Suzuki RM 125? Well, yes and no. Now wait, don't throw the



Note the abundance of space between the tires and fenders. The little 125 has plenty of travel on both ends.

magazine down in disgust, we're going to explain everything.

First of all, the powerband on the Yamaha is much easier to work with than the Elsinore. The Suzuki comes in somewhere between the two. The Yamaha is broader and puts out just as many ponies as the Honda, up until you really get the two machines screaming, when the Yamaha will pull about 500 more rpm. So in that sense it is a lot faster. From about second gear on, it should pull your buddies who have stock Hondas.

But the problem lies in the transmission. That's where it isn't as quick as the Honda or the Suzuki RM. The shift from first to second on the monocrosser is a bad one. The bike will not shift under power through these two gears, although it does fine from second on up. For the average motocross racer, he's at a disadvantage at the starting gate. When you can't quickly get from first to second (very important in starts), you're going to lose a lot of ground going towards the first corner. This is where the Suzuki and Honda smoked the Yamaha. It couldn't get itself moving along quick enough.

Besides the hard shift, first gear is too low. It's too close to second gear, almost a waste of metal. We tried second gear starts and the 125 just doesn't have the torque in stock trim to pull it off quickly enough to compensate for the tranny

problem. The only solution we could find was to leave the throttle on and shift with the clutch from first to second. It worked, but the other two machines still pulled away from the Yamaha.

In your average start area that will allow you to go through four or five gears, the Yamaha can sometimes make up the ground once it gets past that miserable first cog. If it's a night race where you're lucky to get into third before the first turn, the Yamaha will trail just about every time.

Besides that one problem everything else on the bike is super. It's a comfortable machine, and it's dependable. We had to tighten the spokes after the first 20 minutes of break-in to get them seated properly. After that, you only had to check them after every day's worth of hard racing. Nothing broke off, came loose or bent that wasn't provoked by the rider. It's a very dependable machine that requires very little maintenance.

After the original testing sessions, we did a little tinkering with the bike. If it went that good in stock trim, it couldn't take too much to turn it into a super fast racer. We put a high-compression head on the bike and swapped the snaky unswept pipe for a screamer downpipe. The Yamaha instantly picked up more rpm, a broader powerband, and a little bit more low end. The torque improved up into the mid-range, where it petered out and the revs took over. We didn't mess with the cylinder, mainly because after some scrutinizing and measuring, we discovered that it already came with trick porting. At first we were suspicious. Usually our test bikes weren't "fixed up" by the factory so that they would get a good test. We grabbed a Yamaha 125 from a local racer, borrowed it for a day and checked out the porting. His was the same, and his machine was also stock.

After the head and pipe worked so well, we installed a Motoplat ignition

system. Another two horses were extracted from the little engine. The Yamaha already comes with a 30mm carb, so there was no need for one there. We found that it would work well with the 32mm, giving it even a little more boost in performance and mid-range, but the new bigger carb isn't necessary for the rider who isn't a total berserk racer.

So there you have it. With the exception of the funky gearbox, the Yamaha is running at the top of the field. It's going to pull its competitors on top end power, and with a little work should be able to easily put the pressure on the fixed-up Suzys and Hondas. The suspension is better than that found on the Honda rear and about the same as the RM Suzuki, until you get into the super gnarly sections, where the Yamaha will pull away just a tiny bit.

The bike is definitely competitive, and if this year is any indication of what's to come in the 125 class, we're in for a really good selection next year, including some very trick components and fantastic powerplants. As it is now, we're not sitting too shabby.



YZ-C 125

Suggested Retail Price: \$995

ENGINE

| | |
|---------------------|----------------------|
| Engine type | 2-stroke, reed valve |
| Horsepower/rpm | 20/10,500 |
| Bore and stroke, mm | 56 x 50 |
| Displacement, cc | 123 |
| Compression ratio | 7.5:1 |
| Carburetion | 30mm Mikuni |
| Ignition | CDI |
| Torque/rpm | 10/10,500 |

DRIVE TRAIN

| | |
|---------------|-----------------|
| Speeds | 6-speeds |
| Primary drive | helical gear |
| Clutch type | wet, multi-disc |

CHASSIS

| | |
|-----------------------|-----------------|
| Length, overall, in. | n.a. |
| Wheelbase, in. | 55 |
| Ground clearance, in. | 10.7 |
| Weight, overall, lb. | 194 |
| Frame type | double downtube |
| Tire size, front | 3.00 x 21 |
| rear | 4.10 x 18 |

| Max. Pts. | NUMERICAL EVALUATION | |
|-----------|------------------------------|---------|
| 10 | Power | 10 |
| 10 | Powerband | 10 |
| 10 | Acceleration | 8 |
| 10 | Transmission | |
| | (5) Ratios | 4 |
| | (5) Operation | 3 |
| 10 | Suspension | |
| | (5) Front | 5 |
| | (5) Rear | 5 |
| 10 | Brakes | |
| | (5) Front | 5 |
| | (5) Rear | 4 |
| 10 | General Handling | 10 |
| 30 | Miscellaneous | |
| | (5) Starting | 5 |
| | (5) Rider comfort | 5 |
| | (5) Quality of craftsmanship | 4 |
| | (5) Riding maneuverability | 5 |
| | (5) Tires | 4 |
| | (5) Noise level | 4 |
| 100 pts. | Overall Rating | 91 pts. |