

Yamaha 125 YZ shares looks with 250/360 YZs.



DUAL TEST

YANAHA 125 MX or 125 YZ?

By the Staff of DIRT BIKE

It's a confusing choice until you find the facts—
then you just don't care anymore



Standard 125 MX version shares many of the same components.

There's only one logical question and you know we're going to ask it: "Is the 125 YZ worth the extra money?"

And of course, there are only two logical answers: "Yes and No."

Huh?

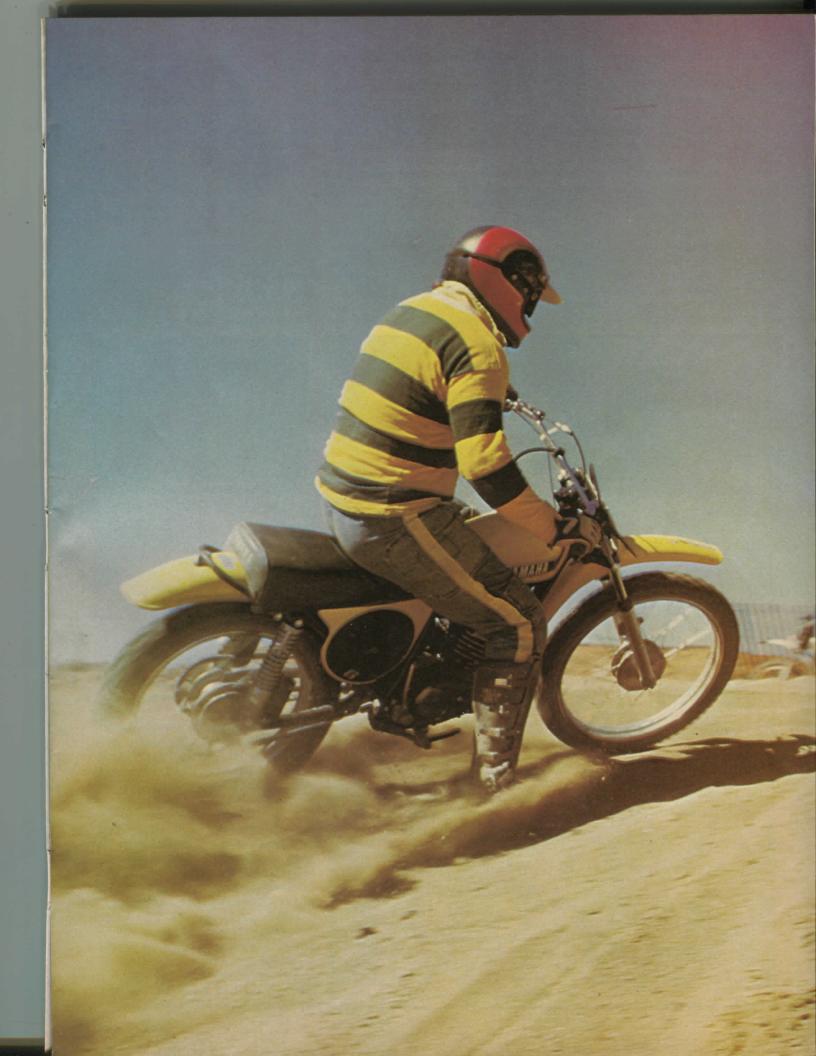
Back up for a minute and take a look at the differences in the two bikes. You pay about \$110 more for a YZ than you do for an MX. The trick stuff they give you is easily worth that. No way could you buy it that cheap if you paid retail for it on the open market. Differences, basically, are as follows:

125 MY

Paint — yellow and black
Weight
16 horsepower
Mild steel frame
Oil injection
Steel rims
Normal ratio gearbox
Ordinary gas tank
Magneto ignition
Little bits and pieces made out of
ordinary metal

125 YZ

Mostly silver gray
Less weight
18.2 horsepower
Alloy steel frame (lighter)
Pre-mix
Aluminum alloy rims
Close ratio gearbox
High-zoot gas tank that weighs exactly the same, but holds less
CDI ignition
Little bits and pieces made out of aluminum and magnesium



Let us add it up for you. Lessee . . . 35 bucks for the porting, maybe 50 for the frame difference, 30 for the rims, 60 bucks for the CDI and toss in 20 bucks for the odd bits and pieces. Disregard the visual stuff, as it does not make you go any faster. Anyway, you get the idea. Just about 200 dollars worth of goodies — some of which you may not need or want — but still, a bargain price for them.

What Yamaha has done, in essence, is eliminate the middleman. These things they have tacked on the YZ are pretty much aftermarket items that Yammie riders have been bolting on their bikes for years. If they could afford it, that is.

So in that respect, the YZ is most assuredly worth the tab. But we feel, in the final look, that overall performance is not that much different from the plain old MX version. Yes, the YZ is faster, but not that much faster. Lap times for most riders were about the same. And on a tight, twisty course, the standard model is actually a better machine, except in the hands of a top 125 class rider. Quite frankly, that top 125 class rider will not be on a Yamaha at all. There are better bikes in this class. Faster bikes. Bikes that handle in a superior manner. Bikes that cost more.

Which is one of the big reasons why so many riders are on the

Yamaha line of budget racers in the first place. Most of those faster, better handling bikes cost well over a thousand bucks - and need additional money to make them "right." Additionally, reliability on a stressed European 125 MXer is not all that wonderful. Just take a look at the activity in the pits between 125 Expert motos. Parts are constantly being worked on or replaced.

The Yamaha motocrossers, then, are primarily sold to huge numbers of Novices and play racers. They're affordable machines, and do indeed seem to hold up well. None of the budget buyers are content to leave the bike alone — everyone is constantly diddling with the carb



MXer is polished with some black.



External engine differences: YZ is flat black.

and hanging on one miracle expansion chamber after another — trying to make the damn thing run like a 400. Mostly, they just succeed in

altering the power curve and shortening the life span. Such is life in

the 125 class.

And life in the 125 class, in most of this country, is crawling with jillions of Yamahas. With this somewhat sobering thought in mind, let's take a very long, very hard look at the choice Yamaha is offering.

Obviously, the YZ has more beans than the MX. At least on top. But from 4000 rpm to 8500 rpm, the standard motocrosser offers almost a full horsepower more. Right at 8700 rpm, the YZ takes a deep breath and goes nutty. Take a close

1974 YAMAHA 125 MX

PRICE: \$708, suggested retail ENGINE TYPE: Reed valve, twostroke, single DISPLACEMENT: 123cc BORE & STROKE: 56mm x 50mm COMPRESSION RATIO: N/A CARBURETION: 28mm SC Mikuni HP @ RPM: (claimed) None

(actual) 16.0 @ 8500 rpm PRIMARY DRIVE TYPE:

Helical gears

PRIMARY RATIO: 3.894:1 FINAL RATIO: 3.13:1 CHAIN SIZE: #428

GEAR RATIOS: 1. 2.833

2. 1.875 3. 1.368

4. 1.091

5. 0.956

AIR FILTER: Wet foam ELECTRICAL SYSTEM: Magneto LUBRICATION: Autolube FUEL CAPACITY: 1.8 gallons RECOMMENDED FUEL: Premium RECOMMENDED OIL: Yamalube FRAME TYPE AND MATERIAL:

Mild steel FORKS: Yamaha; 5.7-inch travel SHOCKS: Thermal-flow;

4.2-inch travel TIRES: Yokohama Front: 2.75x21 Rear: 3.50x18

RIMS: Steel **DIMENSIONS:**

Wheelbase: 53.0 inches Ground clearance: 10 inches Seat height: 311/2 inches WEIGHT: 195 with 1/2 tank of gas and full oil injection unit on front wheel: 85 pounds on rear wheel: 110 pounds FOOTPEG HEIGHT: 111/2 inches HANDLEBAR HEIGHT: 40 inches **INSTRUMENTS: None**

SILENCER: Yes; good effectiveness PRIMARY KICK: Yes

1974 YAMAHA 125 YZ

PRICE: \$819, suggested retail ENGINE TYPE: Reed-valve, twostroke, single DISPLACEMENT: 123cc BORE & STROKE: 56mm x 50mm COMPRESSION RATIO: 8.0:1 CARBURETION: 28mm SC Mikuni HP @ RPM:

(claimed) 23 @ 10,000 rpm (actual) 18.2 @ 10,500 rpm PRIMARY DRIVE TYPE:

Helical gears

PRIMARY RATIO: 3.894:1 FINAL RATIO: 3.357:1 CHAIN SIZE: #428

GEAR RATIOS: 1. 2.833

2. 2.066 1.611

4. 1.315 5. 1.142

AIR FILTER: Wet foam ELECTRICAL SYSTEM: CDI LUBRICATION: Pre-mix, 16:1 ratio FUEL CAPACITY: 1.45 gallons RECOMMENDED FUEL: Premium RECOMMENDED OIL: Castrol "R"

FRAME TYPE AND MATERIAL: Thin wall alloy steel FORKS: Yamaha; 5.7-inch travel SHOCKS: Thermal-flow;

4.2-inch travel TIRES: Yokohama Front: 2.75x21 Rear: 3.50x18 RIMS: Takasago aluminum alloy

DIMENSIONS: Wheelbase: 53.0 inches Ground clearance: 10 inches Seat height: 311/2 inches

WEIGHT: 189 with 1/3 tank of gas Front: 81½ pounds Rear: 107½ pounds FOOTPEG HEIGHT: 111/2 inches HANDLEBAR HEIGHT: 40 inches **INSTRUMENTS:** None SILENCER: None

PRIMARY KICK: Yes

peek at the dyno chart and you'll see how steep the power curve is.

If riders of equal skill are placed on the two different machines, the winner will be largely dependent on what level of skill we are examining. If both riders are below average in riding skill, the rider on the standard model will probably turn quicker lap times, especially if the course is demanding.

The 125 MX is much easier to ride, with the powerband being tractable enough to allow trail riding. Second gear was strong enough for even the tightest turns on our test courses. As long as the bike had any forward motion at all, no clutch slipping was needed.



Typically well-mannered Mikuni carb allowed both race bikes to start easily and even idle.



YZ front brake was magnesium — MXer was the lower priced spread.

Some care had to be taken when riding the YZ — selection of the correct gear for the situation was an absolute must. Unlike the MX, the YZ didn't like to be forced at low revs and would blubber and moan if the motor was asked to work. A moment too late at the shift lever often meant that the rider had to go down *several* gears to regain momentum. There simply isn't room for error in the YZ's engine.

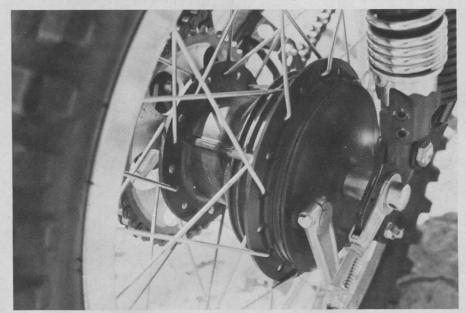
In the hands of fairly skilled riders, the YZ would surely pull the standard model — at least down the straights. Horsepower is, after all, horsepower.

To get an idea of the difference in output, we drag raced both the bikes a whole bunch of times,

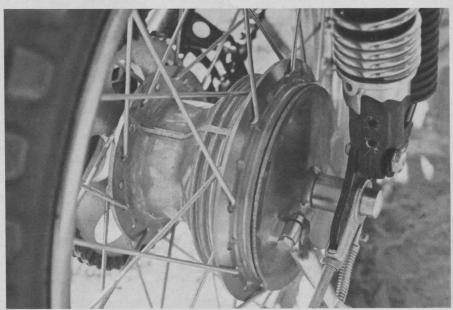
switching riders back and forth for comparison. Invariably, the MX would pull the YZ out of the hole and stay a length or two ahead until the bikes reached fourth gear. Then, the YZ would start to stretch its legs and edge ahead of the MX. It's fairly safe to say that the YZ is worth about one to one-and-a-half lengths at the first turn. Top end on both bikes is about the same, but the YZ will get there sooner than the MXer.

One interesting sidelight took place while drag racing. A Honda 125 showed up on the starting line with George Ethridge aboard. We put Russ Darnell aboard the Yamaha YZ and let him have a

string of passes to get used to the bike. Then, George and Russ punched off 11 straight passes the YZ winning all but one. Yup. In a straight line drag race, the YZ will edge ahead of a standard 125 CR Honda. A standard Honda, by the way, means one that is jetted too rich. As of this writing, Honda has not offered an assortment of jets for their bikes, and all of them come jetted far too rich. Shame. That means that, as delivered, a stock CR125 is down two, maybe three ponies. The Honda will, however, pull the MX version a bit. The big difference happens on the track, though, where the 125 Honda's broad powerband (5000 to 8000



Rear hubs look the same, except for paint. YZ assembly is a bit lighter.



MX rear hub is laced to ordinary steel rim.





MX version had enough tractable power to be trail ridden.

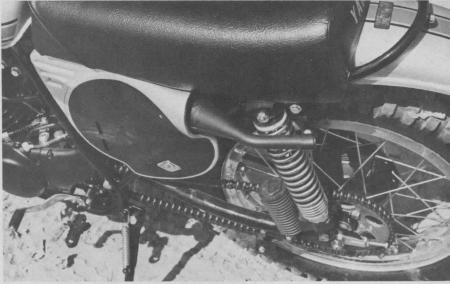
rpm) puts it on the YZ fairly well. Still, we preferred the power characteristics and output of the standard MX Yamaha over both the YZ and the Honda. It sure would be nice to own a Honda with a Yamaha MX engine.

HANDLING

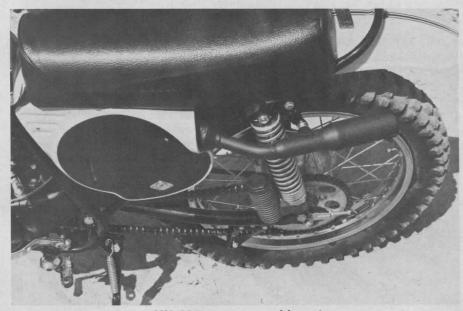
All things considered, the MX handled better than the YZ. Yes, the YZ is lighter, but the narrow powerband made the bike spooky compared to the cheaper model. Horsepower directly affects handling, and these two Yamahas prove this point rather clearly. Both chassis are identical in dimensions, but the MX is much easier to ride quickly. And on bikes with marginal suspension components, this is forcefully brought to light.

Mounted on the rear of both racers are Yamaha's very own Thermal-Flow shocks. While these shocks work OK on the big Yamahas, on these lighter bikes they appear to be a classic case of overkill. Even some of our beefeater-type testers complained that the springs were too stiff. When you consider the fact that most 125 class riders are smaller in stature, one can only wonder why Yamaha didn't cut that spring rate right in half.

Adding to the suspension problems is a set of forks (on both machines) that are positively loathsome in their performance. Yes, they move up and down — but that's about all they do. Harsh impact is transmitted directly to the rider — causing hands and arms to tire prematurely from the beating.



YZ was horribly loud.



MX 125 was reasonably quiet.



Both bikes share same bars, seats, miscellaneous hardware.

And no, a change of oil will not cure the problem. At least not any oil in this world that we know of. These forks are not only a step backwards, but a giant leap into the past. They appear to be the very same trash that is mounted on the Enduro line. Maybe they're not — but who really cares when they don't get the job done.

Adding to the staggering miseries in the handling department are the tires. These wretched excuses for knobbies are sooooo bad, that we can only guess as to what the chassis *really* handles like. Yokohama is the culprit and lack of traction is the crime. No knobs to speak of are on the sides and any time the bike is leaned over, the

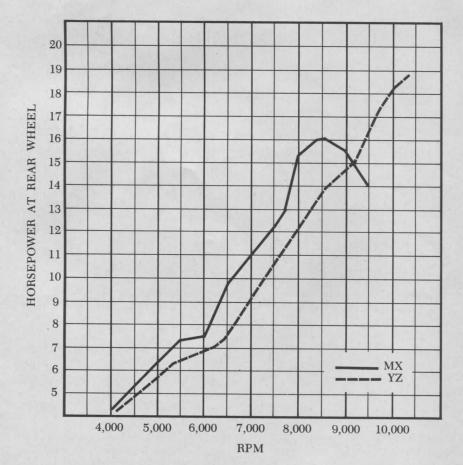


Skinny front tire on both bikes, combined with average chassis, made for several of these numbers.

square profile of the tire creates a panic situation. Even when the bike isn't moving. The shape and pattern are much like that of a 15-year-old Dunlop and you know how grim those things were.

Because of the square shape, if the bike has to make an abrupt change of direction on anything less than an ideal surface, the

machine will take little breathstopping hops outward. Or maybe a big hop. And on hard packed dusty surfaces, the rider will find himself in a constant state of recovering from a case of Terminal Wiggles. Like we said, the frame might be good, but we really don't know because the rubber refuses to cooperate with the rider.







Both bikes had well tucked in pipes, but could have used some heat shielding near the knee contact area.

In straight line handling, the Yamahas both appear to handle better than in years past. Some rearend hop is apparent, but not any queasy tank-slapping stuff. Aside from motocrossing the hell out of both bikes, we also took them out in the desert and entered a 50-mile hare scrambles. Here, both bikes worked well, but the MX version



Stinger broke off 125 MX - didn't seem to hurt performance.



Wretched knobbies allowed rear end to wiggle out under power-like this.



Big deal drag race — MXer would pull YZ through lower gears — but not down any long straight.

was clearly a better cross-country machine. Especially when climbing a loose hill, or attempting to shift up in deep sand. On the YZ, if the upshift was less than perfect, some clutch slipping or a downshift was in order. Too, the gearbox on the MX version proved more flexible under more conditions.

Under racing conditions, we

were able to get only 30 miles out of the MX gas tank and about 25 from the smaller YZ tank. Definitely not even enough for a long moto. Of course, a trail rider or desert racer will want to fit a larger tank to the bike, but any motocross bike should carry enough fuel for a 45-minute moto.





Andy Banes (from England) blips throttle just for fun.



Deep sand made small engine work - but didn't hurt it.



IN GENERAL

Braking has always been a Yamaha strong point — perhaps too strong on the rear, but both of these little racers are far too prone to rear wheel lock-up and subsequent engine stalling. Even after we bent the brake rod for sponginess (a cure we've used on many bigger Yammies), we were still stalling the engine often. Front brakes, on both bikes, are superb as per usual Yamaha practice. Water didn't seem to have much effect on either end of the bike's braking system. One or two seconds with the brakes applied got them back to original strength.

Shifting was beyond reproach on both racers — neutrals were caused by rider error, not by the gearbox. Even with the much shifted YZ, it was clickitty-click, with or without the clutch.

When first riding either bike, test riders complained of poor layout and feel. Nothing seemed to be set up for rider comfort. Knees are drawn up too high when sitting and the bars induce a strange crouch. The bike appears to have been designed for a four-foot, ten-inch rider with his crotch located an inch above the collarbone. Both bikes







feel shorter than they actually are, but the tape shows 53 inches on the wheelbase, with another inch and a half left in the chain adjusters.

The more the bikes were ridden (like most bikes), the more comfortable they felt. Still, they are not relaxing machines to move around on. One always has the feeling of being on the end of a tall chair. Whatever.

BITS AND PIECES

Chains on the YZ and the MX are identical. Pathetic. They kinked and stretched, rekinked, restretched and retightened. We lubed and adjusted until we were sick of the damn things. Right be-

up for a half-hour and left it a little on the loose side. At the end of the moto, it was as tight as a drum. This was on the MXer and we had similar happenings on the YZ. This chain should be taken off before the bike is ever ridden, and used to tie down a foo-foo dog somewhere. If you don't mind the critter escaping, that is.

Servicing the air filter is a minor hassle. Seems the filter doesn't want to squeeze out between the frame rails, so you have to deform it a bit. While you're deforming it, crud from the dirty filter drops right down into the air hose and you'll have to take that apart, too. The filter is one of those fuzzy foam things, fore one moto, we oiled the chain that sheds hair like a sheep dog.

Twin-Air, Filtron, Uni and K&N all offer replacements. Buy one.

Fenders are first-rate on both bikes and lived through several crashes. Good stuff.

Rims on the YZ are aluminum alloy with mud-catching ridges, while the MXer uses steel rims that don't catch mud, but bend easily. Six of one . . .

Both bikes have a horrible case of rear-end chatter when braking hard. Neither sports full floaters. Both need it.

Saddle is decent on the bikes and holds up well. Like most, it's slippery when wet.

Neat clamps and rubber boots abound on the bikes. Everything is held in place snugly.

Our exhaust broke off the MX (just the tip of the stinger) and didn't seem to hurt the power or make the bike any louder.

The YZ was so loud that we hated to ride it anywhere. For the racing, we installed a J&R silencer we had lying around. It didn't seem to hurt the power any. Might have even helped it a bit down low. Of course, that's just a seat-of-the-pants guess.

Nothing leaked on either bike during the entire test. Good.

Footpegs were nifty items and held the boot well.

Overall finish on both units was very good and both bikes are very good looking, if that means anything to you.

SUMMATION

Quite frankly, we like the yellow standard MXer much better than the YZ. It is a far more versatile motorcycle and much easier to ride. Because of the smoother power delivery, handling seems superior to the YZ and at racing speeds, the MX is less tiring.

We wish Yamaha had taken the extra \$110 and spent it on suspension, though, instead of hot rodding the motor.

Face it, both of these bikes will be purchased mostly by Novices and play racers and they need better handling, not more horsepower.

To answer that question we posed earlier, yes, the YZ is worth the difference in money. But they could and should have spent the money differently. We're positive that a rider on a properly suspended MX could beat hell out of a rider on a stock YZ. And that's what racing is all about, isn't it?