

# The new Yamaha This year, you'll either be

In motocross, distance isn't all that separates the lead rider from the rest of the pack. He's probably in better physical condition. His riding skills may be slightly more refined. Or, this year, he may just be riding a new Yamaha YZ.

## The power at the starting line.

To finish a race in first place, it helps if you can start out in that position. So Yamaha engineers have given the new YZ's more power than ever before. Peak figures

*Leading Axle Forks:*  
You have less rake,  
quicker steering.

range from 18 hp for the YZ100 to an amazing 41 hp for the YZ400. They're now equal to or more powerful than any other production racers. The powerbands are wider than on other motocross machines, so the torque comes on sooner and falls off later.

The flywheel inertia works perfectly with the suspension to get a maximum amount of power to the ground.

Typically, this year the YZ rider will be the first one into the first turn.

## The steering precision at turn one.

At turn one, you needn't worry about someone going inside your line. Because on most YZ models the front axle is actually ahead of the fork tubes, instead of underneath them. So the rake can be much less than on a conventional bike. This means you can steer quicker, the front tire bites harder. You stay in the lead.

You'll notice the handling on a YZ is also uncommonly stable. A new rigid, triangulated swing arm has eliminated virtually all flexing and wobble. As one magazine put it, the sensation is akin to riding a well-behaved slot car around a curve.

## It adjusts to you. Not vice versa.

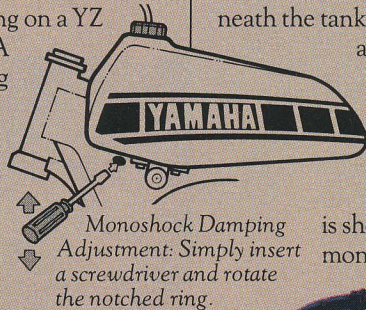
The YZ suspension has more travel than most long-travel suspensions. The YZ400, in fact, has over 9 inches, at both ends. So ruts, bumps, potholes and rollers are simply swallowed whole.

But the real beauty of a YZ suspension may lie in its total adjustability. You can set and re-set the spring preload on the new de Carbon-type nitrogen/oil monoshock right at trackside by simply turn-

ing a threaded nut. As for damping adjustments, you merely insert a long, thin screwdriver into the hole located be-

neath the tank and pry up or down on the adjustment ring. You have 17 recommended settings, or about 17 more than you'd have on a conventional racer.

One thing you'll have less of is shock fading. Because each YZ monoshock is encircled by cooling fins that help dissipate the heat that can kill damping efficiency. Plus each one has a



Monoshock Damping Adjustment: Simply insert a screwdriver and rotate the notched ring.

Lightweight

YAMAHA

New leading axle forks.

Capacitor Discharge Ignition System.

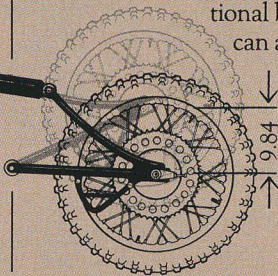
# YZ Monocrossers. on one or behind one.

unique thermostatic control. As heat builds up and oil thins out, it makes minute damping adjustments to compensate for the change.

Up front, the pressurized air within the air/oil forks acts like a second progressive spring, and can be finely adjusted by using the gauge supplied with every air-sprung YZ racer.

You can adjust fork damping by chang-

ing the weight of the oil as on a conventional bike. But now you can also alter damping by changing the amount of oil in the forks. So, while other riders are riding what they brought, you're riding what's perfect for track conditions.



## When you know how they're built, you'll buy a Yamaha.

Wide plastic fenders.

plastic tank.



New owner-adjustable de  
Carbon monoshock (on all  
models except YZ 80).



YZ 250



YZ 125



YZ 100

wheel travel (in.)	front	rear
YZ 400	9.84	9.84
YZ 250	9.84	9.84
YZ 125	9.0	9.0
YZ 100	7.7	7.1
YZ 80	5.2	4.2



YZ 80

### Engineered for winners.

Already, many people are piling superlatives on the 1977 Yamaha YZ racers, like "the fastest," "the best," "unbelievable," etc., etc. Who knows? All we can really say for sure is this: When the Yamaha factory team successfully dominated the recent Florida Winter AMA Motocross Series, they didn't have to resort to "factory bikes." Except for the handlebars and footpegs, they used stock, production YZ's. The same as you'll find now at your local Yamaha Dealer's.