

Yamaha Monocross is really much more than a new kind of shock absorber. It's a new kind of motocrosser that lets you ride faster than you ever have before. A motocrosser that lets you ride faster. Let us explain why:

Monocross = more travel.

When your bike hits a bump, conventional shock absorbers let the rear wheel travel about 3-3/4 inches. After this travel is used up, the bike's rear end starts traveling toward your rear end. This costs you more than a

kick in the pants. It costs you time. Because when the rear wheel leaves the ground, so does the power.

By mounting the Yamaha Monocross shock at 75° from the vertical, we increased the travel of the rear wheel to more than 6-1/4 inches. This helps keep the wheel—and the

power—on the ground.

Equally important, this longer travel means there's much less chance you'll perform the spectacular and much-dreaded "endo." This explains why Monocross riders can keep the throttle on when others are backing off.



Conventional dual shocks. After about 3-3/4 inches of travel, the shocks bottom. Result: Your rear wheel leaves the ground. You lose speed. You may even lose control.

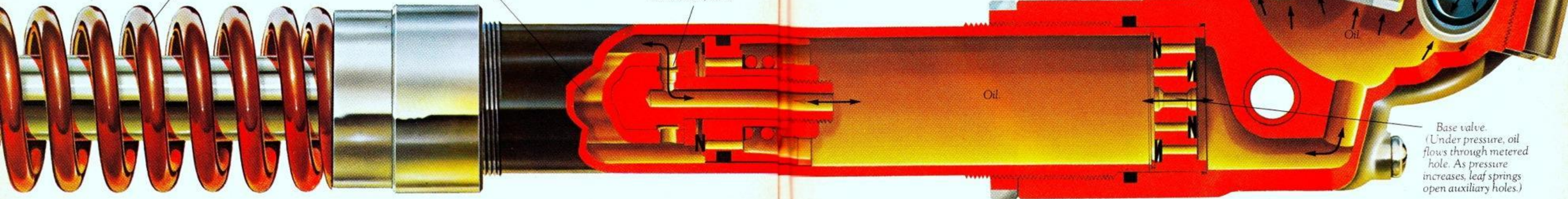


Yamaha Monocross. By mounting the shock absorber diagonally, rear wheel travel is increased to 6-1/4 inches. Result: Your rear wheel—and your power—stays on the ground.

Spring. (Available in three different weights.)

Piston rod.

Piston. (Metered hole controls oil flow.)

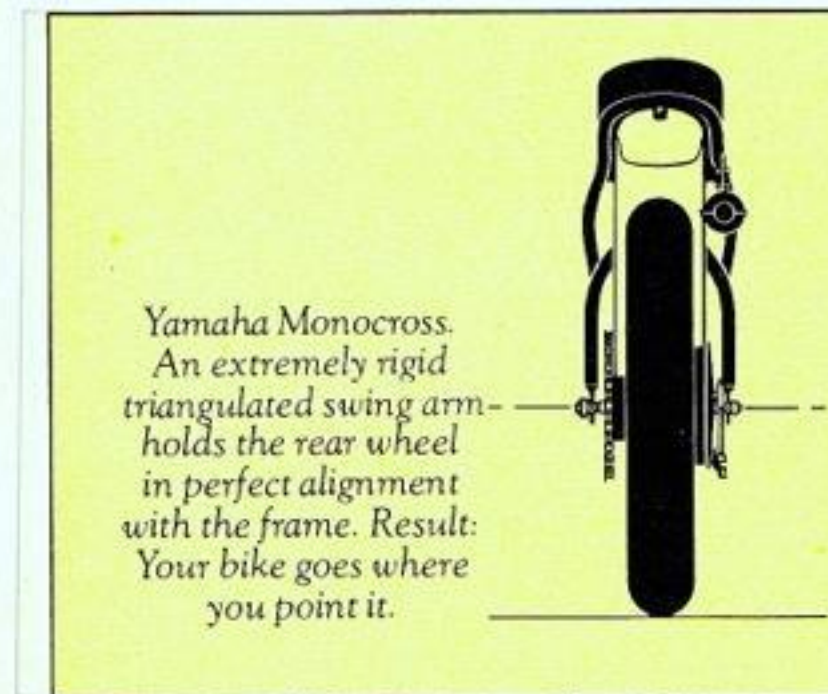
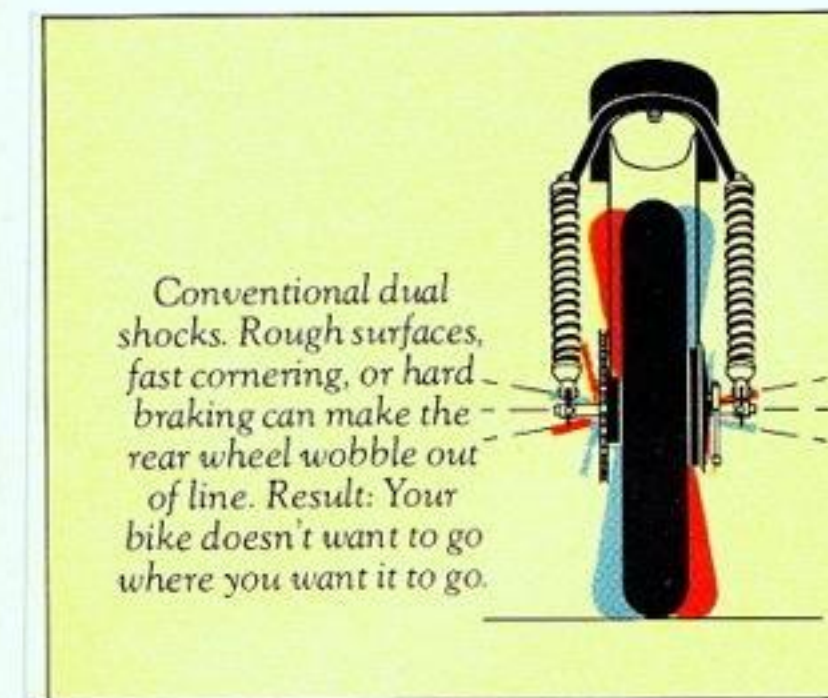
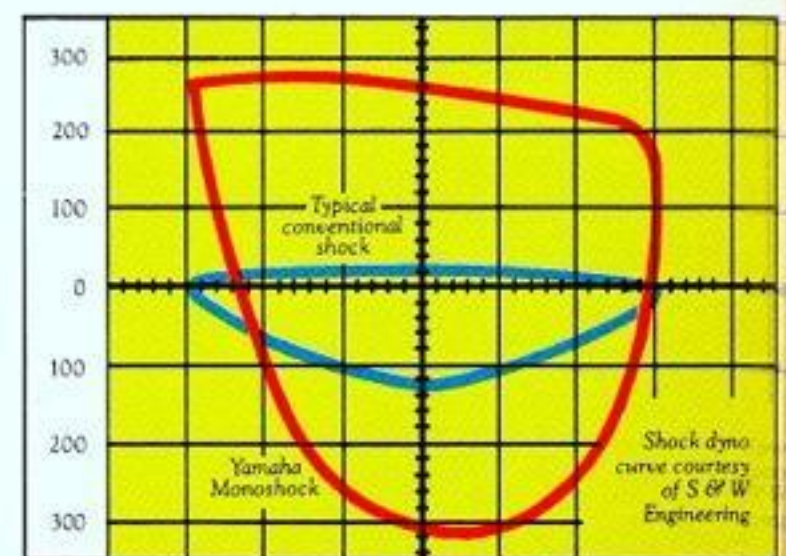


Monocross = better damping.

Yamaha Monocross isn't just a longer shock absorber. It's a better shock absorber. In addition to conventional oil damping, the Yamaha Monoshock utilizes a pressurized nitrogen chamber. Under compression, the oil displaced by the piston rod exerts pressure against a flexible

rubber membrane. Which exerts pressure against the nitrogen.

As the shock dyno curve shows, the compressed nitrogen acts like a second spring inside the shock absorber. The Monoshock is able to provide damping under conditions where conventional shocks cease to function. But this is just one of the Monoshock's beauties. Some others:



Monocross = better tracking.

With two separate shock absorbers, you get two separate responses to every shock. One shock absorber compresses more than the other. Your rear wheel is out of line with the rest of the bike. While you're trying to steer the bike through a turn or over whoop-de-doo's, the rear wheel is trying to steer you into the woods.

With Yamaha Monocross, the rear wheel is supported by an extremely rigid triangular swing arm. Instead of two wobbly shock absorbers. So the rear wheel is always in line. And you spend less time fighting the bike and more time fighting the competition.

Monocross = Yamaha.

Someday, all off-road motorcycles may have a Monocross-type suspension. Right now, however, it is standard equipment only on the Yamaha MX 250, MX 400, YZ 125, YZ 250, and YZ 360 motocrossers. Right now, riders of these machines have a distinct advantage over all other riders. That may be unfair. Or it may be progress.

1. You can make your Yamaha Monocrosser ride stiffer—or softer—just by having your Yamaha dealer change the pressure in the nitrogen chamber, a relatively quick, simple operation. (If you're determined to tinker, you can further fine-tune the suspension by changing the strength of the spring or the viscosity of the oil, just as on conventional shocks.)

2. When you sit down on a Yamaha Monocrosser, the nitrogen pressure keeps it from sitting down on its suspension so you can use all the Monoshock's extra travel for racing.

3. Nitrogen pressure also prevents air from getting into the shock oil. Which prevents foaming. Which prevents your suspension from losing its damping halfway through a moto.

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