
Suzuki's
all new
motocrosser:
RM125
1
1

The RM125

Laid-Down Shocks, Long-Travel Forks and a Faster Engine Are Just a Few of the Changes.

A lot of the press presentations that we go to are, to put it nicely, a bit boring. You sit through hours of technical information, most of which you already know. Then various members of the organization get up on the stand and tell you how great their machine is, the miracles it performs, and their plan to take over the world market this year.

However, Suzuki is taking a different approach, something that the other manufacturers should take a look at. Instead of sitting everyone down in a stuffy auditorium and reeling off hours of info, U.S. Suzuki got together 21 new RM 125 motocrossers, called up all the press and said, "Hey, do you guys want to go riding?"

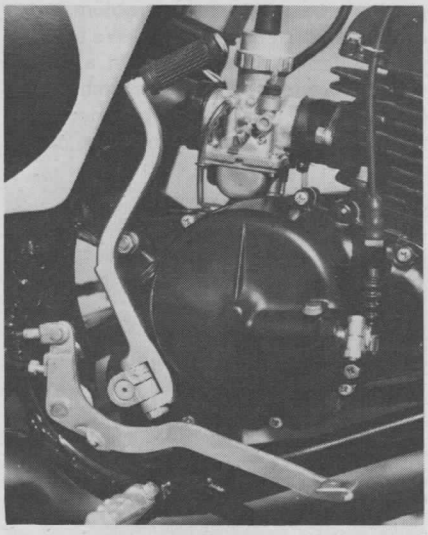
We were first fed breakfast, after which there was a brief but informative tech meeting. Not the usual garbage, but they only told us what the changes are. Most of the statements were followed by "Well, you'll see when you get out there and ride the bike."

The big change for the RM 125 is the suspension. The rear end has been given the laid-down shock treatment. A combination gas/oil shock manufactured by Kioba sits at a 36-degree angle on the rear swingarm. It is mounted farther up on the bottom than last year's shock, and the top mount is located about midpoint of the seat. With the shock in that position, the RM is getting close to 7½ inches of travel. Both the preload rate and the dampening are adjustable. The shocks are mounted upside down, to reduce unsprung weight.

Front suspension has also been changed, now offering longer forks and more travel to keep it in tune with the rear. The rake and trail are 29 degrees and 4.4 inches, respectively. As with the rear, the front forks offer 7½ inches of bounce reduction.

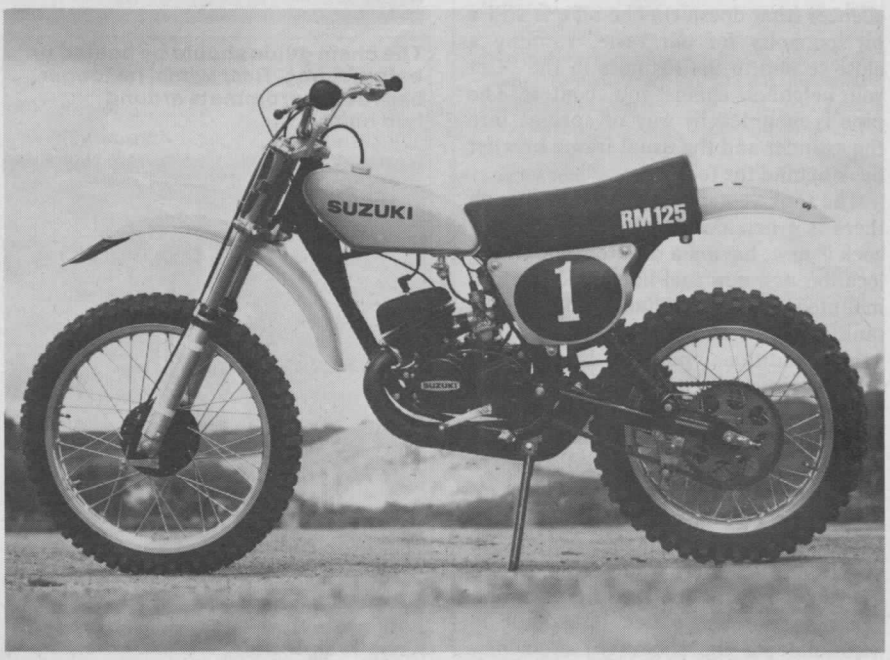
The majority of the engine changes lie inside the cylinder. Using a six-port system, the Suzuki RM has gained mid-range, top end and a bit on the bottom. The power inside comes from three large holes, with a bridge in between so that the rings on the piston won't get hung up and ruin your day. You've got six holes sucking up the gas/air mixture into the combustion chamber. Set in groups of two on both sides of the cylinder, a different set of ports performs a different function. For instance, when you're really screaming the 125, the top ports, which are the most radical and largest, are pulling most of the mixture through. Lug it around and the bottom two ports get most of the action.

Surprisingly, Suzuki decided to retain the five-speed gearbox that was featured on past machines. At first we felt that five would be a bit too restrictive, thinking about the Elsinore's six speeds. After riding the machine, we found that the gears were spaced well, and matched the improved powerband. It worked out to be a nice smooth combination. Suzuki put a lot of time and research into making a cylinder that would match the existing gearbox, instead of adding another gear so that your left leg gets a better workout. Instead of downshifting three times, you only go through two



The 28mm carb is new, small brake pedal and bad footpegs are old. Kickstarter tucks well out of the way.

The RM 125 likes to stay on the ground—and will deliver ample ponies while it's there.



Laid-down shocks, longer-travel forks and a faster engine are all offered on the new machine.

steps on the shifter.

Carburetion has gotten a little boost, adding 2mm to the throat bore. It's now a 28mm thirst quencher. One of the drawbacks is the new choke lever. It's the rod type like found on the YZ Yamahas, which you pull up and then turn to engage the enrichening device. It's hard to grab the small rod with gloves on. You can, however, go down to your Suzuki dealer and buy the old push-down choke lever. It will fit on the new carb.

In addition to the suspension changes, the RM has a six-port cylinder that is perfectly matched to the five-speed gear box.

The pipe has been redesigned, shortened and pulled down lower to the ground. It's a pressed unit, having two halves instead of individual cones. You might want to keep your eyes on the section of pipe that travels under the footpeg. It is there that the most critical bend exists, and if any cracking or breakage occur, chances are it will show up there first.

At the end of the pipe is a small silencer (that doesn't). The bike is still a bit too noisy for our taste, running a close second to the Elsinore in the "Get your neighbors against you" contest. The pipe is mounted by way of springs into the cylinder and the usual frame bracket back behind the footpegs.

The tank remains the same, although there is a new decal this year. The petcock is new, having a different mounting location and new fuel-line lead. It's still mounted on the lefthand side of the tank, where it should be. The seat has gained additional padding in the rear, gradually sloping upwards at the very back. "RM 125" is printed on both sides of the seat.

Last year's fenders worked fine, so Suzuki ordered more for this year's machine. There is no loop holding the fender onto the back frame section, an added plus for riders who get a little too over-anxious with the throttle at times. The side number plates bulge out to accommodate the shocks in their new position. If you look straight down at the RM, it looks like it's about six months pregnant.

Now to answer the big question. Does it go fast? Yes and no. It is a very quick 125, but the Honda, with its other gear, will pull it down a flat dirt road. In fifth gear on both machines, the Suzuki goes just a bit faster. Take sixth away from the Honda and the Suzuki goes faster. Give the sixth speed to the RM and it will pull the CR in sixth.

In rough terrain, the Suzuki in stock trim will pull the Honda in stock trim. The Elsinore has a tendency to bounce around in the rear when you're accelerating over bumpy terrain. Not too much, but enough to slow it down. The Suzuki keeps the back wheel down, getting more power to the ground. Given equal riders, the Suzuki should pull the Honda, due to the Elsinore's slight twitch.

When we first rode the bike, the front end was searching all over the track. A quick change of fork oil to a heavier grade cured most of the problem but it didn't completely disappear. We felt that the rake and trail were in just a bit too much, allowing the front to twitch about. Strangely, a rider doesn't notice it as much as a spectator. When you're on the bike, it doesn't seem to be too obvious. It searches a little, but nothing to be really concerned about. When you're watching from the side of the track, the front end business is evident. With the changed oil, you cure most of it, and it shouldn't hamper your riding style.

The chain guide should be beefed up before riding. Rear wheel no longer has rubber grommets around hub bolts.

Fork protectors and mud flap are both new. Overall, the RM is extremely slim.

The handling of the RM 125 has been greatly improved over the past TM. It now wants to zing in and out of a corner before you realize it. Where the front end is a slight bother on the straightaways, it more than makes up for it in the corners. Going back to the sharp rake and trail of the front end, you are getting a handling package that turns quicker and more precisely, much like a YZ Yamaha. The best cornering technique we found with the machine was to smash into a berm very hard with the throttle on. Just before impact, a quick twitch of the front end will turn the 125 around and head it back down the next straightaway. This model turns better than most of the 125 machines we've tested. It's extremely quick, giving you a lot less time spent changing directions. If you select the right gear going into the corner, you can smash the berm and come out accelerating at the best powerband position. The bike will shave off a lot of seconds on your lap times using this method.

For riders who don't like the bomb-in, fly-out approach, the Suzuki RM 125 will ride the entire berm. It's a cooperative machine and won't throw in little surprises to spice up your life. Again, if you want to use the whole berm (usually a bad choice) the front wheel will do a bit of searching, but stays basically where it belongs. It likes to wander, but it gets the job done well.

We also found that the Suzuki doesn't like to pull off those gigantic flying shots over big jumps. It enjoys keeping the wheels on the ground, especially in the rough. If you're going off a jump on your present mount and landing five feet out, you'll probably return to earth about a foot and a half sooner on the Suzuki. This not only gives you the advantage of having control sooner, but it also allows you to turn on the throttle and get power to the ground much quicker.

The brakes on the bike will stop the machine well, and are getting more precise each year. We were impressed mostly when the rear brake was being worked hard. It's getting to the point that you can feel excellent feedback by pressing the pedal with only your toes. To the rider, this means that he can tell when the brake is working right and when it's skipping across the top of the ground.

We had problems with the front brake at first, due to the grip design and size. The grips are the waffle type, and for some reason are hard to let loose of. They're "sticky" to the point that if you try to reach for the front brake, your fingers want to stay on the grip instead.

We would suggest you change to some better grips that have a good design and are a bit longer. Don't destroy the stock Suzuki grips—they work fantastic in extremely muddy races.

For best results at the starting gate, the old "screw the throttle on almost all the way" method works the best. If you rev the 125 to a little under mid-throttle and drop the clutch, it will die and load up at the line. A little more throttle and a couple of slips with the clutch was the best way out of the hole. Speed shifting, or shifting with the clutch while leaving the throttle wide open, was the best way to get the bike down the straightaway quickly.

As with most other bikes, there were a few things that we could change on the RM 125. The footpegs aren't the best. They're small and not properly spring-loaded. If your foot comes off the peg, sometimes it will fold up and you've got to hunt to get it back under your boot. Longer, wider spring-loaded pegs would be the better way to go.

They have also added a chain tensioner to the chain that works in conjunction with the guide. The tensioner sits right up by the countershaft sprocket. We felt that the 125 might be losing some power because of the drag created on the chain due to the tensioner. Experiment a bit and see which way works best for you. The chain guide should also be beefier. We've gotten letters from Suzuki owners who have had theirs break away from the frame. To solve it, you can get a welder to reinforce it before you do any heavy motocrossing.

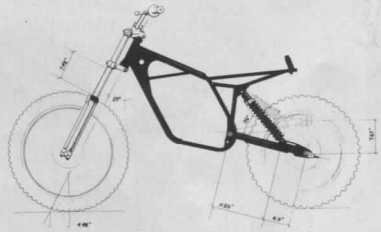
The brake pedal is also small and hard to find if you've got big feet. By bending it out about an inch, we found it easier to use, but we still had an occasional problem. Welding a slightly larger footpad on will help you find the brake when you need it.

Rim locks are getting a bit outdated, but when you first get the bike, they'll suffice. If you're ambitious we would suggest the sheet metal method of holding the tire in place. Also keep an eye on the guide that mounts to the cylinder. It holds the clutch cable in place and is prone to breaking away. Although this isn't a major problem, if you don't replace it the clutch cable wears a notch in the outer fin of the cylinder head. Buy a spare in case the original goes away.

Generally, Suzuki has put a lot of time and research into the RM 125. The engine is a vast improvement over last year's machine, and there is a hop-up kit in the works now that turns it into a screaming flyer. The suspension is getting right up there with what the hot-shoes are running. It handles quicker and a lot more precise, giving you the opportunity to shave a few seconds off your lap times.

So far, Suzuki has showed us that they are serious about their motocross machines, and are putting forth a great effort to give the buyer a bike that is competitive, close to what the go-fasties are using, and that still retain the dependability that the TM has always enjoyed. It's the first effort by a factory to change the suspension on a 125 to the laid-down method. The powerplant has gotten a tremendous boost. The all-around package is going to be right up in the front of the pack through the first turn.

John Sperry of U.S. Suzuki helped us all day and gave a good example of how the Suzuki likes to corner.



The major frame changes are illustrated here. Both ends of the bike are getting around 7½ inches of travel.

Max. Pts.	NUMERICAL EVALUATION	
10	Power	10
10	Powerband	10
10	Acceleration	10
10	Transmission	
	(5) Ratios	5
	(5) Operation	5
10	Suspension	
	(5) Front	4
	(5) Rear	5
10	Brakes	
	(5) Front	5
	(5) Rear	5
10	General Handling	10
30	Miscellanea	
	(5) Starting	4
	(5) Rider comfort	5
	(5) Quality of craftsmanship	5
	(5) Riding maneuverability	5
	(5) Tires	4
	(5) Noise level	3
100 pts.	Overall Rating	95 pts.

Suggested Retail Price: n.a.

ENGINE

Engine type	2-S, single-cylinder
Bore and stroke, mm	56 x 50
Displacement, cc	123
Horsepower/rpm (claimed)	23/10,500
Torque/rpm (claimed)	12.3 ft.-lbs./9500
Compression ratio	7.4:1
Air filtration	polyurethane filter
Carburetion	28mm
Lubrication	in fuel
Ignition	PEI

DRIVE TRAIN

Transmission	5-speed
Clutch type	wet, multi-disc
Primary drive	gear

CHASSIS

Chassis type	single downtube
Overall length, in.	80.3
Height, in.	44.9
Peg height, in.	13.5
Ground clearance, in.	9.5
Wheelbase, in.	53.5
Weight, lbs.	195
Tires, front	3.00 x 21
rear	3.50 x 18