

IND 34355

**KING LIVES!**  
Page 24

**SUZUKI RM125: "WORKS" RACER**

# **DIRT BIKE**

JUNE 1979 • \$1.25 Uk60p

**PHANTOM DUCK UPDATE**

**IT400: BIG BLUE**

**ICE RACING FROZEN BUNS & WICKED SPIKES**

**CAN-AM'S QUICK 250 QUALIFIER**



ISSN 0364-1546



DIRT BIKE ISSN 0364-1546 (June '79) is published monthly by Daisy/Hi-Torque Publishing Co., Inc., with editorial offices at 16200 Ventura Blvd., Encino, California 91436. Subscriptions \$15.00 for 12 issues (one year). Foreign subscriptions add \$3 per year and Canada \$2 per year for additional postage. Copyright © 1979 by Daisy/Hi-Torque Publishing Co., Inc. All rights reserved. Nothing in this magazine may be reprinted in whole or in part without the express permission of the publisher. CONTRIBUTORS: Photographic submissions must be 5x7 or 8x10 glossy black and white, or 35mm and larger color slides. Please mark each photo with owner's name and address. Manuscripts should be typewritten. Unsolicited contributions must be accompanied by a stamped, self-addressed envelope. Unless special arrangements are made in advance, all published material becomes the sole property of Daisy/Hi-Torque Publishing Co., Inc. The publisher does not assume responsibility for unsolicited material. Second class postage paid at Van Nuys, California 91408, and at additional mailing offices. DIRT BIKE, P.O. Box 317, Encino, California 91316.

**TESTS**

- 42 SUZUKI RM125N**  
Still the best?
- 30 CAN-AM 250 QUALIFIER**  
The legendary Canadian
- 50 YAMAHA IT400F**  
Shaggy dog
- 60 SUZUKI DS125N**  
Kids and visiting relatives

**TECHNICAL**

- 24 PROJECT TT500**  
King Kong lives!
- 54 SWINGARM TECH**  
Beating around the bushing

**FEATURES**

- 18 LEGAL UPDATE**  
Midnight skulking
- 21 ICE RACING**  
In June?
- 34 PRODUCT EVALUATION**  
Scott Boots
- 38 WHEN YOU BREAK**  
The 250s, part three
- 59 PRODUCT EVALUATION**  
Clymer Workshop Manuals

**DEPARTMENTS**

- 4 FROM THE SADDLE**  
Bench racing
- 6 OWENSMOUTH**  
Swat tactics
- 8 LAST OVER**  
Wet weather friend
- 10 MISTER KNOW IT ALL**  
Foaming at the mouth
- 12 NEW PRODUCTS**  
Step right up
- 14 RIDERS WRITE**  
Some of them do
- 16 BITS AND PIECES**  
Blatant obfuscation
- 74 CRASH AND BURN**  
Traction attraction

**On the cover:**  
Jim O'Neal approaches exit velocity on the IT400.  
Sieman photo.



# Suzuki RM125N

## EVOLUTION OF THE SCREAMING YELLOW ZONKER

Some things always change

By the Staff of Dirt Bike

This is the third in our series of 125 motocrosser tests: the RM125N Suzuki. The first was the Elsinore, the second, a KX125. Finishing out the Big Four, will be the YZ next month. Then, as previously stated, we'll stand back and take a hard look at how they stack up to each other.

Our RM is emerging as the missile of the group, and a sophisticated one, at that. It's no surprise that the "N" version of Suzuki's 125 bristles with every goodie to be found. Other than a few odds and ends, this latest version is as up to date as anything, in any class.

If you'll think back and count on your fingers for a while, you'll find that Suzuki has come out with five different versions of the 125 MXer in the last three years. They haven't bothered to wait for the traditional end of the year new models like the other Big Four manufacturers.

This has both delighted and teed-off the 125 class buyer. On the one hand, the bikes have been excellent state-of-the-art efforts for a fair price. On the other hand, it's frustrating to go out and buy a brand-new racer, only to have a totally new and updated model appear a few months later.

Still, this paid off for Suzuki in a big way. They absolutely dominate racing in the 125 class. While this may not be true at the National level, it's most assuredly a fact of life at your average track on any Sunday. The reason is simple. The RMs are the rocketships of the class. When you can get to the first turn ahead of the other bikes, your job is a lot simpler.

The first RM125s weighed in at right around 190 pounds, very light for the time. As the models gained travel and speed, they increased in weight with each and every model change. It's hard to go from 35mm fork tubes to 36mm tubes and *not* pick up poundage.

However, with the new "N" model, they've somehow managed to make a



maximum-travel 125 and shed kilos of lard in the process. Our test 125 weighs 187 pounds dry. Take off the removable kickstand assembly, and you save almost two more pounds. Pour some mix in the tank, add oil to the gearbox and forks, and you can straddle the RM125N at the starting gate at right around the 195-pound mark.

### How'd they get it so light?

By careful thought and trimming, mostly. No radical weight-saving steps were taken. For being a class leader, Suzuki is a conservative company that does not like to take chances with unproven techniques.

Most of the fat was trimmed by rethinking the sizes of fasteners, tabs, brackets, mounts and supplementary hardware. More weight was lost with relocation of components and trimming cases and covers. Mostly, the total weight savings was the result of paring a fraction here and a tad there, rather than going for any major surgery in any one area. This is actually the safest way to go about a weight loss, but, no doubt, hundreds of man-hours were spent by the engineers in the process.

A quick glance shows a smaller, lighter tank. The aluminum arm is trimmer. The clutch has been relocated. Even the actual frame is lighter. Less tubing is used and economical thought shows in gusseting and tubing junctures.

### Getting familiar

When slinging a leg over the "N" model, it's apparent that you're on a new generation bike. At well over 36 inches, the Suzuki is a tall bike, requiring that riders under 5'10" wear a non-binding set of leathers. We've watched more than one short rider catch a toe on the back edge of the saddle and topple over like a stunned cow in a meat factory.

Still, once astride the machine, the area where the saddle meets the tank is very narrow and dips a bit when seated, allowing the rider a chance of at least touching the ground with the tips of his toes.

If you're under 5'9", it's best to rest your left foot on something when kickstarting the bike. A toolbox or a milk crate usually serves nicely. The reason for this is obvious. Not only is the bike tall, but for some odd reason, every once in a while, the Suzuki takes a large number of kicks to get lit off.

There was no pattern to this. Hot, cold or medium temperatures would produce a three-kick start one time, then demand a 12-kick start the next time. We tried throttle settings, a string of curses and several prayers, but it didn't seem to make any difference. The bike would start easily when it wanted to and get grumpy when it didn't feel like it.

Compounding this, was the close placement of the footpeg to the kickstarter at the bottom of the stroke. More than once, we saw tears come to the eyes of a fully grown man, as he nailed his instep on the back of the peg.

But, once the bike was running, all of this was forgotten. Even when sitting on the bike, warming the engine up, you can tell there's a good, strong motor underneath you, just waiting to rev its brains out.

Easing the RM into gear, the rider will feel no lurch or clunk. You can't really tell you're in gear until the

clutch is eased out. Engagement proved smooth and over a fairly wide area. It didn't take the hands of a magician to get the right combination of clutch and throttle to initiate forward motion. This could prove a very valuable feature for a rider on a slippery, freshly watered track that calls for easing out of a snotty corner.

The first time you run through the gears good and hard, the solid rush of power almost fools the rider into thinking the bike pulls like a 250. While the surge is nearly as strong as a crisp 250, it doesn't last as long. There's a quick spurt of power to the rear wheel, then the rider had better shift right away.

Over-revving the 125, unlike the RMs of the past, will actually slaughter the delivery of the power. While the "N" model puts out a wild 26-plus horsepower at slightly over 10,000 rpm, it also drops off like a falling brick past that figure. Test riders who tried to ride the new bike like last year's machine were disappointed. When they were asked to short-shift the bike, they found out it worked a lot better.

Now, the RM could not be short-shifted like a 250, but you had to get into the next higher gear much earlier than you *thought* would work. The RM seemed to pull well from about 6500 to 10,000 rpm. This means that the left foot of the rider will be doing a steady tap dance on the shift lever.

Luckily, this is the best-shifting Suzuki 125 we've ever ridden. The only shift that demanded attention was from first to second. Here, unless the rider made a fairly deliberate stab, a random neutral would surface. Once in second, the RM could be upshifted under power, without backing off the throttle. We raced the Suzuki a number of times, and more often than not, it was Holeshot City.

We wished the RM would have had a bit more grunt down low, but then, some of the top end would have no doubt gone far, far south.

### Suspension, front and rear

Naturally, the RM is running long legs. Right around 11 inches at both ends. And, the quality of the travel has improved dramatically over previous efforts. Older RMs (all sizes) had an excess of compression damping, that would cause the forks to react harshly to sharp-edged bumps or square holes. The oil simply couldn't get through the holes in the damping assembly quickly enough. This meant that any sudden, violent impact would make the forks momentarily rigid. On rolling bumps, even deep ones, this was no problem. We're pleased to report that the new forks are genuinely improved. They



Our test RM125 won twice at Saddleback, once at Indian Dunes and picked up a second at Racing World.

followed the ground well and were supple enough to yield reasonably well over those square-edged bumps. On a scale of 1 to 10, we'd give them about an 8.7. Not perfect, but very good.

At the rear you'll find what looks like the same old shock Suzuki has been giving you for a few years. But, it appears that more has been changed than the springs. We found the action decent and fade-free. The average RM125 Suzuki owner will *not* have to run out and pop for a pair of accessory shocks. At least, that is, until these give up the ghost. They are not rebuildable, which is a shame, because these KYBs are not bad at all.

A rubber bumper rides on the shock shaft, and even though this bumper is only an inch and a half or so in length, it appears to have magical properties that keep the rear end of the bike from bottoming out severely, no matter how much impact is dialed in. You can expect to see these bumpers being used more and more as their worth gets proven. The race car people have used this concept for years.

### Following the bouncing berm

As delivered, most riders will find that the Suzuki is not too happy when stuffed into a corner. While the front end doesn't push or drift out when the bike is leaned over, it still does not snap sharply through a directional change.

The answer, of course, is to raise the forks up in the triple clamps about a half-inch. In addition to this, the pressure in the air forks should be run at about 11 or 12 pounds for the average rider. Once this is done, the RM will then turn quite happily. You'll find a very slight trade-off when the forks are raised, and that is a minor tendency for the rear end to swing out under acceleration when heeled over. However, that tendency is so slight, that simply slipping a Metzeler on the rear would bring that condition back

into line.

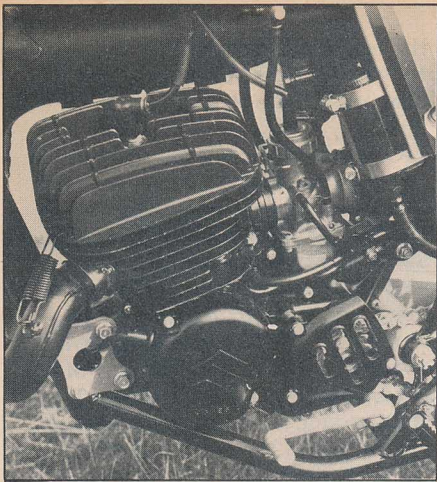
While mentioning Metzeler, serious riders should consider wrapping one around the front rim. While the stock rubber works OK under most conditions, when the course dries out, the stock rubber begins to slip.

One interesting side note of sorts: We've seen tests in other rags mentioning that the RMs don't turn sharply enough. Don't be taken in by their lack of smarts. Experiment with the positioning of the forks, try different oil levels in the forks and find an air pressure that fits your riding style. All of these factors determine how a bike will turn. Even something as simple as bumping up the preload on the shocks will make a bike turn a bit sharper. So, don't take anything for granted until you have explored the tuning capabilities of this or any other machine.

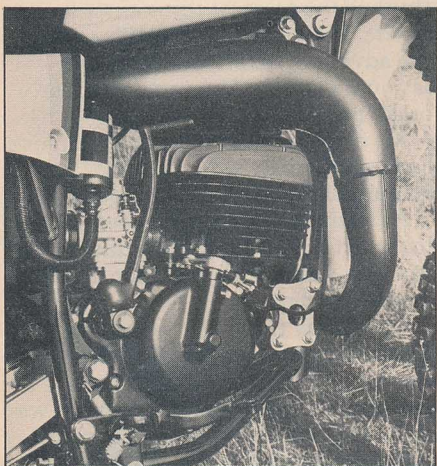
However, there's more to an MX track than just corners. On long, bumpy straights, the RM shines. It's really possible to get tapped out on deep whoopers. You've just got to trust the rear end to take all the punishment in stride. For a long-travel bike, there is very little wallowing through truly deep whoops. Some of the long-travel machines tend to pitch and bury the front under deceleration. This can literally pitch a rider right over the bars. You'll find that the first part of the travel on the Suzuki is on the firm side, which is as it should be. Riders should resist the temptation to soften up the suspension action to "mushy" specs.

### Bits and pieces

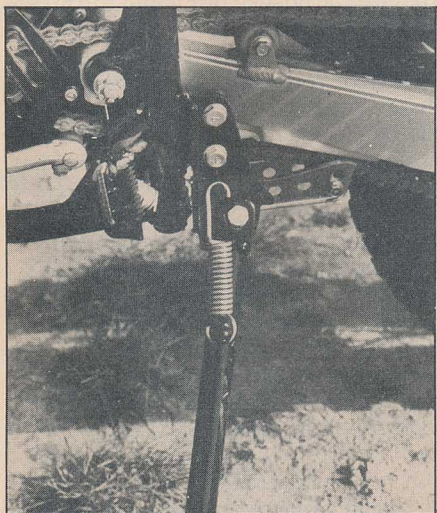
Overall feel and layout of the newest RM is a bit different than past efforts. The bars are much flatter than last year's model and the pegs are fairly far back on the bike in relationship to those bars. This makes the RM125 very easy to ride in a standing position. An average-sized rider will find that — in



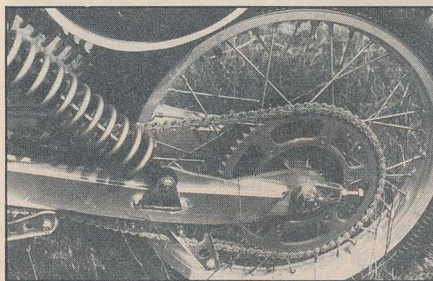
The RM125 has the look and feel of a much larger bike. Even the engine appears large for a 125.



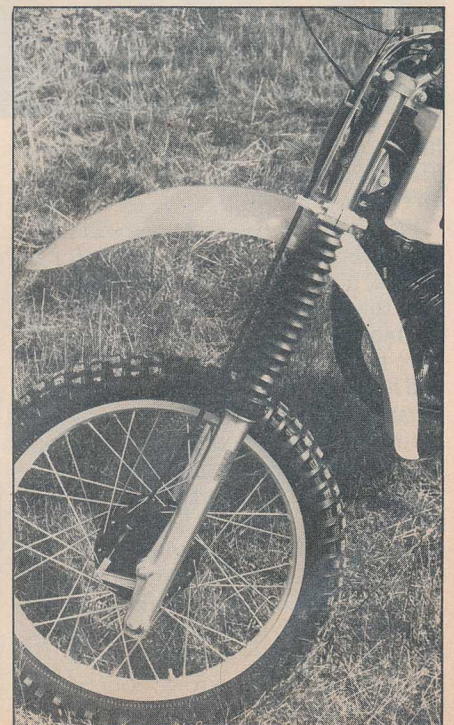
No one burned their legs on the pipe. Layout in the engine compartment was well thought out. Not much space was left over, but everything could be reached for normal maintenance.



Removable sidestand will save the rider about two pounds when left off. Neat roller on top of swingarm keeps aluminum from getting chewed up by the chain.



(ABOVE) Everywhere you look, thoughtful weight-saving techniques are apparent.



(RIGHT) The forks on our '79 RM were the best Suzuki effort to date.

## 1979 Suzuki RM125N

**ENGINE TYPE** ... Two-stroke, single-cylinder, power reed

**BORE AND STROKE** ..... 54.0mm x 54.0mm

**DISPLACEMENT** ..... 123cc

**HORSEPOWER (CLAIMED BY FACTORY):**  
26.5 at 10,750 rpm

**CARBURETION** ..... Mikuni, VM32SS, 32mm

**FACTORY RECOMMENDED JETTING:**  
Main jet ..... 250  
Needle jet ..... R-8  
Jet needle ..... 6DP5-2  
Pilot jet ..... 30  
Slide number ..... 3.0

**RECOMMENDED GASOLINE** ..... Premium

**RECOMMENDED OIL (MFR.):** Suzuki C.C.I.

**FUEL TANK CAPACITY** ..... 6.5 liters (1.7 gallons)

**FUEL TANK MATERIAL** ..... Plastic

**GAS/OIL RATIO** ..... 20:1

**LUBRICATION** ..... Pre-mix

**OIL CAPACITY** ..... N/A

**AIR FILTRATION** ..... Oiled polyurethane foam

**CLUTCH TYPE** ..... Wet, multi-plate

**TRANSMISSION:** Six-speed, constant mesh

**GEARBOX RATIOS**

1	2.333 (28/12)
2	1.750 (24/17)
3	1.411 (25/21)
4	1.190 (25/21)
5	1.045 (23/22)
6	0.956 (22/23)

**IGNITION** ..... Suzuki P.E.I. (Pointless Electronic Ignition)

**PRIMARY KICK SYSTEM?** ..... Yes

**RECOMMENDED SPARK PLUG** ..... NGK B9EV or Nippondenso W27ES-G

**SILENCER/SPARK ARRESTOR/QUALITY:**  
Silencer only, average for racer

**EXHAUST SYSTEM** ..... High-pipe, right side

**FRAME, TYPE** ..... Single downtube, split cradle, chrome moly

**WHEELBASE** ..... 1440mm (56.7 inches)

**GROUND CLEARANCE:** 320mm (12.6 inches)

**SEAT HEIGHT AT TANK** ..... 920mm (36.2 inches)

**STEERING HEAD ANGLE** ..... 30 degrees

**TRAIL** ..... 133mm (5.24 inches)

**WEIGHT WITH ONE GALLON GAS**  
..... 89.5 kg. (197 pounds) — 85 kg dry (187 pounds)

**RIM MATERIAL** ..... Aluminum alloy

**TIRE SIZES**  
Front ..... 3.00 x 21 Bridgestone knobby  
Rear ..... 4.10 x 18 Bridgestone knobby

**SUSPENSION**  
Front, type and travel ..... Telescopic, 38mm tubes, air/oil, 11.2 inches  
Rear, type and travel ..... Aluminum swingarm, gas/oil KYB shocks, 11.0 inches

**INTENDED USE, MFR** ..... Motocross, off-road racing

**COUNTRY OF ORIGIN** ..... Japan

**PRICE, APPROX** ..... \$1279.00

**PARTS PRICES, HIGH-WEAR ITEMS**  
Piston assembly, complete ..... \$25.17  
Rings only ..... \$10.30  
Cylinder ..... \$83.33  
Shift lever ..... \$7.86  
Brake pedal ..... \$9.27

**DISTRIBUTOR**  
U.S. Suzuki Motor Corp.  
13767 Freeway Dr.  
Santa Fe Springs, California 90670

**OVERALL RATING, FROM 0 TO 100, VARIOUS CATEGORIES, KEEPING INTENDED USE OF MACHINE IN MIND:**

Handling	93
Suspension	96
Power	95
Cost	85
Attention to detail	98
Effectiveness, stone stock	97

managed to retain a pleasing shape to the rear section of the RM, even though they have the FIM-required rear-mounted number plates to contend with.

One odd thing: We just couldn't find any reasonable way to keep those side plate mounting bolts in. They constantly fell out. We didn't want to safety-wire the things and somebody stepped on our tube of Loctite. No matter how much you tighten those wimpy little bolts, they somehow disappear by the end of the day of riding. Suzukis all over the world are being ridden around at this very minute, with little nylon ties holding the side panels on. 'Tis a shame.

Brakes were decent, with a new hub riding up front. The rear brake is a floating setup, which some people think is the greatest thing since jockey shorts. We've never been able to see the advantage explained to us in a rational manner. However, the rear brake isn't bad at all.

Air filter servicing seems to improve each year on the RMs, and this "N" version of the 125 is no exception.

As with most new bikes, our spokes loosened quickly and often during the first few riding sessions, then bedded down for a nap.

One funny thing: We kept having our master link clip fall off. MXA had a similar problem with one of their Suzooks and they found out that it was caused by rolling the bike backwards and catching the clip on a sharp edge on the chain tensioner. By bending the offending edge slightly out with a pair of pliers, this trouble spot can be cured easily.

Also, keep an eye on the frame end of the brake stay arm. There's a cotter pin that can be pushed out when the bike is put up on a stand.

Oh yes. There are also zillions of neat little rollers and brackets and doodads all over the bike. You just sort of have to squat down there and look around to appreciate the details in that department.

### In a nutshell

When you consider all of the facts and figures we've presented to you, the Suzuki is undeniably a brilliant package. It's probably the most technically advanced dirt bike on the market today. Each year, Suzuki keeps whittling away at the RM125, and with each effort, they get better and better.

If this trend keeps up, we just might be forced to write a test someday in the very near future wherein we can't complain about anything! Gad. That would be awful. Maybe *that's* why they don't change that wimpy little throttle. □



his normal stance — a slight amount of his weight will be automatically placed on the bars.

With this stance, the rider will find that when he drops to the saddle for a corner, he's already positioned right over the forward area of the saddle near the tank, which is the right place to have the weight when loading the front end for a corner. Going from a seated to a standing position on the RM is a very natural movement, except for tall riders. For some reason, a few of our taller riders have reported that they've felt "hunched over the bars" when standing and that they hit their knees too easily on the bars when turning.

As with all Suzuki dirt bikes, this one comes with a too-short throttle assembly. Even for average-sized hands, the length is wrong. Riders with big hands actually have their hands

hang over the edge of the grip on the throttle side. One of the very first investments most riders will make, is a straight-pull something-or-other.

While sniveling about the throttle, we might just as well moan about the throttle cable. It's decidedly sub-average, with a lot of housing flex apparent when the throttle is cranked on.

We liked the shape of the bars, but bent them easily. They appear to be shaped like the very early Husky bars and are flat and straight.

New plastic abounds this year. The tank is a welcome change, but emotions were mixed about the new space-age shape of the rear fender. In fact, the front fender was also slated to have that shape, but this design was dropped after the first shipment of RMs hit the shores. Suzuki has also