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**HONDA
XR500**

125 MX SHOOTOUT!

DIRT BIKE

AUGUST 1979 • \$1.25 UK60p

**WIDOW-
MAKER!
THE BIG
ONE**

**RM250N:
SUZUKI'S
SLINGSHOT!**

**SPARK
WARS
HOW
TO**

**WEIRD
WHEELS:
HONDA ATC
& ODYSSEY**



BATTLE OF THE BULLETS!



ISSN 0384-1546

Suzuki RM250N Motocrosser

THE MONEY MACHINE

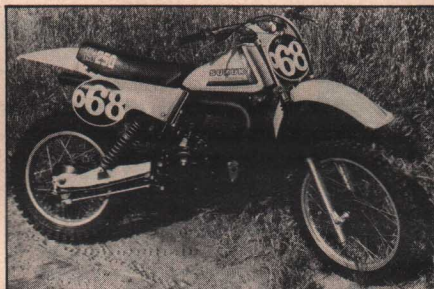
Ready to race, at \$8.29 per pound

By the Staff of Dirt Bike

We christened our new 250 Suzuki test bike in the truest possible DB fashion. After picking the machine up, we took it over to the nearby hills and rode it around for a half-hour. Then, the bike was taken to the smoothly ventilated and tastefully decorated DIRT BIKE garage and gone over with not only a fine-tooth comb, but a fine-tooth brush, as well.

We tightened the spokes until they squeaked, leaned on the motor mount bolts until they groaned and twisted screwdrivers with a vengeance. After all this, we took off the stock 14-tooth countershaft sprocket and slipped on a 15-fanger. Stock grips were removed (personal preference) and Oakleys installed.

The reason for our late Friday night wrenching session was simple: In the morning, the Suzuki would be in a two-hour Grand Prix. We were concerned about the ability of the wheels to take two solid hours of racing abuse without coming apart. As with most new bikes, the wheels on the RM250 require a certain amount of "bedding in" before they stay snugged up. The Grand Prix, held by the Anaheim Hi-Siders at Racing World, would be run over terrain we were familiar with—baked hard for the most part and liberally laced with rocks. We knew we couldn't go the whole two hours on the stock tank and were even concerned with the ability of the bike to cover an hour without running short of gas. Most 250s can go 45 minutes with no problem, but there's not all that much



gas left. And what about the second hour? With a dirty filter and reduced mileage. All our questions were to be answered the next day.

The start was a straddle-your-front-wheel, dead-engine deal. Our bike lit off on the second kick, in gear. This put us in a good position off the line, as most of the other bikes took longer to get fired up.

By the top of the start hill, the RM was running second. That big countershaft sprocket didn't seem to hurt the acceleration at all.

As we started getting used to the 6.7-mile course, the traits of the Suzuki started to show. The engine had a huge

amount of grunt right down low in the power range—almost like a slightly detuned 400. Revs built smoothly, then a strong surge was experienced at mid-range. Strong enough to lift the front wheel gently, even with the rider leaning well over the bars. While the RM250 revved out satisfactorily, it still was more effective to use the mid-range. We only over-revved the bike when we had to and, in general, shifted as early to the next higher gear as we could.

We were to find later on, when we went back to the stock c/s sprocket, that the rear wheel would spin, rather than hook up. After returning to the 15-tooth, we liked the machine much more.

On some of the tighter sections of the long track, we almost wished that we'd stayed with the stock gearing. Almost. Even in a gnarly, tight turn, we didn't have to slip the clutch. Low felt like second, but a sturdy second.

Once we got to the only long straight on the track, we were ecstatic over the ferocious top end. Just right! We got wound out completely in fifth gear near the end of the straight and held it tapped for maybe five seconds, then started backing off for the turn. What a rush!

Fireroads were placed after the long straight, and here the Suzuki was not too happy. Stock tires were Bridgestones and we were running 12 pounds, front and rear, in order to keep from getting flats. There are an awful lot of rim-bending rocks saturating the



Suzuki RM250N

NAME AND MODEL SUZUKI RM250N
ENGINE TYPE Single-cylinder, two-stroke, piston and reed valve
BORE AND STROKE 67.0mmx70.0mm (2.64x2.76 inches)
DISPLACEMENT 246cc (15.0 cubic inches)
HORSEPOWER (CLAIMED BY FACTORY) N/A (31.6 actual, at rear wheel)
CARBURETION 36mm Mikuni VM36SS
FACTORY RECOMMENDED JETTING:
MAIN JET 290
NEEDLE JET R-6
JET NEEDLE 6FJ6—3rd groove
PILOT JET 60
SLIDE NUMBER 2.0
RECOMMENDED GASOLINE Premium, 95+ octane rating
RECOMMENDED OIL (MFR.) Suzuki CCI, Castrol R30, Spectro, Bel-Ray
FUEL TANK CAPACITY 8.5 liters (2.2 U.S. gallons)
FUEL TANK MATERIAL Plastic
GAS/OIL RATIO 20:1
LUBRICATION Pre-mix
OIL CAPACITY N/A
AIR FILTRATION Oiled foam in still air box
CLUTCH TYPE Wet, multi-plate
TRANSMISSION Five-speed, constant mesh
GEARBOX RATIOS

1 2.076 (27/13)
 2 1.750 (28/16)
 3 1.352 (23/17)
 4 1.105 (21/19)
 5 0.913 (21/33)
GEARING, FRONT/REAR 14/50
IGNITION Suzuki P.E.I.—CDI-type
PRIMARY KICK SYSTEM? Yes
RECOMMENDED SPARK PLUG NGK-B9EGV or Champion N-2G
SILENCER/SPARK ARRESTER/QUALITY Silencer only, average noise level
EXHAUST SYSTEM High-pipe, through frame
FRAME, TYPE Single downtube, split cradle, chrome moly tubing
WHEELBASE 1445mm (56.9 inches)
GROUND CLEARANCE 350mm (13.8 inches)
SEAT HEIGHT AT TANK 948mm (37.3 inches)
STEERING HEAD ANGLE 29 degrees
TRAIL 123mm (4.84 inches)
WEIGHT WITH ONE GALLON GAS 221 pounds (211 pounds dry)
RIM MATERIAL Aluminum alloy
TIRE SIZES:
FRONT 3.00x21 Bridgestone knobby

REAR 5.10x18 Bridgestone knobby
SUSPENSION:
FRONT, TYPE AND TRAVEL Telescopic, air/oil, forward axle, 11.2 inches
REAR, TYPE AND TRAVEL Swingarm, KYB gas/oil shocks, laydown, 11.8 inches
INTENDED USE, (MFR.) Motocross, off-road racing
COUNTRY OF ORIGIN Japan
PRICE APPROX. \$1750
PARTS PRICES, HIGH-WEAR ITEMS:
PISTON ASSEMBLY, COMPLETE \$32.61
RINGS ONLY \$7.35
CYLINDER \$129.11
SHIFT LEVER \$10.98
BRAKE PEDAL \$14.42
FRONT SPROCKET \$9.99
DISTRIBUTOR:
 U.S. Suzuki Motor Corp.
 13767 Frøeway Drive
 Santa Fe Springs, California 90670
OVERALL RATING, FROM 0 TO 100, VARIOUS CATEGORIES, KEEPING IN MIND USE OF MACHINE IN MIND:
HANDLING 93
SUSPENSION 96
POWER 94
COST 95
ATTENTION TO DETAIL 97
EFFECTIVENESS, STONE STOCK 95



Racing World grounds. As long as those twisting fireroads had some loose sand on them, the bike wiggled, but worked in a reasonable fashion. However, when on the hard-packed adobe, traction was grim. On this sort of terrain, only one tire will do the job: Metzeler. And even with a fresh set of Metzeler, it's not all that wonderful.

We lost some time on those fire-roads, as the long-legged Suzuki didn't want to snap through the turns. When we first received the RM, we found that we had to lower the triple clamps about 3/8-inch on the fork tubes to get the bike to turn right. This adjustment was made in a riding area with reasonable traction. Our race track didn't have much in the way of traction to speak of, so we had to work much harder. Lots of clambering forward on the tank was the order of the day.

None of the new-generation long-travel bikes turn as well as the bikes of a few years ago. That's just a fact we have to accept if we want to smooth those bumps out. And the RM250 Suzuki is among the longest strokers, with 11.8 inches of available travel at the rear and 11.2 inches up front. The fact that they've been able to keep their saddle height at a reasonable level shows the result of careful thinking.

Once leaving the fireroads, the course dropped down some very long hills. Here, we locked the rear end up a few times and stalled the engine. By clutching and dumping quickly, the RM lit off immediately again. Our first impressions were that the brakes were far too sensitive, but as we put more and more time on the bike, that grabby edge began to wear off and we found the brakes to be reasonable.

After negotiating the downhills, we wandered through some sand whoopdies. Here, the RM ate the ground up easily. While you might have to struggle with a tall bike in the turns, those supple suspenders absolutely devoured the bad sand rollers. We were able to hit them as fast as we could get the bike to go, considering the short approach run we had through the section.

After a few more hills and tight, dusty trails, we headed in for the final section of the GP course. This consisted of motocross-type turns and a few jumps. We had our first opportunity to stuff the Suzie into a few berms, here. Quite a bit of body lean was required to get the tallish bike heeled over. The smooth, strong power made our exit off the berms controllable.

Much to our surprise, we were able to go one hour and 15 minutes before we came in for gas. At that point, the tank had only a cupful of gas left sloshing in the bottom. Too close for comfort. We're sure that the long downhills aided us. On a flatter, faster track, we

wouldn't expect more than an hour on the 2.2-gallon tank. And with stock gearing, that might be stretching it a bit.

At the end of the two hours, the RM had done its job well. It helped the rider end up second in class, despite losing some valuable time in a bar-bending crash. We won't go into details regarding that particular crash. Rider error is never fun. We wish we could have blamed it on the bike... but?

A post-race checkout showed that all of the spokes in both wheels were loose. The wheels were still fairly straight and true. The front motor mount bolts were loose, as was the locking nut on the swingarm pivot. All the other motor mount bolts stayed snug. One saddle bolt (brake side) sheared off at the mounting tab. Two side panel bolts were missing.

Other than that, the bike stayed oil-free, with no signs of weeping from forks or engine. The chain appeared to have stretched very little and didn't need an adjustment. The roller on top of the aluminum swingarm stayed intact, but heavy signs of wear were apparent. We figure maybe four more hours of life in that roller, tops.

We examined the brakes and drums and found a lot of dust and dirt inside. Some of it was imbedded into the lining material. Cleaning and reinstallation shaped that area.

One spot we were curious about: A disassembly of the peg/pin/spring assembly showed that both of the footpeg pins were bending already. This is something that we picked up on a few months ago and have started to check regularly. Suzuki really should have a stronger pin in this critical spot, and until they do, the rider should check both footpeg pins after every ride and replace them when they get bent too badly.

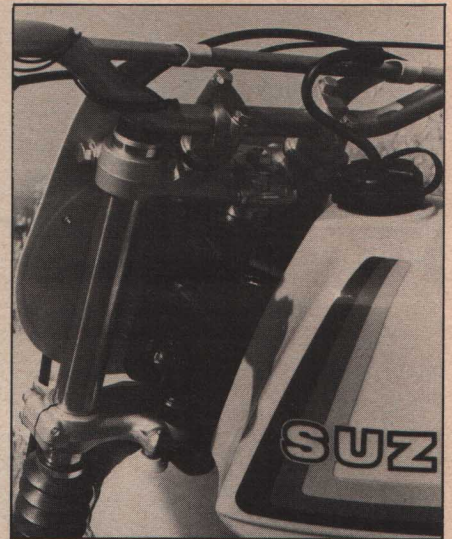
A check of the air filter showed us that it was very clean for having completed a dusty, long race. Part of the reason is the louvered lid that covers the top of the air box itself. This also keeps wayward water from splashing right in on the foam filter. Later, we removed this plastic top and found an instantaneous gain in power. Naturally, we had to play with the jet needle to get rid of a slight dingling, but, overall, we had a gain. Of course, removing this cover would seriously decrease the waterproofing characteristics of the bike, but most of the time, most riders will not be running under extremely wet conditions.

After the RM250N was ridden and raced several more times, we had the test riders compare notes. Here's what they agreed on:

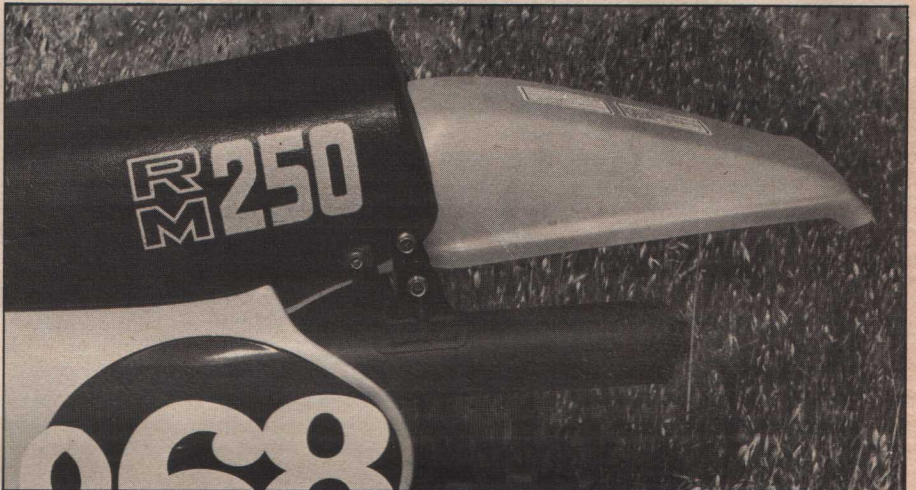
(1)—Suspension, at both ends—excellent. Most of the riders used 11



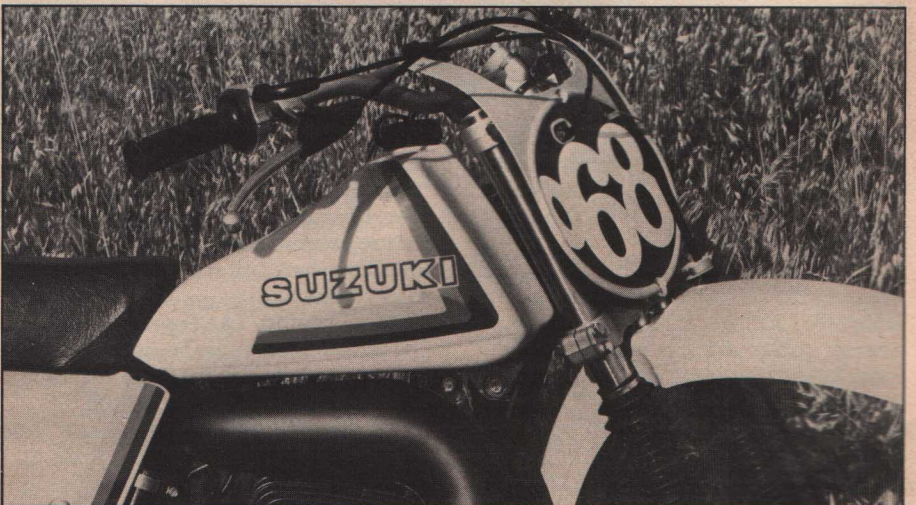
Engine is narrower at the cases than "C" model. Even finning appears to be slightly reduced in size over last year's efforts. Clutch actuation arm has changed sides, trimming up the right case cover in the process.



Heavy gusseting is apparent at steering head. Gussets taper well down the main tube for maximum strength. 38 mm fork tubes are a must with 11.2 inches of travel up front. Deep-walled plastic fenders tend to crack here.



New saddle is slimmer and flatter than the '78 version. It will not interchange with previous years.



Shorter, slimmer and taller tank holds 2.2 gallons of pre-mix. It's easy to move forward for weight transfer with this new design.



pounds of air in each fork leg, but one rider raised the oil level a fraction and ran nine pounds of air. Everyone left the damping adjustments on the standard firm setting.

(2)—All riders agreed that the Suzuki was not the fastest 250 dirt bike in a drag race, but that it had supremely correct power and was very easy to ride. Drag races were run at random and invariably, a Honda or a Can-Am would pull it to the first turn by a length or two. The bike was definitely faster than a new YZ250. Most of the riders felt that the RM had the best and most usable low-end power in the class.

(3)—Each and every rider felt that

first and second gears were too close together. The standard comment was: "Felt like you were still in low." However, because of the superior low-end torque, second could be used comfortably where other 250s would have to go to low.

(4)—Turning. The Suzuki worked OK in the corners, if the rider worked hard at the job. You just don't sit down on the saddle and motor around. Climbing up on the tank is a must. And all riders felt that moving the forks up in the triple clamps was a must, except for high-speed, straight-line work, such as a desert race.

(5)—General layout. No one com-

plained about the shape of the bars, or the location of controls. Once we slipped off the stock levers and used DeHandlers, both the clutch and front brake were comfortable and smooth in operation. That traditionally short Suzuki throttle drew complaints from riders with average or larger-sized hands.

(6)—Brakes and shifting were fine, with the exception of some riders occasionally hitting the odd neutral here and there. Nothing serious.

(7)—All agreed that the RM250N felt light and agile. Moving around on the bike was easy, with the new, slim tank and reduced bulges in the side panels. Every single rider commented on the good looks of the machine.

(8)—Not one rider cared for the tires, and the stock 3.00x21 Bridgestone, in particular, drew a lot of flak.

(9)—Attention to detail. To a man, everyone agreed that all the odds and ends had been well thought out. Little things like a choke lever with a flip handle, and the ability of the bike to start in gear . . . all of these items were big pluses.

(10)—The Loaded Question . . . If you were shopping for a racing 250, would you consider the RM and, if so, why? Two said no, because the bike felt too tall and hard to turn for them. It's interesting to note that these two were both under 5'7" in height. Four other riders were very enthusiastic about the RM250, mostly because . . . "It's a lot of bike for the money and you don't have to run out and buy a whole bunch of kits and shocks in order to go racing." They went on to say that there were other bikes they liked more, for one reason or another, but that a price tag of well over two grand turned them off. At \$1750 suggested retail, the RM250N appears to be a bargain.

One other rider said the bike was nice, but that . . . "It ain't a Husky." That seemed to take care of that.

The last rider, an owner of a 1978 Elsinore, said that . . . "My Honda is faster than the Suzuki, but I think I can turn faster laps with the Suzuki. Also, the Honda beats me to death and the Suzuki doesn't. And I've got about 600 bucks' worth of goodies in the Elsinore, too."

The bottom line

While not the fastest 250 around, the Suzuki does appear to offer more of everything for the dollar than the competition. The fact that no money must be spent on the bike to be competitive, is probably the biggest plus. Because of this and what our field of test riders told us, we have every reason to believe that thousands of riders will buy an RM250N, just because it makes sense. □