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125 MX HORSEPOWER MAGIC! page 52

SHOOTOUT! YELLOW FEVER: YZ 490 vs. RM 500

DIRT
BIKE

DIRT BIKE

HUSKY 430 WR: THE GREAT WHITE HOPE

YAMAHA IT250: THE BLUE YZ

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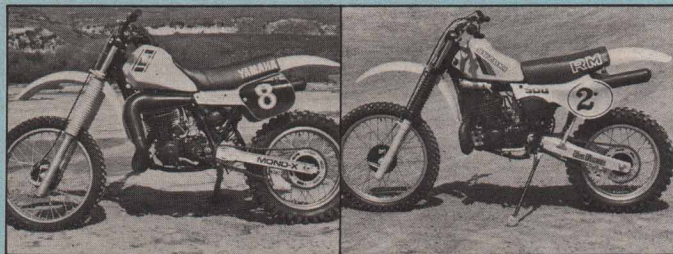
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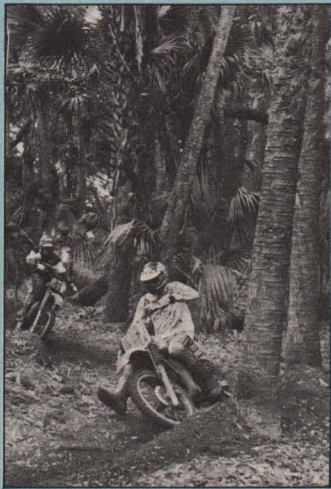
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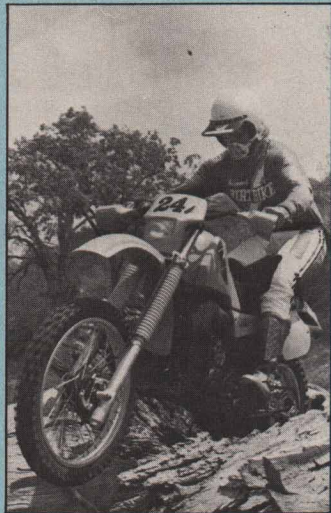
KX60 vs. CR60



YZ490 vs. RM500



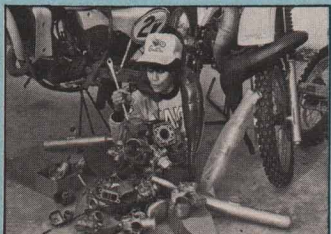
FLORIDA HARE SCRAMBLES



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HUSKY 430WR



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ON THE COVER:—Two-thirds of the *Dirt Bike* staff make an appearance on this month's cover. Webb and Clipper attempt to get stylish for the last and missing third of the staff, which means R. Sieman shot the photo. Color separation by Valley Film.

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4-SPEED FIST FIGHT

Heavyweight contenders in action...
while the World Champ smirks in the wings

By the Staff of *Dirt Bike*

Everyone knew the match-up would be interesting. Both of the contestants have been around; in some years stagnating, in others lurching forward trying to make up for the lost ground.

In one corner, you have the YZ490. Last year proved disastrous for the Yamaha; excess fat, a raspy motor and dull suspension had it getting trounced by most opponents. Quite opposite the Yamaha stood the RM465 Suzuki. A package hampered by a lack of punch; good form, but no guts.

This is a new year and both heavyweights planned a big comeback. The YZ lost some serious weight and gained some technology in the suspension department. Suzuki saw fit to pork up, not on weight, but on engine size. It went from a 465 to a full 500 (or 492cc's).

So the stage was set: big-bore titans going head to head. Because they are four-speeders and weigh about the same, on paper the battle appears close.

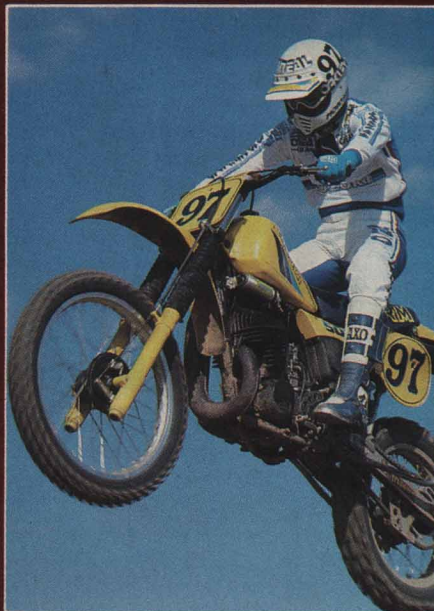
In reality, there's always one winner and a loser. This clash ended almost before the first bell rang. It seems one of the touted heavyweights has a 3½-inch reach on the other. Just 3½ measly inches and the fight turned into a lopsided runaway...

ROUND ONE: THE BIKES

Out of the Japanese Big Four, the YZ and RM are the only two fitted with four-speed gearboxes. This, to us, is a drawback. Versatility is nil, making the bikes just plain MXers. Honda and Kawasaki have five speeds, and the European Maico, Husky and KTM offer both four- and five- or even six-speed versions. You want a motocrosser? Fine. You want more? Fine.

With a four-speed, gearing is critical. Both machines have a tall first, with decent spacing through the final cogs. Trying to rework them for slower or faster situations proves futile; they're tunneled into one game. Sorry.

For '83, Yamaha went berserk and rethought the entire bike with a new frame, new suspension, stronger motor and much, much less weight. The new rear shock is mounted lower and more vertically, besides being a lighter, smaller unit. It has both adjustable compression and rebound damping. Travel is 12.6 inches. The forks appear nearly identical to last year's boingers.



They're not. On the bottom of the damper rod is a so-called "Blow-off" valve, which is supposed to eliminate any harshness from major impacts. Travel is 11.8 inches.

Suzuki basically opted for a motor update. Its displacement has been kicked up to 492cc's over the smallish 464 of the '82 model. All of the frame dimensions, travel, and weight remain unchanged. Some of the graphics are different and the rider seating position has been improved by shrinking the tank, making for easier weight transitions when turning. This year, the forks feature adjustable compression damping. The shock, too, has been fitted with adjustable compression and rebound damping.

POWER PUNCH

In evaluating Open bike power, there are a couple of important functions to consider: how hard it hits and how long it pulls. When you're dealing with serious ponies, the power delivery is critical. Too much too soon equals grief. Too little on the bottom and a giant rush in the mid-range spells doom. Ideally, smoothness is the key.

With this in mind, we can say that the YZ and the RM in *no way* resemble each other in the way they produce power. The Yamaha pulls savagely off the bottom, in-

to and through the mid-range, and revs out strongly. Vice versa, the RM is soft off the bottom, smooth through the mid-range and revs out like a frenzied 250.

Because of the YZ's lengthy surge, riding it is fun. You simply short-shift and stay in a higher gear than normal. This lets the fat part of the punch torque you around the course. Every time things start getting blurred, shift up or brake, depending on the situation. It has good Open power when jetted correctly.

Riding the RM is strange. If you didn't know it was a 500, you'd think it was a strong 360. The overall power delivery is shallow until it moves into the upper revs. Then the hit keeps going and going, like an aroused 250. This forces the rider to seek out this part of the power. Fall off that upper-mid-range blast, and the RM turns into a marshmallow. It feeds on and requires lots of throttle.

Both bikes need some fine-line jetting, and are stifled by a lack of oxygen. The YZ requires attention to the pilot jet, air screw and needle position. We ended up with a 45 pilot and dropped the needle a slot and opened up the air screw one full turn. On the Suzuki a change to a 280 main jet (from a 300), an R-0 needle jet (from an R-4) and a 45 pilot (from a 50) cleans things up.

In stock trim the Yamaha comes with a lid over the airbox. Take it off. Drill a few holes in the right side and upper center of the airbox and the beast will start to breathe. Same thing goes for the RM. Drill out both airbox covers.

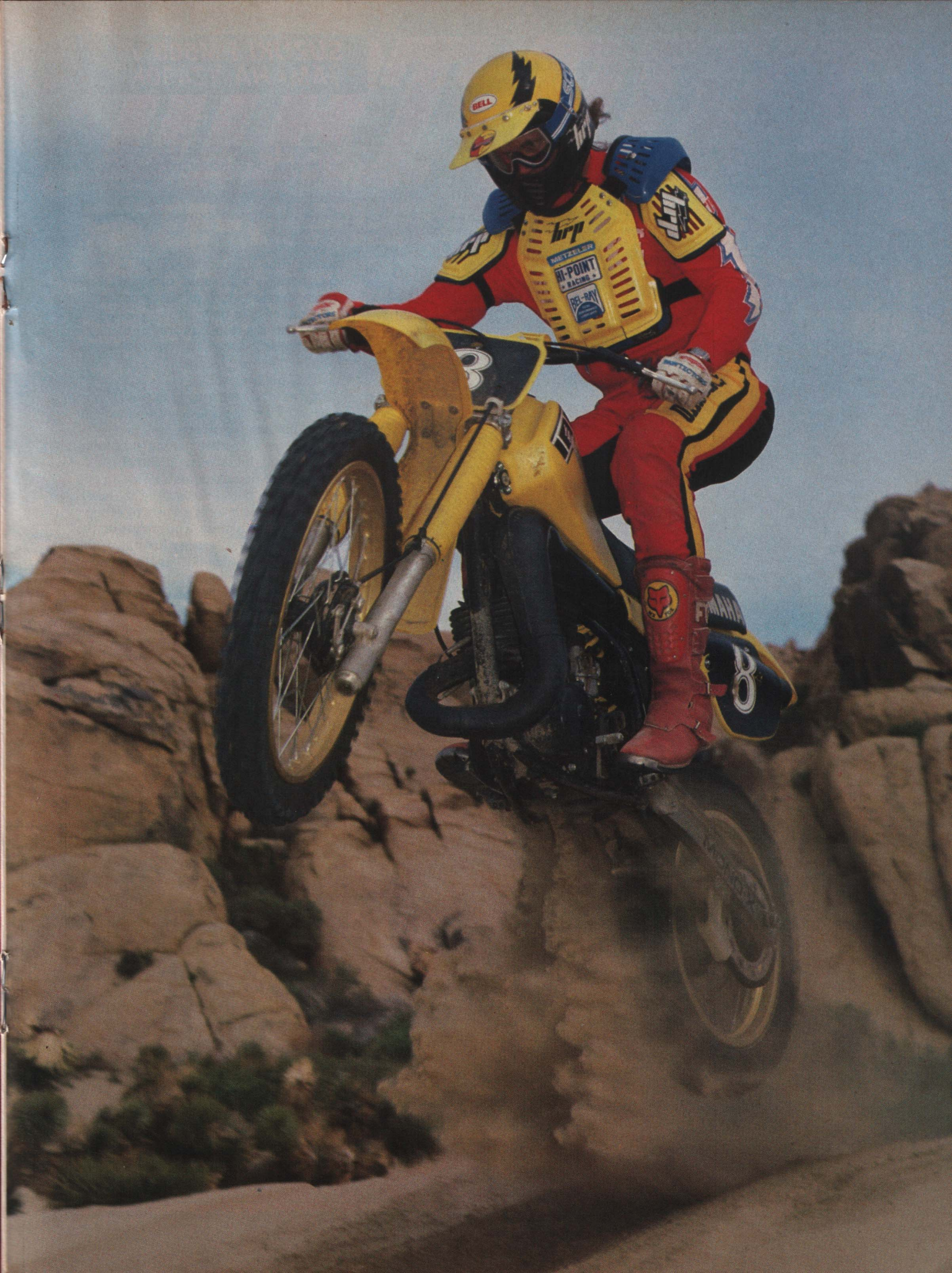
Both machines suffer from overly tall gearing. Adding two teeth to the rear sprocket seems to cure the lull between gears. Stock, they don't have the right gear for any turn on the track. You're either in too high or too low of a gear.

So, the winner in the power department is the Yamaha. It's strong, positive, easy to ride, and has the kind of snap you'd expect from an Open bike.

TOE EASE, BRAKE EASE, STARTING EASE

You couldn't ask for a better shifting bike than the RM. It's smooth, easy, and doesn't demand the use of a clutch.

The YZ, as in years past, is *not* a real slick shifter. In fact, it takes a very



SUZUKI RM500 vs. YAMAHA YZ490K



In flight, the RM doesn't feel as stable as the YZ. But, its lighter feel makes for overall better track manners.

deliberate prod to shake it from one gear to the next. We understand that a longer shifter helps considerably. In power-on situations, careful use of the throttle and clutch is needed to move it into a higher gear quickly.

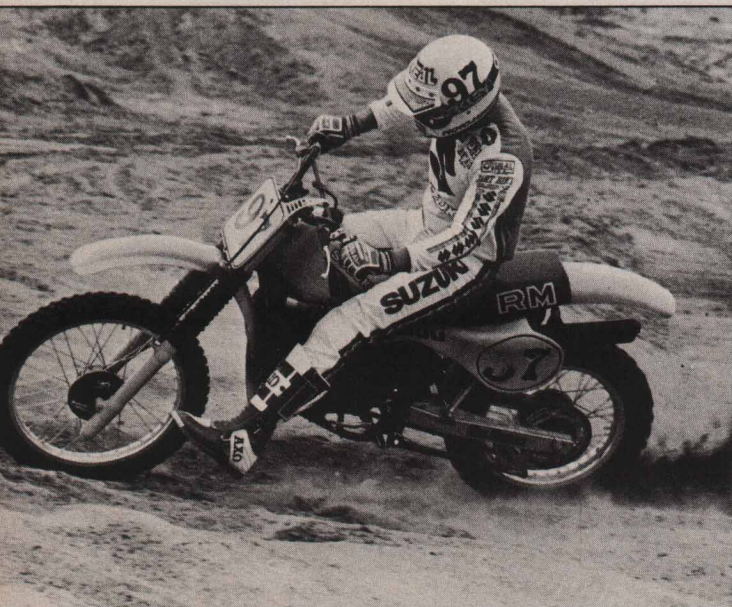
Up front, both machines feature dual-leading shoe stoppers. They are progressive, positive and super strong. A lone finger, maybe two, is all that's needed to bring either bike down from speed. But, Suzuki gets the stupid award for having a long exposed section of cable traveling from high on the slider down to the brake itself. It pulsates and is plain scary.

Rearward, it's a tossup as to which brake is better. They're both strong and lock up easily, making for stalled motors.

Until the corrective jetting was completed, both bikes were nightmarish to start. The RM's kickstarter is awkward and tough to get a full stroke in. Any halfhearted thump at the lever is a waste of energy; a strong slap is a must. The midget on the staff had real grief getting life out of the YZ. More often than not, another person had to start the bike for him. The bike's kickstarter is strangely placed, and needs a full, violent stab before the engine fires. We're split on which is tougher to start; they're both grim.

STABILITY

On paper, you'd expect the Suzuki to be the more stable of the two bikes. It has more rake, by almost a full degree. Ironically, this isn't the case. Any off-power situations, as entering a bumpy, slow turn, would throw the RM into mild but annoying headshakes. Faster terrain and sand proved this was no fluke, as it became even more pronounced. We dropped the forks



Jim O'Neal works the RM. It feels light and very responsive to rider weight shifts and body positions.

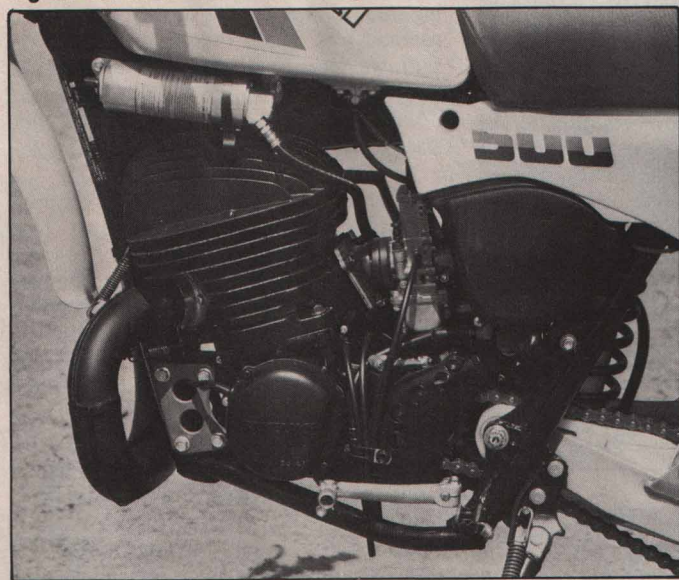


The YZ has to be turned with power. It feels heavy, especially up front, and works the rider.

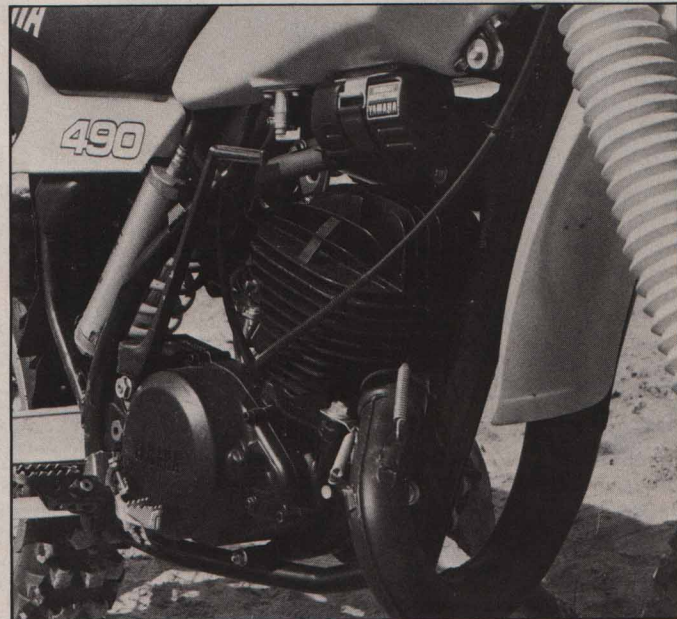
SUZUKI RM500 vs. YAMAHA YZ490K



Because the YZ is the slow turner of the two, it likes the outside berms for the rail effect. The RM goes wherever there's an opening on the track. It turns on a bug's shadow.



The RM is a plumber's nightmare. Tubes, hoses, reservoirs and vents run rampant around the engine compartment of the bike. Some fine-line jetting on the flat-slide Mikuni really makes it come alive.



The motor on the YZ is the strong point of the bike. It pulls from zero and rips all the way to the upper revs.

all the way down in the clamps with little success. The problem is, the forks are too short. Claimed travel is 11.2 inches. Actual up-travel is 10.5 inches. With a long-travel rear and a short front, the normal dive the forks take when the throttle is chopped lowers the front end too much. More travel is the cure.

The YZ suffered from none of these problems. It tracks straight and true, no matter the terrain or speed. Whoops were conquered without much hassle. It feels more comfortable than the RM at speed, handles the off-power bumps without shaking and is easier on the rider.

SUSPENSION

We've said the RM's forks are short, but that doesn't mean they don't work. Stock, they dive and bottom on occasion. Raising the oil level from 6½ inches to 5¾ inches is a must. They now absorb in a reasonable fashion. With the adjustable compression damping set at minimum, we can't



The mighty flying Yellow Zonkers.

find a lot of bad things to say about their action.

Much more is needed to get the YZ forks up to par. They are too soft and demand a stiffer spring. These springs are available

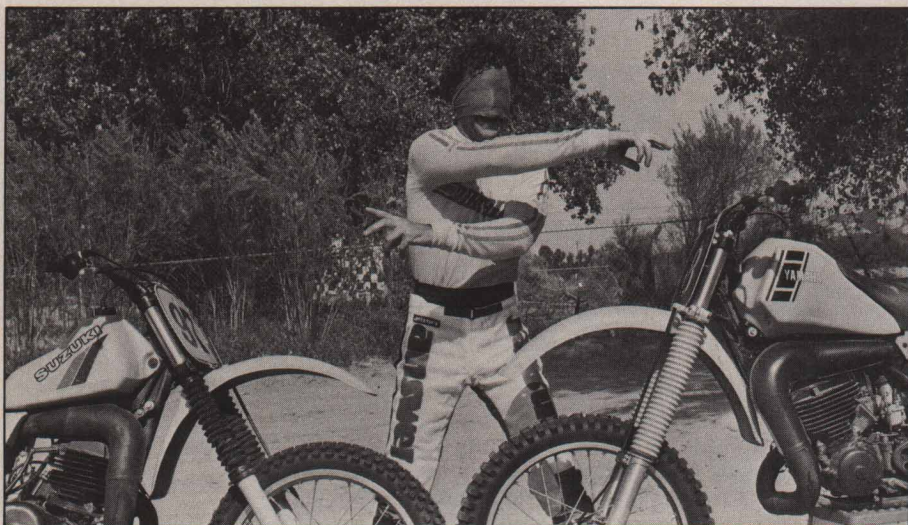
from Yamaha and with a 10mm raise in the oil level (from 170mm to 160mm from the top of the tubes), they work well. Bumps are absorbed flawlessly, except for the major hits—these hurt your wrists. On closer inspection, we found that the unadjustable forks have pre-set compression adjusters very similar to the RM's. The valving screws are peened shut so that they cannot be adjusted. Strange. We never fiddled with the adjusters, but wonder why Yamaha saw fit to install them in a *fixed* position. Had they been adjustable, we might have gotten the forks to work better.

On the back, both bikes feature adjustable compression and rebound damping. The YZ works much better than last year's design, but is still too soft for all but the slowest riders. Again, a stiffer spring is mandatory. With 95mm to 100mm of sag, its action is up to par. No strange quirks or flicks hamper the rider. It stays straight, feels good and goes about its business.

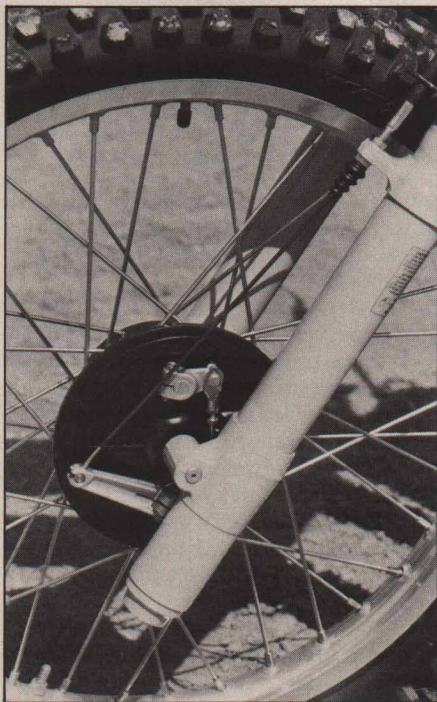
SUZUKI RM500 vs. YAMAHA YZ490K



Head to head, the YZ out-motors the RM quite easily. More grunt, punch and juice make it one of the top Open motors of the year. The Suzuki feels like an overstuffed 250; not a lot of snap anywhere. It has to be revved.



The General—trying to decide what his favorite shade of yellow is.



Suzuki's front stopper works; the bare cable is truly dumb. The Bridgestone front tire is fine for hard tracks, but in the loam it doesn't stick.



A dual-leading shoe stopper on the YZ is progressive, yet very sensitive. The fork boots fold and wrinkle; a set of H-model boots work better. Toss the front tire in favor of a Metzeler or Dunlop.

Once again, the Floater is magic, absorbing the worst with ease, all the while taking small chatter bumps superbly. Once the preload was dialed (95mm to 100mm of sag), we never touched the shock again. It looks like the RM is still the one to beat. There isn't a rear suspension around that does it as well.

TURNING

Here, the bikes were tested with the correct springs, oil levels and preloads set. This aspect of the test turned into a shocker. We expected the YZ to be the flicker, the line holder. Instead, we found that the RM will turn inside or outside the YZ, no problem. With the RM, picking a line isn't crucial. It'll go where you point it. Just pivot and gas it. That's all. No bothersome body shifts or weight transfers are needed. The bike allows for a natural, fluid movement from sitting to standing and from the back of the seat to the front. Very nice.

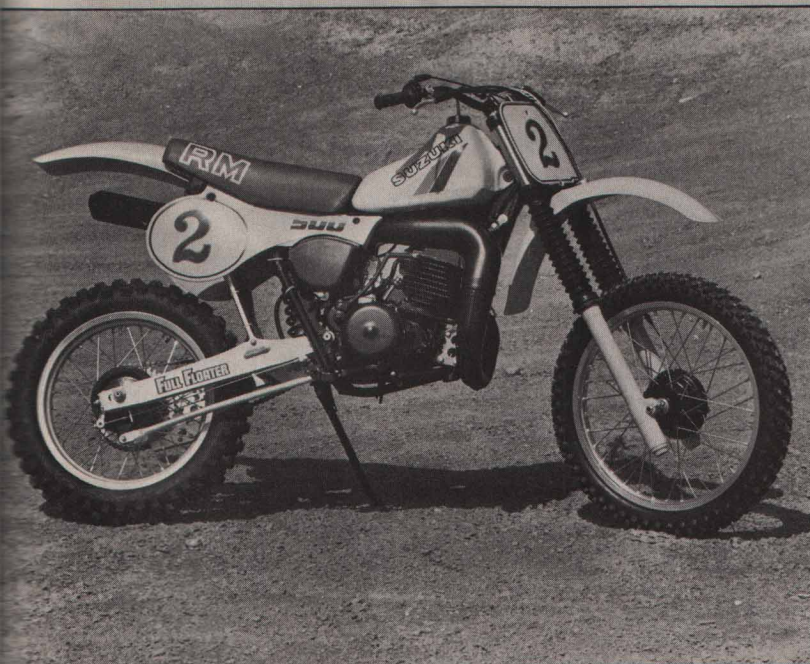
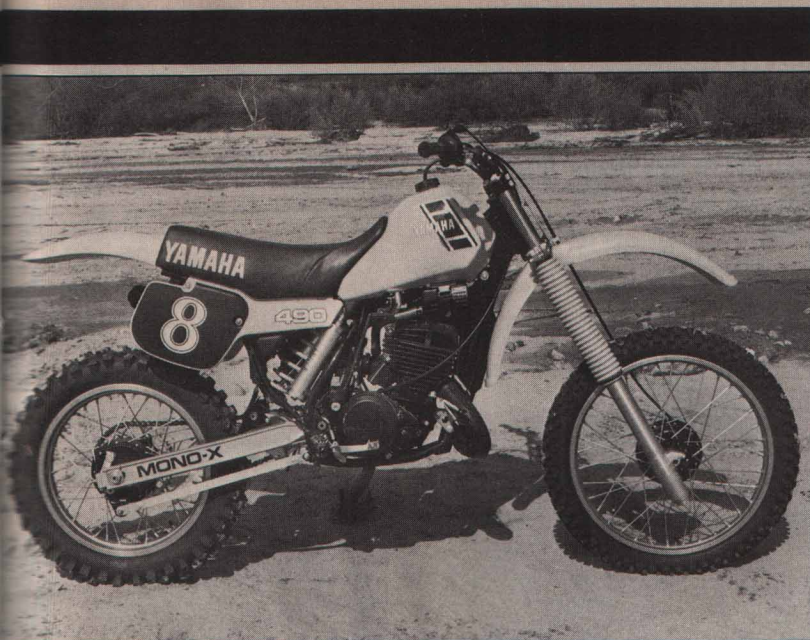
On the other hand, turning the YZ is a task. You have to be as far forward as you can get, dial in some throttle and it *still* wanders. Considering the light weight of the machine, it feels a good 30 pounds heavier than it really is. On rail-type berms and higher-speed corners, things aren't quite as nasty. It sticks okay, just as long as you stay on the gas.

ABOUT THOSE THREE INCHES WE MENTIONED...

One would wonder why the RM turns in a far superior fashion than the lighter, tighter-raked YZ. After countless sessions on each bike, we finally figured it out. In the normal seating position on the RM, the distance from the steering head to the rider's belt is 12½ inches. On the YZ, it's almost 16 inches. A full 3½-inch difference! With the YZ, the rider *can't* get far enough forward to get it to turn comfortably. The RM allows you to slide up and sit on the tank if you want to.

This doesn't account for the heavy feeling of the YZ. The RM feels as if it's 25 pounds lighter than the Yamaha, when it actually weighs 6.5 pounds more.

After some time is spent riding the two bikes you begin to feel the difference in



	YAMAHA YZ490K	SUZUKI RM500
ENGINE TYPE	Air-cooled, 2-stroke reed valve	Air-cooled, 2-stroke reed valve
BORE AND STROKE	87.0mm x 82.0mm	88.5mm x 80.0mm
DISPLACEMENT	487cc	492cc
CARBURETION	VM38SS Mikuni	VM38SS Mikuni
FACTORY RECOMMENDED JETTING:		
MAIN JET	440	300
NEEDLE JET	Q-8	R-4
JET NEEDLE	6F16-3	6FM46-3
PILOT JET	50	50
SLIDE NUMBER	3.0	2.0
RECOMMENDED GASOLINE	Premium, 92-plus octane	Premium, 92-plus octane
FUEL TANK CAPACITY	10.5 L (2.8 gals.)	9.0 L (2.0 gals.)
FUEL TANK MATERIAL	Plastic	Plastic
LUBRICATION	Pre-mix	Pre-mix
RECOMMENDED OIL	Yamalube R	Suzuki CCI
OIL CAPACITY, TRANS.	0.75 L (0.80 qt.)	0.80 L (0.85 qt.)
AIR FILTRATION	Foam type	Dual foam type
CLUTCH TYPE	Wet, multi-disc	Wet, multi-disc
TRANSMISSION	4-speed	4-speed
GEARBOX RATIOS:		
1	1.750:1	2.000:1
2	1.315:1	1.555:1
3	1.045:1	1.210:1
4	0.833:1	0.954:1
GEARING, FRONT/REAR	14/46	14/46
IGNITION	CDI	CDI
PRIMARY KICK SYSTEM?	Yes	Yes
RECOMMENDED SPARK PLUG	N-86 Champion	NGK B8EGV
SILENCER/SPARK ARRESTER/		
QUALITY	Yes/no/average	Yes/no/average
EXHAUST SYSTEM	Up-pipe, left side	Up-pipe, right side
FRAME, TYPE	Double cradle, chromoly	Single downtube, split cradle, chromoly
WHEELBASE	1500mm (59.1 in.)	1475mm (58.1 in.)
GROUND CLEARANCE	330mm (13.0 in.)	370mm (14.6 in.)
SEAT HEIGHT	955mm (37.6 in.)	970mm (38.2 in.)
STEERING HEAD ANGLE (RAKE)	28° 30 min.	29° 6 min.
TRAIL	120mm (4.72 in.)	123mm (4.84 in.)
WEIGHT WITH ONE GALLON GAS	228 lbs.	234.5 lbs.
RIM MATERIAL	Aluminum alloy	Aluminum alloy
TIRE SIZE AND TYPE:		
FRONT	Bridgestone 100/80 x 21	100/80 x 21
REAR	Bridgestone 150/80 x 18	140/80 x 18
SUSPENSION, TYPE AND TRAVEL:		
FRONT	KYB 300mm (11.8 in.)	KYB 285mm (11.2 in.)
REAR	Monocross 320mm (12.6 in.)	Floater 322mm (12.7 in.)
INTENDED USE	Motocross	Motocross
COUNTRY OF ORIGIN	Japan	Japan
RETAIL PRICE, APPROX.	\$2449	\$2399
DISTRIBUTOR	Yamaha Motor Corp. U.S.A. 6555 Katella Ave. Cypress, CA 90630	U.S. Suzuki Motor Corp. 3251 E. Imperial Hwy. Brea, CA 92621
PARTS PRICES, HIGH-WEAR ITEMS:		
PISTON ASSEMBLY, COMPLETE	\$57.20	\$38.89
RINGS ONLY	16.00	11.02
CYLINDER	270.90	169.86
SHIFT LEVER, COMPLETE	25.60	17.47
BRAKE PEDAL, COMPLETE	37.90	21.48
FRONT SPROCKET	9.50	13.93
OVERALL RATING, VARIOUS CATEGORIES, KEEPING INTENDED USE OF MACHINE IN MIND:		
HANDLING	Fair	Very good
SUSPENSION:		
FRONT	Good	Fair
REAR	Good	Excellent
POWER	Very good	Fair
COST	Very good	Very good
ATTENTION TO DETAIL	Very good	Fair
EFFECTIVENESS, STONE STOCK	Fair	Good

their overall handling manners. The YZ, with the motor of death, loves to be short-shifted and lugged. Rough straights are smoothed best by riding this way. Fail to shift up and the bike rips, instead of floats, over the bumps. It exhausts the rider since he must maintain a death grip on the bars.

Now, if you attempt to ride the RM this same way, the results are grim. It won't get out of its own way. Revving the motor and staying on top of the powerband is a must. Every time you think you should shift up, don't! It needs to be ridden like an over-stuffed 250.

PIECES OF EIGHT

In the style department, Suzuki suffers from a case of the normals. It is your basic unflashy-looking bike. The YZ appears big, yet smooth lines give it a tasty feel and a nice look.

Both bikes are fitted with Bridgestone tires, front and rear. Wallet permitting, in-

stall Metzlers or Dunlops quickly. The stockers work great on bone-dry tracks and nowhere else.

Keep a close eye on the spokes; both bikes' spokes loosen wildly and need maintenance during the first few hours of riding. Expect the circular life of your Yamaha front rim to be very short. The material is soft, and after a short period the rims resemble coat hangers.

Shock adjustment is especially easy on the YZ. In fact, it's the easiest single-shocker to work on. The RM's reservoir line runs all the way to the underside of the tank. Dumb. This, with a collection of vents and tubes, congests the engine area beyond belief.

The Yamaha grips fit into the cut-and-throw category. Anything else is better. Both bikes have nice split-perch lever assemblies and comfortable dogleg levers. Also, both throttles are in-line units.

Don't expect to go too far on the RM, as the gas tank holds only 2.0 gallons. This is marginal at best. In contrast, the YZ takes in 2.8 gallons. You can feel the extra size in the tanks. The Suzuki is more comfortably shaped.

Keep an eye on all the little nuts and bolts on the RM. Loctite the rear fender bolts.

By installing a set of Boyesen reeds in the YZ, you can expect a nice gain off the bottom and into the mid-range. Same thing goes for the Suzuki.

THE FINAL CONFLICT: ROUND TEN

Our decision wasn't split, it was unanimous. By virtue of its ease of riding, cornering ability and light feel, the RM never gave the YZ a chance. The door was slammed shut after a lap was taken on each bike. It still amazes us that the YZ is lighter than the Suzuki. This, with the 3½ inches of added available rider movement, provided the knockout punch for the RM. □