DYNAMITE RM370 TEST/RM250 UPDATE

DIRT BIKE

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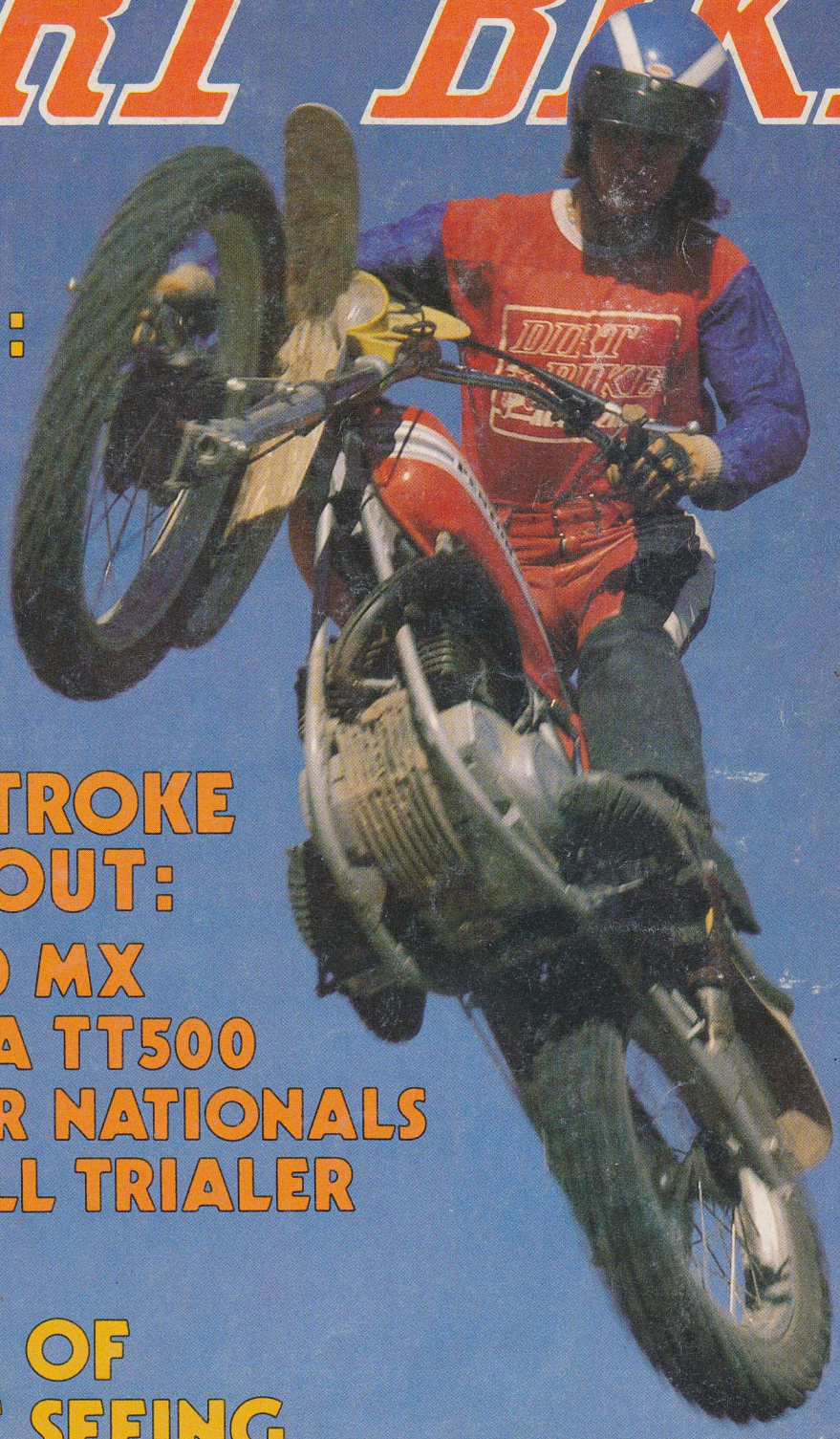
MARCH 1976



350 SHERPA T: CHAMP AGAIN!

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SIX DAYS OF ALMOST SEEING THE QUEEN

BAJA 1000 - KEEP YOUR CR IN ITS FRAME

DIRT BIKE

MARCH 1976 • VOLUME SIX • NUMBER THREE

TESTS

TECHNICAL

COMPETITION

DEPARTMENTS

Is the production idler wheel the same as Roger's?

Exorcism beneath the border

English Enginuity

ON THE COVER: Get out your January issue. Look at the RM370. That's in this issue. Don't look at this month's cover of Carl Cranke on the 125 Penton until after you read the Baja story.

NEXT ISSUE ON SALE MARCH 9

TESTING THE PURSE-SNATCHERS

1776 miles on the 370 and 250; Trans-AMA'd, SAM'd, CRC'd and pre-Baja'd; set-ups and shakedowns; a cast of thousands

RM SUZUKI MONEY-GRABBERS

For years people bought Japanese dirt bikes with the idea that they could make them work nearly as good as the expensive European machinery. But in this past year, at least two Japanese manufacturers have made tremendous dirt machines. Powerbands have evolved into the usable types previously found exclusively on European units. Likewise, new suspension systems, some radically different, were introduced. In some cases, they worked better than the European stuff.

Besides that, it seems like for every one detailing engineer on the European bikes, there are five or six for each new Japanese bike. Not that we think that details are as important as handling and suspension, but it's all the beautiful little pieces that make a decent package.

Add parts availability and consider the difference in parts prices between Old World and J-models to see why so many have left the prestige of owning a European machine for the practicality of owning a Japanese motocrosser.

All of this brings us up to the Suzuki RM series bikes, and in particular, the RM370 — the object of this test.

We have always felt that it would be as easy, especially for the Japanese with their vast amounts of racing experience and many victories, to produce a motocross bike that was very good instead of just alright. Finally, it got done.

We were so impressed with the suspension, handling, power and detailing combination on the RM125 that we knew — or rather hoped — that the 250 and 500 class bikes would be equally as impressive. It's a good thing we didn't know. We would have been worse than a bunch of kids waiting for Christmas morning.

If you missed the very technical RM250 test in our January issue by our very technical technical editor, you blew it. You had better order the back issue so that you'll have one of your own to keep. For this 370, and its smaller brother the 250, are

by the Staff of DIRT BIKE

THE bikes. Much more so than any of the recent "best yet" bikes we've tested lately.

Since writing the 250 test, Gunnar pulled a ninth at Puyallup and a tenth at Livermore in the 250 support class of the Trans-AMA on the same stock RM250 test bike. Not too shabby. Especially when you figure that the RM had right around a thousand miles on it and the original piston in it until the Livermore race. He figures that pre-running for the Baja 1000 took care of about 850 of those miles.

Back to the 370. We've had that an equally long time but wanted to live with it before we gave you a long-term test. The things that make the 250 so much better than anything else we've tested before were evident on the 370 during the first ride. Not only are all the critical component requirements met — power, suspension and geometry — but they are virtually spot-on.

Beyond the cylinder finning lie four swirling transfer or scavenging ports and a pair of reeds. Reeds that feed the bottom end only. Not at all your basic breathing arrangement. Port timing is slightly delayed as far as the inlet port is concerned. This delay is calculated to produce a greater torque output in the low to middle ranges (it minimizes the chances of mixture blow-back through those two rpm ranges). In the high rpm range, the amount of mixture being drawn in would naturally be less than normal except that the action of the reed valve increases the output in the higher range. This bit of radical exotica is where the RMs get their huge helping of smooth, usable poop.

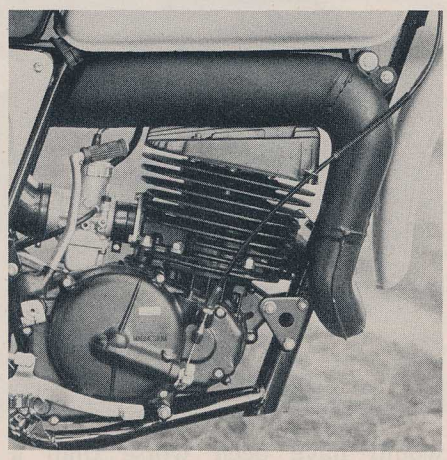
The trickness doesn't end there. Up near the top of the cylinder, just above the exhaust port, is a small bypass port that angles down into the exhaust cavity from a few millimeters above the exhaust port. Its job is to reduce the compression while the piston is moving very slowly in order to make starting easier. That it does. Once the engine is running, however, the piston is moving so fast that the hole can't affect normal engine operation. Nifty, eh? Someone has burnt a lot of midnight oil on this baby.

Suzuki started using this Power Reed arrangement on the RH74 and RN74 (250 and 370) factory racers in the beginning of the '74 season. The "long stroke" engine configuration

Photo by Tom Corley

showed up in the RN75s just this last season. Now, already and yet finally, they are ours.

There's not a part on these bikes that will remind you of or fit onto the old TMs. Well, maybe just one: the rings on the 370 are the same Keystone-style steel rings as found in the old TMs, but are both smaller in diameter — to accept the smaller bore, longer stroke design, and .3mm thinner to up the power output.



Power reed sits between the four rear cylinder hold-down studs, below the nuts. Note right (wrong) side shift shaft plug in case below pedal, massive cylinder finning and flowing lines of up-pipe.

In the exhaust side wall of the piston, as in the RH and RN75s, you'll find two holes drilled to let the mixture through to lubricate and cool that side of the piston and also the exhaust port rib.

The rod is now piston-steered like the Huskys and the factory Zooks, instead of crank-steered like the TMs. The idea here is to relieve strain on the big end bearings by taking up the thrust load on the small end.

Topping off the top end is a cylinder head identical in design to the casting used on the RN racers.

Feeding this top end is an aluminum-bodied Mikuni VM36SS carb identical to the 250s except for the jet sizes. Two of the little niceties of this unit are the choke rod (it'll stay on when you pull it and it has a definite click to it when it's up) and the anodized aluminum slide (instead of the old heavy brass, chrome-plated number). The new slide allows easier throttle control with less effort by your right wrist muscles. There is no idle adjustment screw; idle is set with the cable adjustment, if you think it should be.

Out the other end, the exhaust gasses flow through a new upswept pipe that tucks in very well, is spring and rubber-mounted, and is very similar to the racers.

Out back again. Feeding the carb is a wet polyurethane foam element in a very well designed polypropylene and rubber air box. (Well designed considering the space that was left to put one in.) There's lots of room for dirt and mud to settle below the filter, out of harm's way, and there's a neat rubber drain at its bottom through which liquids will make their exit. When ours arrived, we noticed that the little rubber flaps on the drain had been torn or cut away.

Down below, the crankcases are an engineering work of art. There's nary a bit of extra space inside the cases that cling to every change in shape of the parts within. Thin strengthening ribs everywhere you look. The clutch cover case, ignition cover and countershaft sprocket cover are very thin, light magnesium alloy. More on that later.

The spark plug gets its charge from the Pointless Electronic Ignition (PEI) system which is identical to the ones found on the R series, H and N machines. All of the wires on the primary parts are clamped and epoxied to keep them from breaking due to vibration. Needless to say, it performed flawlessly.

The clutch is wet and carries five lightweight aluminum alloy plates and one steel-driven plate as opposed to four and one on the 250. It rolls on double caged roller bearings.

Primary reduction is by straight cut gears.

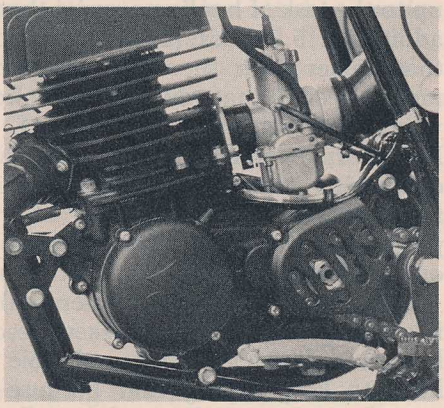
Crank and all transmission shafts run on ball bearings.

There is no slop before the shift lever starts moving the shifting mechanism. It has a good feel to it. However, the same problem exists that we had with the 250. A very small problem since it works fine over 99 percent of the time, but still, it's there. It feels like the spring on the shifting drum indicator is slightly weaker than what is needed. If you even slightly brush up against the lever with your boot, or if you touch a berm (not to mention flying sticks and stones), you're instantly in another gear or, usually worse, in neutral! In addition, this foible makes it difficult to find neutral when you do need it (like for starting). Perhaps a combination of

CMC's #1 Mike Bell.

a stronger shift drum indicator spring and shift fork return spring may be in order, as the lever requires relatively little pressure to put things in motion.

Alas! This modern-day dirt-pounder won't primary kickstart. Evidently the motor boys felt that the addition of one and a half to two kilos in weight, roughly 15mm in crankcase width, and the added production costs would not make this convenience worthwhile. Combine this with the hard-to-find-neutral problem, and it makes for some pretty anxious moments out on the track should you happen to stall it in a race.



Phillips head screws alone, with flat or lock washers and with both; integral-washer bolts, regular and shouldered bolts; bolts with and without lock washers; Castle nuts, plain and nylon locknuts; nuts with no washers, flat or lock washers, nuts with both; pivot pins, cotter pins, circlips and slip pins.

On the lower rear of the right side clutch cover there's a small rubber-covered tin plug where a seal will fit in and an extended shift shaft will fit through.

At the final event of the Trans-AMA at Saddleback we noticed that Emilio Ostorero, ace Italian motocrosser, had his RM370 set up to shift on the wrong side. That is, of course, the right side. So it can be done. Not so easily with the 250s; they have a different case without a plug. Enough said on the power train for now.

Where your hands rest, you'll find a nicely bent pair of chrome moly bars painted black and a fine set of grips that won't have to be changed. Most everyone felt that the bars were just right, but there's always someone . . .

The throttle too is very trick. It has an inverted V-shaped ridge along the inside edge of the plastic barrel that fits nicely into the same shape molded into the grip to keep it from sliding off. There are also several other little ridges running lengthwise for the same purpose. It's well designed and constructed to keep working and keep dirt out. Like anything else, it can be broken. Gunnar broke the end off the plastic barrel in a hard git-off on his 250.

Levers are first-class with rubber-covered ball-ends and nifty little dust, mud and gungo covers. They pivot on chrome-headed bolts with Castle nuts and cotter pins. Way to go!

The winner of the Kill Button Shootout (Nov. '75) is securely clamped to the left side of the bar complete with an extra ground wire.

Also clamped to the bars is a hefty looking aluminum alloy fork crown that looks as though it's cast, while the lower one has two additional pinch bolts and appears to be a forging.

Our steering head bearings on both the 370 and 250 loosened up twice and then settled down.

The front number plate performs a couple of duties and is held on by two separate rubber straps, probably so that in case one should disappear the plate won't. Two small wire loops with plastic rollers are bolted

to the plate to guide the front brake cable through its long and constant movement. Besides helping to identify you and guide the cable, the plate serves as protection for the ignition's black box, rubber mounted and double bolted to the front of the steering head. There's still that extra wire protruding a few millimeters out of the black box just like on the 250. Must be for testing.

Sliding on the bottom of the beefy 37mm fork tubes are a set of aluminum alloy forgings that carry 245cc of oil and an offset front axle. This offsetting is so that the inner tubes can operate through a longer distance as they go beyond the axle location. In the case of both the 370 and 250 (their chassis are identical), you get 211mm (8.3 inches) including the hydraulic slow-down area; 220mm (8.66 inches) is claimed. With 148mm of overlap between the inner and outer tubes with the forks extended, more than most, you get a very stable feeling while the front end does an excellent job of absorbing the bumps, holes, rocks and chasms normally found in *terra firma*. For slight handling mods, the tubes can be slid up a few millimeters till the caps hit the bars, or down a little as well. Yes, you have to remove the bars to add or change the oil.

The plastic fork protectors come stock. Be sure to securely tape the front brake cable to the protector at the top around the wiper boot to prevent the cable from bowing into the knobs or breaking the top of the protector off. Or, if the entire protector comes off, it could play hell with your front brake and your body.

The front end hasn't always been so plush, though. In fact, it still isn't as perfect as it can be. In the beginning, when George went down to pick up the 370 and set it up (for him?) he made a mistake. He had assumed that the bike was set up correctly in the first place. Four weeks, a bent front axle, two sets of sacked fork springs, a ding or two in the rim, a blown front tire, 3430cc of fork oil and ATF, a bent footpeg, and several assorted mushroomed fork internals later, the solution had been found.

In the forks, when we picked it up, there were, in addition to the stock pieces, two 10mm preload spacers. One in each leg. We were handed a bag containing two more and were told to add them if the front end was too soft.

George tried every possible combination of fork oil and preload imaginable in an effort to get them to work as well as the forks on the 250. He was looking to find a way to get the hydraulic slow-down to take over in the last few millimeters of travel. In reality, the forks were never allowed to reach those final few millimeters because the springs were coil binding just before they reached that position in their movement. That is, the springs were compressed until there was no space between their coils and so became in effect, a solid wire tube. THUNK!!! Thus: resulting machine damage, accelerated rider fatigue from the forks stopping abruptly two and three times a lap, and a few deserved greenbacks missing from George's wallet.

For every 10mm of preload added, roughly 10mm is subtracted from the travel. George tried everything but removing the spacers that someone had already put in. He felt that someone had surely measured the spring compression length and figured in the preload or they wouldn't be handing him still more spacers.

The forks didn't work too badly till the oil warmed and foamed up, and the springs sacked a little from the added strain. Then they were horrible. For four races, they were horrible.

Now, without the additional preload spacers, the fork action is nearly as good as the 250. Which is very good. But not quite as good because the springs don't seem to be up to the task of hauling around the additional 5.7 kilos (12.5 pounds) that comes with the 126cc larger motor. Weight that you would think would sit toward the front. However, our front end weight comparison shows a decrease in front end bias of 3.5 percent at 44.8 percent on the 370 to 48.3 percent on the front of the 250.

Hanging under the bottom crown is a nice plastic fender that's wide, long, and does it's job very well. We have to keep saying that because everything does work just that well. Imagine all these pieces, all on the same motorcycle, all working the way they were designed to, and doing it very well.

Trick steel sleeves and special rubber fittings are used to hold on the fender and other goodies throughout the bike, like the black box; they allow the bolts to tighten with the rubber compressing only a little, providing suspension from vibration.

Straight spokes (3.5mm) are laced between the 21-inch Takasago shoulderless aluminum alloy rim and

He saved it.

the 130mm front brake made of roughly the same material with slightly different ingredients.

The front binder has a good progressive feel and is not the least bit grabby, just strong. It will, under extreme conditions rarely reached by the average owner, fade slightly. So will any other brake. It matters not.

Hooked onto the forks at the steering head is a semi-double cradle chrome moly steel chassis. It's heavily gusseted near the steering head and triangulated repeatedly to repel flexing, bending and breakage. No frame problems were experienced throughout our extensive testing of both bikes.

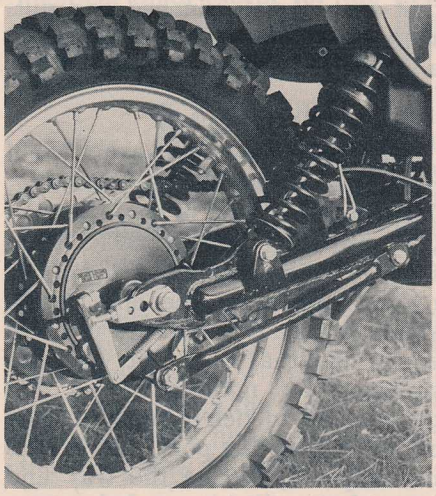
Swinging off the rear of the frame is a rather longish 496mm swingarm, also made of chrome moly. It pivots on, get this, roller bearings, which are protected from dirt and grit by a cover on each end that houses an O-ring seal. Like the 250, it's a rigid, long-lasting and trouble-free setup. All manufacturers should adopt this arrangement.

The swingarm is where the RMs differ more from the RNs and RHs. The factory racers have a boxed aluminum unit with the shock mounts moved up a little further on

the arm, but they use the same position where the shock mounts to the frame. So the shocks aren't laid down quite as much.

Two different rate springs are wrapped around the Kayaba nitrogen gas shocks. The smaller top spring collapses completely before the heavier spring starts to move. They seemed to be a perfect rate for everyone who rode either bike. On the 250, with close to 2080 kilometers (1300 miles) on them, they are now set on the second preload position. The 370, on the other hand, after eight 40-minute motos, lots of practice, several photo sessions and hours of merciless riding by test riders, is going to the third and highest available preload position after we discovered that the rear axle was bent from the shocks reaching their limit just a few times too often. Again the additional 5.7 kilos comes into play. The rear springs too are slowly sacking.

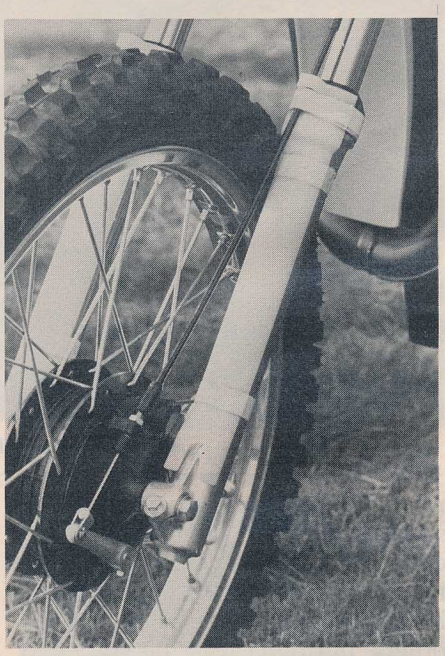
Like the front end, after shaping the springs and with 20-weight fork oil in them, the rear feels good at low speeds and flat-out as well.



True track with nitrogen gas Kayabas and 218mm axle travel.

When the rear wheel is sucked way up into the frame and bottoms, the bike will sometimes take a small hop sideways, but it's nothing serious. A slow-down at the end of the stroke when the shocks are compressed fully is so progressive that you'll never feel them clunk. Dialing on the throttle a little more will straighten out the situation immediately. The shocks will fade, but only slightly and only after about 30 minutes of hard riding. You'll be able to feel it and still keep track of things. Factory Suzukis run shocks with remote reservoirs for a larger oil capacity to help eliminate fading problems. It would be nice if Suzuki would release something similar as an accessory item sometime soon. If they do, we'll be sure to let you know how they work.

As we have said, the beauty of the RM is the way things work so well



Kayabas with 211mm of travel and protectors, a Takasago, three rubber wipers, a rubber cover, and a front wheel slower-downer.

together. The suspension, in conjunction with the geometry and power, is where this bike truly shines. The RM has turned a flat-out ride on a rough sand track through a section of one- to two-foot whoopdies from a dream into a reality. We never experienced this whoop-eating, flat-out stability on any other machine. It has made believers out of all of us. There is a better and faster way to go. And it's on a Suzuki RM.

Bolted firmly to the left underside of the swingarm is an excellent chain guide. It's very sturdy and the rubber roller will last practically forever if you oil it each time you lube the chain. Sure you can bend it if you hit lots of rocks, but it's the best one we've seen so far.

On the upper right side of the rear swinging fork is a very thin tab on which is bolted the rear brake cable guide. You must be very careful when tightening or loosening the bolt or the tab will soon separate from the arm.

Out at the trailing end of the swingarm is a very clever arrangement for adjusting the rear wheel location and chain tension. The adjusters are held to the frame by two hollow bolts. The axle passes through the center of these, thus allowing you to remove the wheel by simply removing the cotter pin and nut, then sliding out the axle. With the spacers out, the wheel can be pulled free without disconnecting anything else. No cables, torque arms, nothing. So, you won't have to readjust your chain when removing the wheel, or when adjusting the chain, you won't have to loosen the axle. Very nice. The wheel bearings, as in the front hub as well, are sealed on the outer side. When the rear axle bent, it loosened up the bearings in the hub, but only a little.

Rear brake diameter is 150mm. It works and feels every bit as good as the front one. No problem. Lurking inside that drum, however, is a potential problem. Namely the rear brake return springs. Two broke on the MXA 370 that Preston rode at the Riverside race; DNF. It ruined the hub, the shoes, and messed up the backing plate. One broke on Gunnar's 250. Being the slick guy that he is, he caught it in time. We have also heard of others breaking, so the ones on our 370 were replaced with Kawasaki exhaust springs. They're about the same tension, maybe a little stiffer and haven't broken yet. They're also in the 250 now. Must be the heat generated there that gets to 'em. They did it to us, they'll do it to you.

Six beveled, socket-headed bolts with nylon locknuts secure the 50-tooth, aluminum alloy sprocket to the hub. Keep a close eye on them (like after every moto), or you'll be asking for it. Use lotsa Loctite. And don't forget, WD-40 on everything to keep it clean and lubed.

Rear spokes are 3.5mm also, but reinforced to a larger diameter where they meet the hub. Incidentally, we didn't have any of the spoke breaking problems that we had in the beginning with the 250. Not one broken spoke to date, front or rear. You must tighten them just a little at a time. If they are very loose, as they set at first, make three gradual sweeps around each wheel. The rear wheel shapes up quickly compared to the front. As they seat in, two passes. Finally you can do it in one. Keep the ol' eyes open and the nipples a twistin'.

The rear rim is also a Takasago

alloy number and is wrapped with a very low profile IRC six-ply weenie. A 3.00 IRC hangs around the front rim. RMs in our area are coming with these or the superior choice, Bridgestones. We were surprised at how well the Bridgies worked on our 250, and on a wide variety of surfaces. But then, we never rode a bike that stuck in the corners so well as the RM either. IRCs seem to work fine when the track is sandy, loamy (for California) or tacky. When it dries out, and the dirt's like sand on concrete, they just don't cut it. If you have a choice . . .

Hanging out in the air far above the rear wheel is a rear fender made of the same nice rubbery plastic as the front fender and side number plates. They've proven themselves on several occasions to be quite durable. After several hours of running, the rear on Gunnar's 250 developed a small crack just behind the seat.

Let us not forget the seat. It's perched atop the small-diameter chrome moly tubes of the rear frame, hooked over a frame tube in the front and secured with two bolts at the rear on either side. It's just peachy as far as comfort is concerned. All you could ask for in a seat. Except for maybe plastic instead of sheetmetal for a seat base. Padding is excellent and it's very lightweight. Right around a kilo without the bolts, we'd guess. One thing you've got to do when you get yours is to unbend the little tabs that hold the covering to the base (one side at a time works best) and reglue the rubber edging to the sharp edge of the seat base so that it won't come loose and cause the seat to tear like our 250 did. Do it. It's one of the few things you will have to do to set it up.

There is another problem that you could run into with your seat. After five 40-minute motos and some practice, the right seat mounting tab broke away from the base and it bounced around the final few laps of that fifth moto. George tied it down for the next heat but it loosened up and the left side let loose too. His hot setup was to drill out the three tiny spot welds that hold the mounting tabs to the base and install six 10-32 machine screws with large flat heads and aircraft locknuts with large washers under the foam. In fact, if you value a place to rest your body once in a while when riding, you might do the same to yours at the same time you're gluing the rubber edge stripping. Two items for the initial set-up. Gunnar's hasn't broken and we haven't heard of any others, but don't let it be you.

Gunnar Trans-AMA'n at Puyallup.

Straddling the top backbone of the frame, above the pipe, behind the steering head and directly in front of the seat is a beautiful, super-lightweight, aluminum alloy, bright Suzuki yellow fuel container. It's held to the frame by two qualified rubber straps. One hooks around the frame and to the tank on either side in the lower front. The other stretches up to a hook in the rear. Large rubber snubbers are riveted around the backbone under the tank to prevent it from vibrating against the frame. Certainly one of the better ways to mount a fuel container on a motorbike, for there are no tabs to break from vibration. The entire unit (with straps, petcock and cap) weighs just 1.36 kilos. Filler cap is plastic and has a one-way-type valve to let air in but not fumes out.

There is, however, one small problem or two that we had with ours. On both the 250 and 370, the plastic filter tower that sticks up into the tank comes loose from tightening the petcock, maybe a little too much. And on our 370 and six other RMs we've heard of, a small crack developed on the top front edge of the tank directly in front of the filler. At first it was just a minute drool that stunk up the van and messed up that beautiful yellow paint. Gradually it became worse, so we had it heliarced. Seems that when the aluminum is rolled around at that spot, it gets pinched and puts some stress there. Then, eventually, a little T-shaped crack appears.

WAXIN' UP

Swinging your leg over, you'll notice that it feels like the real thing. The petcock is easy to use. Down is ON, anything else is OFF. Cold starts require a pull up on the choke rod. Clamped on the end of the kickstarter shaft is another piece of equipment that does just what it's supposed to, nothing more. The pedal is easy to kick through because of the little bypass port, and it folds in completely out of the way and stays there till it's needed again. Then, and always, it swings out easily, thanks to a little rubber boot that covers the pivot point to keep dirt out. (What did we tell you about the detailing?) It can take several kicks when cold, only one when hot. Hear the roar! Sounds like you're standing inside the workings of Big Ben.

PADDLING OUT

A short snick of your left toe puts you in the foam. The lever on the left side of the bars attached to the clutch has a very easy action to it, hot or cold. It performed flawlessly on both our RMs through a combined

total of some 2400 kilometers (1500 miles) of brutal operation. Ease it out.

Once under way, you'll get the feel of all those big powerful beans, oozing out of the pipe, twisting the rear wheel, trying to bust it loose, rocketing you forward. Ours pulled 36.7 horses at 6500 rpm and it gradually dropped down to 34.2 way up at 8000. (Check out the chart in the specs.) The 250 dropped off sharply after 8000, reaching its peak of 28.9 hp at 7500 and 28.4 at 8000. So there was a wider spread at the top where the engine is still running very strongly. A wide powerband with lots of punch on the bottom, in the midrange and on top. That's what open class machines are all about. And that's what the RM370's got. Lots of it, everywhere. Most people who rode it, including Kent Howerton who went testing with us one day, agreed that the 370's power (coupled with the handling, of course) made the bike a lot of fun to ride. Very *usable* power. Most also agreed that the 250 was easier to ride. Again, two identical bikes except for the tires, motor and pipe, with a huge difference in feel between them.

SETTING UP

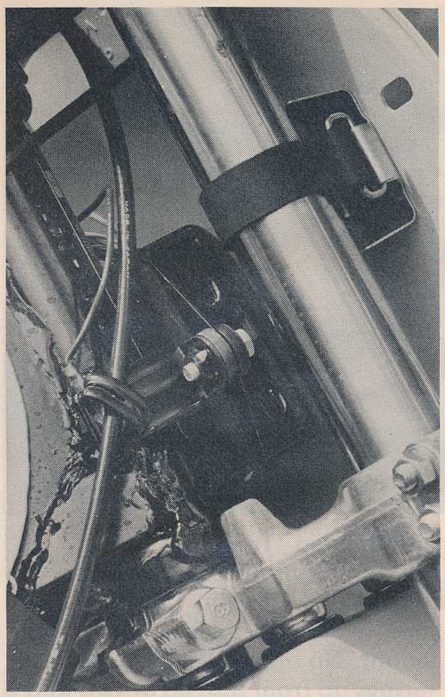
Second, third, fourth and fifth come just as easily and quickly as first gear. Shifting is easy, with the power on (especially so in the higher gears) or off, with the clutch, or without. You'll probably knock it out of gear a few times on your first date with the bike till you get used to the gentle indicator spring. Usually it jumps out with the power off, like in the air off a jump. Don't worry, the suspension will save you.

SHOOTING THE CURL

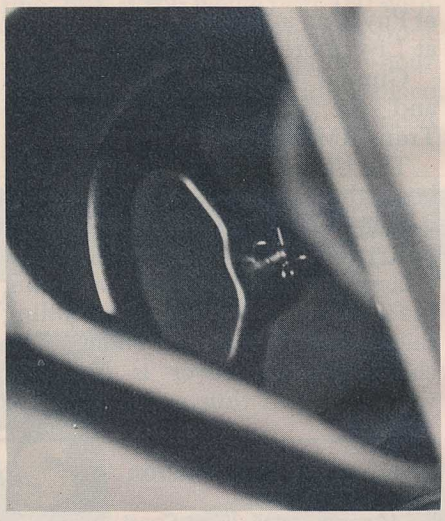
Gassit! Head down the track toward that big, slick berm that you could never quite pull in fourth before. Click it into fifth as you enter the berm, dial on those pent-up ponies and rocket away. (Sorry, Rex.) Unbelievable!!

You'll find yourself taking tighter lines through each turn on a lap. It has taken us forever to dare to lean the RMs over far enough for the front wheel to lose traction. The front end STICKS! You can change your lines for passing like crazy.

With all that beautiful power at hand, combined with the fine working suspension and excellent geometry, you get the confidence to do most anything. On the RM, you can get away with it. Very forgiving indeed.



Ignition black box and rubber mounted everything; ugly welds.



Looks awkward, but not after you clean it once. There's room for your fingers to feel all the way around to make sure the filter seals against the box. A little twist will help. Replacing the wing nut with a plain nut makes it easier to screw on. Don't you EVER forget the slip pin.

Power-slides are easy to come by and easier to control. You can just blast into a corner, much faster than ever before, and know that somehow you'll get out of it. And with the shiny side up and the rubber side down. It'll make a better rider out of you for sure.

Front and rear suspension work in unison to soak up little bumps and big holes at low and high speeds as well. It works even better at high speed. The RM begs to be ridden fast and hard. When you have, then and only then will you fully appreciate what the RMs are all about.

MISCELLANEOUS TIDBITS AND HARDWARE

Pivoting on steel pins with springs at about a 45-degree angle off the sides of the frame are a couple of the nicest footpegs you'll ever rest your boots on. They're toothy, sturdy and more than adequate.

The rimlocks are excellent; very light and never let a tire slip once, even through several flats.

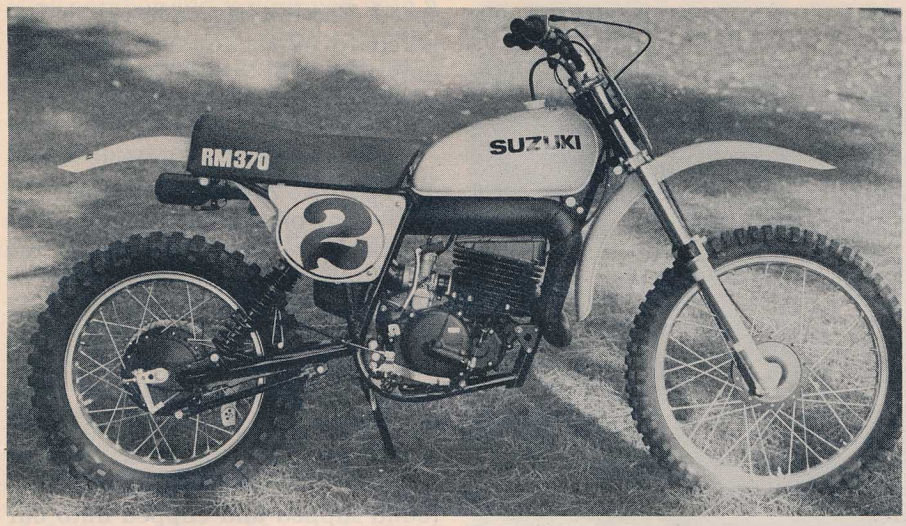
A new and better brake pedal was found slipped and clipped onto our 370. It's a stamping as opposed to the forged unit that came on our 250 and all of the earliest RMs. Better in two ways. First, because it's safer and easier to bend back without heating (great, since the pushing tab of the pedal protrudes out into a very precarious position just beside the clutch cover and well outside of the bottom frame tubes).

Second, it now has a larger area with teeth to hit with your boot. Gunnar made a beefier one using the rear portion of the old stocker with more material for additional side strength and a wider section with bigger teeth to make it easier to find. We bent the pedals on both bikes around like pretzels once each. Its mount is separate from the frame and held on with two bolts. This setup is sturdy and practical; it can be replaced if wear should occur from lack of oil over the years. Shoot some WD-40 on the pivot each time you hit the chain guide roller. There's a healthy twist-type spring around the pivot and a compressing spring on the far end of the cable to help return the pedal.

We discovered that the rear brake will tend to be a little sticky if you thoroughly wrap the rear hub on both sides with course marking banners to retain the heat.

Imagine, a finely refined piece of racing equipment like the RM with a sidestand. It neither gets in the way nor weighs much. (We unbolted ours because the bike is never left sitting around long enough to need one.)

Cables are all first-class but there's a little bugaboo in the design of the rear brake cable stop, up near the pedal. Dirt from your boot collects there where the inner cable enters its housing and causes the inner wires to



wear quickly. On the lower ends of both the clutch and front brake cable there are small rubber wipers threaded onto the adjusters to keep out foreign matter. More nice details.

PROBLEMS, WHAT PROBLEMS?

First of all, keep in mind that with all of the things we have told you and are about to tell you, we probably have more time on our RMs than anyone. The 250 is truly battle-scarred from several local races, hours of testing and photo sessions, prerunning most of the Baja 1000 course, more local races, and finally finishing up with Gunnar's two Trans-AMA races. It all adds up. Most of you will probably not put in the time in a year and a half that we've put into these bikes in just a few short months.

Only the needle jet had to be changed in the 370 from a Q-0 to a Q-4 to get the proper midrange response. Much simpler than the 250. If you don't have the test in the January issue, shame on you.

Another breathing problem we had was with the filter shrinking from constant cleaning in gasoline on the 250. It cost Gunnar the original piston and a first-over bore job after the Puyallup Trans-AMA. More dirt again found its way past the filter at Livermore. With more than 1000 miles on it at Puyallup, the original equipment was still tight enough for a ninth. Not bad for a stocker. The 370's filter is still working fine. So far. JT has just laid a couple of Phase 2 filters on us to try, but we haven't yet.

On the other end of the breathing is the lightweight up-pipe. We figure that when both the header springs disappeared from up front, the additional vibration caused the tab to break away from the rear of the pipe where it meets the rubber mount. No big deal. Next time, four springs up front instead of two and a little weld on the tab.

On the 250, the stinger broke off at Puyallup and the header split a bit at Livermore. Lots of hours.

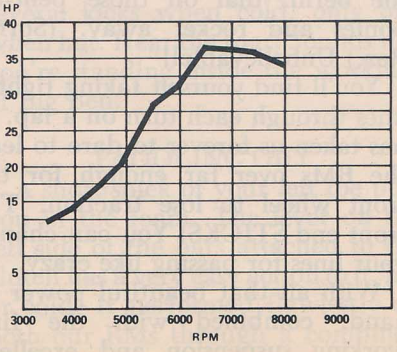
Gunnar replaced both sprockets and the chain before the two Trans-AMAs.

The bars are fairly soft, so when bent, they can be bent back.

Once when the 250's forks were pouring oil out the seals, disassembling them, merely wiping the seals with a rag and reassembling them cured the problem. The clutch/primary cover is made of very light and thin magnesium. So

SUZUKI RM370A

Price:
(Approx. retail, West Coast) $1560
Engine:
Two-stroke single, piston port and reed valve
Displacement 372cc
Bore & Stroke ..... 77mm x 80mm
Compression Ratio ..... 6.9:1 (actual)
Carburetion ..... Mikuni VM36SS
Standard Jetting:
Main jet #340, pilot jet #50, jet needle 6FJ6-3, slide cut #1.5, needle jet #Q-0, air adjusting screw 1-1/5 turns open, float level 0.55mm
Horsepower:
Claimed 42 hp SAE net at crankshaft
Clutch:
Wet, multi-plate with aluminum and fiber discs
Primary Drive:
Straight-cut gears, ratio 2.384:1 (62/26)
Transmission Ratios:
1) 2.071
2) 1.625
3) 1.263
4) 1.000
5) 0.869
Final Drive:
#520 D.I.D TM chain, 108 links
13-tooth countershaft
50-tooth rear sprocket
Air Filtration:
Wet polyurethane foam element
Electrics:
Nippondenso PEI
(Pointless Electronic Ignition)
Starting ..... Non-primary kickstart
Lubrication ..... Pre-mix, 20:1
Recommended Fuel ..... Premium
Recommended Oil:
1. Shell Super M (vegetable type);
2. Castrol R30 (vegetable type);
3. Golden Spectro (synthetic type);
4. Bel-Ray MC1
two-cycle racing lubricant;
all 20:1 ratio
Fuel Tank Capacity:
8 liters (2.1 gallons)
Frame: Chrome moly, semi-double cradle
Suspension:
Front—Kayaba telescopic forks, 220mm stroke claimed, 211mm measured;
Rear—Kayaba nitrogen gas shocks, 218mm measured travel
Wheels & Spokes:
Takasago shoulderless rims with 3.5mm spokes up front and 3.5mm reinforced spokes rearward
Tires:
Front . . . 3.00x21 IRC or Bridgestone 4PR
Rear . . . 4.60x18 IRC or Bridgestone 6PR
Dimensions:
Wheelbase ..... 144.5 -0 +2.8cm
Swingarm length 49.6cm
Ground clearance 25.8cm
Bars, height 113.0cm
Bars, width 89.0cm
Pegs, height 33.7cm
Pegs, width 44.5cm
Seat height ..... 89.0cm (in the middle)
Fork angle:
Claimed and measured, 30 degrees
Weight:
Claimed dry weight 102kg (225 pounds); measured weight with oil but no gas, 104.1kg (229.5 pounds)
44.8 percent on front,
55.2 percent on rear
Brakes:
Front ..... 130mm cable-operated
Rear ..... 150mm cable-operated
Instruments ..... None
Lights ..... None
Silencer ..... Yes, but for MX only
Spark Arrestor ..... No
Warranty ..... None
Parts Prices:
Piston $27.84
Rings $15.32
Clutch cable $5.57
Brake pedal $12.76

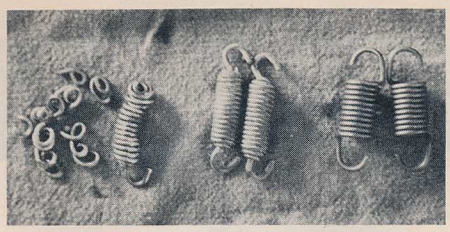


thin, in fact, that when you pull in the clutch lever, you can see the case breathing. In when you pull the lever, and out when you let it out. Check it out.

One Sunday at Saddleback a small boulder jumped up and kissed the same thin cover squarely, punching a hole, draining the oil, and mashing a section of the clutch plates. No difference in clutch action was felt, so it must have happened during the last part of the moto.

Surely, you'll remember to replace your rear brake springs (it happened to Wolsink in the first moto of the final Trans-AMA at Saddleback) and to glue the edging and bolt the mounting tabs to your seat. Keep an eye on your filter and exhaust springs. If your tank develops a tiny crack, get it welded. It's only about the lightest metal tank around. The 370 has knee dents to prove it.

There's a little rubber shield between the pipe and the left side number plate to protect the plate from melting. After a while, the two little nubs that protrude through the plate will rip away from your leg sliding by. We used Silicone Seal to hold it on.



Left to right: MXA's DNFers; how they used to look; the Kawasaki exhaust springs used as replacements.

That leaves us with the suspension. The 250's is still working perfectly front and rear. The 370 is another story. While it is close to the 250, it's not as good as it could be. The forks are just a little bit off and it won't be long for the rear. It's the springs. They just don't seem to be up to the job of supporting the extra 12½ pounds difference that comes with the 370 motor. You can get by for quite a while with no preload spacers and 20-weight oil in the forks. For some time it should work fine. But, if you weigh over 180 with your gear on, or compress the front end seven inches for two three-hour rides to and from your riding place very often, you're going to need stronger springs.

It takes the rear several hours of riding before you would want to go even to the first preload notch. But the day will come. Maybe our springs will settle on the third notch before we have to try a spacer between the springs. Or, for that matter, different springs. We'll work on it and let you know what we come up with.

RIDIN' IN THAT LAST WAVE ALONE

We got involved with our testing because we became so involved with this impressive machinery.

Look at the bikes as a total package: there's not a better stock bike available. The RMs have all the qualities of several brands in one machine. Their combination of handling through power, basic geometry and suspension design puts them far above any other bike at this time. It seems to us that they'll probably remain on top for quite a while. They are beautifully engineered and constructed. A lesson in detail. And they're what's winning. Beating the tricked-out jobs. Truly an out-of-the-crate racer.

Need we say more?