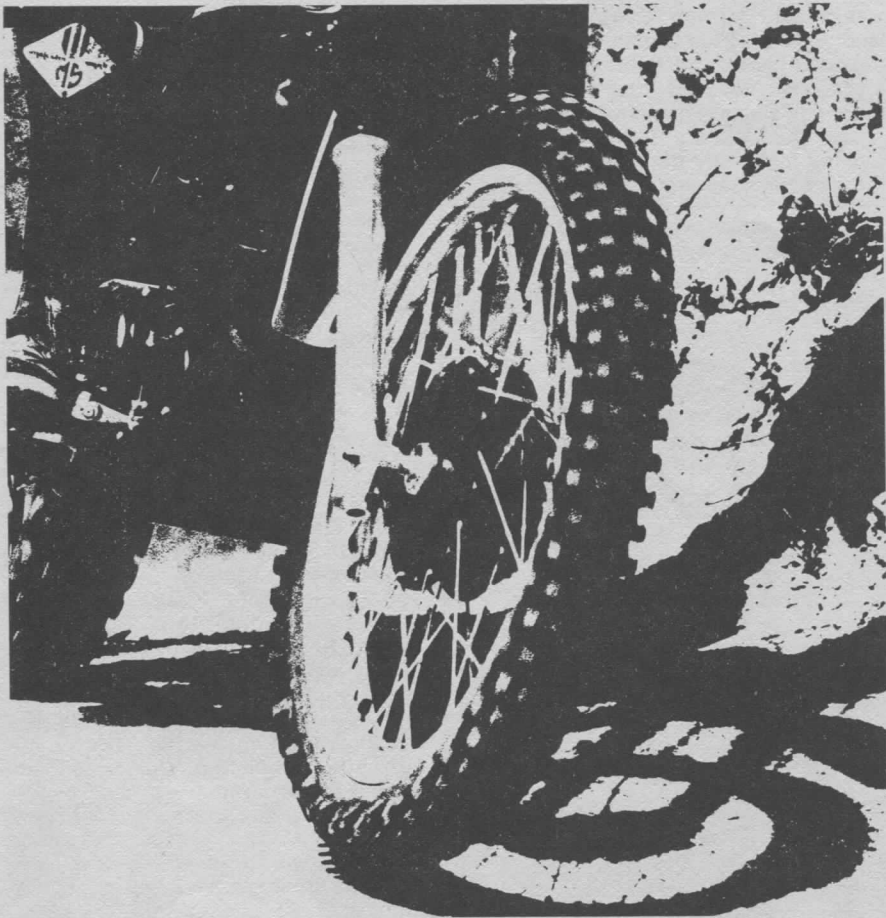


Innovation, or sign of the future?

23-INCH FRONT WHEEL FOR MOTOCROSS



By Tom Beesley

People, racers in particular, are always trying something new and different. Call it experimenting, research, development, innovation, back yard tuning, or whatever, but it always amounts to little more than a racer trying to get an extra advantage over his competition.

Sometimes such developments work out so well that they become standard items, not only for a particular type or brand of motorcycle, but for much of the whole industry. When it works good for one guy, and he starts winning all the time, everybody else clambers to follow.

Examples: Long travel suspension, knobby tires, upswept exhaust pipes, 50:1 oil/gas ratios, treadless road racing

tires, gas shocks, air forks, 21-inch front wheels.

Take that last example in greater detail. Younger readers will no doubt say: "What's so trick about a 21-inch front wheel? All the bikes come with them." Older readers will hopefully remember when everybody ran 19-inch front wheels. Nobody argued about it, nobody questioned it. That was just the way things were. That was the state-of-the-art. At the time.

Then, back in the dark ages of motocross, farther back than most of us want to remember, some of the European riders (who reigned totally supreme then) started showing up at race tracks with

"outlandish" 21-inch front wheels.

Some people were skeptical, some thought it was funny, but when those bikes so equipped started leading the pack with great regularity, everybody had to sit up and take notice. The superiority of the "new product" was obvious.

The riders with the 21-inch wheels were able to go much faster and smoother than the guys with the 19s.

You all know what happened. Nowadays, only street machines come fitted with anything BUT a 21-inch front wheel. That size is thoroughly accepted as the industry norm for off-road machines.

Well now, buddy-boy, things are about to change again.

On the World Championship Grand Prix circuit last year, a couple of riders showed up a few times with a great big 23-inch front wheel laced onto their hubs. The same thing happened again. There were skeptics and scoffers, but it looked as though the setup had some very definite merits.

Yokohama made the tires and D.I.D. made rims. What we're telling you is that you can get both right here in the U.S. of A., and get a head start on your racing buddy down the street.

We got the opportunity to try out a 23-inch setup and we'll tell you straight away that we liked it. The bottom line of this whole thing will be (after you finish reading everything between here and there) that the 23-inch front wheel feels as different (and good) compared to a 21, as a 21 does to a 19. How's that grab you?

Sudco International furnished us with the Yokohama tire, tube, the D.I.D. rim, but we turned the rim over to DG Performance Specialties for lacing to our hub (Suzuki PE-250) with their neat-o 8-gauge super-heavy duty spokes. When we picked the laced wheel up from DG, they had gold-anodized the rim as well as the spokes. It really looks super.

First off, the tire was really easy to mount. It has fairly thin sidewalls, but a larger tire is easier to stretch over a rim anyway. Those thin sidewalls turned out to be one of the potential trouble spots with the setup, as the tire is more susceptible to rock bruises and knocks than some we've tried. On many courses, that slight vulnerability won't matter in the least, but we did have a little trouble on our local rock-strewn desert loop.

Don't let us spook you off yet! We pumped the tire up, ran it hard through the rocks and came back with about half as much air as we started with. But there is still air in the tube, and we rode the bike back to the truck. Doesn't seem to be flat, or a slow leak, but that air definitely went somewhere. And yes, we did have a valve cap on the stem.

Anyway... The tire has a 4-ply rating, which is perfectly acceptable. The thin

walls are probably in an effort to reduce the weight of the much larger tire. Also, Yokohama says that the arrangement is supposed to be for motocross racing, wherein you normally don't encounter quite as many sharp rocks as in our beloved SoCal desert. We have to give them that point.

We've already told you that we liked the 23-inch front wheel, but now we should tell you why. Basically, the handling of the motorcycle (as we said, a Suzuki PE-250, which while not that bad, still isn't the world's best handling enduro machine) was improved about 95 percent. Just like those old guys who switched from 19 to 21-inch wheels, we could go faster and smoother, with the 23.

The larger tire puts more rubber on the ground, so you've immediately got



more traction to play with. There is more side bite while leaned over in turns, and it's not hard to figure out that that's a big plus. You really have to be trucking to get this tire to wash out from under you.

Our tire was a 3.00x23-inch job, so it wasn't ideal in our favorite deep, deep sand wash. A 3.50 desert tire is better for this application. The relatively thin profile of the 3.00 cuts a pretty fine swath through the sand and just digs on down. Because of the larger diameter of the tire, though, the sand wasn't as bad as with a 3.00x21-inch tire. We think that a 3.50x23 tire, although pretty heavy, would be the absolute berries for desert racing.

For most motocross courses, the 3.00 profile will be fine.

As good as the 23-inch wheel arrangement is in the turns, where it really shines is in straightaway bumps, whoops, holes, dips, etc. Here, the tire really makes a believer out of you. It's so smooth! Everybody who rode our 23-inch equipped PE felt the same way.

The way we did our test was to lay out a course in the desert, about 14 miles long. We did a couple of laps with the

stock 21-inch setup on the bike, then whipped in to the "pits" and did a quick switch over to the 23. Sure could tell the difference in the two. What we'd like to do is take a rider out and do the same thing, only not tell him or let him see the new wheel and see if it makes any difference. Bet you a hundred bucks the guy would come in after trying the 23-inch wheel and demand to know what radical improvements we'd made to the suspension.

We motocross track-tested the bike at Saddleback Park, which is a nightmare during the week. Seriously, that track is the hardest, slipperiest, roughest surface on earth. A perfect surface to try out suspension, or something as radical as this 23-inch wheel.

Same story as in the desert. We could go considerably faster with the 23, and a whole lot smoother. That tire just rode over those bumps like they weren't even there. Much like the difference in long or short skis through moguls. The short ones turn faster, but the long ones are smoother and faster on the straight.

The biggest single type of obstacle on the mid-week Saddleback course is the stutter bumps you get on the approach to a corner. When the track is properly groomed, as for a race day, the rear wheel chatter and hop creates these little ridges. On relatively soft soil, they aren't any problem, but when Saddleback gets baked hard as a brick, those previously harmless little bumps become disasters lying in wait for a hapless rider to come along. Again, the 23-inch wheel was much, much smoother over those bumps than the stock 21.

While we can't certify any other tracks, we know for sure that several well known riders, including the DG Performance racers, have gone to the 23-inch wheel as THE hot setup for Saddleback Park, because of the superior handling traits the tire gives any motorcycle in just such bumps and holes.

The larger tire size has a number of other outstanding characteristics. Most significant, you'll find that you won't need as much suspension travel, because the tire itself compensates for the little bumps that use up travel at a progressive rate. The amount of travel presently available on most all off-road machines will be more than adequate.

How will a 23-inch wheel benefit you? If you've got a machine like the PE-250, which won't win too many prizes for outstanding front forks, the switch will be like artificial respiration for a drowning person. New life into your motorcycle.

If you've got a Maico, or something like that, the improvement will admittedly be more marginal, but there will be a significant improvement nevertheless. The extra security you'll have available in rounding corners just might give you that extra edge over your competition you've

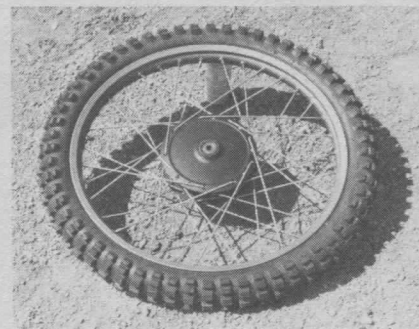
been looking for.

On the negative side (slightly), you must be careful, before you plunk down your dollars and cents, that the tire will work with your bike. If you've got zero inches of clearance between the tire and the fork triple clamp or the fender when the works are fully compressed, you are going to find yourself sailing through the air the first time you do compress the forks all the way. The tire just won't turn very well when it's pushed up against the fender.

To make sure, before you go to a 23, put the bike up on your favorite milk crate, with the front end up off the ground. Remove the forks caps and the springs, then push the wheel up as far as it will go. Measure the distance between the center of the axle and the fender. It had better be at least 15 inches, or a 23-inch wheel won't work, because diameter of that tire is very nearly that, at 14.85 inches.

Whether or not the Yokohama/D.I.D./Sudco/DG Performance 23-inch front wheel is something that's going to catch on and radicalize the front wheel business (like the 21 did to the poor old forgotten 19) remains entirely to be seen. We think that it could happen, but there are two schools of thought on the subject.

Some people feel that usable suspension travel has reached the limits already and that the bigger tire is necessary to give that extra winning edge. Others say



that the suspension outer limits haven't been reached yet, and that bikes are going to go back to 19-inch wheels to allow the suspension to act properly.

All we can tell you, at least until we peek around the pits at the Trans-AMA races, is that the 23-inch wheel made our Suzuki enduro machine handle like a dream, that we went faster and smoother on it than on a 21-inch wheel, and that there are some very definite attributes that can be easily understood by merely understanding the most basic of physics laws about tires and wheels rolling along the ground and over and through bumps and holes. Think about it, then decide for yourself.

In the meantime, we will keep a close ear to the ground, and we'll sneak and peek around the Trans-AMA pits to see if our very own heroes are using 23-inch front wheels on their bikes.

Let you know later... 