





# SMAILEST SUPERBIKE

The power is there, but at high speeds, the handling isn't.

Although large displacement, fast touring machines have been with us for a long time, it wasn't until 1969, when Kawasaki unleashed their now legendary Mach III on the general public, that the motorcycle industry became aware of what the word "superbike" was all about. It would be safe to say the Kawasaki triple of-

fered the motorcycle fraternity more performance per dollar than they had ever been able to get before. To watch the facial expression suddenly change on a rider who had just taken his first test ride on this three cylinder missile was an education. It seems no matter how much you tell a person about something, it isn't until he experiences it himself that he really understands what it's all about.

Just how strong an impact the Mach III had on the motorcycle public may best be borne out by the following incident which happened shortly after we received our first test bike back in '69. The day we got the machine, it was ridden home for the first



Styling has changed somewhat over last year. Bright orange paint abounds with plenty of shiny decorative trim.

time with only about 25 miles on the odometer. Upon leaving the freeway and dropping down the offramp to the stoplight, we came upon another rider who was piloting a brand new 40 inch twin. He eyeballed our bike quizzically and casually asked some question regarding the performance. As honestly as we could, we answered his queries, but it became immediately apparent there was a certain amount of disbelief on his side.

Just a few moments before the light changed, he asked us to wick it on for a block or so. Not really wanting to do this, we declined, but he was quite persistent. We looked around, and there was very little traffic to contend with. So we agreed.

The light went green, and we let our twin cylinder friend move first. The minute we saw his front wheel move, we turned the wick up and dropped the clutch. At this point, the race was over. At the end of one city block, we were a half block ahead. After rolling up to the next stoplight, our new found friend pulled up alongside, his eyes as large as dinner plates. All he could say was, "Wow! I would never have believed it." You could tell from just looking at him that



In addition to the standard friction type steering damper, Kawasaki has added a piston type damping unit underneath the lower triple clamp.

the wheels were going around in his head as he tried to figure out how he could sell his brand new motorcycle and purchase one of these two stroke bombs.

That was in 1969. Since then, the Mach III has become a commonplace motorcycle, but it has also become a standard by which many other machines are measured. The early Kawasaki triples were not without their share of problems. Electrical troubles and lower end bothers were not un-



A much needed improvement this year was the addition of the single disc front brake assembly. The new lower legs are cast aluminum.

common. However, one by one these problems were eliminated, until today the bikes now offered for sale offer reliability and dependability, as well as staggering performance.

The triple is a bike one must ride with a fair degree of respect. Even those riders who have a good number of years of competition under their belts generally show restraint the first time they climb on a Mach III. There's good reason for this.

Aside from the appearance of the 1972 model, there are a number of changes in the chassis. Starting at the front end, the new disc brake is a tremendous improvement over the conventional shoe arrangement Kawasaki has had up to this point. This single disc unit is powerful and exhibits no fade, although it takes a fair amount of pressure at the handle to actuate the caliper. The forks are somewhat new also. Instead of the steel bottom legs, the older heavier unit has now been replaced with a cast aluminum pair that should be somewhat lighter. On top of the upper triple clamp are some restyled instruments that are fairly easy to read at speed. While the new ones are certainly more stylish, at higher speeds the older instrument faces were more legible.

The basic chassis is untouched over



The seat is more than just comfortable, whether for solo or two up riding. Large turn and rear taillight signals make visibility at night a certainty. The rear brake was just fair.

last year's, although there are some subtle differences. The engine, for example, does not have a CDI ignition anymore. It now sports a conventional three point three coil setup which we had reservations about. Upon the completion of our six-hour test, the bike was running every bit as strong, if not stronger, than when we had started. A quick check back at the shop indicated the timing had not changed one bit. Starting is as quick as it has ever been. The engine runs just as smooth. Our guess is the CDI was dropped because of cost. It's far more expensive to put out a quality electronic ignition system than a conventional coil and condenser arrangement.

The rest of the engine is pretty much the same as last year. Although the bike was slightly slower, top speed was between 106 and 107. This was with the rider sitting bolt upright. Tucked in, the top end picked up another four mph. One interesting thing is that for the first time on an Oriental manufactured machine, the speedometer was amazingly accurate. At 100 mph, it was only 1 mph off. We were informed that Kawasaki has gone to great lengths to see to it that all the motorcycles this year have speedometers that are more realistic. This is certainly a welcome change.

There is a marked difference in the appearance this year. The fenders are



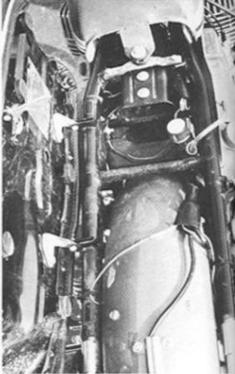
New matched instruments are quite attractive but are not as easy to read as last year's. The key is now located up on top where it should be.

now being painted the same color as the gas tank and side panels. There is a stripe of sorts on the gas tank that, while it certainly is distinctive, we don't feel adds to the appearance. This, however, is a matter of personal taste.

Stylists have done an amazing job in executing the shape of the gas tank. The fuel container holds four gallons even, and it's a good thing, too. While the Mach III certainly puts out plenty of beans, it's really thirsty. Running our high speed tests for six hours, we were somewhat staggered to find out our average was just slightly less than 13 mpg. We should hasten to mention here that any time we run a test of this sort involving a two stroke motorcycle, the mileage always plummets like a rock. Average use on a test vehicle yielded approximately 25 mpg. If you're looking for something easy on gas, you'd better look elsewhere.

Oil consumption, on the other hand, was quite impressive. We could average about 200 miles per quart of oil, and only one time during the test was it necessary to replenish the tank. This is very unusual. Another item that rather surprised us was the fact that the rear chain did not need any adjusting during the entire time we rode the motorcycle. Not only that, but throughout the entire six-hour test, no lubricant was added to the chain. This is also a first for Kawasaki.

One thing we wish the factory would do is to raise up both the side and center stands, because in a left hand turn, both drag badly. At the end of our test, the center stand had grounded so many times there was very little left of it. We suspect another week or so would have found us minus the upper portion of the center stand completely. A glance at the photo will illustrate what we are



What used to be jammed full of electrical components is now empty. This would be a good spot to keep spark plugs or a small lunch.



The grips were not the most comfortable in the world, and for long distances we would prefer a smoother type. Check the rubber dust cover on the clutch handle.

talking about. The side stand did fare better.

For long periods of time in the saddle, the fluted type hand grips are not the hot setup. They tend to tire your hand more quickly than the smoother, more conventional style.

The one area of performance that we feel should be high on the list of the sincere factory effort is that of handling at high speed. By high speed we mean anything over 75 mph. In this area, the Mach III just doesn't cut it. We found the front end would oscillate badly when being hustled

















Throughout the entire six-hour test, as well as the rest of the testing period, the rear chain required no lubrication or adjustment. This must be a real first.

through a corner at 80 mph. At 70, the rider just begins to notice a slight uneasiness on the chassis' part. At 75, it's much more pronounced, and at 80 it's a problem.

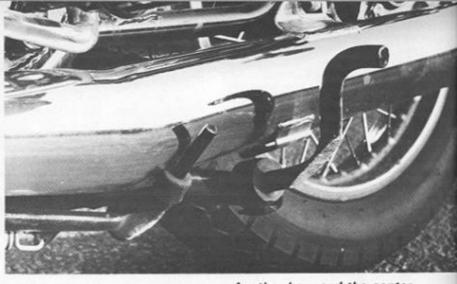
For average riding on the freeway up to 70 mph, the chassis is fine. So most people will never find themselves faced with this uneasy feeling, but we found when traveling in a straight line that moving one way or the other produced a slight hinged feel. It is our opinion Kawasaki should expend some effort and look at this problem seriously as one of prime importance. There is no question as to the motorcycle's performance potential, and it should follow that the chassis should match the power plant.

In an effort to find out once and for all why the H1 exhibited a definite reluctance to go straight over 80 mph, we spent more than a considerable amount of time measuring, aligning and in general checking the motorcycle over from front to back.

We disassembled the front fork assembly only to find out the new fork design is a vast improvement over the old one, and we would suspect Kawasaki fans will have no further problems in the front end department.

When we finally got around to checking the wheel alignment, we discovered the rear wheel was not tracking in the same path the front wheel was. It was offset to the right (the rear wheel) about 1/2". A sixteenth of an inch we'll go along with. If we're really pressed, we'll even live with an eighth of an inch, but a half inch is far more than healthy. Our first reaction was that we had gotten an oddball, but after checking several other brand new machines, as well as a couple of last year's models, we came to discover all Mach III's (that we checked) had the rear wheel offset.

What is happening is simply



this-the motorcycle being a single track vehicle cannot possibly be stable with the front wheel running in one track and the rear wheel running in another. As the speed gets higher, the handling gets hairier, (for all practical purposes, the bike can't make up it's mind which way it wants to go) and there is certainly no question that our test bike testified to this condition. What threw us off completely was the fact that the rear wheel, when viewed from the back, was directly in the center of the fender. Also, when measuring the rear wheel, it was exactly in the center of the swinging arm. Naturally one would surmise the wheels were properly lined up. Not

In an effort to pinpoint the problem and prove or disprove our theory, even though the wheels did not line up properly in the frame, we went about moving the rear wheel around until it was as close as we could get it.

Upon checking the motorcycle once again on the same course, we discovered it not only tracked truer (we also added a new rear tire) when steaming around a corner (we were able to increase our cornering speed by almost a full 10 mph) but the machine no longer exhibited any tendency to wander when moving in a straight line. This proved conclusively that the wheel alignment situation is certainly a critical one on the Mach III, as well as any motorcycle. Until such time as the rear wheel is moved to the left 1/2" permanently, the chassis is not going to get around corners the way it should.

Kawasaki must be commended for their diligent effort in solving all of the mechanical problems it had on the early H1's. But for some reason or other, until the factory came up with the new fork, the chassis stayed pretty much the same as it originally came over here in 1969.

A perfect solution to the offset

Another hour and the center stand would have been ground clear away. Right side ground clearance was a little better.

wheel situation would be leaving the hub where it is in the swinging arm and merely by loosening and tightening spokes shift the rim and tire to the left another half inch. This would solve the problem as well as make it an inexpensive remedy. Needless to say, this will do wonders in making the machine track properly. Regardless of what chassis modifications are attempted, unless both wheels are running in the same track the chassis will not perform as it should.

Anyone contemplating the purchase of one of these motorcycles would be wise to consider having the wheel moved over such as we did and be absolutely sure both wheels line up properly. As dumb luck would have it, when we embarked on our Mach III project bike some time back, when both wheels were down being balanced, somehow or other the rear wheel spacers were lost. When it came time to reinstall the wheels, we machined up new rear wheel spacers after being sure both wheels tracked in the same line. Had we used the original spacers, we would have discovered this problem a long time ago. So much for that.

Because of the additional stopping power of the front brake, the rider does not tend to notice the rear binder not being changed this year. It's still slightly less than marginal, but the new disc up front more than makes up for it since the majority of braking power is on the front end anyway.

New this year is a small cylindrical push pull type damper located on the bottom of the triple clamp with the other end fastened to the frame. We suspect the factory has added this damper as a means of controlling the high speed stability problem. Unfortunately, they haven't.

For the entire six hours, and for that

matter the entire time we have ridden the motorcycle, the engine has yet to fail to start on the first prod at the kickstarter, or even so much as skip a beat regardless of the demands placed upon it. The same thing holds true of the entire driveline system. Everything about the bike from a mechanical standpoint is good. We did notice the clutch getting a bit soft toward the end of our high speed test, but then it was discovered the slack at the cable end near the clutch lever had disappeared. A readjustment of the cable had everything as it was before.

The clutch cable adjustment was the only mechanical item needing attention. This is saying quite a bit, as the bike was ridden hard by everybody on the staff at one time or another. This together with being flogged at maximum revs for six hours is enough to bring out the weaknesses in any mechanical design. Once Kawasaki gets this handling situation squared away, they will have a far more than satisfactory road cruiser.

The power range this year is fairly wide, wider in fact than the machine we tested last year. Power started coming in on the test bike at 3500, and it pulled clean to 7800 rpm. Under 3000, there is very little if any usable power, so it is always necessary to keep the revs up. The only time we found this annoying was in very heavy traffic. It is either a matter of keeping the revs up or doing a lot of clutch slipping, which is one thing we avoid like the plague. All in all, for the money the Mach III is a good buy.

Bob Braverman/ Walt Fulton







# KAWASAKI MACH III 500

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ENGINE

Type 3 cylinder piston port two cycle
Bore and stroke 60 x 58.8mm
Displacement498cc
Compression ratio 7.0:1
Max. horsepower 60 at 8,000
Max. torque
Ignition capacitor discharge
Carburetion three 28mm Mikunis
Lubrication oil injection

### DIMENSIONS

Seat height	31.5	in.
Wheelbase	56.3	in.
Ground clearance	6.1	in.
Dry weight	410	lbs.

### WHEELS AND BRAKES

Front tire size	3.25 x 19
Front brake type	internal expanding
Rear tire size	4.00 x 18
Rear brake type	internal expanding
Tire pressures	F-22, R-24

### TRANSMISSION

Type	5-speed
Clutchwet,	multi plate
Internal gear ratios 1st 15.95, 3rd 7.90, 4th 6.6	
Countershaft sprocket	15T
Rear wheel sprocket	45T

### PERFORMANCE

indicated nignest one-way speed	110 mpn
Acceleration 0-60	. 4.3 sec.
Braking distance 30-0	30 ft.
Quarter-mile acceleration:	
Top speed	102
Elapsed time	12.95

# GENERAL

Air filtration		. dry
Battery type	l	12V

### CAPACITIES

Fuel tank	4.0 gal.
Oil tank	. 5 pints
Gear box	.1 quart
Fuel consumption	32 mpg

### FRAME AND SUSPENSION

Front suspension t	elescopic double damping
Rear suspension	adjustable shocks
Frame type	double loop cradle
Steering damper type.	friction disc

COLORS: Red

## PRICE AS TESTED-\$995.00

American Kawasaki 1062 McGaw Santa Ana, Calif.

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