

The Kawasaki KX250-A4 breaks the inscrutable moid that Japanese motorcycles are cast in. Have no doubts that it is the product of data processing and scratch pad thinking, but the sheets were clean when the bike was started. The Kawasaki KX250 has been a long time coming. When the first KX250s were released several years ago they were atrocious. And because they were so bad they were discontinued by Kawasaki Heavy Industries. For the past couple of years the public has lived without a new Kawasaki motocrosser.

Yet, Kawasaki continued a serious motocross racing program. Without a single bike to sell, Jimmy Weinert, Gary Semics and Torleif Hansen raced and won on prototypes. And as the time passed, the protos got better and better. But why race unless you want to sell what you race? Throughout the summer of 1977 we heard rumors that Kawasaki was going to start making motocrossers again, but it wasn't until late winter that anything definite happened. But, when the new Kawasaki KX250-A4 arrived, it was a blockbuster.

THE PACKAGE

Three or four years ago the biggest development in racing was the advent

of light equipment. The bikes were becoming so light that the FIM and AMA set minimum weight standards to keep the bikes from getting too exotic. But lately, the modern motocrosser has become a real porker. Even under a lenient system of weights an RM250 or YZ250 would be lucky to hit the track at 230 pounds. The KX250-A4 weighs 216 pounds with half a tank of gas and ready to race.

If you sat the three major Japanese 250s (Suzuki, Yamaha and Kawasaki) side by side they would appear to be quite similar in materials and design, but the Kawasaki is a feather compared to the other two. The reason



KAWASAKI KX250-A4

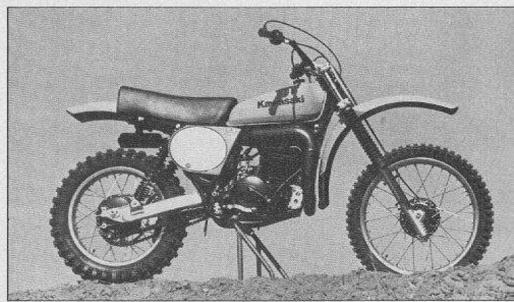
is quite simple: attention to detail. To save weight on the A4, the seat base is plastic, the fenders and air box are plastic, the rear wheel is magnesium, the front backing plate is magnesium. the axles and swingarm pivot are hollow, the cylinder is almost 99-percent aluminum, the rims are D.I.D aluminum, the swingarm is aluminum and the engine is extremely narrow at the crank. Weight is where you can find it. Kawasaki found it and trimmed it off. Using good chrome moly in the frame allows the use of a thinner walled tubing, which in turn weighs less than a regular mild steel frame.

The engine is a straightforward, reed-valved, 249cc air-cooled two-stroke. The 70x64.9 bore and stroke engine has a two-ring piston. The top ring is a dykes type, while the bottom ring is a very thin (.030) oil retention ring. The piston has two holes drilled on the intake side to aid the reed valve. The reed valve is a special, patented Boysen reed, with six petals. The Boysen reed is the sole property of Eyvind Boysen and is undisputed as the best design currently on the market, and Kawasaki had to pay a rather healthy royalty to gain use of the design.

Porting is straightforward and not very radical, which means that the accessory houses are going to be able to pump some serious ponies out of the engine once they get it. There is a large intake port feeding off of the 38mm Mikuni, and in a radical departure there are two intake scavenger ports that feed directly from the reeds to the transfers. The exhaust port is a winged shape and bridged. The castings are very clean and don't have the little blobs and globs that clutter many mass-produced cylinders.

The cylinder itself is a return to an earlier Kawasaki innovation. The aluminum cylinder is almost totally aluminum. There is no iron liner for the piston to run against. Instead, the A4 uses the same process that the 1974 Kawasaki 125 Rotary Valve used — electrofusion.

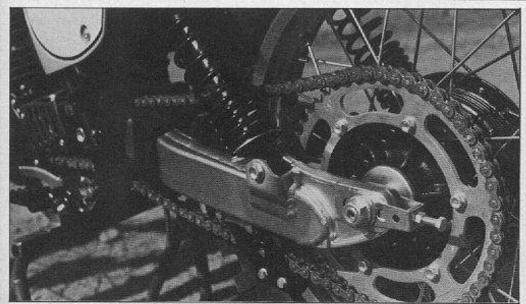
Kawasaki's electrofusion process involves setting up the cylinder in an exotic machine and inserting a special rod down into the bore. That rod is then electrically charged and ignited so that it sprays a hard coating almost seven thousandths thick over the bore. The



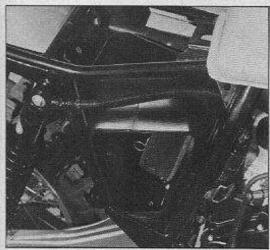
It is rumored that riders will have to fill out resumes in order to receive a KX250-A4 in 1978.



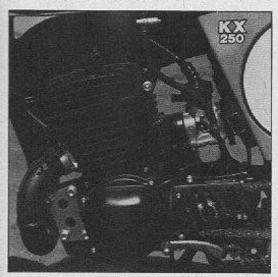
The A4 is designed to be ridden hard, but is a little too stiff even for the fastest of the fast guys.



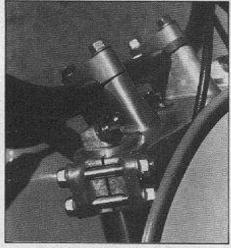
Gold-anodized swingarm and rims set off the Kawasaki green very nicely. There is no spring-loaded chain tensioner.



The air box is easily reached through an enormous porthole. The reservoir tubes are well out of harm's way.



If you selze it you'll be buying a new one. The cylinder is manufactured with some Buck Rogers technology.



The Kayaba air/spring forks are aided immensely by a strong set of four-bolt triple clamps top and bottom.



Ignore the little fins. The forks have 9.3 inches of travel.

result is a very hard lining and extremely light weight. But, the cylinder cannot be bored out to accept a larger piston.

The ignition system is a Kokusan electronic CDI with an internal rotor. The spent gases escape through the bridged exhaust port into a very neat up-pipe constructed out of stamped cones. The pipe sweeps up the right side of the bike and the stinger exits on the left rear where it attaches to an adequate silencer.

WORKING IT OUT

Before you climb aboard you will notice that everything is well done. The front forks are Kayaba air/spring forks that we ran with 12 psi of air to complement the 11-pound springs. The forks offer 9.3 inches of travel. The triple clamps are very solid-looking units with four bolts on both upper and lower clamps. The steering stem uses tapered needle bearings. Both the needle bearings and four-bolt clamps are excellent steps forward for a Japanese manufacturer.

As you toss a leg over the saddle you will pass directly above the gold-anodized aluminum swingarm. The swingarm itself is constructed from rectangular tubing with rolled corners. The rear of the swingarm, the part that holds the axle, is a forged aluminum casting. The tubing and forging together form an extremely strong structure. The rear shocks are gas Kayabas with remote reservoirs. The shocks are 16 inches long and the reservoirs fit neatly into little pockets attached to the frame (no clumsy hose clamps).

The controls are very nice. The levers, kill button and throttle are mounted to a nicely shaped, but extremely wide (35 inches) set of bars. The throttle requires a little too much twist for our liking. Quick-shifting 250s need extremely short-turn, quick throttles. The brake pedal is really tucked in out of harm's way, but once you adjust to finding it, it applies the full-floating rear brake with ease. The rear brake torque arm is not only a full-floater, but it also has needle bearings and well-designed rubber booties protecting its moving parts.

THE RIDE, CLYDE

The Kawasaki KX250-A4 (nobody knows what A4 stands for) is not the

KAWASAKI KX250-A4



With half a tank of gas the bike weighed 216 pounds. Extremely light for a Japanese 250.

fastest, best-suspended or torquiest 250 on the market. Its power comes on at 6000 rpm and stops at 8000 rpm. It will not rev beyond that point, but it will run well below the 6000 minimum. The Kawasaki is a short shifter. The best approach is to shift up whenever you can. There is no advantage to be found in wringing it out a little more. The power is decent and quite respectable, and it is made all that much more potent by its one major plus — it handles.

The A4 doesn't lack power, suspension or torque on its competition, it just doesn't outshine them in this category. But in handling, the Kawasaki takes on that elusive quality of personality. The A4 is the best-handling Japanese 250 made and the equal of anything in its class. Remember, it weighs 207 pounds dry and about 216 on the track, so it is very light for a deuce-and-a-half. Combine this light weight with its short-shifting, constantly-on-the-move power and you have a big-horsepower 125.

The Kawasaki really handles. Don't confuse handling with suspension. The Kawasaki has 9.3 inches in the front and 8.7 inches in the back, so it is not

a standout. Handling is the response patterns and attitudes that the bike takes while maneuvering. The A4 can be tossed around like a 125. We would come bombing in high, and then, spotting an opening on the inside, slam the A4 down to its cases and carve like Ben Casey at Thanksgiving.

The Kawasaki is a front-end handler. You will get the best results by sliding up on the tank and using the excellent front-end geometry to pull you through. The bike comes with Dunlop Sport tires, a 5.00x18 on the rear and 3.00x21 on the front. In traction situations they worked fine. We, of course, prefer Metzelers for hard-packed action. A front-end handler is a bike where whenever you get in trouble you depend on the front to get you out of it. A Maico is a front-end handler, when in doubt, toss the forks at it, because the rear end Isn't quite as good.

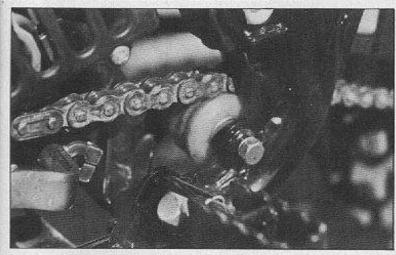
The rear of the Kawasaki worked well, but the extremely heavy damping on the Kayaba shocks combined with a very stiff spring rate made it a little choppy. After the shocks got older, and began to wear in (and out), the bike felt much better, but the rear end would

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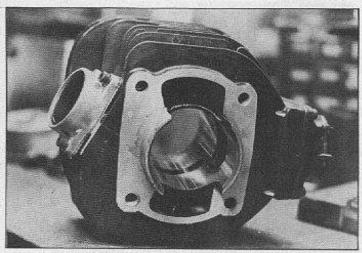


No acrobatics are called for. The A4 is a natural-born flyer.

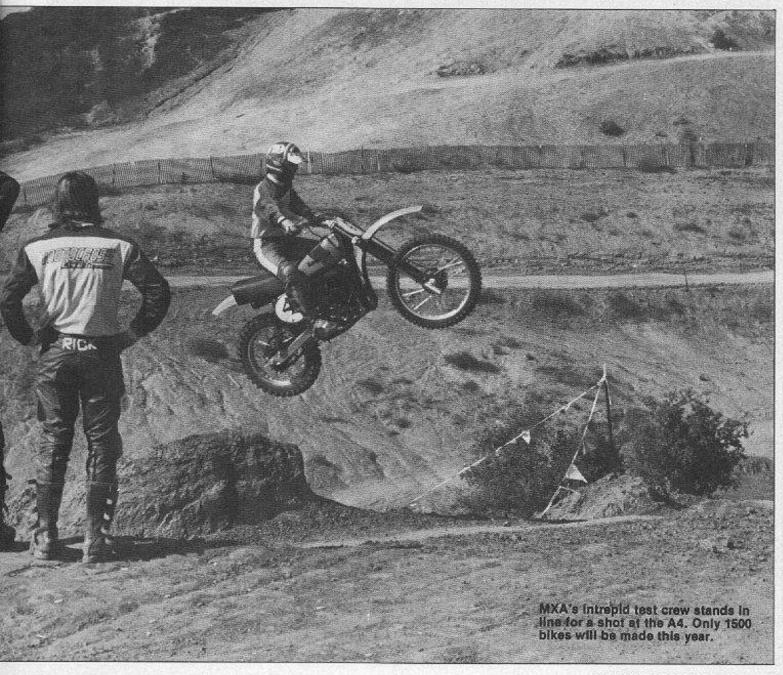




The swingarm pivot bolt is drilled for weight. The chain rides on three plastic rollers.



The cylinder is extremely light. The Electrofusion liner is only seven thousandths thick.





KAWASAKI KX250-A4

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made all the manufacturers realize that they would have to start thinking about meeting the challenge. Aluminum swingarms will be standard on all the Japanese racers this year. Hopefully the light weight trend will be rejuvenated again. The biggest porker is the Yamaha, but Suzuki isn't off the diet scale by much.

The Kawasaki does not have a chain tensioner. Instead, it has three well-placed rollers that provide constant tension at every point in the travel arc. We'd rather have a tensioner. Leaves more room for pilot/mechanic error. The front forks have these funny and funky little fins on the lower slider. They look stupid and serve no real purpose. We bent the footpegs backwards a little bit with each ride. They need additional bracing out toward the outer loops.

The countershaft sprocket is five inches away from the swingarm pivot bolt. The reason for this is that the engine design has the kickstarter mechanism mounted too far rearward. The distance between the countershaft and swingarm pivot is essential in aiding chain tension. The less distance. the better. The front brake anchor is a very trick bolt that mounts off the back of the fork slider. It eliminates slop and is very positive. The air box is large and has a side opening that is accessible and handy, but the foam filter is the normal Japanese green, porous foam. Check with JT Racing about a Phase 2 filter.

Jetting on the stock bike was a 165 main jet in the 38mm Mikuni. We dropped this to a 162.5 and kept the needle in the middle, but we are just a few feet above sea level. There is no kickstand and we don't miss it. The brakes are very good and the cables are well mounted.

WHEN, WHERE AND HOW

You probably want to buy one or at least beat one. They will be available in limited numbers in 1978 and a price has not been set. Each dealer will get at least two bikes. Kawasaki suggests that they race them, but if they want to sell them they can. Sometime next year they will be available in large numbers. Expect them to cost at least \$100 more than the Suzuki or Yamaha (\$100 minimum, probably more). It is the best-made Japanese motocrosser available. You will have to pay for quality material and light weight. It's worth it.

