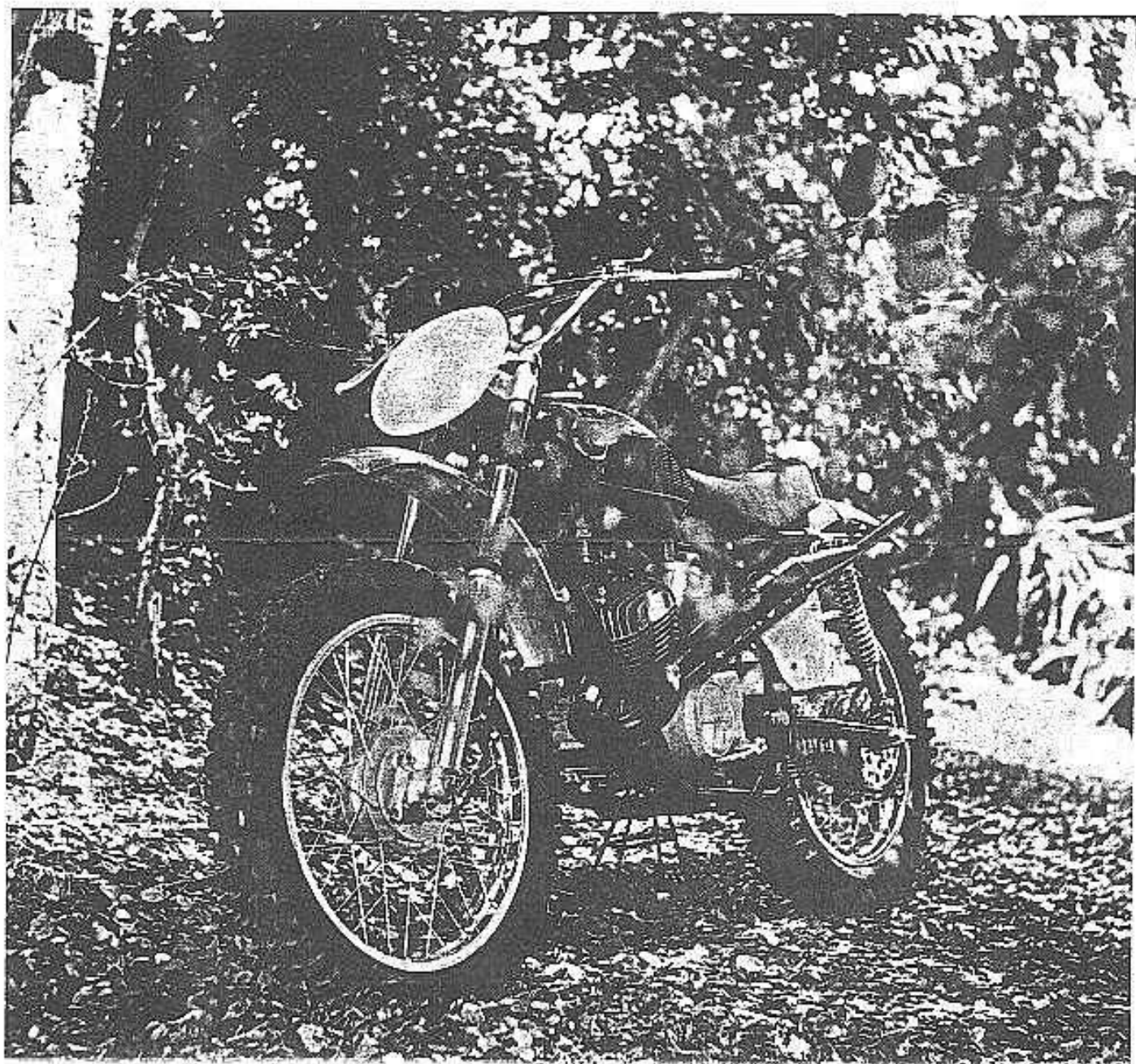


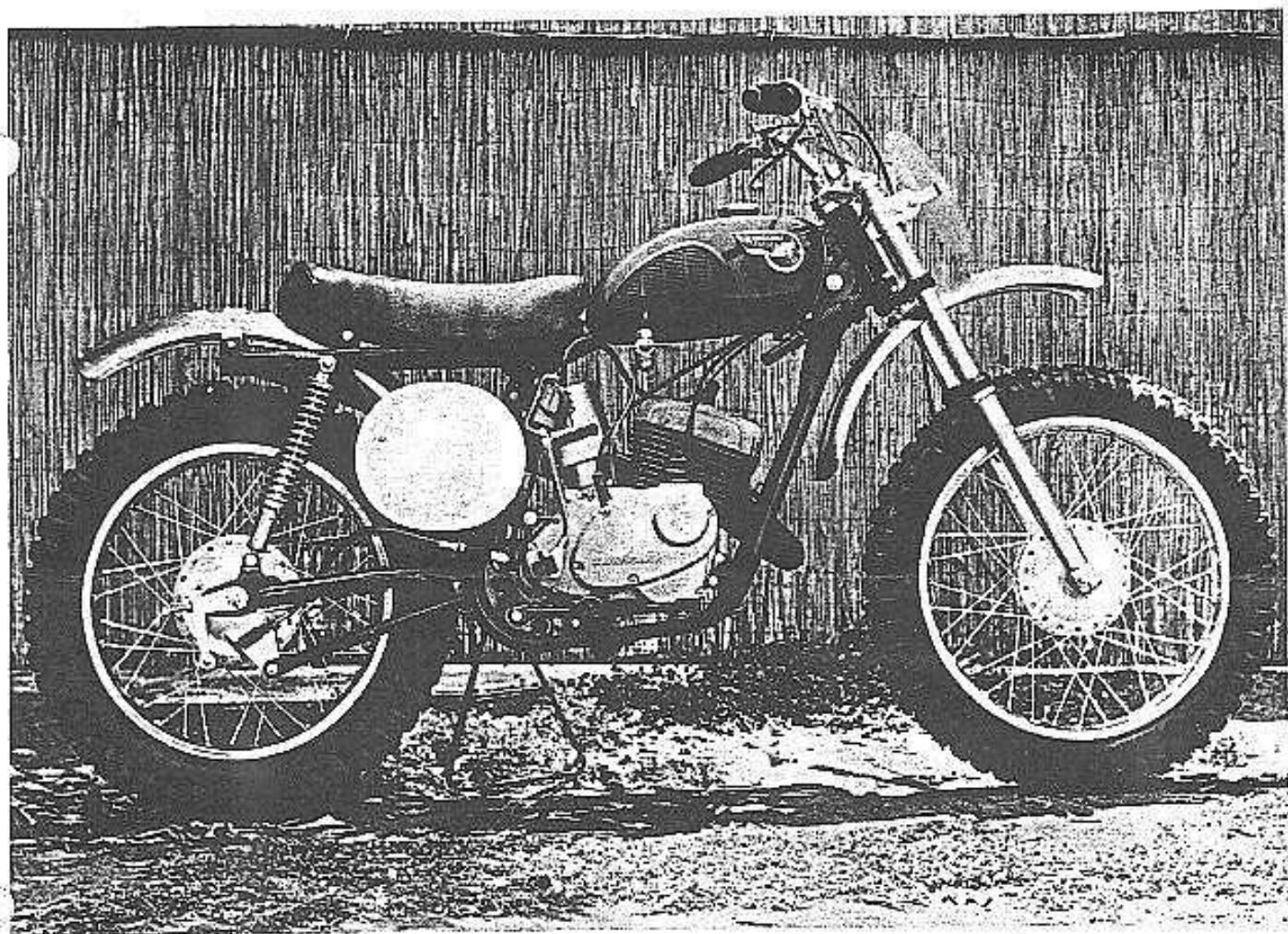
KAWASAKI 250 SCRAMBLER

You Are Surprised I Speak Your Language?

FOR YEARS, THE ENGLISH AND EUROPEAN manufacturers have had their own way in scrambles and motocross — understandably so because these are, after all, their games. Competition in the professional 250 and 500 Grand Prix series has become so keen that many of the factories across the Atlantic have undertaken monumental development programs to produce title-winning rough-ground mounts, and, with the nature of the sport being what it is, much of the effort has been directed toward chassis and suspension design. Indeed, horsepower has been a secondary consideration, for without a good handling chassis, all the horsepower in the world would not win even so much as one leg of an open-to-center Sunday scrambles in the south of England. Meanwhile, halfway round the world, the Japanese busied themselves with motorcycle development projects directed toward high power output and high-volume production — precepts that have led to exotic multi-cylinder two- and four-strokes that have excelled in every phase of the two-wheel sport save one — motocross.

Lest we be misunderstood, we would go on record at this point as saying that horsepower is never a detriment.





But, the manner in which power is delivered is a wholly different matter. In the case of a competitive motocross machine, engine output must be totally predictable and totally controllable — attributes that are hardly the forte of heavy-breathing multis. The Japanese industry's emphasis on engine output is analogous — inversely — to the European emphasis on handling, wherein in the East, chassis and suspension design have been relegated to second chair. And then, suddenly, the game changes and up pops the Kawasaki 250 Scrambler to shoot down any theories about what does what better than anyone else.

Some months back a handful of prototypes of this bike arrived in the U.S. with an effect tantamount to dropping a large rock into a very still pond. "Let me see! Let me see!" rang the cries from all those who gathered around. "Not bad — for them," was the reaction. Respecting the wishes of the fledgling — in tenure only — company, we refrained from making a public pronouncement of the attributes or shortcomings based solely on a "feedback" model. Instead, we elected to reserve our time and space for the real article.

The "real article" does not need, nor does it encourage, any qualifications or apologies; it is just about everything that any scrambles/motocross machine should be — fast, light, good handling, reliable, simple and inexpensive to maintain and reasonably priced.

The motive force in the Kawasaki is — how should we say — very un-Japanese in that it is a single-cylinder 15-inch-class two-popper displacing some 238cc. However,

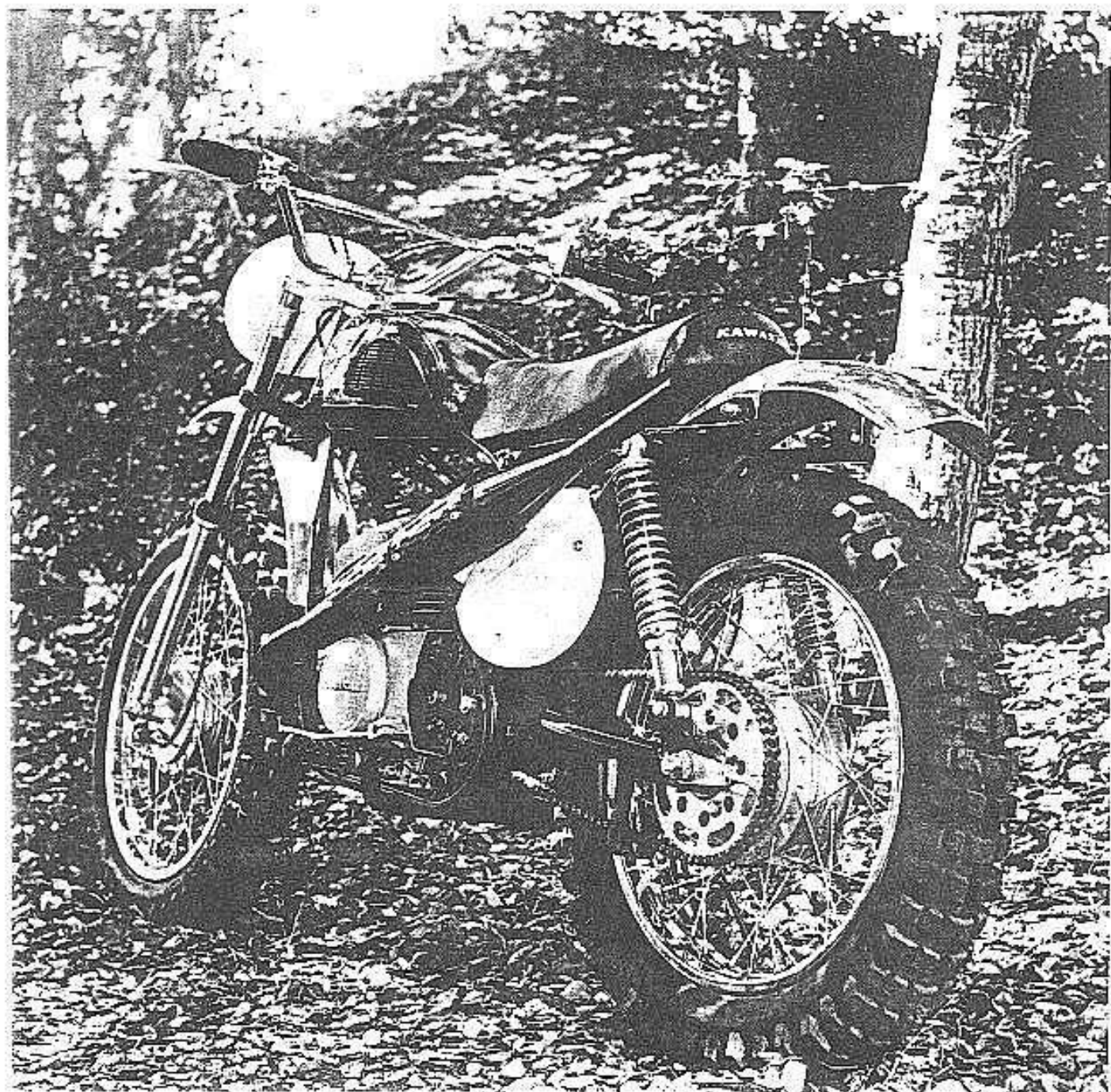
the design is orientally redemptive in that it is grossly over-square, everything is hung upon ball, roller or needle bearings, and it is aspirated with a rotary valve. The game rules are given their fair share of consideration in the power-on-the-ground department with the new Kawasaki, because things happen in a rather comfortable fashion; the power band is quite broad, and only moderately pipey near the top of the scale. The engine starts so readily that we won't waste time stating more about it. It pulls hard from the low end of the register, and when it does come onto the pipe it evidences a healthy rise in pitch without being prone to do silly things like snap the rear wheel harshly out to the side.

One of the more intriguing aspects of this engine is its manner of port control — rotary valve — and the ease with which the power band can be modified. Starting with the very mild valve from the Kawasaki 175cc (which snaps right into place on the 250) the torque spread can be made very broad. From there it is a simple matter to increase the valve cutaway, incrementally, and arrive at something akin to a road racer. At \$7.58, the valves invite some pretty inexpensive tuning.

The gearbox of the Kawasaki 250 is superbly smooth and positive. Even intentionally careless shifting won't produce missed cogs. Spacing is desirably close with the biggest noticeable lag existing between first and second. The full-of-surprises rotary shift scheme seen on the prototypes was supplanted by a positive-stop neutral arrangement that has the do-nothing notch placed at the bottom

of the pattern with the four ascending gears placed in a correspondingly ascending order. This present scheme must be considered the lesser of two evils because, while it may not produce the assurance of forward motion that a bottom-stop first gear does, it assuredly offers more peace of mind than does an after-top-neutral followed-by-low layout.

The full double loop frame of the Kawasaki 250 is one of the handsomest pipe assemblies we've seen. The main cradle drops beneath the engine in a manner that seems almost un mindful of the steel and alloy burden that it must support. In short, the frame design is so exquisite, so pure, that the engine seems like a free-rider that came along later on, and the chassis more closely resembles the product of the better efforts of one of Europe's free-lance special builders — who devised a what-if frame for any number of excellent motocross powerplants. The greater portion of the good manners of the Kawasaki 250 have to be credited to its excellent front-end geometry that is better in getting



its rider out of trouble than he is at getting the bike into the glue. Steering precision is unbelievably fine — and curious — because it is as good on hard, slick surfaces as it is on deep tacky ones. We find it hard to rationalize these qualities being evident on the same bike other than to conclude that they are the products of good geometry and weight bias.

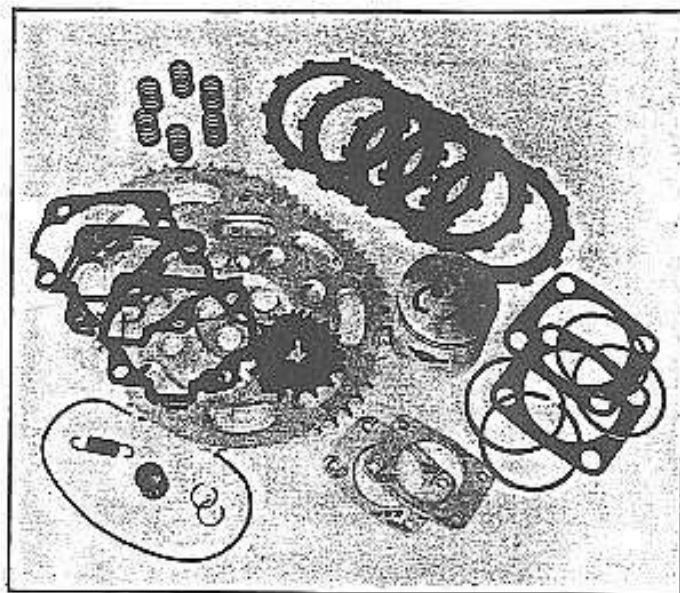
Good sense practice carries over to the rear suspension of the Kawasaki, with a large-diameter swing arm assembly that is pivoted at the extreme frame width. The arm is longish, despite the wheelbase, at 16 1/2 inches — 1 1/2 inches longer than the same unit on the prototype. The bottom spring-shock attach point is located immediately forward of the axle slot, however, and gives the rear legs more cant than we normally prefer; the rear springs don't have as much mechanical advantage as they might otherwise enjoy if they were more vertical. To overcome this, Kawasaki has fitted an optional constant-rate spring of considerable resistance — much to our chagrin. After our first outing we complained of the near-rigid feeling that these beefier items provided and were answered with "Why didn't you say something?" The distributor promptly fitted a pair of units of less poundage — available to anyone who buys the model — and the problem was solved. The rear damper units were now permitted to do what they are intended to do, and the character of the entire plot took on a more integrated feel, with both ends working in accord with each other.

As further testimony that this bike is a serious attempt at being an honest-to-goodness motocross mount, we call attention to the cycle parts such as the wheels with their reasonably sized *single-leading-shoe* brakes that, in addition to being not more than is needed in the dirt, are very light. The front suspension units, familiar as they might appear, are Kawasaki's own, patterned on the popular Ceriana, and judging from appearances we would guess them to be lighter. They have about six inches of travel and damp very well on both compression and rebound.

The rear hub is a QD type, mounted with a rubber cushion center to reduce the shocks produced by gear changes, braking and wheel-spin landing to the engine and gearbox. The rear wheel sprocket, and the countershaft sprocket, are easily changed items that add to the picture that this is a competitor's piece of equipment that can be fiddled and changed in a matter of minutes to suit the conditions of a course. Both wheels are fitted with sport-pattern Yokohama tires that offer excellent grip on soft surfaces and do a wondrous job of sticking on hard ground that would seem better attacked with a less radical tread.

The threatening, humped tank seen on the prototype has been replaced with a most-attractive unit that is found also on the firm's 120 scrambler. For short trips — such as on a closed course that doesn't involve many miles — the fuel capacity will be adequate. But, for those Pacific coast riders who think nothing at all of racing flat out for a hundred miles before Sunday lunch, the fuel vessel is wholly inadequate. We're told that a fiberglass tank-seat-fender unit is in the offing, as an option, and will cure the range problems of the bike through greater fuel capacity. For the rider not concerned with mileage, much is to be said for the present components; the unobtrusive new tank provides just the proper amount of desired knee grip, the seat is nicely padded and very comfortable, and the rear fender is reinforced with riveted straps at its attach points and rearmost terminus — in addition to being broad enough to keep mud from being deposited on the operator's back.

Control and seating relationship of the Kawasaki most decidedly favors the small-to-medium rider, but there is sufficient working room, with reference to handlebar adjustment, that even six-footers could enjoy a reasonable degree of comfort in all but the full standing position.



Curiously — for a motocross type machine — the flat-in-the-saddle dirt tracking position is quite good with the rider's position being well forward. And in combination with the precise steering and high specific horsepower output, we would imagine the Kawasaki to find as many friends within the set who pursue the sport of hard, smooth track competition as it will with those who opt for the cobbler courses.

Not surprisingly, in view of Kawasaki's parent company's principal endeavors, the 250 scrambler abounds with aircraft quality nuts, bolts, welding and finish. The package is quite spare in that it doesn't sport any pieces that are not totally functional and necessary. The engine appears at first to be a tad wide, but this is, of course, necessitated by the carburetor placement dictated by the rotary valve. The width is more visual than real, and the carburetor placement offers a definite plus in that it is protected from dust, grit and mud by the outer engine case. The outer case, by the way, provides a large still-air chamber that receives its air through a commodious cleaner element that sports a generous inlet pipe tucked well up under the seat.

To complete the picture of being a serious motocross iron, the Kawasaki 250 arrives ready to race with a spares kit — just like the professional European marques. The kit includes a plug-in sidestand, an extra standard piston, two sets of rings, a complete gasket set, a full clutch, a pair of head gaskets, a wrist-pin needle bearing assembly, a grouping of wheel and countershaft sprockets that permit gearings for just about any condition, and a handful of other bits that will carry most ardent riders through an entire season.

In toto, the Kawasaki 250 scrambler must be regarded as a major achievement in motorcycling. Granted, there are a couple of 250-class machines that are faster, and maybe a couple that handle better, but the margins in these areas are slight, to be sure. The point that comes driving through is that this motorcycle — with the exception of a few feedback prototypes — is Kawasaki's first attempt at building a competitive motocross mount. And, even tossing this qualification aside, we can only conclude that they have "whomped" up one super piece of hardware. ■

KAWASAKI 250 SCRAMBLER

SPECIFICATIONS

List Price	\$875
Suspension, front	telescopic
Suspension, rear	swing arm
Tire, front	3.50-19
Tire, rear	4.00-18
Brake, front	5.1 x 1.1
Brake, rear	5.9 x 1.1
Total brake swept area, sq.-in.	38.0
Brake loading (test weight/swept area)	
lb./sq.-in.	9.9
Engine type	2-stroke single
Bore and stroke	
(inches-millimeters)	2.75 x 2.4; 70 x 62
Displacement (inches ³ -centimeters ³)	14.1, 238
Compression ratio	7.7:1
Carburetor	26mm Mikuni
Ignition	magneto and coil
Bhp @ rpm	28 @ 7000
Oil system	oil mist
Oil capacity, pts.	oil-in-fuel
Fuel capacity, gal.	1.6
Starting system	kick, folding crank
Lighting system	none
Air filtration	paper element
Clutch	multi-disc, wet plate
Primary drive	gear
Final drive	single-row chain
Gear ratios, overall:1	
5th	none
4th	11.4
3rd	12.6
2nd	18.1
1st	30.4
Wheelbase	52.5
Seat height	31.7
Seat width	6.0
Foot-peg height	12.5
Ground clearance	9.0
Curb weight (w/half-tank fuel)	217
Test weight (fuel and rider)	377

PERFORMANCE

Top speed	69
Maximum speed in gears (@ 7700 rpm)	
5th	none
4th	69
3rd	43
2nd	32
1st	19
Mph per 1000 rpm, top gear	
Speedometer error	
30 mph indicated, actually	none
50	
70	

ACCELERATION, ZERO TO—

30 mph, sec.	3.2
40	5.0
50	7.3
60	9.4
Standing 1/8-mile, sec.	10.1
terminal speed	64
Standing 1/4-mile, sec.	17.3
terminal speed	69

ACCELERATION AND ENGINE ROAD SPEED
RPM x 100

