







# Plain Trailing

## FIVE TRAIL BIKES TESTED

### From city commuting to the mud and ruts of Salisbury plain

**G**ROWTH of the trail bike market in the UK has caused off-road machines to polarise into more definite designs. They are no longer the half-hearted compromises or the out and out racers we were served up with a few years ago. Today's trail bikes are equally useful on the street or off it.

The trend in these dual purpose machines has been marked quite clearly. Considering the lack of off-road facilities conveniently near to most of us there has been a surprising growth in trail bike clubs, enduro riding and the like. Then the machines themselves are particularly suitable for learners and daily ride to work bikes and, since they went through a patch where they were considerably cheaper than their roadster counterparts, the increase in popularity is less surprising in this part of the market.

Most of us like to play racers when confronted with such a machine and trail bikes are invariably tested according to their ability to reach enduro standards. In fact, if you insist that the bike be equally good on- and off-road, trail bikes reached a peak in off-road performance with machines like the KE175 Kawasaki.

To get more performance would entail a less tractable engine, or a bigger, heavier bike, plus all the paraphernalia like motocross tyres; in short, one which is less street-worthy and probably harder to ride. Using the extra performance of a genuine enduro racer is a lot more than half the battle.

We've not found a European bike which is a genuine compromise between road and rough and certainly not one at Japanese trail bike prices. Consequently this review samples a cross section on things Japanese but what the machines have to offer covers a very broad spectrum.

**Kawasaki KE175:** until recently probably the pick of the bunch, offers as much performance as you can expect without losing out on tractability, fuel consumption and so on. Functional enough to cope with tough off-road conditions, it also makes a civilised commuter or an easy machine for a learner to cope with.

**Suzuki TS185B:** made in much the same mould as the Kawasaki, Suzuki have updated their trail bike motors using the reed valve induction derived from their competition bikes. It lets the motor express itself at the top end without fouling up at

low speeds but a cursory glance over the chassis tempts you to think Suzuki are only playing at the off-road side and concentrating more on a street bike with MX styling.

**Kawasaki KL250:** a sign of some positive thinking, while the four-stroke single gives more power than the 175, Kawasaki have taken a deliberate step away from enduro-type performance. The bike is heavier, but with potential four-stroke plonkability and fuel consumption plus a chassis aimed at comfort rather than streamlined functionality, the concept is one of a real *trail* bike. In fact Kawasaki readily admit that they've set out to do everything the XL250 does plus a bit more, to establish a bike which is better than what they consider to be the market leader.

**Yamaha XT500:** improved over the first version, this big single is still about the heaviest trail bike around and while it can be very rapid it can also be a handful.

**Suzuki TS125B:** another reed valve two-stroke, at the bottom end of the price scale the 125 offers perhaps the bare minimum to cope with off-road hardships. Despite the rather fragile appearance, the lightweight actually has a surprisingly useful performance.



# SUZUKI TS125 B

**B**EING the smallest bike of the five on the trail bike test, we quite expected the TS125 to get a little left behind on the faster trails and tarmac sections that linked up the heavier going on our course. But the little Suzuki proved itself to be nearly a match on speed and acceleration with the other four bikes. Although it would lose out to the bigger engines on the open road, its light and lively handling and swift response to controls made it just about the quickest bike overall on the trails. The Kawasaki 250 thumper, which we figured should be superior in the rutted mud of part of the trail because of its tractability, actually balked the 125. The Suzuki could lift its front wheel out of the slime and slither along in the general direction of the track with relative ease, although often neither wheel was pointing in the direction of travel.

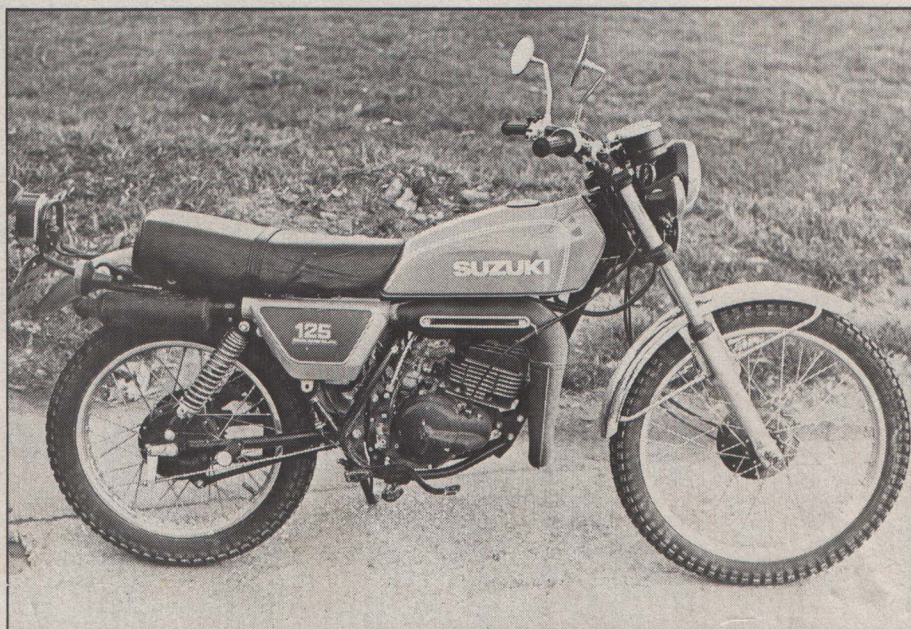
The chromed metal mudguards fitted close to the tyres didn't clog up with mud as we had expected, and in fact kept the bike and rider very much cleaner than the more professional-looking guards on the other bikes.

In the long term, though, the steel mudguards are bound to suffer from spills on the trail and would be better made in flexible plastic. A more serious lack of professionalism was the badly mounted footrests which were much too low, and stuck out miles from the sides of the bike, and the poorly positioned gearchange and brake levers.

With no bash plate to protect the engine and levers, the Suzuki was poorly prepared to endure the rigours of hard trail riding, and one of the footrests fell off in the short time we had it.

The lay-forward rear shocks were efficient and the Suzuki handled very well on the road, but the spring pre-loads needed setting on their stiffest position for the most taut feel to the suspension on the rough. The Suzuki would bounce over obstructions like a moto-crosser and the front forks were quite up to dealing with lumps in the trail hit at 50 plus. The brakes were surprisingly good. The tiny s/s front drum would stop the bike effectively from top speed on the road and the rear brake matched it well. On slimy off-road going, the brakes could be finely controlled to slow the machine safely.

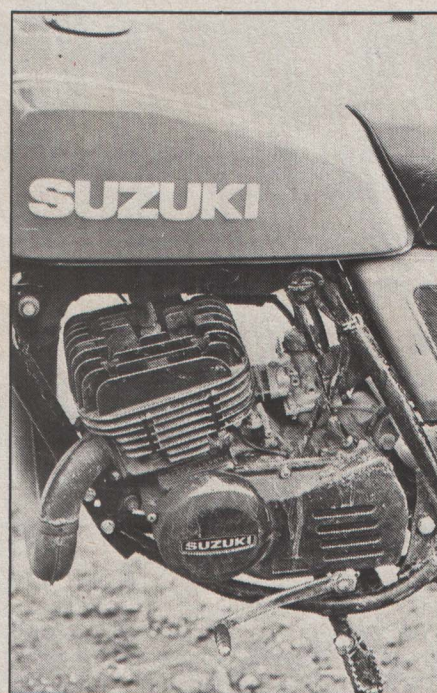
While the little Suzuki steered and handled well, this was largely due to its light weight, and the most outstanding feature of the machine was its engine. The reed valve and piston port induction system, exclusive to Suzuki who call it "Power-Reed" induction, allows the motor to run smoothly and with useful torque at low to medium revs, and yet allows the engine to work near top efficiency at high revs as well. The result is a snappy, peaky motor that rips like a racer through the gears on the open trails, and yet will amble along at tickover speeds in sticky going. Throttle control was precise and the engine reacted instantly to the touch. The five gears were ideally spaced and selected perfectly with or without the super-light



The Suzuki TS125B looks very neat and purposeful, and was a pleasure to ride on or off the road.

unlit roads, but the big square tail lamp mounted on a tubular frame glowed like a beacon. Switchgear was simple and uncluttered, and the braced handlebars were the right width for optimum control and comfort.

At £435.50 the TS125B represents real value for money on the trail bike market, and will make an ideal commuter bike as well as spirited off-road mount. Some of the chassis and ancillary design faults tempt the thought that Suzuki are only playing at making trail bikes, and with such an engine they could produce the ultimate trail bike with a little application of their moto-cross and enduro experience. As it is, it is just very good.



The "Power-Reed" induction motor is the Suzuki's best feature, and the badly positioned footrests and levers its worst.

clutch.

The 1.8 gallon fuel tank is about average for a trail bike and allows around 100 mile range with 55-60mpg on average. The 2 pint oil tank feeding the CCI injector system, needed hardly any topping up after the trail test.

The 6v 25 watt headlamp was poor, main-beam limiting performance considerably on

## TECH SPEC

**Engine:** single cylinder two-stroke, piston ported with reed valve intake. Lubrication by pump injection, ignition by flywheel magneto, 24mm Mikuni carburettor. Bore and stroke 56 x 50mm, displacement 123ccm, compression ratio 6.8:1. Multiplate clutch, five-speed gearbox.

**Chassis:** overall length 81.7in., overall width 33.5in., wheelbase 52.6in., ground clearance 9.1in., castor 61deg., trail 5.24in., test weight 223lb. Front tyre 2.75 x 21, rear tyre 3.25 x 18, fuel tank 1.8gal, oil tank 2.1 pint. Price: £435.50 inc VAT and delivery. Concessionaire: Suzuki GB, Beddington Lane, Croydon, Surrey.



# KAWASAKI KE175

**G**ENERALLY acknowledged as one of the best trail bikes around, this year's 175 has only a paint job to distinguish it from earlier models.

Where Suzuki and Yamaha have gone to reed valves to achieve a wide spread of torque from the two-stroke motors, Kawasaki have stuck with their rotary disc valve in a clean, compact unit. This, combined with a carefully designed exhaust gives what's needed at the top end for the Kawasaki's 75mph maximum speed and retains the motor's pure slogging ability at the bottom of the rev range. With a motor buzzing close to 9000 on the open road, a hard spark plug is necessary to prevent overheating. In fact an NGK B9 is used, fed from an electronic ignition system which prevents the plug fouling and the motor gassing up even when it's asked to pull a load from a plonking 1000rpm.

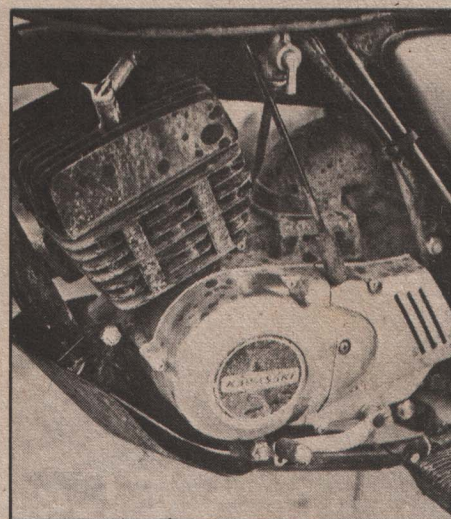
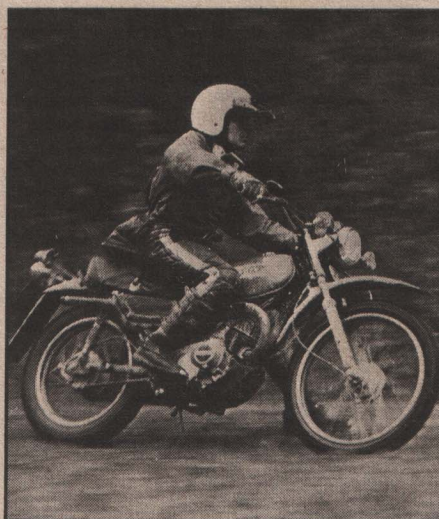
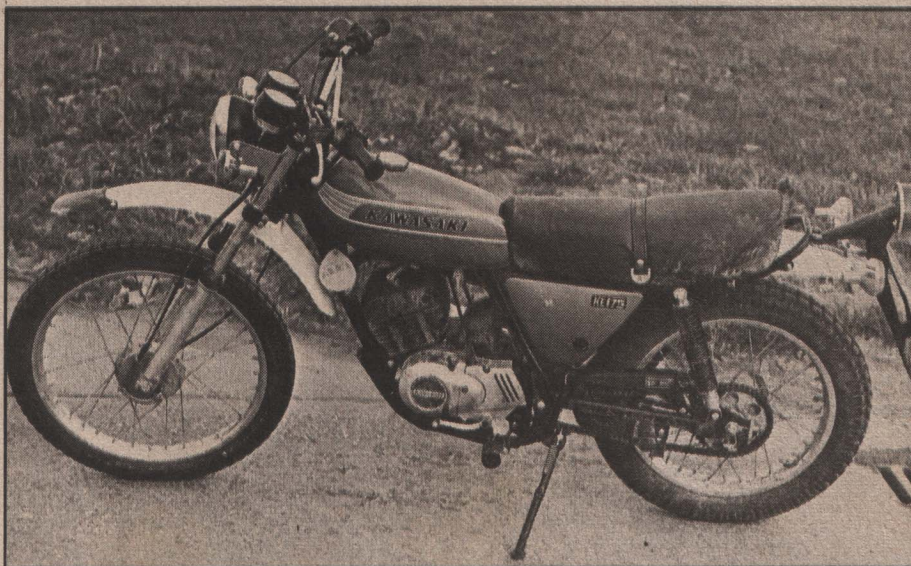
The result is flexible, and above all, reliable power with more than a fair turn of speed for street use. Its efficiency is reflected in the 175's fuel consumption; 65mpg used pretty hard, over 80mpg used carefully. One drawback is the small tank size, a mere 1.3 gallons coupled with a nerve-wracking reserve which takes the Kawasaki a miserable ten miles. And when the next garage is eleven miles away, the last mile is the most miserable of all.

In a robust chassis with rather old-fashioned suspension the Kawasaki has remarkably good handling despite a pretty bumpy ride from the stiff, short-action springs. On tarmac it can be cornered hard enough to ground the footrests — on trials tyres — and braking is generally as good as most pure roadsters. Off-road the handling is best described as easy. The 175 is only a few pounds heavier than the Suzukis but it is enough to show. It's probably a combination of weight, riding position and the lively pick-up of the engines which make the Suzukis feel a lot lighter at the front. The Kawasaki develops more gentle power and it's not so easy to lift the front wheel to skim across holes and puddles or to keep it from getting wrenched to one side in mud. But overall it is easier to ride and copes with the same obstacles in a more sedate manner.

In general it is sturdy and reliable and, after riding the 500 Yamaha, the 175 feels positively tiny.

Off-road the Kawasaki's biggest flaws are a lack of clearance, mainly at the footrests which could easily have been made narrower and at the control pedals. These stick out waiting for every rock and tree stump to wrap them round the footrests. As a concession they are made of mild steel which is easily bent back into something close to its original shape. The upswept, matt black exhaust is also prone to corrode at the front of the expansion box. Finally, the rigidly mounted indicators stick out vulnerably and are a marked contrast to the general tidiness of the detail design.

Handling, braking and gearing are all the more remarkable for working so well under such a variety of conditions. From greasy



mud slopes to sweeping main roads the Kawasaki delivers the right performance. The small drum brakes, like any of this size, will fade under repeated use from top speed; for normal use they are fine and are controllable enough to be used on slippery surfaces too.

The disc valve motor has clean lines, doesn't clog up with mud easily, needs the minimum of maintenance and when running adjustments are needed the bike is simple to work on. For an off-road novice or a learner-rider the bike has big attractions — it fires up easily and won't gas up, it pulls like a train even if you are in the wrong gear and you can get away with grabbing big handfuls of throttle because the motor doesn't have any vicious tendencies. On the negative side it's pretty near idiot-proof, on the positive side it makes an economical commuter with plenty of scope in its off-road role.

## TECH SPEC

**ENGINE:** single cylinder two-stroke, piston ported, disc valve intake. Bore and stroke 61.5 x 58.8 mm, displacement 174 ccm, compression ratio 7:1, claimed output 16 bhp at 7000 rpm, electronic CD ignition, 26 mm Mikuni carburettor, lubrication by pressure injection, 6V lighting, five-speed gearbox.

**CHASSIS:** overall length 82.5 in, overall width 33.6 in, ground clearance 9.3 in, wheelbase 54 in, test weight 248 lb, castor 59 deg, trail 5.3 in, fuel tank 1.4 gal, oil tank 2.3 pint, front tyre 2.75 x 21, rear tyre 3.50 x 18, suspension stroke, front 5.9 in, rear 3.5 in. Price: £518.50 inc VAT and delivery. Concessionaire: Kawasaki UK Ltd., Deal Avenue, Slough, Bucks.



# SUZUKI TS185B

**T**HE 185cc version of the highly successful TS125B should have been as good only faster, but in practice the machine that we tested turned out to be a bit of a disappointment. Not that there was really anything wrong with it, in fact it was an excellent little trail bike, but it was no faster than the 125 and a good deal less crisp in response to the throttle. Snapping the throttle open in low gears would fetch the front wheel off the ground easily enough, and there was a shade more torque than its little brother possessed, but somehow the engine felt less finely honed than the 125. Perhaps it is because its extra 3.5bhp is produced at 6,500rpm instead of the 8,000rpm of the 125.

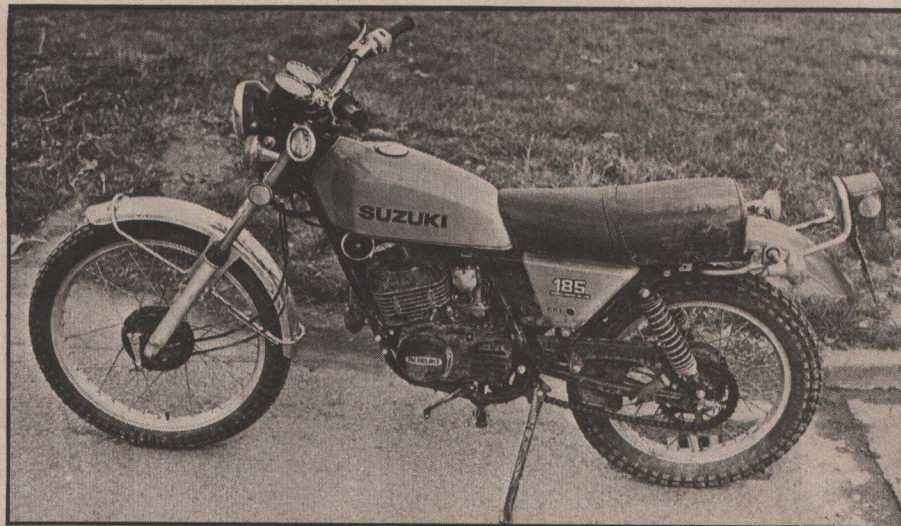
The extra cubes in the motor really only contributed to the overall weight of the bike, and while still light at 239lb it was less easy to wrestle through deeply rutted liquid mud and didn't float over the ripples of faster tracks quite as well. You would never have noticed the difference without having both bikes to compare with each other on the same day though, and no TS185-owner is going to complain of poor handling off road.

On tarmac the 185 was noticeably more stable than the 125, and gave a very comfortable ride with the trail suspension absorbing all the bumps before they got to the rider.

The 185 had the same road-style chromed metal mudguard as the 125, and it kept mud and water from flying into the rider's face. The brakes had seemed particularly powerful when we first got the bike, but within a hundred or so miles on the road the little front drum had degenerated to the barely adequate category. While this was fine for the trail riding which followed, it did leave the machine under-braked on the road.

Far from being an overbored version of the 125 with identical chassis and running gear, the TS185 has a completely different frame, being of double cradle construction compared to the 125's single down tube and top tube form. This robbed space from the petrol tank, which had marginally less capacity, despite being a touch wider.

Both the Suzukis had their up and over exhaust systems tucked neatly away under the petrol tank with heat shields to protect



the rider's right knee, and the bike could be comfortably guided with the knees through tricky going.

The five speed, slick-changing gearbox operated perfectly, despite a slightly slipping clutch, and the first two gears were exceptionally close for tractability in sticky stuff.

On the road, the low second gear meant some rapid gearchanging when accelerating away from traffic lights, and this made second a pretty ineffectual gear. Otherwise the 185 was a delightful little commuter bike, limited at night by a headlamp as pathetic as the 125.

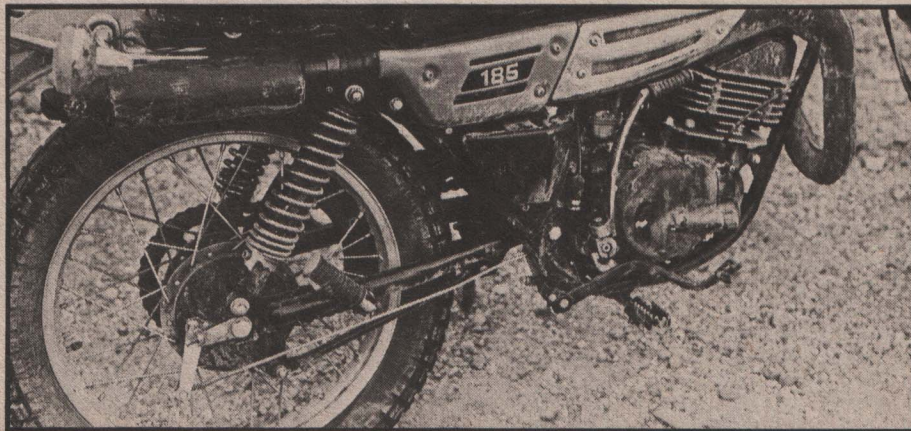
The 185 has chromed braced handlebars instead of the matt black tubes fitted to the 125, but otherwise it had identical switchgear and instrument layout. The rev counter contained indicator, neutral and main beam lamps. At the carburettor end of the push-pull throttle cables was a pulley unit to convert their movement to an up and down slide action.

Both Suzukis had a peculiar petrol tank cap with sprung pegs to lock them into place, and fitted almost flush with the tank top to reduce the risk of injury.

It is usual practice to rubber-mount fragile

items that are likely to get broken in a tumble on the track, but Suzuki have seen fit to mount the rear lamps on both their new trail bikes onto a solid steel tube. Again, the footrests were perched on a little bar slung below the frame and gear and brake levers were just looking for an excuse to get bent or broken off.

Noise on both models was kept to a minimum by large spark arrester cans on the ends of the up-and-over expansion chambers. Once the machines had warmed up, smoke emissions from the pipe were pretty insignificant too, and this was reflected in the tiny drop of oil used by the 185 during the test. Petrol consumption was about on a par with the 125. Both bikes were well finished, and the 185 especially in its bright orange paintwork looked very smart and purposeful. Apart from the few grumbles about badly mounted footgear and rearlamp it was hard to fault the TS185B as a dual purpose work hack-cum-fun bike. But at £529.50, almost £100 more than the 125, the 185 really has very little more to offer than its smaller stablemate.



## TECH SPEC

**ENGINE:** single cylinder air cooled two stroke with piston port and reed valve induction. Lubrication by pump injection. Ignition by flywheel magneto. 26mm Mikuni carburettor. Bore and stroke 64 x 57mm giving 183cc. 6.4:1 compression. Wet multi-plate clutch and five gears.

**CHASSIS:** overall length 81.5ins, width 32.9ins, height 53.1ins, wheelbase 53.1ins, ground clearance 9.1ins. Weight 239lbs. Castor 58deg, trail 5.98ins. Front wheel 2.75 x 21in, rear 3.50 x 18in. Brakes both s/s drums. Fuel tank 1.7gal, oil tank 2.1pt. Price £529.50 inc VAT and delivery. Importer Heron Suzuki GB, 87 Beddington Lane, Croydon, Surrey.



# KAWASAKI KL250

**K**AWASAKI'S 175 represents a peak in trail bike development; keeping the small two-stroke engine, the only real improvements left would take it towards the less tractable enduro type machine like those made by European manufacturers. Any serious changes would upset the nicely balanced compromise which makes the 175 so attractive for road and trail.

The answer was quite obvious when Kawasaki introduced the Z200 — even in roadster trim this lightweight had all the low-speed characteristics an off-road bike needs. Although the motor was bulkier than two-stroke equivalents it had ample torque to allow a wide-ratio gearbox and the chunky four-stroke power usually gives better traction than the smoother output of a two-stroke.

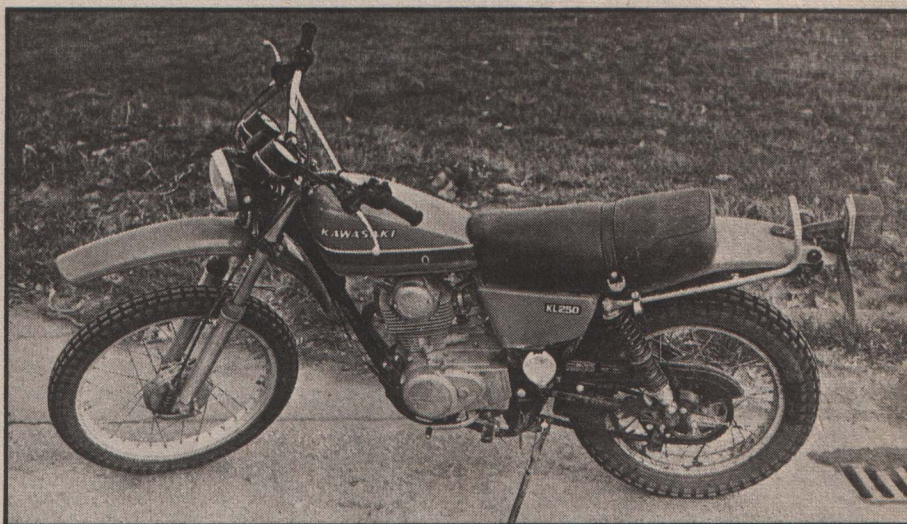
So when the KL250 closely followed the 200 it was no great surprise and it was nice to find that Kawasaki had made one of the most realistic attempts at building a trail bike. While the end product is a serious off-road machine it is also a step away from the street scrambler.

An obvious development of the 200, the KL250 is longer, an extra 4 inches on the wheelbase presumably gives better off-road stability but ironically leaves the trail bike with a wider turning circle! There is the conventional 21 inch front wheel, the head angle is raked out giving more trail and there is more suspension movement. The front forks have a stroke of 7½ inches, while the rear shocks travel 4½ inches.

The SOHC motor is bored and stroked to take it out to 246ccm and 21 claimed bhp.

The 250's cams give the same duration as those on the 200, but have been reprofiled and give different timing, and a larger, 28mm Keihin carburettor is used. Ignition is through a magneto and contact breaker, compared to the electronic system used on the two-stroke 175, and the 250 uses a much softer grade of spark plug.

The result is a soft, flexible motor which nevertheless manages a fairly crisp performance at its 8,000 to 9,000rpm peak. Optimum cruising speed is in the mid-60s and, under normal commuting use, we averaged 84mpg. This is one area where the 250 scores; its fuel consumption doesn't suffer



too badly even in pretty heavy off-road conditions and the range from the 1.9 gallon tank is way above average at 130 to 160 miles.

Some 50lb heavier than the average Japanese trail bike and noticeably heavier on the front wheel, the Kawasaki's chassis puts the emphasis on comfort. With a good seat, good riding position and nicely set-up suspension you don't need a moto-crosser's constitution to enjoy a day's riding.

It isn't likely to make any impression on the enduro scene but at the same time it isn't exactly slow and the four-stroke single seems to take a lot of the physical (and mental) effort out of cross-country obstacles.

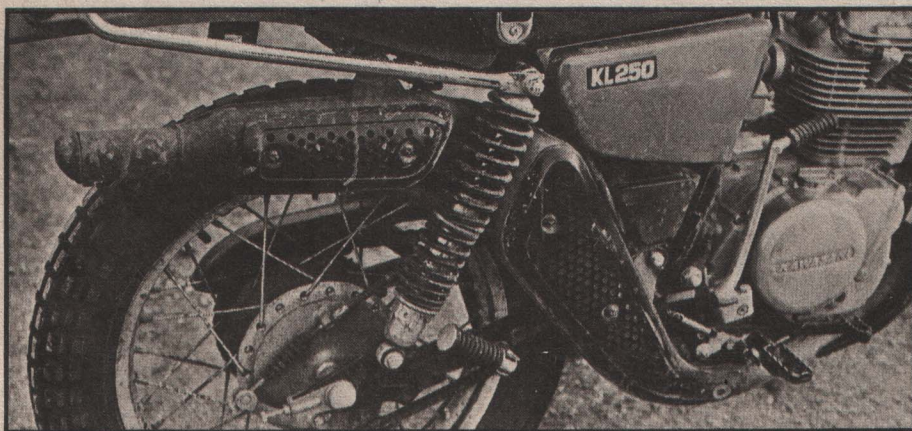
For normal green laning, if there is such a thing, the Kawasaki is probably the most comfortable, easy-going machine I've ridden. In difficult areas the lighter machines tended to score over the plodding four-stroke, especially the bikes which went light at the front and could use the quick pick-up of the two-stroke engines. But up slopes or on slippery chalk the 250 got its own back and along most routes the rider could thump along sitting in the seat where, on other bikes he would need to be up on the

footrests if only for the sake of comfort.

On the road the Kawasaki comes close to being the ideal, every-day machine. It's as good as any 250 where handling, braking and comfort are concerned, it wins on manoeuvrability and fuel consumption and only loses out on sheer top speed. There are also the advantages of the essential simplicity of the single cylinder motor and well thought-out detail design, although the 6V lighting is only adequate for 50 to 60mph cruising.

For those who want to play racers the 250's image is all wrong — although someone may yet prove we've underestimated it — but for those who enjoy riding green lanes and who want a good road bike, the new Kawasaki is one of the best so far.

One disadvantage, compared to other trail bikes, is that the 250 is considerably more expensive. In relation to machines of the same engine size the price looks a lot better. However, for off-road or commuting use, engine size isn't a main criterion and the financial attractions of the 175 or 185 machines do a lot to offset the 250's all-round appeal.



## TECH SPEC

**ENGINE:** SOHC single, bore and stroke 70 x 64mm, displacement 246ccm, compression ratio 8.9:1, wet sump lubrication, magneto ignition, Keihin PW28 carburettor, claimed 21bhp at 8,000rpm, 6V lighting, five speed gearbox.

**CHASSIS:** overall length 87in, overall width 34.4in., wheelbase 55in., ground clearance 8.1in., castor 61deg., trail 5in., test weight 292lb, fuel tank capacity 1.9gal, front tyre 3.00 x 21, rear tyre 4.00 x 18, suspension stroke, front 7.5in, rear 4.5in. Price: £688.50 inc VAT. Concessionaire: Kawasaki UK Ltd., Deal Avenue, Slough, Bucks.



# YAMAHA XT500

**J**UST for a change there were few problems starting this particular example of Yamaha's big single. Nine times out of ten it would burst into life on the first prod and it also responded better to pumping the kickstart rather than relying on the traditional big swing from the top of compression. The real problem was with the awkwardly placed starter pedal when the bike was stalled in slippery mud.

The 500 feels — and is — much bigger than the average trail bike. On the road it is pretty comfortable and reasonably quick; 70mph cruising and 100-mile runs are perfectly feasible, an aspect which brings the more remote trails within range of people who don't happen to live on the moors.

Despite fuel consumption of 60mpg or better, the long distance usefulness of the Yamaha was hampered by its small, 1.9 gallon tank.

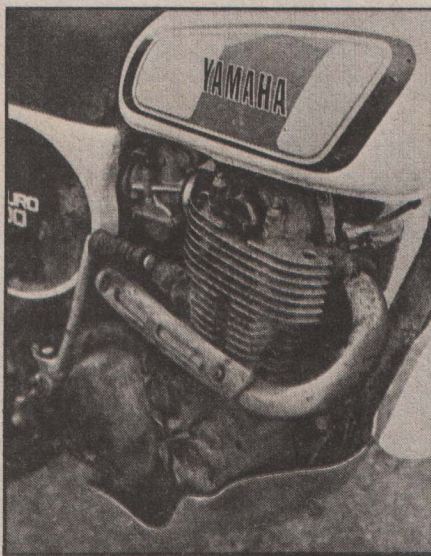
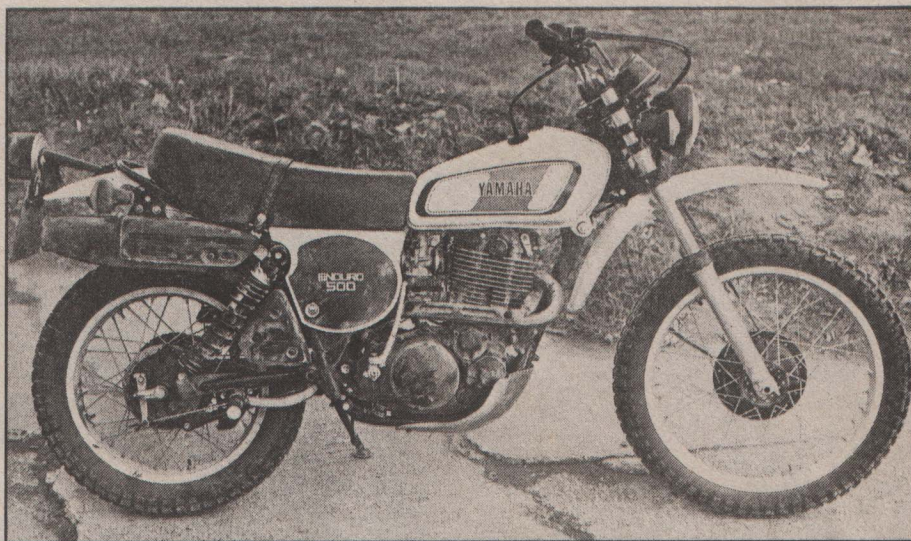
The Yamaha could be summed up as having few definite faults and equally few outstanding virtues. Its brakes are a good example, their performance is OK and typical of small drums which give a good compromise between road and off-road use. The rear brake linkage had some lost motion which spoiled the feel to the brake and because the Yamaha is faster and heavier than the norm the brakes were prone to fade from high-speed stops.

The big attraction of the whole machine is, of course, the large four-stroke single cylinder engine. It pumps out great pulses of power which give you confidence to tackle any obstacle. And it keeps the same, flat torque characteristics which let it plonk through deep mud at tickover speeds or thump along 70mph motorways. The motor gives the whole machine character.

Off-road the 500 could be surprisingly quick but demanded more skill and effort from the rider. Its handling, in most conditions was pretty good but over something like slippery chalk the heavy Yamaha got difficult to control; the front wheel would find all the ruts and grooves and follow them religiously. It was at its best in conditions where the motor could be used — long fast sections, steep slopes or gooey mud gave the Yamaha no problems at all.

One advantage of the big bike is that it gives a good riding position which is comfortable enough for longish runs. The suspension is a bit too stiff for road use but comes into its own on green lanes where either the springs soak up the bumps or the Yamaha's sheer mass flattens them out of the way.

The 500 is also a pretty tall machine, which could make it a bit cumbersome, especially if the rider were a bit nervous of using the power and tried to turn it all into a delicate balancing act. Free play in the twin throttle cable made fine on-off throttle control a bit imprecise anyway. Dual cables have always seemed a rather unnecessary, belt-and-braces operation which is even more out of place on a bike of this nature. Rather than a safety measure, the dual cable represents just one more thing to go wrong or get



broken.

The Yamaha's lighting is just about up to its performance as long as you're prepared to ride with a bit less verve after nightfall. The rest of the detail design was good; the metal footrests and pedals are tucked well in, the indicators are mounted on rubber stalks and the Yamaha is generally finished in a very business-like way.

In general the Yamaha was good on normal trails, and if the high weight caused occasional problems it also gave the bike more momentum to plough happily along with a reasonably comfortable ride. The engine is probably most impressive at low revs, where it will pull with surprising force and literally drag the Yamaha over quite daunting obstacles. Unlike the smaller bikes it is not a machine for the novice, while the more experienced rider has the alternatives of the cheaper lightweights or spending his money on something more tailor-made to his own needs.

## TECH SPEC

**ENGINE:** SOHC single, bore and stroke 87 x 84mm, displacement 499ccm, compression ratio 9:1, dry sump lubrication, magneto ignition, 34mm Mikuni carburettor, 6V lighting, multiplate clutch and five-speed gearbox.

**CHASSIS:** wheelbase 56in, castor 59.3deg, trail 5.3in, ground clearance 8.4in., test weight 323lb, fuel tank 1.9gal, oil tank 3.9 pints, front tyre 3.00 x 21, rear tyre 4.00 x 18.

**Price:** £834.50 inc VAT and delivery  
**Concessionaire:** Mitsui Ltd., Oakcroft Road, Chessington, Surrey.