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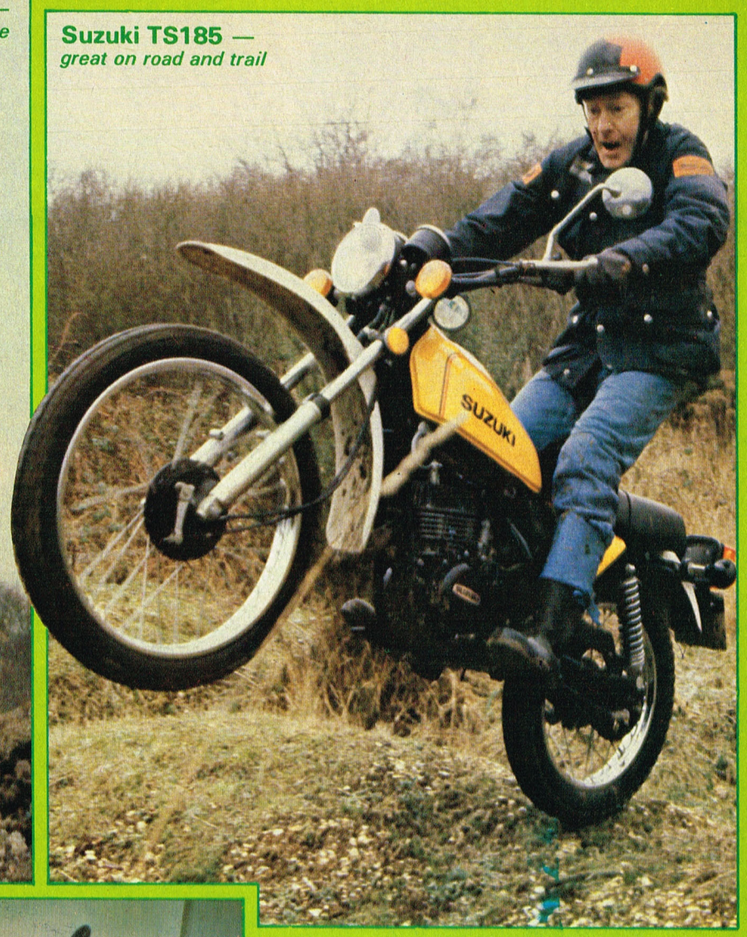
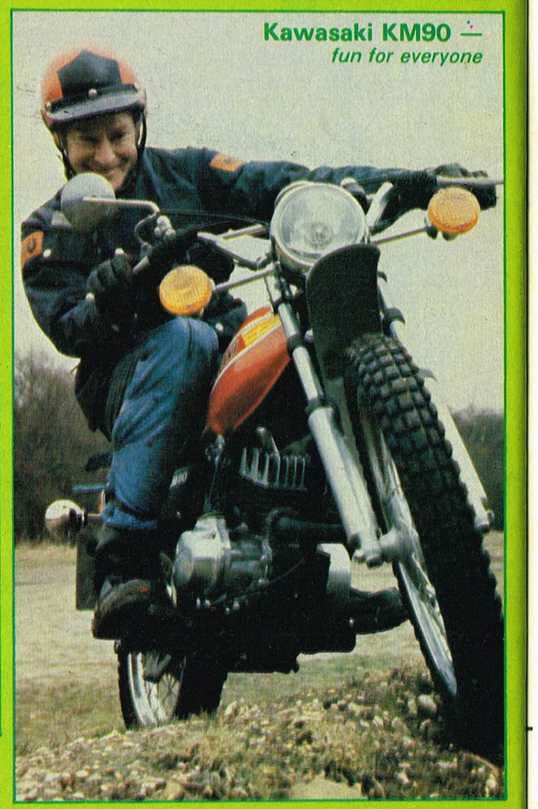
Fantic 125 Trial —
perfect balance



Suzuki TS185 —
great on road and trail



Kawasaki KM90 —
fun for everyone

Trail Trial Trio...

Trail Trial Trio...

ON THE ROUGH AND ON THE ROAD — SUZUKI'S TS185, FANTIC'S TRIAL 125 AND THE KAWASAKI KM90 PROVIDE FUN BIKING

SUZUKI TS185

The finesse of a TS

The superb test we had planned for the Suzuki TS185, the Exeter Trial course, was buried inches below the freezing salt and grime of a grisly winter along with the massive network of detailed arrangements laid down by the meticulous MCC. After one postponement, the Exeter Trial was finally cancelled.

It would have been a tough test for rider as well as bike; a good way of illustrating the qualities of the 185 as a durable road bike as well as a capable trail machine, coping with the intermittent off road sections that make up part of the 320 mile 'trail' route.

Instead we had to be satisfied with a few slippery rides around town and a Sammy Miller topsy turvy pogo yank around his land which left the Suzi covered from top to tail in mud.

It did undergo one unusual test, which hopefully won't be made a habit of and that comprised a trip on several of British Rail's green machines.

To look at, the 185 echoes the compact and practical have-a-good-time look of the TS125, but in spite of its extra power, in value for money terms the smaller version is probably the better buy.

However, despite the terse competition that exists now in the middleweight trail bike class, the 185 ranks very highly against machines of similar capacity.

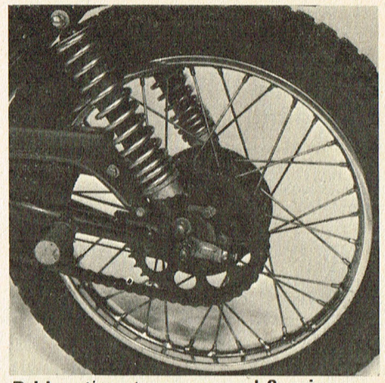
It stands nearly 43 inches high with a slightly shorter wheelbase than the 125 with its double tube cradle frame giving a ground clearance of 9.1in. The neatly tucked in up and over exhaust system conforms well to the slimline styling of seat and tank and heat shields prevent your over trousers melting — though it still gets hot around the leg(ital) area. The petrol filler cap also merges rather smoothly into the contours of the tank — to prevent injury under heavy braking perhaps..?

Both front and rear white plastic mud flaps are set high above the wheels which, to a certain extent, is an improvement on earlier models that featured chrome mudguards set very close to the wheels. Though it seems to be the fashion to have such high flaps in certain instances they seemed a bit over done resulting in a sprayed and splatted rider.

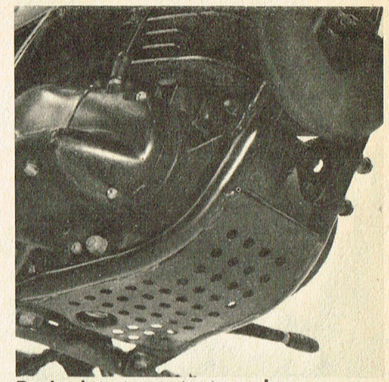
G rail for B rail

Rear lights were mounted on a black matt grab rail (which British Rail found handy) and surprisingly the indicators were not rubber mounted, but stood out on steel stalks making them very vulnerable to bending and braking in the event of a fall.

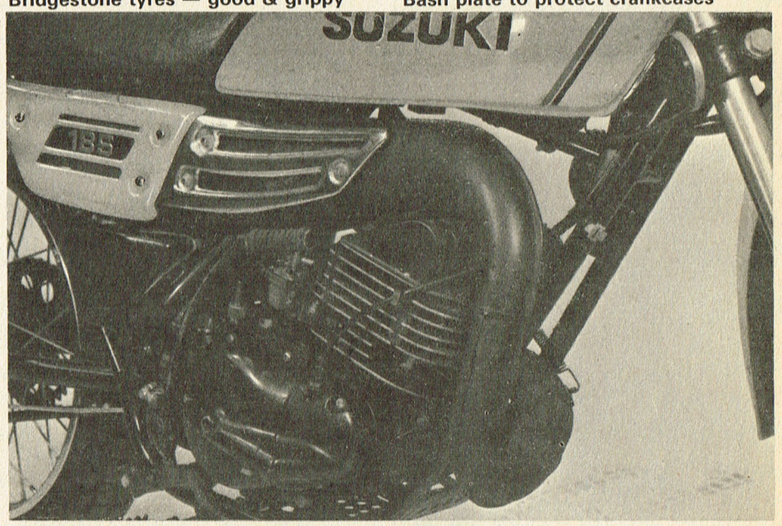
Starting the two stroke single — with its PEI (pointless electronic ignition) system — was a problem. It was temperamental — and if you've ever got done up in a load of very warm bike gear and spent the next twenty minutes doing leg exercises you'll know what being temperamental is all about.



Bridgestone tyres — good & grippy



Bash plate to protect crankcases



Neatly tucked in up and over exhaust system complements slim line of tank and seat

Sometimes you could spend hours kicking it over while it popped and banged with otherwise no response until it got heavy encouragement from the rear. But just once after it had spent the night outside in the frosty snow it started — second kick. Thus we discovered that it needed a lot of choke to begin with and took quite a while to warm up and rev freely. Once it was warm it would fire up again and again no sweat — which is nice to know when you've stalled in a sloppy bog and are sinking fast.

The riding position was good — more in a practical manoeuvrable way than in comfort, for the seat was quite slim and hard for a long ride; the Exeter Trial could have been a real bum story.

The high braced bars and slimline tank meant you could really get your knees tucked round and be able to guide and control the machine. The steering head angle enabled very tight and easy turns which, combined with the low down plonkiness of the 183cc engine, provide a sure means of tackling tricky situations whether round a smelly lorry or a bush of prickles.

Good commuter

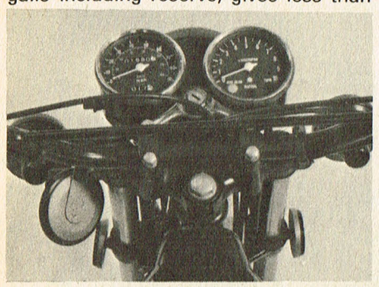
As a good commuter machine it had no major failings but maybe a few minor ones. The brakes were not remarkable in performance though adequate. Part of the problem, as with a lot of trail bikes is that the tyres aren't so grippy on the tarmac and so they'll take a longer distance to stop safely than most roadbikes, though unfortunately we were

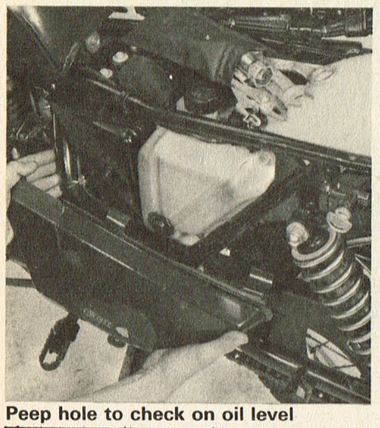
Trail Trial Trio..

unable to get any test figures to illustrate either way.

The 183cc motor felt quite powerful when it really got going and a big handful of revs in a low gear would bring the front wheel in to the air. Though you could feel the power surge in around 6000rpm, generally whatever the revs there seemed to be power to handle any situation, so that it was as efficient doing a few mph as it was at higher speeds. This kind of versatility is down to the reed-valve, piston port induction system, which allows smooth and torquey running and a responsive, peaky motor.

Fuel consumption was in the 57mpg region which, with a fuel tank holding 1.8 galls including reserve, gives less than





Peep hole to check on oil level

100 miles scope before hunting for fuel. So if you're going on a long trail best keep some fuel in your flask, its easy to clock up the miles and be stranded without even your toothbrush. And enlarging the tank would lose its desirable slim line necessary for trail riding.

The gearbox was very smooth in operation with or without using the clutch. The clutch though, was a bit sticky and would bind making it hard to bump start.

The five gear ratios are a road/trail compromise so that the first two gears are very low — ideal for the rough but on the road you need the higher gears for more effective acceleration. Overall, the engine and gearbox provided a good range of speed and useful torque. Maximum speed was around 70mph, though we were unable to check this electronically.

Road riding on the TS was easy going so long as you remembered to readjust the five-way adjustable rear units if you've been playing around with them on the rough, for on the top setting they felt quite wooden.

The long travel front forks were well-damped and quite unruffled by any potential jaw lockers the road had to offer.

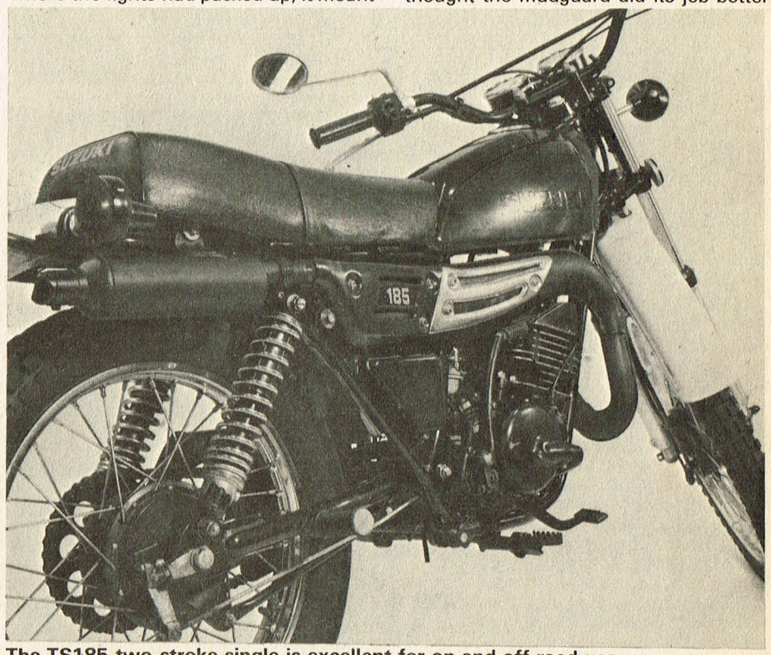
Ticket to ride

One thing that was noticeably lacking for road riding (hoping you wouldn't go trail riding in the dark) was the headlamp. The 6v battery powered the incidentals such as indicators horn and pilot light but power to the main lights was direct from the engine so that visibility was very poor on unlit roads. Visibility was even poorer when they blew completely and left me more than 'just a push down the road' from home. Short of leaving it where it stood the alternative was to put it on the train (buses aren't very obliging) and so I did. And unfortunately, from the awkward location where the lights had packed up, it meant changing trains three times — and platforms...

Needless to say, by the time I had manhandled it all the way home, I had begun to appreciate its well-balanced build, which made no hard task of pushing or of scooting down on to a platform of bewildered commuters.

Instrumentation was of the usual Japanese calibre with speedo and rev counter containing the neutral, mainbeam and winker light indicators. Plus, of course, a mileometer and trip meter which was of dubious use as its rather slow digit rewind system (one mile per turn) would take for ever to reset to nought.

A fairly standard tool kit could be found under the lockable seat, which could be used for the most basic maintenance such as checking the plug, tensioning the chain and tightening up wobbly nuts and bolts.



The TS185 two-stroke single is excellent for on and off road use

Off Road with Sammy

Sammy's reaction to the 185 was a very favourable one. He seemed to like it a great deal and felt that it was a very capable trail machine.

His first criticism was, as always, that the footrests were too low. They tended to dig into and catch on ruts and so hinder the ride. This is often a fault on trail bikes where, unless they are neatly upturned out of the way, clumsy positioning of footpegs and controls can lose all the benefits of an initially good ground clearance.

Though he too found starting a problem he made no comments of any real faults with the engine and was rather full of praise for the gearbox, which he found very accommodating. First gear was very low — low enough for extremely slow work, but still provided a good turn of speed. He proved this by doing a few power slides in a straight line.

He commented on the exhaust pipe being well out of the way and he also thought the mudguard did its job better than some as it kept most of the mud off the engine.

On the handling side he thought the forks were a bit stiff, but put this down to the cold conditions. A lot of people forget to change their fork oil and and he recommends a thinner oil for the winter season.

He was impressed with the tyres, 'Bridgestone trails', which were a bit scrubbed out but nevertheless had worn well and offered a good grip.

The brakes he thought were good for off road work — they seemed to survive the watertight test — though he found the rear brake locked the wheel too easily and would thus stall the engine.

All in all, he was very enthusiastic about the bike — and what a good job it has an engine bash plate. The TS185 is obviously a competent middleweight trailster and commuter — I wonder if it would have made a good Exeter Trialer?

MERRIL BOULTON

FANTIC TRIAL 125

A question of balance

FANTIC'S 125 Trial ought not to be in this article at all. It's a purpose-built trials machine, not a dual-purpose trail bike.

On the other hand, we could bend the definition of a *Trail Trial* to include taking a trials bike out on trails as well as our normal trail-bike trials. Confused? Good.

The truth is that we wanted to enter the Fantic in the Exeter Trial (which, unfortunately, got cancelled) and using it in a *Trail Trial* gave us a good excuse for borrowing one.

It also gave us a good excuse for including the amazing little KM90 in our group of three to even up the balance. But I digress.

The 125 Trial uses Fantic's own single-cylinder, piston-ported, air-cooled, two-stroke motor. It is based on a Minerelli unit but has several internal changes such as a chromed cylinder liner and a very high 12:1 compression ratio. Lubrication is by 50:1 petroil mixture.

A wet multi-plate clutch feeds the claimed 12bhp at 5500rpm into a six-speed gearbox. For trials use the final gearing is ultra low, with an 11 tooth gearbox sprocket and 60 tooth drive sprocket. A 17 tooth gearbox sprocket is available for trail and enduro use. There is a cush-drive in the rear hub.

The frame is a conventional double-loop cradle in lightweight moly-steel tube. The leading-axle forks are steep, and the short swinging arm is controlled by Marzocchi hydraulic shocks with five spring pre-load settings.

Mono-purpose-and-a-bit

The Fantic isn't meant to be a dual-purpose bike. Rudimentary lights and a horn are fitted to make it street legal, but this is to satisfy the needs of trials with road sections rather than for normal road use.

However, not all of us can afford to buy and run more than one bike. So we used the Fantic for commuting to see whether it could earn its keep in between the weekends' fun.

The trials gearing is far too low for the road, and even pulling away in second gear means lotsa changes in the first 100 yards. Once in sixth (top) gear you can stay there most of the time, only dropping to fifth or fourth for most traffic hazards. Sixth gear will quickly wind the bike up to 50mph, which is more than enough for town work.

Anyone using the Fantic for trail or enduro riding will have the faster, 17 tooth, gearbox sprocket fitted, This will bring the gearing up to that of most road-going trail bikes.

Much more of a problem than the ratios, the gear lever position is terrible for road riding. With rearward-mounted footpegs and a low seat already forcing a knees-bent riding position, lifting your left foot off the peg to swing it forward and have a big stab at the next gear is a big effort.

There is a similar problem with the rear brake pedal. Although the pedal is in the right place relative to the footpeg, you'll find that your toes are pointing towards the ground. It takes a lot of ankle bending to get on top of the brake.

The forks are a bit hard for use on the open road, causing the bike to pitch on undulations. Thinner fork oil would probably be a good idea in the winter. Sharp bumps and potholes were absorbed quite well.

Manoeuvring in traffic is a joy, although the wide bars will catch on cars' wing mirrors if you're not careful. The high footrests are no problem because the bike is so easy to balance when coming to a halt. With a bit of practice and the use of first gear you need hardly put your feet down at all.

As long as you don't go playing at being Ron Haslem the tyres are pretty good, even on wet roads. You wouldn't expect the tyre pressures to be written on a trials bike, and they aren't. The very comprehensive handbook recommends 11/14psi front/rear, although I was riding around in ignorance on 20/25psi with no ill effects.

The narrow, single seat numbs your bum after two or three miles so it's just as well that there's no room and no footpegs for a pillion. You could just about strap a round of sandwiches to the rear mudguard, but no more.

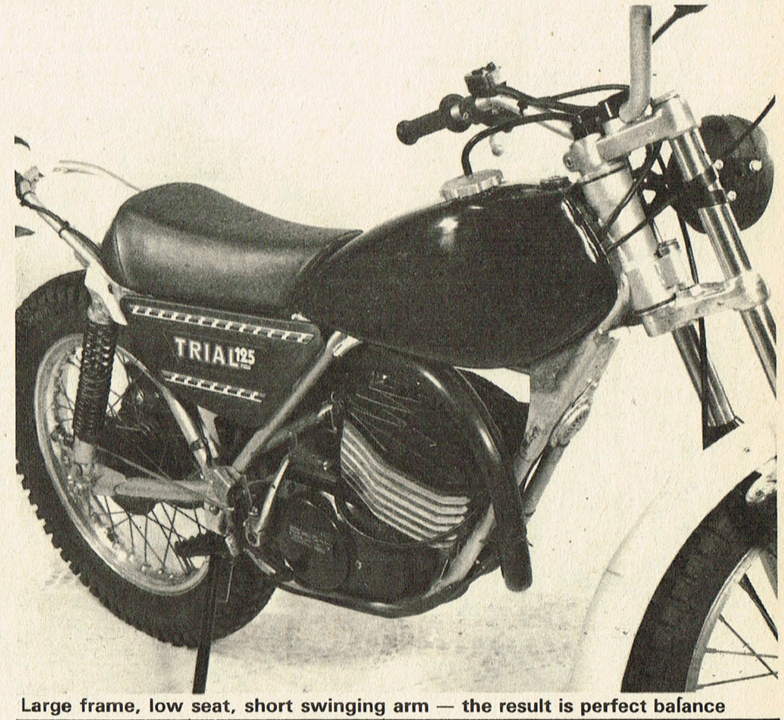
Starting the engine was usually a one or two-kick process despite the short stroke of the kickstart lever before it comes to rest against the right-hand footpeg. Both footrests fold up, but they are spring-loaded and so won't stay out of the way of the kickstart.

There are no winkers, the tiny fork-mounted speedometer/mileometer is not illuminated, and there is no ignition switch or key (spark power is supplied by CB points and magneto). This is ail quite reasonable on an off-road bike. Switches for horn, lights, dipswitch, and engine cut-out are gathered together in a tinny unit strapped to the left-hand bar.

The switches all rely on the handlebar for an earth and the handlebar is anodised, which meant that the lights faded away every so often and it was easier to stop the engine by stalling it than to try scraping a good enough earth for the cut-out. Any home mechanic ought to be able to solder on an earth or put a self-tapping screw through one of the straps, though.

Having to use petroil mixture is a nuisance. The handy little measure in the fuel-tank cap is graduated for US gallons, ho hum. There is no room on the bike to store a bottle of two-stroke oil.

No centre-stand is fitted, of course. The super-long side stand folds up along the right-hand swinging arm, but you soon get used to that. A steering lock is fitted, and you get a few very basic tools jammed into a plastic tube under the right-hand side panel.



Large frame, low seat, short swinging arm — the result is perfect balance

In its element

This is what it was meant for and this is where it's at. Once you get the Fantic off the road you can forgive it for all its limitations on the road — for which is was never designed anyway.

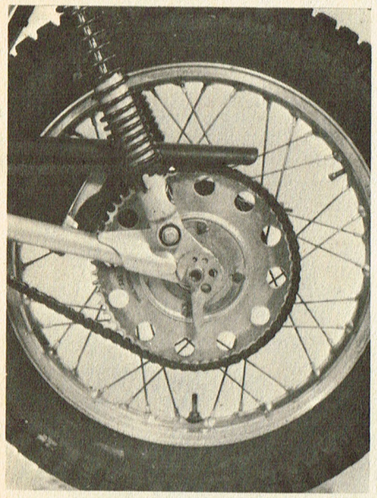
The frame is big for a 125 — more like contemporary 250s. This makes the bike more stable at speed through the ruts and berms and also brings the centre of gravity nearer the rider, an important contribution to the Fantic's delightful balance.

The biggest potential disadvantage of a large frame is that it tends to make the

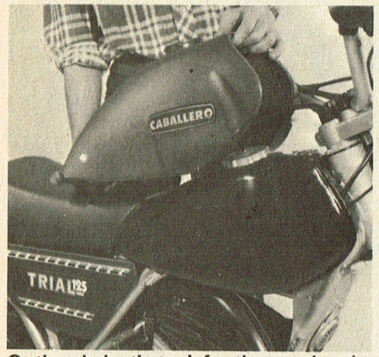
Trail Trial Trio..

bike tall in the saddle. The Fantic gets around this by having its single seat mounted on the rear subframe, below the level on the rear mudguard. Having such a low seat compared to the high-mounted pegs is no problem when you are standing up most of the time, and it makes a nice cushion to grip with your knees for control.

Using lightweight frame tubing and



Trials gearing from 60-tooth sprocket



Optional plastic tank for the rough only

dispensing with non-essential gubbins has kept the weight down to 174lb. That's over 50lb lighter than the Suzi 185 and only 6lb heavier than the diminutive KM90. And it counts. Placing the bike accurately in tricky terrain, or dragging it out of the same terrain after tackling more than you could handle, is no sweat.

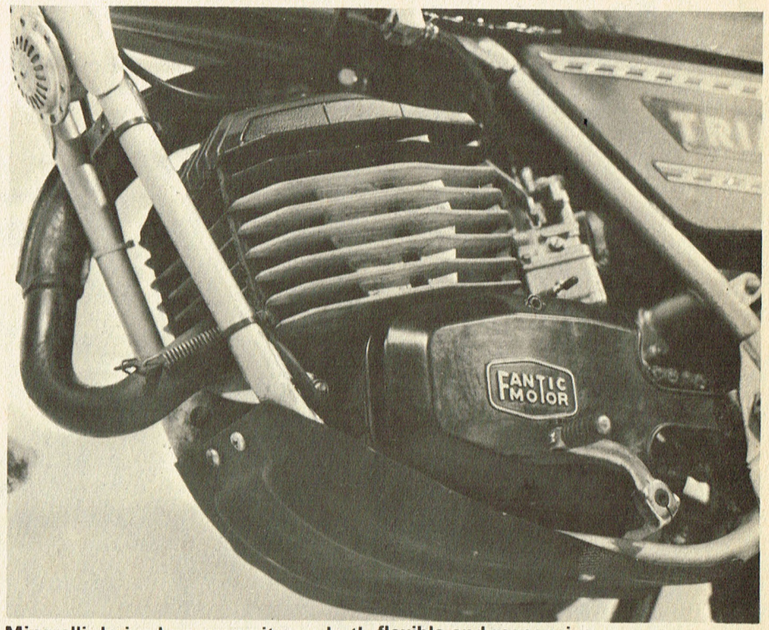
Watching Sammy Miller make the most of this purpose-built bike was a delight. Things didn't go too smoothly at first because the engine refused to fire until about the 100th frustratingly-short kick. Sammy said that he has found this problem with other Dell'Orto cab'd bikes such as SWMs. They are very susceptible to cold weather and take a long time to warm up. It certainly was cold on that morning, and the engine was usually much easier to start.

Once the engine had warmed up, restarting after a stall was first kick. The only hassle was that the kickstart engages after the clutch and so the bike can't be started in gear.

With the choke off and the engine running cleanly, Sammy proceeded to show how good the balance is. Seeming to pause at the top of ridges with the bike standing on its back wheel, he could put the front wheel down gently — after turning in mid-air if necessary.

Standing on footpegs mounted behind the pivot of the short swinging arm, even a novice like me soon learns how to keep his body weight in line with the rear axle. This leaves the front wheel free to lift over an obstruction at the merest whiff of throttle. Or climb near-vertical slopes without need of a quick run-up — simply let the bike revolve under your feet until the top fork yoke is nearly touching your chest, and climb.

After making allowances for the cold fork oil, Sammy found the suspension very good for trials work. He went on to say that the Fantic would be a good bike for a beginner in trials, trail riding, or an enduro. However, he added that there



Minarelli-derived power unit was both flexible and responsive

wasn't sufficient suspension travel for serious enduro riding — something like a DT175 or the TS185 would be better.

The leading axle is mounted slightly ahead but at the bottom of the forks. This set-up makes the steering more responsive but doesn't increase fork travel.

The low gearing of the test bike impressed Sammy on the low-speed woodland section of his off-road playground, but he said that it was too low for the trail sections. Being an expert he always selects his gears well in advance of any obstacle. I, on the other hand, often needed to change cogs quickly and easily and I found the gearchange stiff and awkward.

The gearlever shaft runs in the aluminium engine casing without a bush or bearings. Possibly salt from the roads had got in, corroding the ally and so making the lever stiff. We found sticking gear-levers a problem on a couple of our test bikes during the icy weather.

One nice touch is that the end of the gearlever is hinged and spring-loaded. This helps to stop it getting bent and also cuts down the number of times that vegetation does your gearchanging for you.

Sammy set the tyres to 10/8psi front/rear, and thought that they gave good grip for a 125. The handbook recommends 8/7psi for trials use, and the importers say that the pressures can safely come down to 3psi if needed. Both wheels have security bolts.

The importers felt that the road pressures of 11/14psi would be best for trail riding. It would be a good idea to pump the tyres up to 15/23psi for enduro work, where rocks are being hit at high speed.

Sammy's last comment was on the brakes. He found them well matched to the grip offered by the tyres, but was disappointed to note that the front brake took a long time to dry out. This could be nasty if you came out of a water-filled ditch and onto a road section, as so often happens when trail riding.

Is it for you?

The Fantic 125 Trial is a serious off-road bike suitable for trials as well as trails. Comparing it to a trail bike like the TS185 would be unfair to both.

If you want a road-going bike that you can take off the road for an occasional bit of fun, then the Fantic is not for you. If you are an experienced off-roader regularly entering enduros, then the Fantic isn't for you either.

But if you want to spend your weekends riding over any part of Britain that They will still let you, may be entering a few trials, and you would like to be able to get to work and back on the same bike, then the Fantic is ideal. It will bring out your best.

NEIL MILLEN

KAWASAKI KM90

More fun than we've had in years

NO, don't laugh. Being only 37 inches high doesn't mean that Kawasaki's KM90 isn't a fully-equipped road bike. Or a trail bike. Or whatever.

Nobody seems very sure what the KM90 is. American-inspired Kawasaki brochures call it a midi bike for junior-sized cross-country riders, road legal for those old enough to hold a licence.

Kawasaki UK say that low insurance costs make it popular as a teenager's road bike (sixteeners can't ride it). They are also selling a few to well-heeled persons who don't bother registering them 'cos they are only going to be used for commuting around the yacht or down to the wine cellar and back.

The single-cylinder, rotary disc valve, two-stroke motor is one of Kawasaki's longest-running units. It has been around for years in 90 or 100cc form. There is nothing crude about it, and the rest of the KM90 is as sophisticated as most full-sized road bikes.

Oil injection does away with messy and inconvenient petroil mixing, CB points and magneto keep the ignition system simple. A 70mph speedometer with mileometer, lights, winkers, and a full set of handlebar switches and warning lights — it's got the lot. There's also a good-quality toolkit and the handbook gives a very comprehensive guide to home maintenance.

Off-road flavour is added by high-level exhaust system and mudguards, and block-pattern trail tyres.

No joke on the road

With a top speed of 55mph on the downhill bits, and a relaxed cruising speed of 45mph, the KM90 is well out of the moped class. Using the superslick five-speed gearbox it's easy to blow off most four-wheeled town traffic, changing up and down without the clutch.

After getting used to selecting all five gears in the same direction, with neutral at the bottom of the box, I found it very convenient. It makes you wonder how neutral got in between 1st and 2nd on other bikes.

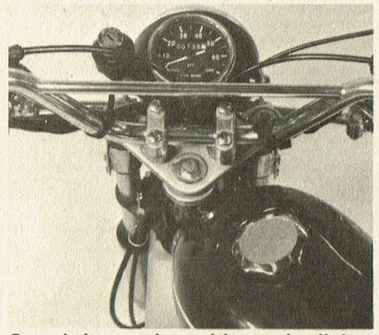
Fifty plus is a lot of mph for a little bike, especially when the steering head angle has been chosen for manoeuvrability rather than straight-line stability. But Big K's kiddie skips along without problems as long as you don't try any dumb stunts, like cornering hands-off.

A degree of respect goes down well when you've got small, semi-knobbly tyres on a greasy road. With my confidence boosted by the knowledge that the frame is so small that I could always stand up and let the bike have an accident all on its own, however, I tried a bit harder. And they're OK. As good as some so-called road tyres I have known.

Considering the attention to detail elsewhere, it came as a surprise to find that the tyre pressures are not jotted down on an easy-to-read part of the bike's exterior — quite important on a bike which is likely to have its tyres let down for off-road use. The pressures are given in the handbook, of course.

With single leading shoe units at both ends, the brakes did all that was asked off them and had lots of feel. It rarely happened accidentally, but you can lock the rear wheel with no risk of the bike becoming unstable. The front wheel was very hard to lock — which is good.

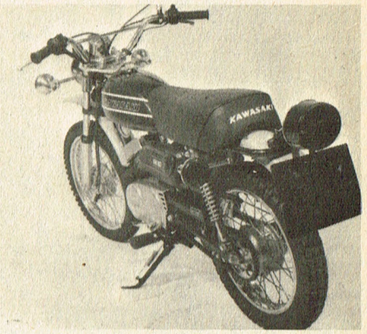
Despite its midget proportions the



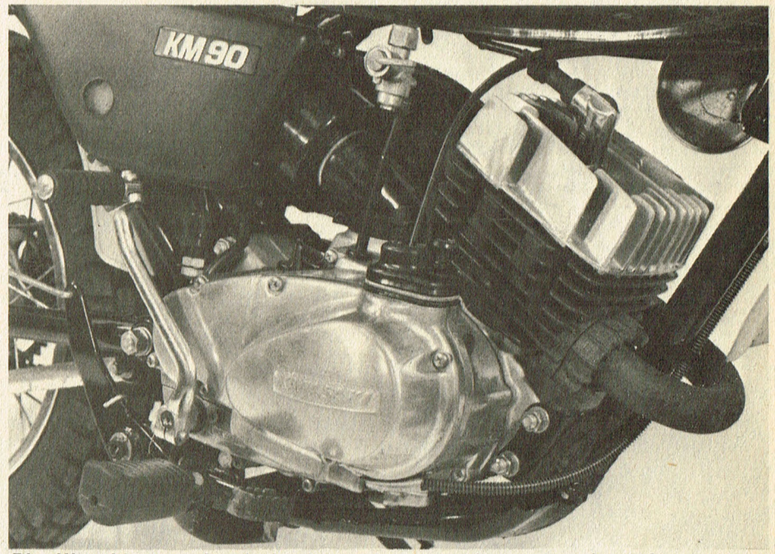
Speedo is complete with warning lights

A scream on the rough

Asking Sammy Miller to give a serious off-road evaluation of the KM90 was, perhaps, a bit unfair. He looked a bit dubious as he wrapped himself around the tiny frame, but he soon succumbed to its charm and started grinning.



Pretty, practical, and petite



Big K's oldest engine isn't short of power as long as you keep the revs up

KM90 isn't uncomfortable for adults, even the long-legged ones. Biggies will find that they need to use most of the dual-looking seat, but since there are no pillion pegs fitted you've got the whole seat to yourself anyway. Luggage is more of a problem because there isn't much room for strapping stuff on. If you don't want to swap your briefcase for an executive backpack, there's probably a rear carrier to fit.

Pilot and rear lights are powered by the 6V battery, but the headlamp runs direct from the magneto and so only works when the engine is running. It's bright enough for others to see you by, but not suitable for much riding on unlit roads. The winkers are a bit slow and weak unless you keep the revs up.

The lift-off seat is not lockable and has quick-release catches, and must come off to get at the oil tank filter. Only one mirror is fitted as standard.

"Quite a long wheelbase — more stable for beginners. Well finished." Quite a compliment from the man who can find fault with purpose-built bikes.

To try out the KM90 in the way it is meant to be used we spent a chuckle-filled Saturday afternoon challenging the might of Dorset's schoolboy scramblers on a local moto-cross practice circuit. At first the little Kwacker fell heavily behind the kids on their Yamaha YZs, but then we all swapped bikes and the YZs lost...

Several people who had never ridden bikes before were persuaded to have a go on the KM90 — and they all rode off into the mud and ruts with no problem. Little kids came back shouting for more and big kids, like *Motorcycling Monthly's* senior (ha!) artist Cole Schnaar, enjoyed himself so much that he's signed up for an RAC/ACU training course.

The suspension, which no-one pretends to have designed for moto-

Trail Trial Trio..

cross, only bottomed out under severe conditions — even with 12-stone riders charging flat-out at the berms. No adjustment is possible.

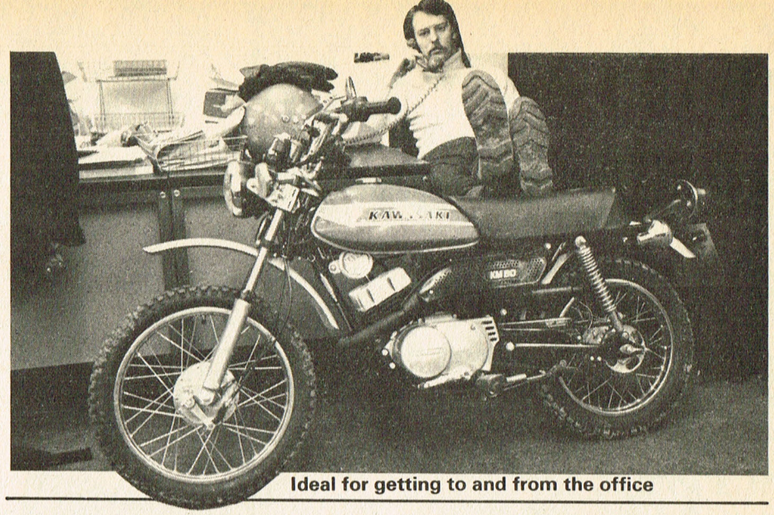
Biggest drawback proved to be the tiny, 14/16 inch wheels. These were small enough to get to the bottom of every hole. Unless you go fast enough to fly over the top (which is quite possible) the bike leaps from pothole to pothole like a salmon on heat, with only the flash of your teeth through the mud to give away your presence. The small wheels are necessary, of course, to keep the seat height down for the kiddies.

The tyres were a good match for the limited power available, and found plenty to bite on when the brakes were squeezed. Robert Saluz, our Art Editor's son as well as a budding Junior ACU scrambles ace, was particularly impressed with the brakes — not that I noticed him using them much as he flew over my left shoulder.

No security bolts are fitted to the wheels. To stop the bike squirming about too much in deep sand we let both tyres down to about 15psi. No problems.

The engine was reasonably flexible for trickling along in low gear, but the gearbox has to be used freely to keep the revs up for spirited riding. First gear was much in demand since it would slog through mud at near tickover speed or scream its way up near-vertical slopes at 20mph.

One of the nicest detail touches — and one that a few more trail bikes would do well to copy — was the quickly-detachable headlamp. A few moments' spanner work and the cleverly-designed brackets unclamp from the fork stanchions, removing the headlamp and winkers in one go. The whole lot is wired up through one block connector behind the lamp. How simple. How sensible.



Ideal for getting to and from the office

Another coupla nuts and snap-connectors saw the rear winkers out of harm's way. Unfortunately, we only discovered how easily it all unbolts after one of our party over-enthusiastically pushed one indicator stalk into the headlamp shell and snapped another one off altogether. We won't be so lazy next time.

The bars are a bit low for an adult standing on the pegs, and the chain is fitted with a guide but not a tensioner. Neither of these points proved to be serious drawbacks, though.

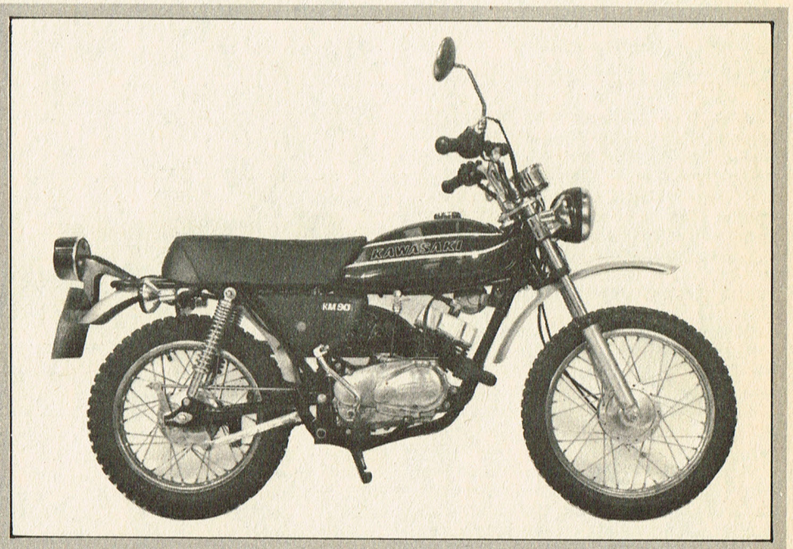
Togetherness

The KM90 is the best investment a family could make. Everyone over the age of about seven years can have the time of their life off the road, those over 17 years can go to school on it, and Dad can commute on it when Mum wants the car. It's biggest failing seems to be that Mum will have trouble finding room to carry much shopping.

Don't laugh at it, laugh on it.

NEIL MILLEN

Kawasaki KM90



ENGINE

Two-stroke single cylinder, rotary disc valve. Bore x stroke 47.0 x 51.8mm (1.85 x 2.04in) = 89cc (5.43cu in). Compression ratio 6.8:1; Carburettor: Mikuni VM19SC. Lubrication system: Superlube (oil injection). Primary kick starter. Max horsepower 6.6HP @ 6500 rpm. Max torque 0.81 kg-m (5.86 ft-lbs) @ 5500rpm. Maximum speed approx. 50mph. Fuel consumption 85mpg.

TRANSMISSION

5 speed constant mesh, return shift. Wet, multi disc clutch. Primary reduction ratio: 3.52 (74/21); Final reduction ratio: 2.57 (36/14); Overall drive ratio: 8.68 @ 5th gear. Gear ratios: 1st - 2.92 (35/12); 2nd - 1.76 (30/17); 3rd - 1.30 (26/20); 4th - 1.09 (24/22); 5th - 0.96:1 (23/24).

ELECTRICS

Magneto ignition system; Spark plug NGK B7HS or equivalent. Battery 6V 4AH; Headlight 6V 25/25W; tail/brake light 6V 5/21W; Turn signal lights 6V 21W;Meter light 6V 3W; Neutral indicator light 6V 3W; Turn signal indicator light 6V 1.5W; High Beam Indicator light 6V 1.5W; Fuse 10A.

WHEELS & BRAKES

Wire spoked wheels shod with Nitto trial tyres. Front tyre 2.50-16-4PR. Rear 3.00-14-4PR. Front and rear leading shoe brakes. Claimed braking distance: 6.5m @ 35KPH (21.3ft @ 22mph).

FRAME & FORKS

Tubular swing cradle frame. Front telescopic forks, rear swinging arm suspension. Castor 63°; Trail 74mm (2.9in). Minimum turning radius 1.6m (63.0in).

DIMENSIONS

Overall length: 1745mm (68.7in). Overall width 765mm (30.1in); Overall height 945mm (37.2in). Wheelbase 1100mm (43.3in). Ground clearance 160mm (6.3in). Dry weight 76kg (168lbs). Fuel tank capacity 6.0 litres (1.3 Imp Galls) Oil tank capacity 1.0 litre (0.9 Imp qt).

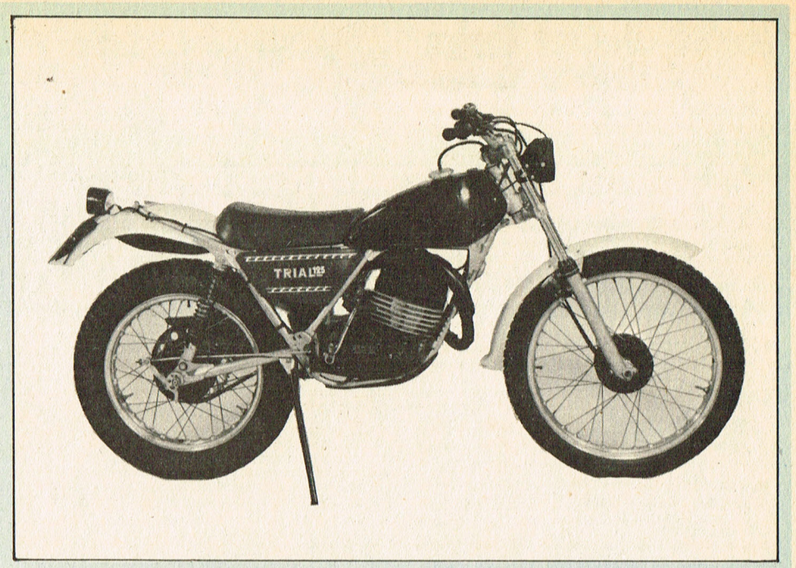
EQUIPMENT

Lights, indicators, horn, mirror, speedo, mileometer, tool kit, prop stand.

GENERAL

Test machine supplied by Kawasaki Motors UK, Deal Avenue, Trading Estate, Slough, Berks. Price: £430 inc. VAT and delivery.

Fantic Trial 125



ENGINE

Single cylinder, two-stroke, aluminium cylinder with chromium liner. Bore x stroke: 55.2mm x 52mm. Compression ratio: 12:1 developing 12bhp at 5500rpm. Electronic ignition. Petroil mixture 50:1 (2%). Carburettor: Dell'Orto PHBL 24 BS. Top speed: approx 50mph with low gearing. Fuel consumption approx. 100mpg.

TRANSMISSION

Clutch: multiple disc in oil bath. Transmission: primary gear ratio 1:2.8, secondary chain ratio 1:5.45. Ratios: 1st - 1:3.54; 2nd - 1:2.5; 3rd - 1:1.83; 4th - 1:1.38; 5th - 1:1; 6th - 1:0.75.

ELECTRICS

Ignition type: electronic Ducati or Dansi. Spark plug: Champion L 86 or Bosch W 225 TI. Electric supply: direct drive. Parking light 6V 3W, main/low beam 6V 25/25W, rear light 6V 5/18W.

FRAME & FORKS

Double loop high resistance steel tube. Front suspension: telehydraulic fork, oil capacity 11.4 cu.in. Rear suspension: swing arm with hydraulic Marzocchi shocks adjustable to 5 position.

DIMENSIONS

Wheelbase 1300mm (51.2in.); Overall length 2020mm (79.5in.); Overall width 850mm (33.5in); handlebar height 1140mm (44.9in); Ground clearance 280mm (11in); Weight 79kg (173.8lbs); Fuel capacity 6.5lts (1.35 Imp galls). Fuel consumption 2.7lts per 100kms (0.59 galls per 62.1 miles).

WHEELS & BRAKES

Aluminium wire spoked wheels. Internal expanding front and rear brakes. Tyres: Pirelli Mototrial front 2.75 x 21, rear 4.00 x 18. Tyre pressures for road use: front 11.2psi, rear 14.2psi. Trial use: front 8.4psi, rear 7.1psi.

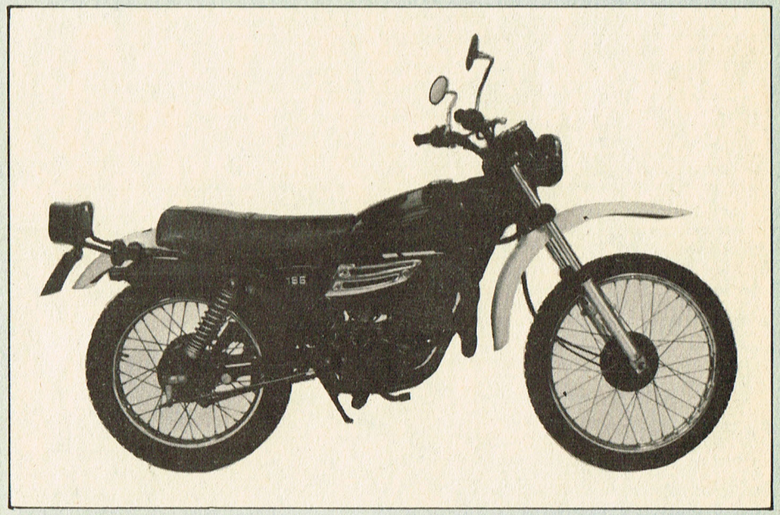
EQUIPMENT

Toolkit, speedo mounted to fork leg (not illuminated), skid plate, prop stand, horn, rear light. Handle-bar mounted switch contains lights on/off, dipswitch, horn, and engine cut-out.

GENERAL

Test machine supplied by Barron Eurotrade Ltd, Fantic House, High Street, Hornchurch, Essex. Price £729 inc. VAT and delivery.

Suzuki TS185



ENGINE

Single cylinder air cooled two stroke with piston port and reed valve induction. Bore x stroke: 64.0 x 57.0mm (2.52 x 2.24in) + 183cc. Compression ratio: 6.4:1. Suzuki CCI lubrication system. Maximum claimed horsepower 17bhp @ 6500. Carburettor Mikuni VM26SS. Air cleaner polyurethane foam element.

TRÅNSMISSION

Clutch: Wet multi-plate type. Transmission 5-speed constant mesh. Gearshift pattern 1 down 4 up. Primary reduction: 3.210 (61/19); Final reduction 3.250 (39/12); Gear ratios: 1st - 2.750 (33/12); 2nd - 1.812 (29/16); 3rd - 1.250 (25/20); 4th - 1.000 (23/23); 5th - 0.800 (20/25); Drive chain: 520, 96 links.

ELECTRICS

Ignition type: Suzuki 'PEI' (Pointless Electronic Ignition). Spark plug NGK B-7HS or NIPPONE DENSO W22FS. Battery 6VAH/10hrs. Generator: Flywheel magneto. 6V 25 watts headlamp.

FRAME & FORKS

Front suspension: Telescopic, oil damped. Rear suspension: Swinging arm, oil damped, spring 5-way adjustable. Steering angle 40° (right and left). Castor 58°00'. Trail 152mm (5.98in). Turning radius: 2.2m (7.2ft).

DIMENSIONS

Overall length 2070mm (81.5in); Overall width 835mm (32.9in); Overall height 1090mm (42.9in); Wheelbase 1350mm (53.1in). Ground clearance 230mm (9.1in); Dry weight 98kg (216lbs). Fuel tank incl. reserve: 8 lts (1.8 Imp galls) Reserve 1.9 lts (1.7 Imp qt). Engine oil tank 1.2 lts (2.1 Imp pt). Transmission oil 700cc (1.23 Imp pt).

WHEELS & BRAKES

Wire spoked wheels. Internal expanding front and rear brakes. Bridgestone Trail Tyres: Front 2.75-21-4PR; Rear tyre 3.50-18-4PR.

EQUIPMENT

Mirrors, toolkit, indicators, speedo, rev counter, trip meter, grab rail.

GENERAL

Test machine supplied by Heron Suzuki GB, 87 Beddington Lane, Croydon CR4 TD. Price: £550 inc. VAT and delivery.