

Vee

MOTOR CYCLE MECHANICS

SEVEN BIKE TRAIL TEST

500 TRIUMPH BLUEPRINT
MZ 150/250 SERVICE



ON TEST
YAMAHA RD400
MZ TS125



**SUPER SAVE
OFFER** CASTROL BIKE CARE BOOK
AND SERVICE CHART

**WIN A Z750
KAWASAKI**

WEEKEND COWBOY

SEVEN TRAIL BIKES IN NORTHERN EXPERTS COUNTRY



On one of the easier stretches the Honda, looking a bit the worse for wear, followed by the Montesa, with pillion passenger, and the Fantic 125.

Report by John Robinson

ENDURO machine, or a lightweight commuter vaguely styled on the latest moto-cross trends? While trail bikes tend to fall into one of these categories, many have been improved, getting closer to the ideal of combining reasonable road transport with competent off-road performance. To many people who buy this kind of machine the off-road aspect is purely fun — and maybe they don't have a lot of experience anyway. Someone who wants to get into enduros needs a different kind of motorcycle and plenty of experience too.

We set up this test to evaluate a wide cross-section of



John Robinson and the Yamaha Enduro go paddling. In the background the Kawasaki 175, Honda 125 and Fantic 125.

machines in the hands of a variety of riders, varying in requirements as well as in levels of ability. All of the machines would be competent along the average green road, although some would represent a lot better value for money, so we decided to give them something a bit tougher and took a route following the Northern Experts' course in Derbyshire and Cheshire. The object was to see how the bikes would cope with difficult obstacles as well as running over typical trail routes and being ridden on the road.

Real trail bikes, typified by the Japanese

— off-road. But this comes at a price. They are not as usable on the road, they are often noisy and street equipment like lighting is minimal and usually not the most reliable item on the bike. They are a lot more expensive and demand a fair degree of skill to be able to make full use of their performance.

This test was set up with these things in mind; any of the bikes would be competent along the average green road but what we wanted to find out was just how much you could expect from each one. So as well as riding them on the road, as commuters, and

covered and the types of terrain chosen by Frank included rocky, stepped gulleys, a steep climb which seemed to be made of loose cobblestones, muddy hill climbs, axle-deep fords, quarries and a scrambles course. There were rocks and large holes covered by an innocent-looking heather and trails over a deep, black, slippery peat. On many of the "sections" there was the inevitable sheer drop only inches to one side and some, if not all, looked guaranteed to stop most of us. Often the route would look impossible for anything less than a track-laying mountain



machines, suffer limitations because they are a genuine attempt at a compromise: They are not as quick as a roadster with a similar engine size, they tend to have small tanks which restrict their range to 60 or 70 miles and you could fairly expect the trials' tyres and small brakes to perform less well than a roadster. Off-road they are hampered by carrying road equipment which makes them heavy and often there isn't enough ground clearance or steering lock. A compromise on gearing usually means the lowest two or three ratios are very low with a big jump up to the high ratios — leaving only three gears for road use.

Despite this, trail bikes have been continually improved and now offer a far better deal to anyone wanting a real off-road bike as well as a casual commuter. You can now expect a top speed of around 70 mph and, paradoxically, the handling and braking are as good as on lightweight roadsters. Equally important, you don't pay any more for these dual-role bikes; the Suzuki and Yamaha machines, for example, are actually cheaper than their roadster counterparts.

There is a general feeling among serious off-road riders that the Japanese bikes are no more than toys and that the people who ride them regard anything less than a three-lane motorway as a green road. This just isn't true, from our tests we've found that the machines are quite capable of tackling formidable obstacles, even in the hands of novices. On top of that they are a lot more forgiving than comp bikes.

Enduro bikes have a lot more performance

along ordinary trails, we took them around part of the Northern Experts' course and pointed them at some more difficult obstacles.

Riding ability obviously plays a large part in this kind of going, so with the seven test machines and a privately owned Bultaco, we had eight riders ranging from an expert down to a complete novice.

BROAD SPECTRUM

There was Colin Mayo, Bob Goddard and myself — who have ridden a reasonable amount off-road but not as much as we'd like and while we don't consider ourselves proficient we at least know what we intend to do with the bike. Achieving it is often another matter.

Frank Melling, who writes a lot of our off-road bike tests, came to show us the way. As Frank competes and wins awards in enduros and moto-cross, we can safely regard him as an expert, although we've still got doubts about his sense of humour! Colin Wilkinson who also has a fair amount of experience brought his own Bultaco.

Photographer Rod Sloane's off-road riding had been limited to an occasional green road and he'd never tried his hand at any serious rough stuff, while Roy Hibbert of Guysons and Mick Creamer had never ridden off hard tarmac before.

What with the range of bikes and the variety of riders a pretty broad spectrum was

goat, but then Frank would point out one of the harder sections used in the Northern Experts' and ours would look like an access road in comparison, which in fact, is what most of them turned out to be.

Considering the relatively difficult going and the attitude of the more experienced riders, it was a surprise to find that at the end of the test the machine everybody found best was the 175 Kawasaki. Admittedly it wasn't best at every section but, considered overall and in the light of what it was expected to do in the hands of a variety of riders, it emerged as the best trail bike.

The first section Frank led us to looked bad enough to put us all off. A muddy one-in-one bank dropped ten feet into a rocky stream. The exit on the other side was downstream some 20 or 30 feet, over a short slippery bank. When Frank eased the Kawasaki through we could see how deep it was. Too deep! But he got through easily enough. In my devious way I reckoned that if I could avoid the perils of the bank I could get the Montesa across. So, while everyone else was staring down at the stream — which had taken on the proportions of a raging torrent — and slowly shaking their heads, I slipped the Montesa behind some trees and trickled it along the edge trying to plop silently into the water so's nobody would notice I'd missed out the bank. With the 250 pulling full throttle in first and the big knobby tyre propelling it along the crossing wasn't nearly as rough as it looked.

From here there was a series of metalled roads, shale tracks and rutted, muddy trails

leading up and along the sides of the hills. On this kind of going all of the bikes proved easy to handle as opposed to handling well. How you measure good handling depends largely on the rider. For instance I thought the Montesa handled very well. Although it was a bit tall and could have been lighter, it did what I wanted it to do. As I got used to it I found I could push myself back and use the engine's power and the rear wheel's grip to let the front skim along, making steering light and easy. But Frank who was riding a lot harder didn't like it, saying the rear suspension — which I merely found comfortable — couldn't keep pace with the bumps and he reckoned it was generally a bit too bulky. So while the expert could chuck it around and find faults, I felt there was more power than I could use and was quite happy with the way it responded. Yet a complete novice would probably find it a bit of a hand-ful.

Frank was a lot happier on the Kawasaki which was proving quicker than we'd expected and along one section we ran a side by side sprint between the 250 and the 175, covering about 300 yards. The Montesa popped a bigger wheelie and lost a bit of ground, then started to catch up until I missed a gear, finally drawing alongside the Kawasaki at our "finish" post, travelling slightly faster. The 250 was faster and had more at the top end, but the Kawasaki was so much easier to use that it cancelled out any real difference in performance. Also the Kawasaki was overgeared, while the Montesa was undergeared.

The tracks led us down through a rocky gully and over a narrow stone bridge to a climb called Flash. The bridge not only obscured the view of this but slowed down the approach to it as well. The steepness of the slope wasn't as much of a problem as the surface which, to either side, was slippery mud or some nameless substance, with loose rocks in the centre. As with most of these climbs the rocks looked worse than the mud but gave better grip. But once we'd got over the problems of traction and were threading a way over the boulders and steps, there was little time or energy left to choose a line through the hairpin bends that seemed to materialise under the front wheel.

Frank had suggested that the Honda and the 50 with the two least experienced riders go round by the road and the Honda duly disappeared. But as we were easing the machines through the stream bed on the run up to the bridge the buzz of a million bees and the clanking of cameras heralded the approach of Rod and the Fantic.

The others had gone through and I followed Colin up the first slope where his Yamaha bogged down on the first hairpin, with the back wheel down between two rocks. Reluctant to lose any of my hard-won momentum, I let the Montesa bounce past him, scrambled round the corner and parked on an easier section, neatly blocking the whole path except for a muddy shoulder on the edge of the drop down into the river below. This successfully stopped Rod's forward motion while Colin and I lifted the Yamaha out of its resting place.

Meanwhile Frank had got the Kawasaki up to the top and came back to see where we'd got to, followed by Bob on the 125 Fantic. While Frank slipped his bike through the narrow gap between the Montesa and the void, Bob was reluctant to trust his navi-

gation to such fine limits and ran into the Montesa. Rod stood back waiting for the traffic jam to clear and so Colin, having decided that the Yam was too heavy, leapt upon the Fantic 50 and whizzed off up the hill, closely followed by the rest of us.

Some little while later Rod appeared at the top, paddling furiously on the Yamaha and looking grieved in a breathless sort of way that his moped had been taken away from him.

A few miles further on we stopped by a small cottage where Frank announced that here we could have some fun — for a small consideration the owner would let us use his hill-climb and scrambles course. The last trails had been nice and easy and now it was all beginning to sound hairy again. We'd discovered much earlier in the day what Frank's idea of fun was.

The hill climb was approached by a slippery grass slope building up to a muddy channel carved into a one-in-one slope which got even steeper towards the top, going up maybe 150 feet in all. The mud got deepest about three-quarters of the way up, clearly showing the common failure point. There were also rocks sticking out which weren't immediately obvious until you were about to hit them.

When I arrived at the "start" a couple of



hundred yards from the hill proper, there were already two bikes on their sides at the three-quarter mark and bodies rolling down the hill. It looked daunting enough but the Montesa picked up viciously in second gear and hurtled over the tufts and bumps in the general direction of the brown scar on the face of the hill. I can't really say I was steering it. As the front wheel tracked up the first slope the Montesa was pointing in the right direction and I felt I couldn't reasonably expect a lot more. The engine screamed over the first bumps and most of the way up there was never more than one wheel on the ground at any one time, and often less than one. But it just kept bucking, pitching screaming away, and to my lasting surprise, carried on up the hill. With the exception of a couple of kicks at the very top, when a rock jumped out at the front wheel and the 250 reared up on end, I didn't even have to take a foot from the rest.

After a whizz round the scrambles course, strictly at our own respective paces, Frank led the way over some grassy slopes to what appeared to be a long disused quarry. This was littered with very large stones and featured a lot of steep climbs. Bob discovered he could get the Fantic 50 up one only by holding it flat in second — and conveyed this exciting piece of information to Roy Hibbert.

The last time Roy rode a bike was ten years ago on a Gold Star. As he'd never ventured off-road before the Honda 125 was presenting him with some very novel problems.

He decided to tackle the slope a la Goddard, but flat in second on the Honda is rather different to flat in second on the 50 and provided quite a different trajectory at the top of the slope. Far from being put off, and convinced it was the right way to do it, Roy went back for more and for the rest of the afternoon could be seen soaring skywards in graceful curves.

So that was the type of going we put the bikes through, not typical of trail conditions but a more severe test on both machines and riders. In this way we hoped to find the toughest conditions that each machine could tackle.

In Frank's hands the bikes got over all the obstacles we put in front of them although the Honda tended to run out of power, the Suzuki and Kawasaki lacked clearance, the Yam was a bit too heavy. On the whole, though, they kept up with the Enduro bikes. Most of us wouldn't even have considered some of the routes but with Frank egging us on (or should that be ego-ing us on?) it was surprising what the bikes could achieve. Given equal measures of prompting and confidence we found that the Kawasaki,

Suzuki, Montesa and 125 Fantic were the easiest to manoeuvre through the tricky bits. The Yamaha needed a bit more forcefulness, the Fantic 50 was easy enough to handle as long as you could keep the motor buzzing (changing gear half-way up a muddy bank isn't as easy as it sounds) while the Honda didn't have as much power in reserve as the larger bikes. Even so, it was surprising how much it would take before getting bogged down. The two riders with no off-road experience were happiest with the Honda and the Suzuki while Rod, who has to be the largest among us by a couple of stone, always made a bee-line for the 50 or the Honda.

Using a machine which suits your capabilities or which just exceeds your ability makes off-road riding a lot more satisfying and it was this relation between machine and rider which we were trying to establish. Frank had already commented drily that all the bikes were better than their riders — a statement which is probably true of most owners who haven't the benefit of trials or enduro experience.

On the second day we took some maps and more or less navigated our way around a series of real trails running over the tops of the hills. Under these "normal" trail conditions the only difficulties the bikes got into are best described as rider-induced.

KAWASAKI KE175



Voted best of the bunch by everybody. In short it is great for trail riding for an expert or a novice, it is quiet, has gentle power characteristics and is easy to handle. Yet there is enough performance — only an enduro bike would beat it — and the Kawasaki goes really well on the road. It pulled an indicated 75 mph with 1000 rpm in hand in top gear and the top three ratios are well-suited to road performance. A six-speed box, as used on the 125, would make it still more versatile, but the 175 disc valve motor is torquey enough and manages quite well on five. Considering that the machine is well over-g geared, its performance on the road is very good. Dropping the gearing by a couple of teeth would improve it still further and get more torque to the back wheel in the lower gears.

Like all the Japanese bikes it was easy to start and while only running about 50 miles on main tank — the price you pay with virtually all these machines — it had a reasonable reserve, good for at least 20 miles. Handling on the road was superb with better cornering than most roadsters and very effective brakes.

There were few complaints about its performance off-road. It could have used more ground clearance with higher, narrower footrests and our demonstrator had obviously been used more on the road than off judging by the half-worn tyre on the back which really limited traction. Given the grip of full-size knobbles it would have been better still.

It was comfortable with a nice riding position except that the strap across the seat could dig into the rider's rear and get painful after a few cross-country miles.

For off-road use it makes sense to remove wing mirrors and indicators but Kawasaki have used the front indicator stems to hold the headlamp and removing the rear ones seems to entail stripping out the rear light bracket. The front mudguard could be more effective and there is no brace across the front forks, which could be seen and felt pattering about, although it didn't appear to upset the handling.

The conclusion is that it's one of the nicest trail bikes ever, easy enough for a

novice to handle, with enough performance for a more experienced rider to use or for road work and, at £419 it is not ultra-high priced. From an expert's point of view, Frank preferred it to the others, although, I think, with a view to stripping off superfluous items and generally turning it into more of a comp. bike.

KE175: 124 ccm, disc-valve single, bore x stroke 61.5 x 58.5 mm, compression ratio 7:1, claimed output 16 bhp at 7000 rpm.

Lubrication by Superlube injection, magneto CDI ignition system, lighting from 6v alternator/battery.

Five speed gearbox, ratios: 2.67; 1.75; 1.2, 0.95; 0.77, primary drive by gear, 3.13 reduction, final drive by chain 3.43 reduction; alternative gearbox sprockets 13, 14, 15 tooth, alternative wheel sprockets 45, 47, 48 tooth.

Dry weight 231 lb, test weight 252 lb, front-to-rear ratio 43.57 per cent.

Front tyre 2.75 x 21 rear tyre 3.50 x 18 Wheelbase 53.9 inch, overall length 82.5 inch, overall width 33.7 inch, overall height 43 inch, ground clearance 9.3 inch.

Fuel tank 1.5 gallon.

Price £419 inc VAT.

Fuel consumption overall 44.7 mpg (oil 145 mpp) maximum speed 70 mph.



SUZUKI TS185

The TS185 is a very similar machine to the Kawasaki, giving a nice easy ride and zippy throttle response. The motor has a sporty crackle which made it sound as if it had a faster pick-up than the Kawasaki although it seemed marginally less powerful. In the lower gears there was enough power there to pick the front wheel up high enough to skim over rocks, although it had to be used harder than the Kawa for the same effects.

The 185 was one of the lightest machines and was very easy to throw around, on or off-road. I really enjoyed riding it and rate it a close second to the Kawasaki mainly because the Kawa would just outperform it and handled better on tarmac. To offset this the Suzuki had better fuel consumption and, at £360, is cheaper.

Reliable starting and electrics, and slow-running without gassing up are hall-marks of the Japanese motors which make them attractive to a novice and the 185 is no exception. But Suzuki have fallen down on the rear indicators — although there appeared to be five screws holding the rear half of the mudguard on, it fell off shortly after the indicators were removed!

The 185 fits nicely into Suzuki's range of trail bikes; it is more powerful and flexible than the 125 but not so bulky as the 250 — in fact it was one of the lightest machines we tested. It was ridden for a large part of the time by the least experienced rider and the fact that it came through with only a bent clutch lever proves its manageability.



On the road the gears are well spaced for its dual role while the handling and brakes are good enough to make it a safe commuter.

To sum up, the Suzuki is a nicely finished, easy handling machine which is well suited for both road and trail.

TS185 — 183 ccm, bore and stroke 64 x 57 mm; compression ratio 6.2:1, claimed output 17 bhp at 7000 rpm.

Lubrication by CCI automatic, electronic ignition, 6V AC lighting.

Gearbox ratios: 2.75; 1.81; 1.25; 1.0; 0.80. Primary drive 3.2:1, final drive 3.25:1. Alternative sprockets: gearbox 31T, wheel 38 and 40T.

Dry weight 218 lb; test weight 236 lb; front/rear ratio 43.6/56.4 per cent.

Front tyre 2.75 x 21; rear tyre 3.50 x 18.

Wheelbase 52.6 inch, overall length 50.1 inch, overall width 33.3 inch, overall height 44.3 inch, ground clearance 9.4 inch, fuel tank 1.8 gallon.

Price £360 inc VAT.

Fuel consumption overall 52 mpg (oil 150 mpp). Maximum speed 65 mph.

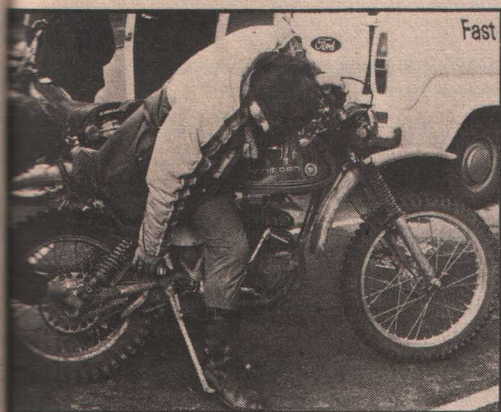
MONTESA 250

I liked the Montesa, although nobody else did. The points they made against it varied and it is really a case of choosing a machine to suit your own requirements. Colin summed it up

as a thinly disguised scrambler with lights, not very nice to ride on the road, too noisy and expensive. From Frank's point of view it wouldn't make a good enduro machine because it was too heavy, too tall, too expensive and didn't have enough performance or handling. While we're listing the bad points I may as well add that it could sometimes be a pig to start and had silly fuel taps — a sort of rubber sheath with a ball inside which you squeeze up and down to close or open the fuel line.

It was noisy and also needed oil mixing with the petrol and, averaging 32 mpg, it only had a range of about 50 miles. On top of all that it was very difficult to select neutral and the Montesa couldn't be kick-started while still in gear.

The harsh, no-compromise set up of the machine makes it a bit anti-social and not



too easy to handle on the road, a situation made worse by the scrambles tyres. While it was undoubtedly more powerful than the Kawasaki, the latter was so much easier to use that any difference in real performance was minimal.

In my perverse way, I still liked it, mainly because it had more performance than my level of ability allowed me to use yet it steered and generally responded in a way which suited my limited style. I found the Montesa predictable and usable although perhaps it was harder work than the Kawasaki and Suzuki — more of a challenge!

The rear suspension made the back end feel so stable — whereas on the other machines the whole bike seemed to be pitching and hopping about, the Montesa only seemed to bounce around at the front, which made it that much more comfortable to ride. Frank had his doubts about the suspension, namely that when the machine was pushed harder the dampers wouldn't keep up the pace.

On the road the Montesa was undoubtedly quick. It was undergeared but would hold an indicated 140 on the kph speedometer — about 85 mph — and would get up there very rapidly. The tyres didn't help tarmac handling, the front end was a bit too keen to go light over bumps, and the 250 needed treating with some respect.

A good but expensive machine, for someone who wants to pick up a lot of off-road experience. Generally a bit too anti-social for a regular trail bike.

Enduro 250 — 246 ccm, bore and stroke 70 x 64 mm; compression ratio 12:1, bhp not available. Lubrication by petrol/oil mix, electronic ignition, 6V AC lighting.

Gearbox ratios; 2.6; 1.615; 1.117; 0.833; 0.681. Primary drive 2.65:1, final drive 48/11; alternative sprockets; gearbox 12T.

Dry weight 234 lb; test weight 255 lb; front/rear ratio 44/56 per cent.

Front tyre 3.00 x 21; rear tyre 4.50 x 18.

Wheelbase 57 inch, overall length 85 inch. Fuel tank 2.6 gallon.

Price £759.99 inc VAT plus £10.80 delivery.

Fuel consumption overall 32.9 mpg (oil 131 mpp).

Maximum speed 85 mph.

HONDA XL125



Although apparently underpowered the 125 four-stroke found a lot more traction than the other machines and nearly always managed to keep on going without bogging down. It felt a lot smaller and consequently easier to manage than the others and was most popular with the least experienced riders. The only times it lost out compared to the bigger bikes was when the going demanded sheer power, which, in normal use, isn't that often. Roy startled everybody by crossing the rocky stream sitting in the saddle, feet up around the cylinder head and emerging bone-dry on the other side.

A very quiet, docile and economical machine — at £369 it is one of the cheapest trail bikes and also gave by far the best fuel consumption. On the road it was equally well-mannered but drastically over-geared in top, into a slight headwind it would be quicker in fourth, getting up to 50-55 mph, but as soon as the rider shifted into top it would lose speed again.

Not a bike for the ambitious off-road rider, but ideal for the learner or around-town commuter and fine for green lanes.

The 125 actually weighed roughly the same as the 125 Fantic and the 185 Suzuki but felt a lot lighter when it had to be hauled around and gave us a best fuel consumption of 67 mpg, averaging 65 mpg overall. It appeared not to use any oil, which was a

pleasant contrast to the two-strokes.

Another advantage of the four-stroke is that its subdued exhaust note is completely inoffensive and unlikely to startle any other green lane users. It may not be the kind of bike that gets a dramatic write-up, but a green lane rider can get a very good deal from the Honda.

XL125 — 124 ccm, bore and stroke 56.5 x 49.5 mm, compression ratio 9.4:1, claimed output 12.5 bhp at 9000 rpm.

Lubrication by wet sump, magneto ignition, 6V alternator/Battery lighting.

Gearbox ratios; 2.769; 1.722; 1.272; 1.1; 0.814. Primary drive 4.055:1, final drive 2.866:1; no alternative sprockets.

Dry weight 222 lb, test weight 236 lb, front/rear ratio, 44/56 per cent.

Front tyre 2.75 x 21 rear tyre 3.50 x 18.

Wheelbase 52 inch, overall length 81 inch, overall width 33 inch, overall height 43.5 inch, ground clearance 7.5 inch. Fuel tank 1.3 gallon.

Price £369 inc VAT.

Fuel consumption overall 64.7 mpg (no oil used).

Maximum speed 55 mph.

FANTIC 50



Originally we hadn't intended to feature the 50 Caballero in the trail bike test — comparing a 50 with 175s and 250s didn't seem entirely fair. Frank Harris at Fantic had let us hang on to the bike since our moped test — largely because everybody liked it so much he'd given up all hope of getting it back! We took it with us to provide Rod with transport other than a test bike, simply because whatever the photographer is riding doesn't get into the pictures. But right at the beginning of the test the Fantic showed that it could stay right with the others and actually made it through all the sections that the others tackled.

Admittedly it was hard work at times, and the motor constantly needed buzzing through the gears, whereas the others

could use just one gear through any particular section. Where it lacked in power it was light enough to be wiggled, heaved and generally persuaded over obstacles (185 lb wet). With pedals it qualifies as a sixteener machine and must be the most versatile moped on the market — and, at £399, one of the most expensive. Looking for faults on such a big-hearted little bike seems a bit petty and trivial. With all that performance from a 50cc engine it isn't surprising that it's noisy, needs buzzing to peak revs and is generally as spartan as a racer. Amazingly it was dead easy to fire up, ticked-over steadily and would pull evenly from very low revs, eventually screaming up to, shall we say N rpm, where N is an imponderable number.

Fantic 50 — 49.9 ccm, bore and stroke 38.8 x 42 mm, compression ratio 12:1, claimed output 7.2 bhp at 8000 rpm.

Lubrication by petrol/oil mix, electronic ignition, 6V AC lighting.

Gearbox ratios: 3.30; 2.30; 1.68; 1.38; 1.26; 1.15. Primary drive 4.615; final drive 5.35; alternative sprockets.

Dry weight 138 lb; test weight 185 lb; front/rear ratio 44.8/55.2 per cent.

Front tyre 2.50 x 21; rear tyre 350 x 18 wheelbase 50 inch, overall length 80 inch, overall with 35 inch, ground clearance 9.5 inch, fuel tank 1.75 gallon.

Price £399 inc VAT.

Fuel consumption overall 80 mpg (oil 320 mpp). Maximum speed 55 mph.

hard life and recently had a new gear cluster fitted and a different exhaust system. Frank, who had ridden the same machine when it was new, said that it felt a bit clapped in comparison. It's equally possible that the new gear ratios didn't suit the motor's power characteristics, as the only noticeable drop-off was in second gear when the motor would just go flat. With this kind of machine the gearing is as important as on a racer.

On the road it was undergeared, screaming up to about 60 or 65 mph very rapidly and obviously capable of more had the gearing allowed it, but raising the overall gearing would probably spoil its off-road performance where first, second and third gears are used most of the time.

Fuel consumption was even worse than the Montesa, the worst figure we got was 24 mpg and the best was 32 mpg. The fuel needs to be mixed with oil, an unnecessary and messy chore compared to the luxury of the separate-pumped systems.

The only real complaints about the Fantic were that the motor is perhaps a bit too peaky, the handling on tarmac, with knobby tyres, can be rather vague, the motor is noisy and there is generally too little compromise for a real trail machine. It was also difficult to find neutral. One of the biggest factors against the machine is its price — at £649 it is restricted to a narrow band of riders who need precisely what the Fantic offers. In this case it is a fine motorcycle, if you want a more general machine there are plenty of bikes which can do the job for a lot less money.

125RC — 123 ccm, bore and stroke 55 x 52 mm, compression ratio 12:1, claimed output 18 bhp at 8000 rpm.

Lubrication by petrol/oil mix, electronic ignition, 6V AC lighting.

Gearbox ratios: 3.4; 2.14; 1.5; 1.25; 1.0. Primary drive 2.521, final drive 3.538, alternative sprockets, gearbox 14 and 15T, wheel 46 to 48T.

Dry weight 222 lb, test weight 240 lb, front/rear ratio 46.7/53.3 per cent.

Front tyre 3.00 x 21, rear tyre 4.00 x 18. Wheelbase 55 inch, overall length 84.5 inch, overall width 35 inch, ground clearance 9.5 inch, fuel tank 2.1 gallon.

Price £649 inc VAT.

Fuel consumption overall 26 mpg (oil 105 mpp). Maximum speed 65 mph.

speedo — about 1000 rpm below the red line. Off road the gentle flexibility of the two-stroke single made it an easy machine to ride although on the harder sections it was hampered by its weight. At 288 lb it was the heaviest of the test machines and while this was only 30-odd lb more than the Kawasaki and the Montesa, the Yamaha didn't seem to have the same urge from the engine. It would definitely benefit from lower gearing, but even so the "Enduro" label is not justified.

The Yamaha looks hairier than it is but it makes a relaxing, comfortable trail bike which is easy to use on or off the road. It would probably go better if the gearing were lowered by a couple of teeth as this would not only get more torque to the back wheel in the lower gears but would also improve its top gear performance for road use. It may even improve its fuel consumption too; averaging 37 mpg made it the worst of the Japanese trail bikes possibly because it had to be used hard in the lower gears.

Overall the bike had a solid, substantial feel and if it wasn't as light and easy to throw around as the others, it was more at home loping along long, rolling trails.

It seems to have been well thought-out, with front indicators slung on the handlebars where they are not likely to get snapped off. The rear dampers have a finned oil reservoir although it is hard to tell whether this is a valuable asset or a gimmick.

With a bit of attention to gearing and slimming some weight off the Yamaha could be a much nicer machine. As it was it was a bit too cumbersome for the kind of going we tackled but would be really suitable for the average green road run.



DT250 — 246 ccm, bore and stroke 70 x 64 mm, compression ratio 6.8:1, claimed output 2.14 kg-m at 6500 rpm.

Lubrication by Autolube, magneto ignition, 6V alternator/battery lighting.

Gearbox ratios: 2.53; 1.68; 1.17; 1.00; 0.86.

Primary drive 65/23, final drive 44/15, alternative sprockets; gearbox 14, 15 and 16T, wheel 40 and 44T.

Dry weight 269 lb, test weight 288 lb, front/rear ratio 43.5/56.5 per cent.

Front tyre 3.00 x 21, rear tyre 4.00 x 18. Wheelbase 56 inch, overall length 86 inch, overall width 34 inch, overall height 45 inch, ground clearance 8.7 inch, fuel tank 2 gallon.

Price £519 inc VAT.

Fuel consumption overall 38 mpg (oil 140 mpp). Maximum speed 65 mph.

FANTIC 125RC

An enduro bike with a peaky motor that gives so much performance you forget it's only a 125. It is the kind of machine that needs the power kept on all the time, steers largely on the throttle and the harder you go the better it seemed to get. This particular demonstrator had had a



YAMAHA DT250

The 250 Yamaha was generally voted the best styled of the bikes and it certainly does look the part. For trail riding it turned out to be a very controllable and pleasant machine, despite its weight. Like the earlier 250 Suzuki, the emphasis seems to be on comfort rather than performance and the soft suspension gave a very comfortable ride, even over rocks.

Performance wasn't quite so impressive. On the road the motor was overgeared in top and would only show 65 mph on the