

JOHN ROBINSON RIDES YAMAHA'S NEW BIKES IN MOROCCO

AS THE first few models of Yamaha's 1977 range filtered across the world, Yamaha, Amsterdam, put on one of the biggest press launches that two-wheeled Europe has seen. About 60 journalists homed in on Marrakesh, Morocco, to spend three days riding the new machines.

Four-strokes are in, as far as roadsters are concerned, two-strokes being relegated to dirt bikes, although Yamaha claim they are developing two-strokes as hard as they can and have no intention of giving up what they consider to be a superior type of engine.

As far as the UK is concerned the interest was focused on the three cylinder XS750 and the XS250 twin. Off-road bikes, represented by the DT250 and 400, now have the race-developed mono-shock frame and, still with an orthodox frame, there was a revised version of the XT500 four-stroke single.

Such a lavish reception tempted me to think that Yamaha might be covering up for

something and as their earlier attempts at building big four-strokes had not exactly been earth-shaking, I was more than a bit sceptical about the new 750, which happened to be the first bike I rode.

On roads crowded with trucks, donkey-carts, bicycles and pedestrians, all of which regarded themselves immune to other traffic, I concentrated at first on picking out the route and following Yamaha's advice to ride on the horn button. Rights of way in Morocco are decided upon by the size of the vehicle and the amount of noise it can make.

In the first few kilometres I was so wrapped up in these matters that the only thing I noticed about the triple was that it had a very penetrating note to its horn. Photographer Vic Barnes, following on another 750 noticed more, namely that I'd settled into it very quickly and was moving off so rapidly that he decided I'd had more than coffee for breakfast and that he was going to drop back to leave me to a sure and certain fate.

The very fact that I didn't notice how quick the 750 was is really what the bike is all about. As a rule it takes me a couple of hours to get used to a new machine — on the 750 everything happened as it should happen, and the bike was responding so precisely that after a few minutes I felt as if I'd been riding it every day for a week.

We'd let quite a few other riders get away in front of us because the last thing I wanted to do was ride a new machine to somebody else's limits. As we got out on to a long straight country road, the convoy in front straggled out with the 250s and 360s dropping back. Discovering that a long blast on the horn had other traffic obligingly pulling off the narrow tarmac on to the loose surface of the semi-hard shoulder, I wound the 750 up through the gears and set about catching the leading bikes. A short way behind, I was feeling happy enough to let his 750 go and was finding that it thrived on revs, coming on strong above 6000 and going

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Dirt road, dirt bike — Yamaha's new 400.

hard up to 8000. We caught the others where the road left the flat plain and started to twist and turn up into the mountains. These typically alpine roads still had the loose-surfaced shoulders but on the whole had a good smooth tarmac surface, degenerating only where the odd seasonal river washed the road out or a land slip had broken it up — usually on a blind bend.

Half an hour out of Marrakesh the convoy democratically decided that we were lost and continued navigating on the principle of whether we thought we ought to go North or South and which road looked the most interesting. Decisions like these take time and the smaller twins caught up. On the slower, twisting roads the big bikes' performance didn't give much of an advantage and the group stayed in a much tighter bunch, swinging through the tight curves along the mountain side. It was quite an impressive sight, all the better because the 750 was easy enough to handle and safe enough to be able to relax and enjoy both the ride and the rugged countryside. Even in November, everything was parched and brown, from the hills and the plain to the animals and the inhabitants, tanned by the sun into the shades of a sepia photograph.

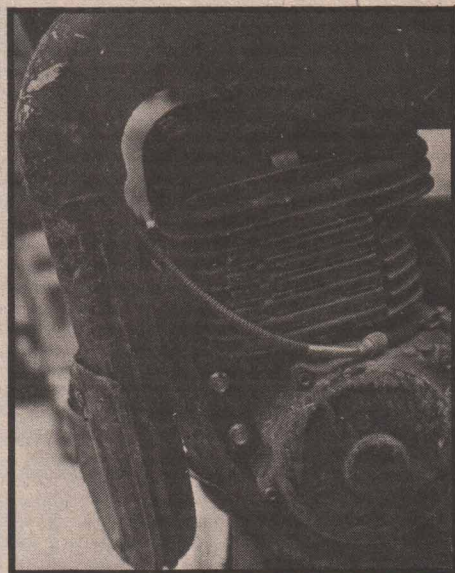
The half-dozen bikes in front of me were kicking up dust and stones and I reckoned

reacted with power on and off. Apart from a slight tendency for the back wheel to move to the left when the rear brake was locked on, there was no sign at all that it had shaft drive. There was no twitching under power-shifts, no lift at the back when the clutch was fed in hard, the responses were just like those of a perfectly-adjusted chain drive. Of course, the difference between the Yamaha and other shaft-drive machines is that the crankshaft is set across the frame and not in-line.

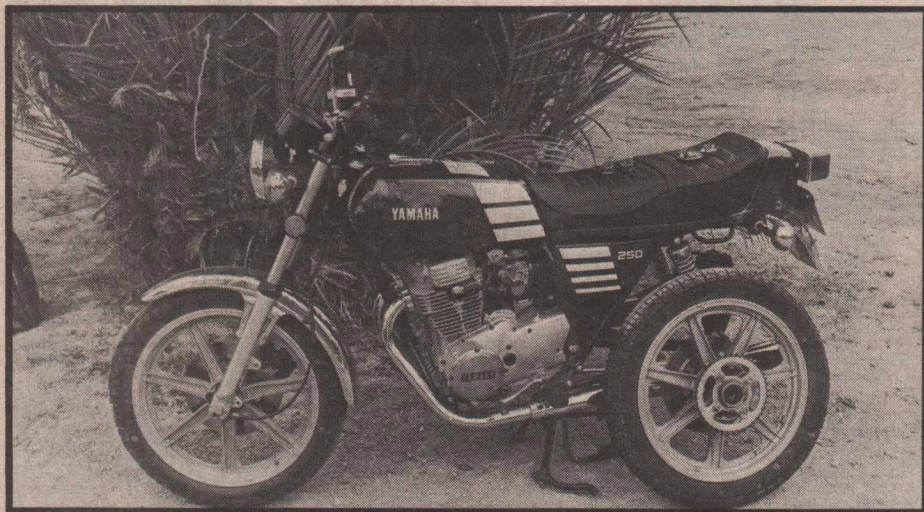
The next section of road, leading away from the hills, was straighter but the surface was worse and much bumpier, making the front forks top out with a sudden jolt and often getting the whole machine airborne. Yet, remembering that we were running the bikes flat in top, the ride comfort was good and the worst that ever happened to me was a slight twitch of the handlebars when the road dropped away from the front wheel.

The comfort, ride and handling, from mountain hairpins to flat-out straights were about as good as you could expect from a roadster and very much better than I'd been expecting from the Yamaha. The brakes, too, were up to the performance, although towards the end of the mountain section the rear pads were fading on my machine.

Actual performance was difficult to evaluate under these conditions: sitting



The two-stroke enduro motors seem at their best under hard conditions



Smart and sporty in appearance, the 250 twin will give the Honda some competition

the best place to be was second, out of the flying debris but far enough back to get two chances if anything went wrong. I squirted the Yamaha past a few slower bikes and tucked in behind Mike Nicks (Editor, Bike) up front on another 750. It hadn't felt like I was using all the bike's capabilities but as Mike heeled his machine into the turns there was precious little daylight getting through between engine and ground.

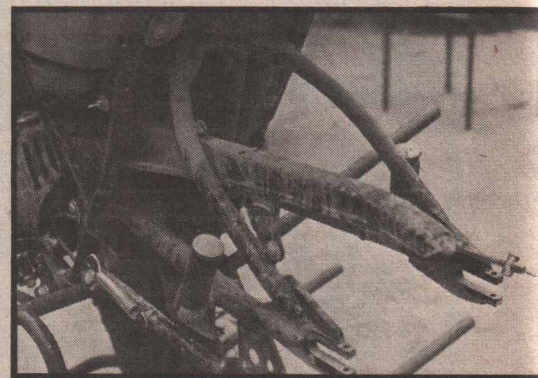
My machine had developed a flat spot around 5000 rpm — the torque curve has a dent in it there and Yamaha had been having problems with the low-grade fuel — consequently I was buzzing the motor, spinning it very close to the 7500 rpm redline. Overtaking the other bikes I found I could pull away quite easily by keeping the revs right up, on the twisty roads using only first, second and third gears. It seemed like the Yamaha liked it this way and, unusually for any road machine, could be dropped into bottom gear right into a tight corner with no twitching or hopping from the back wheel.

Reactions passed through an inflexible shaft drive can make machines leap about and one thing I'd experimented with before we set off was to see how the Yamaha

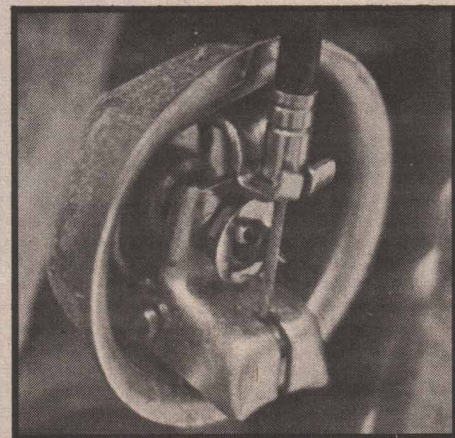
upright the 750 would easily pull an indicated 170 kph (106 mph). Getting down on the tank and taking it up to 8500 in fourth it would show 190 kph (119 mph) at 7500 rpm and I'd guess the instruments were reading some 7 or 8 mph fast. It would get up there quickly as long as the motor was buzzed but when I slowed down and used only top gear the motor felt comparatively flat and woolly. I don't know what the altitude was up in the mountains but the combination of height, the warm air and the poor quality fuel would take the edge off any motor so the new Yamaha is, contrary to some reports, reasonably quick.

Later on I took out another 750 which had much cleaner carburation in the middle-range, possibly the lack of high-speed company made it feel more powerful but it felt a lot happier pulling top gear at "normal" 50-70 mph speeds.

The motor, like the XS500, doesn't have the brute force of a big engine, the reaction to opening the throttle is nothing like the kick you get from a Norton or Triumph twin. It's smooth like the Honda fours but seems to need more revving and maybe the nicest thing is that once you get it spinning and take a big handful of throttle the exhaust



Monoshock rear end — the damper is hidden up above the air cleaner



The decompressor valve is operated automatically by the kickstart mechanism

note starts to sound like a subdued version of the Trident's mellow howl.

Getting lost took us a longer way round than Yamaha's planned route. My machine went on to reserve at 150 km and finally ran dry at 190 km — fortunately we were back on course by then and there was a Yamaha service truck on the road behind us. With its 17-litre fuel tank just about full when we left, the 750's consumption works out at about 32 mpg — a reflection more on the way we were riding than on its overall economy. Our

750 Honda gives that kind of mpg when it's thrashed around a track, yet gives an easy 50-55 mpg under normal road conditions and I'd guess that the Yamaha is pretty much the same.

One other thing that Yamaha have got right is their attention to the little details; the riding position and controls, even with wide-ish handlebars, contrived to make me feel like I was sitting in the machine and a part of it. The light brakes, quick-action throttle, easy-to-find controls and so on all add up to an agreeable and attractive machine. As I said, I felt at home on it within minutes and in the time it takes just to get used to most machines I'd formed some very definite opinions about the XS750. And very different opinions to any pre-conceived ideas I had about Yamaha four-strokes.

No doubt the machine will show faults and niggles — I have doubts, for example, about Hy-Vo primary drives — but certainly there was nothing serious enough to show up in my brief acquaintance with the machine.

One possible obstacle is its price, currently quoted in the £1,400 bracket, projected at a March '77 delivery in the UK. So it could prove expensive against the Honda and Suzuki 750s and the new Kawasaki 650 four — in fact at full retail the Yamaha could cut about the same as a discount Gold Wing. Someone was saying that there's a definite market for shaft drives in the UK, and this in itself may offset the price tag. And talking of expensive shaft drives, BMW may be pricing themselves out of the market because the only things they had above and beyond all things Japanese are slowly being whittled away. Japanese engineers are now making their bikes *handle* and once they've found the key to the door their approach is not just to open it but to make the whole doorway bigger.

In contrast to the philosophy behind the triple the 250 and 360 twins go back to earlier Japanese concepts. They are not unlike the Honda twins and perhaps the biggest flaw is their lack of character. They are — intentionally — sedate, unpretentious and no doubt simplicity itself to the oriental mind. In other words, production - engineered to the eyeballs. The let-down is that from the makers of the RD series, masters of lightweight performance, we have a specification which includes cast alloy wheel, a six-speed gearbox and a motor which gives power up to 10,000 rpm. Yet it's all for a commuter, ride-to-work bike; Yamaha taking over where Francis - Barnett left off.

It would be easy to criticise the XS250 hard, especially after riding the impeccable 750. Of its claimed 27 bhp, it doesn't produce 20 until it gets to 7500 rpm; sitting up we got an indicated 120 kph (75 mph) just into the red area in fourth, on the redline in fifth and as a practical maximum in sixth, well below the safe rev limit. With some effort it would show 130 kph (81 mph), but this isn't the point of the twin.

As a sedate but nimble commuter or a safe and easy bike for learners, Yamaha haven't quite got it right. If they'd knocked 2 or 3 hp off the top and spread it across a wider rev range it could be a totally different machine to ride. While the comfort, braking and handling seemed to be up to lightweight standards, the machine as a whole doesn't get it all together.

The 360, which is basically a big-bore version of the twin seems to be going more in the right direction. The power comes in earlier and there's a lot more of it — below 6500 rpm it produces twice as much torque as the 250. The change from 55 to 66 mm bore gives the 360 a slightly higher compression ratio, it has a softer camshaft, different

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carbs and a higher final drive ratio. Otherwise the two bikes appear to be identical.

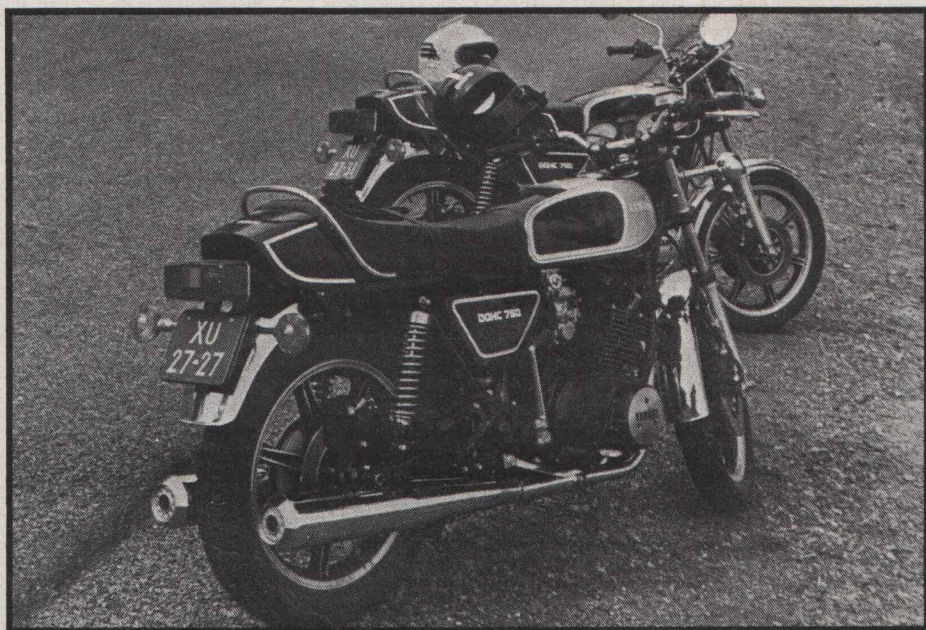
The motors are conventional Japanese layouts. The SOHC parallel twin has a gear primary drive, six-speed cross-over gearbox and breathes through constant velocity Mikuni carburettors. The machines have a good overall finish with a lot of refinements like Yamaha's self-cancelling indicators, vacuum-operated fuel taps and front and rear disc brakes. The initial delivery of twins is expected in January and will consist of 250s only, for the time being. The bikes will initially have wire wheels and Allan Robinson, Mitsui's new sales manager, is intent on keeping the price below that of the 250 Honda.

After the roadsters there were still the dirt bikes to try and plenty of dry, dusty tracks to ride them on. Yamaha had three models, the

scale for an enduro machine and current development is going in the direction of a softer, trail bike which is, after all, where the bulk of the market lies.

The two-strokes, while livelier in the engine department, are still heavy; compared to the 500's 138 kg, the 400 has 135 kg and the 250 is slightly lighter at 130 kg. Both motors have peak torque very close to peak horse-power; the 400 has a flat torque curve up to a maximum at 5000, to give 29 bhp at 5500. Above this speed the torque drops away very sharply, in the first three gears the motor would slow and misfire, not being able to take full throttle at higher revs.

Despite being tall and heavy for competition bikes, both two-strokes were incredibly easy to manage and at my level of riding were stable and — more to the point —



Superb ride and handling make the shaft-drive triple a really attractive machine

DT250 and 400 two-stroke singles which share the new monoshock frame and an updated version of the XT500 four-stroke single.

The 500 has a lot of detail changes, the exhaust is now swept up over the top of the crankcase and below the motor there is a comprehensive, all-embracing bashplate. The indicators are now on rubber stalks, there's a new tool compartment under the rear frame rail and the back brake has a re-designed linkage. Perhaps most notable, the kick-start is longer and there is a transparent window in the cam box so that a mark on the cam can be seen when the engine is in the optimum position for starting!

Was it any easier to start, though? Well it did fire first kick, but perhaps that was because there were a lot of people from Yamaha watching me! Although the 500 seems to have competition potential it is in the wrong end of the price v performance

predictable. The hard, slippery dirt tracks and the trials tyres made slips and slides inevitable but the suspension seemed to cope with no trouble at all, letting the wheels float across the surface with no frightening feedback to the rider and no vicious reactions.

Making the back wheel break loose is no great achievement on dirt but sliding *across* ruts and bumps, which is where I usually unload, has to be an achievement of the bike rather than the rider. And when I finally overdid it the 400 had the decency to let me low-side gracefully across the track, rather than spitting me unceremoniously over the top.

The DT175 is one of the most popular trail bikes in this country and the bigger singles show every sign of carrying on the tradition. But for me the star of Yamaha's new range has to be the XS750, Japan's first real attempt to put the "grand" into touring.