

Machines under the 200 cc mark have always fallen into a distinct lightweight category but today's buyer has a much greater range of choice than ever before. One step up from the mopeds and scooterettes,* there is the straightforward commuter machine like the Suzuki 120 or the 100 cc Kawasaki featured here. Going further up the capacity scale the 200s offer that much more performance without the physical size of larger machines — even 250s seem much larger than their engine size warrants. In between the two there is a new variety of trail machine, with engines ranging up from 100 cc.

From the last two groups we chose the RD200 Yamaha as

LIGHTWEIGHT TEST

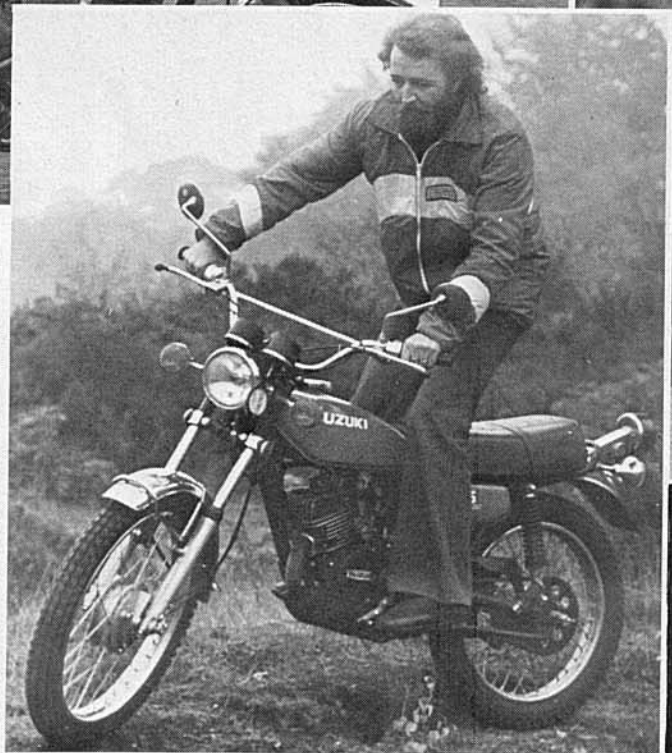
YAMAHA RD200
KAWASAKI KH100
SUZUKI TS125A



one of the more sporty lightweights and the new Suzuki TS125A as the latest of its particular breed.

The wide range of choice may make things easier for the customer but only if he knows precisely what he wants in the first place. If not the situation just gets more confusing.

There are a number of reasons for choosing a lightweight: to learn on, purely for commuting, for economy, as a second vehicle and so on. For each reason there is probably one machine which will do the job a whole lot better than the others. Economically, the smaller the machine the better it is. A learner who intends to go out and get a bigger bike as soon as he can would get a lot more



Above: the RD200 Yamaha, equally at home in city traffic or on the country lanes. Above left: Ideal for short-haul, ride-to-work stuff, Kawasaki's 100 loses out on longer runs.

Left: with plenty of performance for commuter runs the 125 Suzuki is expensive but offers an alternative off-road role.

experience on the quicker 200s.

You obviously don't get much in the way of performance from any small machine and if I were in the market for a lightweight I'd look for something which offered motorcycling fun in another direction. The trail bikes supply just this while not losing out too much as a town run-about. For my own particular needs the Suzuki offered a lot more than the other two.

As a commuter test the flat, almost empty fenland roads in the Peterborough area offered no resistance to any of the machines. The Yamaha, being faster, obviously felt better and had more at the top end for getting safely past long lorries, an undertaking which often requires serious thought on low-powered machines.

We also tried the machines across London and here the Yamaha began to excel itself, particularly in the faster moving suburban traffic. Its performance, gearing and handling are very nicely suited to these conditions and it is not too big to be physically lifted into the last available parking slot.

compact

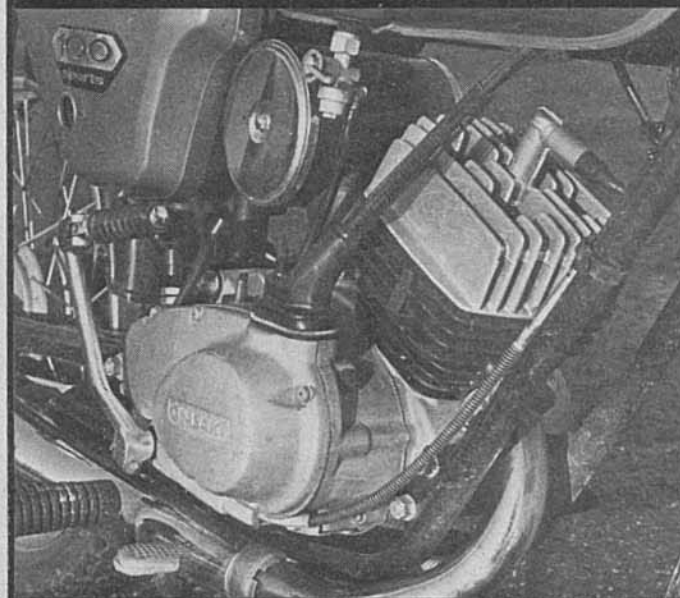
The Kawasaki is one of those machines which is so easy to ride that you don't have to think about it and, like the Suzuki, is just nippy enough not to get squashed into the gutter at every surge away from the traffic lights. The 100 cc disc-valve motor may look a bit mundane and ordinary but it gives the impression of being able to go on and on with the minimum of attention, and you get very reasonable performance from a very compact package.

Out of town the RD200 began to show its family resemblances — the motor starts to pick up quickly over 6000, with the bulk of its power between 7000 and 9000. To keep up speed you find you have to keep the motor spinning within this band and then it seems that there aren't enough gears. It is odd that the 350 and 250, which have more power, should have six gears while the 200 is only blessed with five but really needs six.

The extra ratio would make a big difference to the Yamaha — although as it was, flicking down two or three gears into a corner and winding it on changed the sporty exhaust crackle into a Stuka-like whine. Top gear is something of an overdrive, this being highlighted by very strong winds. Into a headwind the Yamaha would pull up to peak revs in fourth but changing into fifth was rather like putting the



Small, neat, functional, and the promise of reliability and economic running costs offset the Kawasaki's relatively high price.



The 100 cc motor has a disc valve intake which gives it a reasonable spread of power and 60 mph performance



Suzuki's latest 125 has more of a "real" motorcycle feel and combines comfort with good handling.

brakes on, the little motor just could not pull it. In a swings and roundabouts fashion, though, it would really hurtle along once the wind got behind it.

With a full riding suit and sitting upright the RD would run along at 70 mph under fairly neutral conditions and would cruise on half throttle at not much below this. Wearing leathers and crouching down gave it several more mph; into a strongish headwind it reached an indicated 80 mph in top, while fourth gear gave us an indicated 82 mph. Downwind it pulled 92 mph, which as the speedometer was only 5 mph fast, is a creditable performance.

Depending upon the conditions the 100 cc Kawasaki would make 55 to 60 mph, while the low-geared Suzuki was screaming away at 55 in top.

This little motor is based on the TS125M with changes which seem to push the power up the rev scale. It has two additional transfer ports and a central spark plug, giving, Suzuki claim, ten per cent more power. The most impressive thing about the engine is the way it spreads power giving useable throttle response from tickover at an indicated 1000 rpm right up to the 8000 red line. Most of the power comes in above 6000 but unlike most current Japanese engines on which the power just seems to stop at a given point, the Suzuki goes on into the red band, as I discovered when a truck driver took a sudden dislike to being overtaken.

As well as re-styling and the matt black engine, the TS125A features other changes aimed at making the rider more comfortable in both its on- and off-road roles. The handgrips are in rubber which is softer than the previous vinyl while the footrests have been changed from rubber to steel. The clutch release is now a rack and pinion type to give a smoother operation — necessitated perhaps by the buzzy engine characteristics — and the front forks are 3 mm bigger, with thicker walls and, say Suzuki, better damping. None of the new engine parts are interchangeable with the TS125M mainly because the A has a six-stud barrel, but the later forks can be fitted to the earlier chassis.

The Suzuki's steering is incredibly light which, with a steering head angle of 60 degrees and nearly 5 inches of trail, is surprising. But on the road it is stable and the only effect is to make it easy to wiggle through traffic jams.

Another thing which always baffles me with this kind of machine is the way the trials tyres grip on tarmac and the

stopping power of the diminutive brakes which is out of all proportion to their size. The 125 was no exception. It could be hurled through corners safely and the brakes would pin the light machine down as efficiently as any sportster. On this model the back brake was more powerful than the front — a reasonable state of affairs for off-road riding — and both levers were positioned perfectly for maximum control.

I did not get many opportunities to ride the 125 off-road but on a couple of brief trips it seemed quite capable of handling the majority of green lane conditions. Handling and braking on slippery surfaces — bearing in mind my definitely non-expert rating — were good enough to make the machine easily controllable and the riding position was comfortable which also seems to help the handling.

The motor likes high revs more than plonking and after a short distance at low engine speeds it seemed to partially gas up and wouldn't respond to the throttle. This made steep slopes more of a problem because if the motor got bogged down the only cure was to lift the clutch and give it a couple of hearty blips, and pulling away again then required a lot of revs and the resulting wheelie was almost inevitable.

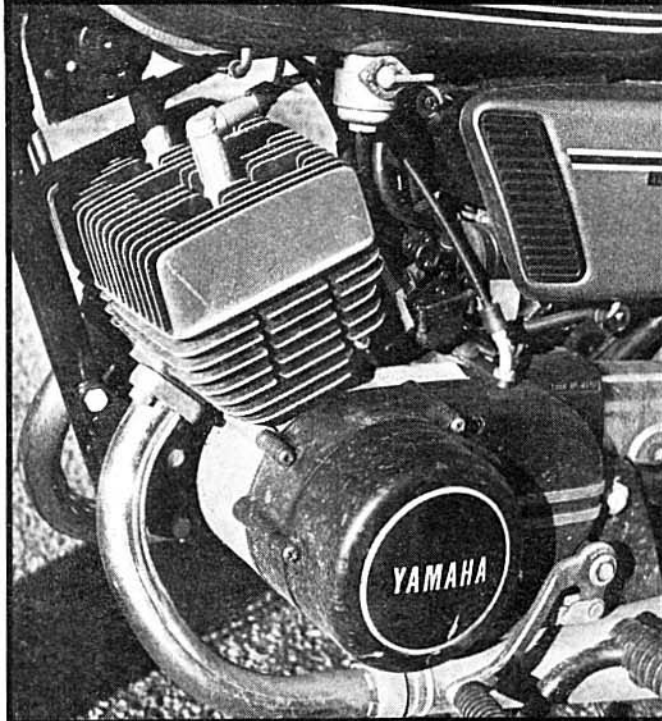
The Kawasaki is very much a scaled-down motorcycle. It feels and handles very small yet the 100 cc motor is flexible and gives a respectable performance. It's at its best when it is used on about half throttle because this gives something very close to full road speed combined with optimum fuel consumption. Buzzing up through the gears and then cruising on half throttle in top gives the impression that the motor is a lot more powerful than it really is, as it will hold something in the region of 50 mph. Using the rest of the throttle doesn't give a lot more speed but uses a lot more fuel.

Running costs are an important factor, especially if a lightweight is chosen because of its economy. When we ran these machines flat out, the worst figures we recorded were 80 mpg for the Kawasaki, 67 mpg for the Suzuki and 42 mpg for the Yamaha. Being deliberately gentle with the throttle and the gears gives marked improvements on these but going up in the same proportion.

There are other aspects of running costs, like maintenance, where the single cylinder motors obviously score and where things like the Kawasaki's enclosed rear chain pay off. One substantial annual item is insurance and we had a broker quote



Smallest of the Yamaha twins, the buzzy reed-valve motor gives very respectable performance for a 200 but would benefit a lot from a six-speed gearbox as used on the larger RD motors.



us for these three machines. The make of machine made no difference to the figures, neither did the possession of a full driving licence. For a 17- or 18-year-old living in a large city or bad risk area, fully comprehensive premiums worked out at £40 for the 200 and 125, and £30 for the 100. This improved by stages until a rider aged 25 or more would be paying £20 for the two smaller machines and £30 for the 200. Cover for the 200 stayed the same but the other two would be £5 cheaper in rural areas.

With the low power outputs and speeds of small machines, handling problems are minimal compared with bigger bikes. With the exception of mopeds I

don't think I've ridden a lightweight which handled badly. The Yamaha had a nice feel to it and was very responsive. A couple of times it slid on wet roads, a short sharp slide which was controllable and the tyre gripped again very quickly as soon as the bike was straightened up. The Kawasaki was a bit springy, particularly on the back suspension but it held on to a line and always had a predictable manner.

What is more important with this kind of machine is its ease of riding. For a learner this is doubly important as he'll have a lot of other things to concentrate on besides getting to know the bike. All three machines were good in this respect and for a

complete novice would make a much safer introduction than a moped.

smooth

The Suzuki and the Yamaha both started up promptly — the Yam having a starter motor anyway — while the Kawasaki took four or five rapid jabs on the starter pedal and needed some co-ordination of throttle and the handlebar-mounted choke until the engine warmed up. On all three the basic controls were well-placed, smooth and positive in operation. I didn't like Kawasaki's positioning of neutral "below" first gear nor their dip-switch which went from main to pilot to dipped beam.

The lights on all three machines, while allowing a fair amount of scatter, were more than adequate for the performance. The Kawasaki had a pencil beam which was particularly good and a clearly defined cut-off on dipped beam. Both the Kawasaki and the Suzuki have direct lighting for the headlamp but on both it was powerful enough to maintain a reasonable light at tickover. The Suzuki developed several electrical faults; the tail-light went, the neutral warning light came on when it felt like it and the indicators blinked very slowly at low engine speeds. The Kawasaki's tail lamp also blew after 200 miles.

The Kawasaki is a neat, low-stressed little machine, designed around the commuter's needs. The qualities which make it ideal for ride-to-work running reduce its appeal for longer journeys — a round trip of 30-odd miles is about the limit — but it is undoubtedly very cheap to run. To get enough performance out of the engine to keep up with normal traffic the Kawasaki has to be buzzed pretty hard although it is just fast enough to keep you away from the loonies who prey on small motorcycles. Running in the lower half of the rev scale takes the motor out of its power band, knocking a big hole in the road performance but stretching a gallon of fuel over countless miles.

I got the impression that reliability and ease of servicing would also be a strong point. The exception being the direct lighting when the headlamp is used, which produces voltage surges and destroys tail lamps. This condition seemed aggravated by the dip switch which actually switches the headlamp off in between changing from main to dip, allowing full generator output to hit the tail light. The cost of a clipper diode would soon be made up in light bulb

savings (and possible fines) and would be well worth fitting before the machine was run.

Fuel consumption is one of the Kawasaki's main attractions but was offset by the small reserve which took me a mere six or seven miles before the machine spluttered to a halt. There was enough in the other side of the tank to get me a couple more miles to a garage, after laying the bike on its side. In a large town this wouldn't be as much of a problem as out in the wilds where the garages all seem to close at 6 pm prompt.

Within the framework of a commuter machine the KH100 does its job admirably but that is the limit of its scope. It is competing in a subsidised market with the communist machines and Suzuki's B120, where £230 is the going rate, so Kawasaki's price of £289 makes it costly and — ironically — on a par with sports mopeds.

The Suzuki offers much the same sort of road performance as the Kawasaki, with possibly more power but with lower gears which keep cruising speeds down — it's all too easy to over-rev in top — and make the fuel consumption that much worse.

alternative

As a commuter machine there's not much in it, except that the Suzuki feels a bit bigger and a bit more like a real motorcycle — and it's a lot more expensive at £339. It is very comfortable, easy to handle and makes up for any lack of performance by offering an alternative role as a trial bike. If you're interested in this kind of riding, it's well worth the extra expense and the Suzuki managed well enough in the limited off-road riding we were able to arrange. It could certainly cope with any green lane. The RD200 Yamaha offers more performance — by about 20 mph — but at a price. It's listed at £407 and its fuel consumption is none too impressive. There were no serious complaints about the machine, in performance and agility it is well suited to commuting plus a bit more, but it is curious as to why Yamaha see fit to produce such a similar model to the 250 (and the 350 for that matter). The 200 is considerably cheaper than the 250 (why?) and would be cheaper to run. But if cost is the buyer's criterion the Yamaha isn't the cheapest of machines. For a learner the 200 is easy enough to handle and is more directly related to bigger motorcycles, and able to provide safe experience for someone who intends to get a bigger bike.

SPECIFICATIONS

| PERFORMANCE | YAMAHA RD200 | SUZUKI TS125A | KAWASAKI KH100 |
|--|--|---|--|
| maximum speed brakes from 30 mph fuel consumption: hard riding average | 87 mph 29 feet 42 mpg 44 mpg | 56 mph max rpm 28 feet 67 mpg 70 mpg | 63 mph 30 feet 80 mpg 90 mpg |
| ENGINE | | | |
| type displacement bore x stroke compression ratio claimed output lubrication carburettor ignition | 2-stroke twin reed valve 195 ccm 52 x 46 mm 7.1:1 22 bhp at 7000 Autolube 2 x Mikuni cb and coil | 2-stroke single piston valve 123ccm 56 x 50mm 6.8:1 14 bhp at 7000 CCI Mikuni VM24SH magneto | 2-stroke single disc valve 99 ccm 49.5 x 51.8 mm 7.0:1 11.5 at 8000 Superlube Mikuni VM 195C Magneto |
| TRANSMISSION | | | |
| primary reduction final reduction gear ratios, 1 2 3 4 5 | 3.31, gear 2.395, chain 2.833 1.705 1.250 1.045 0.918 | 3.563, gear 3.333, chain 2.750 1.813 1.250 1.000 0.800 | 3.25 gear 2.47 chain 2.96 1.77 1.30 1.09 0.96 |
| CHASSIS | | | |
| front tyre rear tyre front suspension rear suspension front brake rear brake wheelbase overall length overall width dry weight test weight castor trail tank capacity oil tank | 2.75 x 18 3.00 x 18 tele fork swinging arm 21s drum sls drum 49 inch 76.7 inch 29 inch 256 lb 286 lb 62 deg 3.75 inch 2.5 gal 3.5 pint | 2.75 x 21 3.25 x 18 tele fork swinging arm sls drum sls drum 51.6 inch 80.7 inch 30.3 inch 198 lb 220 lb 60 deg 4.9 inch 1.5 gal 2 pint | 2.50 x 18 2.75 x 18 teles fork swinging arm sls drum sls drum 48.2 inch 74.8 inch 31.5 inch 196 lb 216 lb 64 deg 3.2 inch 2.2 gal 2.5 pint |
| PARTS PRICES inc VAT — £ | | | |
| front mudguard handlebar speedo cable cb points set of pistons / rings exhaust system list price warranty | 12.14 3.74 1.28 3.37 19.04 19.64 407.45 6 months/4000 miles parts and labour | 5.65 4.32 1.99 2.46 8.68 22.29 339.60 6 months/6000 miles parts, 3 months labour | 8.05 3.46 1.27 2.25 6.56 21.25 289.00 6 months/ 6000 miles parts and labour |