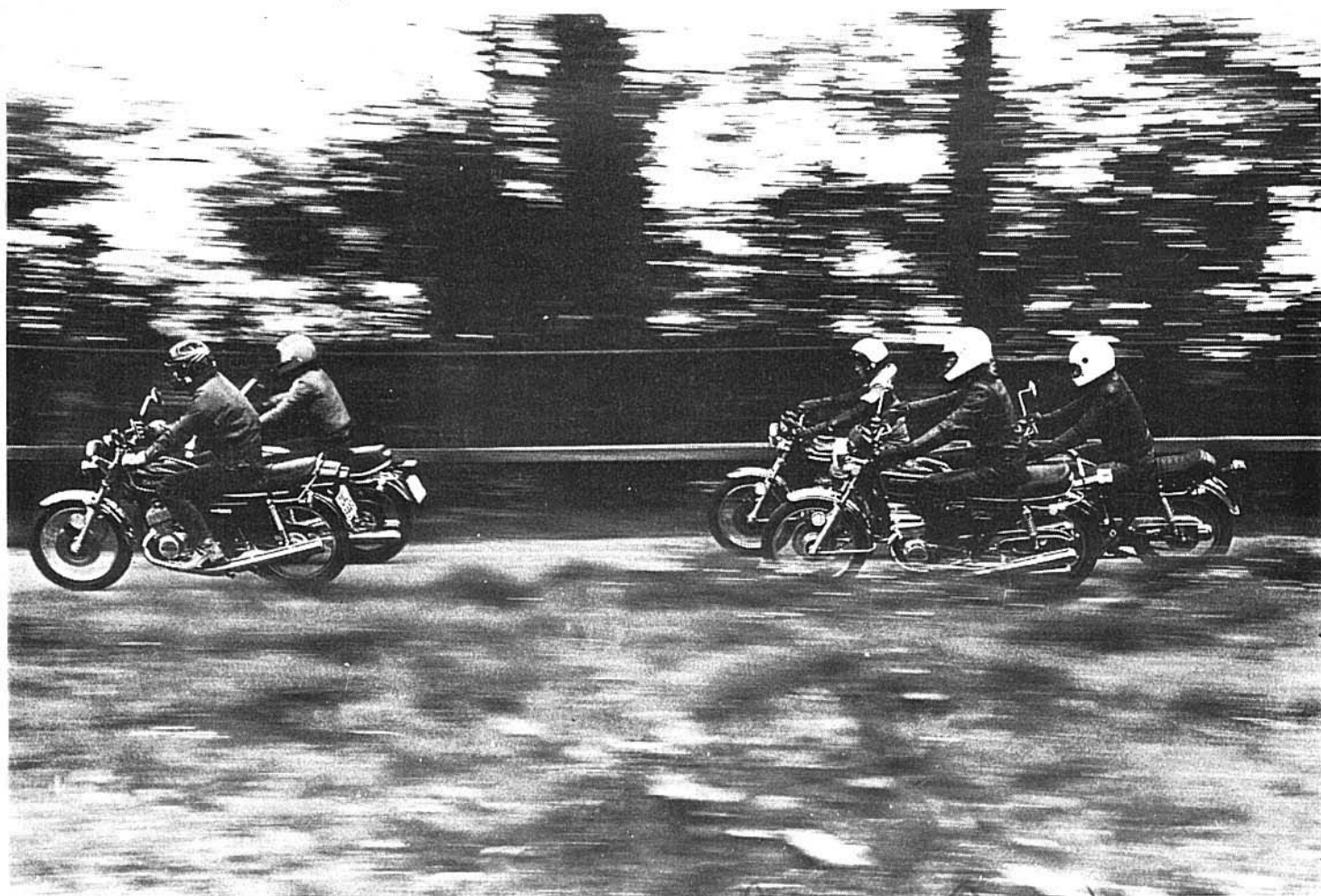


400cc

GIANT TEST



Photography John Wallace

Testers: Bill Haylock, Mike Nicks, Peter Watson, J. P. McMurphy, Graham Sanderson

**Five years on from the first issue of
Bike, we pull together five
machines that collectively form the most
appealing group package
we've yet sampled in terms of performance
linked with value for money.**



Honda CB400

DO YOU SPEND much time on a psychiatrist's couch? If so, word-association tests will be familiar. For the benefit of those with sound and straight minds, they consist of the head-shrinker barking out various words, and you, the subject, retorting with the first response that enters your head. A year ago a biking psychiatry session would have gone something like this: Yamaha — fast, Kawasaki — scary, Suzuki — fun, Honda — ZZZZZZ (subject asleep).

Yes, the CB250s, 360s, 500 and 750 fours were pretty boring motorcycles — very capable, highly durable, brilliantly engineered, but, as the advertising slogan went, "You meet the nicest people on a Honda", and the Honda marketing set-up was chasing these elusive nice people with desensitised, aseptic motorcycles. Whilst engaged in this the marketing men must have noticed (a) Ever-increasing numbers of nasty people riding around on Yamahas, Kawasakis, etc., and (b) Nice Honda owners suddenly becoming nasty by tearing off tanks, seats, handlebars and even frames and replacing them with "sporty" items.

Enter the Honda 400 four with "Super Sport" written on the side panels, and, for the first time in along while on a road Honda, super sport thinking imprinted upon frame tube thicknesses, valve diameters, fork angle, damping rates, etc. I think this is quite revolutionary in a way because, judging by past experience, declining market share would have stimulated the stylists into coming up with a four - into - one exhaust system, a slab-sided tank, narrow handlebars — and then nothing, full stop. But Honda have bitten the bullet and said, "Our bikes must go, handle and stop". Their production engineers and designers are probably still recovering from the shock of having to design a frame that was more than just a bracket which stopped the engine fall-



'What more do you want from a mere 400cc?'

ling out.

I'm going on about all this at some length because it's so refreshing to see a range of bikes, the Honda "Fabulous Fours", redesigned to suit the European market and thus become interesting, safer and more fun. You get on the CB400F, hit the button, and are immediately rewarded by a coffee-grinder type sound as the engine struggles to warm up on choke. As soon as you push it off the stand the compactness feels good, which is surprising really because at 393 lbs it's not that light.

If you're used to Japanese bikes you'll then spend the next few seconds trying to locate the footrests, which are not in their usual position half way along the engine, but are actually mounted behind the motor

about two inches rearward of the seat tip — perfect. The bars are straight, narrow and really comfortable.

Clutch pull is very smooth, but curiously quite heavy. First gear goes in with a fair crunch, but it's nothing like the chain wrenching crash sometimes found on wonders of Oriental technology. Feeding out the clutch sets off the usual clunking and winding up in the transmission that finally exits as motion at the rear wheel. Drive line slop is one criticism of the Honda that is not trivial, since it does mar the tight feeling of the bike, particularly around town when the jerking makes it downright uncomfortable after long periods in heavy traffic.

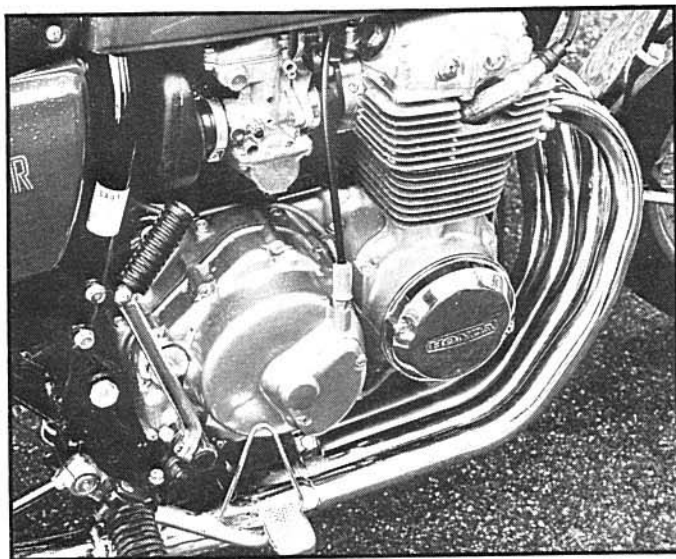
Once moving, the next delightful feature comes to

light — the gearbox. This contains numerous gears, six in all I believe, each of which can be smoothly selected by a small movement on the lever. This is no small achievement on a rear-set footrest set-up, since slop and/or friction in the linkage can spoil the feel of the gearchange. The secret of the Honda's efficiency in this lies under the little rubber covers at either end of the gearchange linkage, Heim joints. These are expensive to produce but don't need accurate assembly or maintenance to work precisely — more good thinking from Honda's engineers.

Winding the black rubber thing on the end of the right handlebar back towards you provides many answers to the 400's great sales success. Nothing dramatic happens at first. The engine pulls hard and smooth with the exhaust note only barely perceptible, the tachometer needle moves purposefully round the dial, and everything feels fine. The needle then approaches 7,000 rpm and three things occur almost simultaneously. The bike surges forward, the exhaust starts to wail like a proper four - into - one, and finally the hole in the front of the rider's full-face lid fills up with a great big grin — that's the secret of the 400, it really is a joy to ride, especially fast.

Unfortunately for many Japanese offerings, if you ride fast in England a bend of some description will appear very soon, and if taken in true biking fashion (i.e. flat out) yet another set of Y-fronts will end up in the laundry. Not so on the Honda. Sweepers, twisters, even bumpy bends can be taken at highly improper speeds. However, adhesion from the Bridgestone tyres seems adequate but not excessive, to judge by the agonising squeals that emanate from the front under heavy braking.

The sources of the excellent handling are to be found in the suspension, particularly in the



Sci-fi loop on the brake pedal is presumably to stop your plimsolls melting from exhaust pipe heat.

forks which are a new floating-ring damper valve design. They provide firm and progressive rebound damping which permits the use of softer springs, which in turn absorb bumps better without allowing the entire bike to wallow.

The only reservation I have about the Honda's handling concerns straight line stability at high speeds. The 400's power is such that motorway cruising in the indicated high eighties/low nineties is an entirely practical proposition, and in fact it's very easy to forget that the bike is only a 400. At these sort of speeds however, a slight front end lightness manifests itself. It's not a weave, nothing near a wobble, just a vaguely insecure feeling.

The CB400's motorway performance was, in fact, astonishing. As long as the engine was revved freely to build up speed, impressive acceleration can be had by almost red-lining the motor and then changing up, which drops the revs straight back into the heart of the power band. Once in top it would hold an indicated 90 mph at a shade over eight grand, seemingly well within its limits. It would also run well over the ton when asked to play racers — what more do you want from a mere 400 ccs? The only consequence of such behaviour was a fuel consumption rate that dropped from a hard-riding average of just under 50 mpg to 42 mpg on totally insane motorway thrashes. At running-in speeds

figures of 65 mpg can be easily achieved.

Being of sporty pretensions the Honda does not really cater for two-up travel, as evidenced by swinging arm-mounted pillion footrests, a fairly short saddle, and the lack of a grab-rail. Young ladies had few complaints but gentlemen who were loathe to fling their arms about me found the absence of a grabrail disconcerting, even more so when it was discovered that the entire dual seat would tip forward if held underneath its rear edges. Since most of these two-up trips were nocturnal another serious criticism reared its head — the lights. They really are just not good enough, a diffuse and muddy dip beam giving way to a main beam that just disappears into the gloom 75 yards ahead of the bike.

That brings me to another plus point and another slight criticism, the brakes. These functioned perfectly, causing tyre-howling, controllable stops on demand. The criticism is the abominable squealing the brake emitted every time it was used.

So there we have it, a bike that will run with the best, walk over the rest, and won't scare you or your wallet to death in the process. Working on the basis of "If a lot is good, more must be better", I wonder what a 400 would go like with clip-ons, a Rickman half-fairing and an S&S exhaust system?

J. P. McMurphy

Kawasaki KH400

IT'S A PITY the fuel crisis had to spoil it all. I'm not suggesting that we should return to full-tilt abuse of the earth's resources in the vague hope that alternative energy will turn up from somewhere, but the madcap days of the sixties certainly produced some bold, if somewhat illogical, examples of motorcycle engineering.

Those were the years when mankind conveniently forgot to remember that oil was a finite commodity, and the memory gap led to such phenomena as Kawasaki's two-stroke triples. Illogical? Well what else do you term a 376 lbs hunk of metal that requires a gallon of fuel to travel a mere 30 miles?

Unless America's all-powerful Environmental Protection Agency performs an unlikely about-turn in its thinking, the production days of the stroker triples are all too clearly numbered. Meanwhile, they're still very much with us, and even their excessive fuel consumption doesn't put off too many buyers, to judge by the number of three-pipers to be seen on the road.

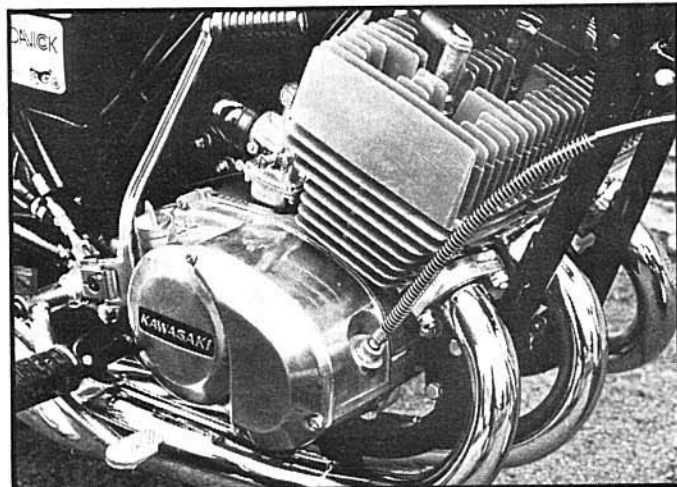
The KH400 version of the theme is the bike that used to be designated S3. Tested by *Bike* in August 1974, it burned the test strip with a 108 mph top speed, and a 14.4 second standing quarter — out-

rageously fast for a mere 400, even by Kawasaki triple-cylinder standards.

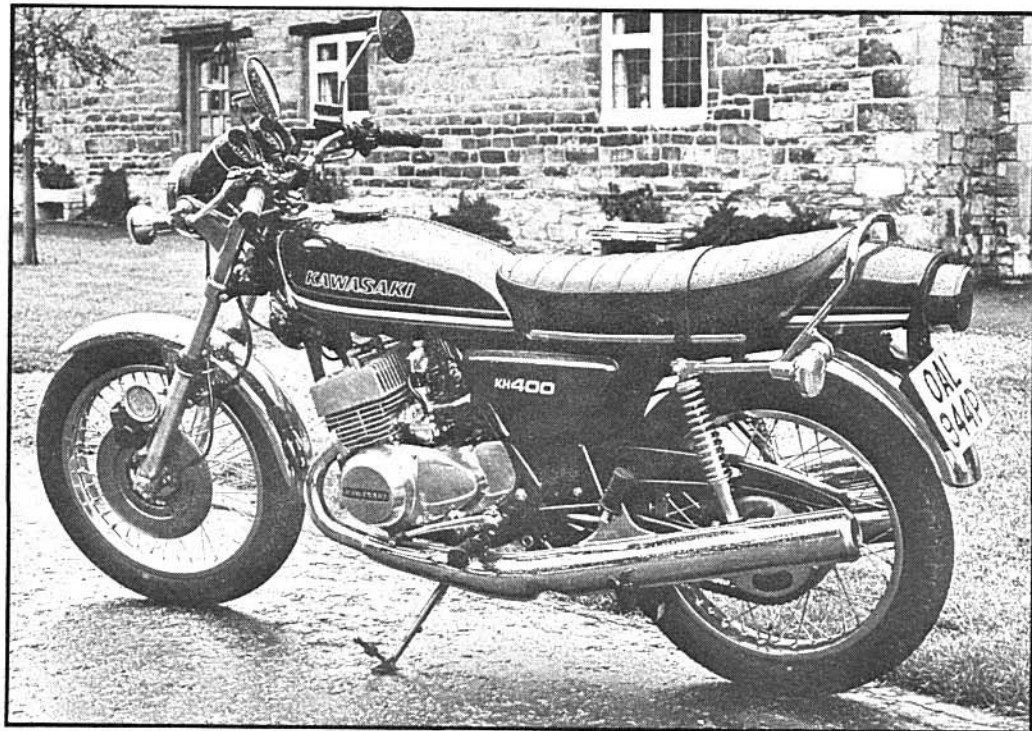
As the figures in the Check-out panel show, the KH has suffered the same fate as many other modern bikes, and has become slower with age. Sadly, the matter is largely out of Kawasaki's control — they simply had to quieten the bike to make it saleable in countries with particularly strict noise regulations. The engine porting remains unchanged, but redesigned silencers and a modified induction system have robbed the bike of 4 bhp, making the claimed peak power figure 38 bhp at 7,000 rpm (and we're lucky — West German buyers get a 36 bhp version to comply with *their* noise laws). These revisions, together with a slightly lowered final drive ratio, explain why this latest 400 was 8 mph slower than the S3 through the speed trap.

That last paragraph must make pretty dismal reading, but the good news is that the softening-up process hasn't really affected the 400's performance that much on the road. It remains a dramatic and exciting motorcycle oozing with flash machismo, and it's capable of easy cruising rates higher than any speed limit in Britain.

Falling between the 250 and



Engine internals remain unchanged for '76, yet induction and silencing mods have robbed it of 4 bhp.



500 cc Kawasaki triples, the 400 inherits most of its breeding from the mild mannered smaller bike, rather than the "ride me if you dare" 500. Indeed, one unconsciously expects any two-stroke triple to be an evil spirited son-of-a-bitch to control, yet the 400's engine is amazingly tractable.

On one occasion, while negotiating a tight 15 mph roundabout, I held the five-speed gearbox in what I thought was third to see how the KH would pull away. Two-up, it made a sedate but unflustered exit without stuttering or overloading, and it was only when changing up further along the road that I realised the bike had been in fourth all the way. Impressive. (And who is this dumbo that can't operate a mere five-speed box without the aid of a digital indicator, you're no doubt ruminating.)

Further up the rev band there are no vicious steps in power delivery to trap the unwary, unlike the early 500s which must have brought many an owner to the brink of terminal shock on occasions when *all* the horses suddenly lunged into action halfway through a bend. Adding to the general air of civilised biking is a motor that doesn't vibrate, even though it's not rubber mounted.

Ironically, and happily, the

'Like many other bikes it's slowed with age'

changes to the silencers have not purged the 400 of that distinctive Kawasaki triple-cylinder sound. Most two-strokes sound boringly alike — but not the big Ks. That jagged edged moan is still there whenever the throttle is wielded with spirit, making the Kawasaki surely the only strokers on the road that are positively pleasant to hear.

The KH now has the benefit of electronic ignition, which simplifies servicing, but a change that has even greater repercussions for the rider involves the rear shocks. These have been fitted with softer springs to add the velvet-cushion touch to ride comfort. It works, too — humming along a smooth main road on the KH is almost reminiscent of BMW's superlative ride control. But you've probably guessed the worst — Kawasaki haven't got the equation quite right, and on rough roads the handling becomes less than reassuring. The under-damped rear end pitches and wags, and some fairly intense concentration is required if you're going to keep it between the trees when travelling fast under such conditions.

But here's a crazy thing. On

most bikes inadequate rough-road handling would whip up a storm of criticism, but none of the test crew who tried the KH found its behaviour particularly offensive. It's happened before with ill-handling Kawasakis, notably the 500 — instead of putting them down people talk of them being "interesting" or "challenging". It can only be the charisma that Kawasaki build into their motorcycles that leads bikers to respect them for their faults, rather than dismiss them.

However, there certainly wasn't much charisma attaching to the brakes on the KH. The front disc was acceptable, although it required considerable pressure, but the rear drum's contribution to speed dissipation was negligible. On dry roads it was incapable of locking the rear wheel. Not that one wants to rush into corners crossed up à la Yvon Du Hamel, but the effect of weight transference on a motorcycle means there's something amiss with any bike whose rear end declines to lock up under lead footed use. A further effect of the KH's feeble rear brake was to exaggerate the weight bias to the front end under hard braking

for corners, and at times this seemed to unbalance the plot just at the crucial point of peel-off.

Close examination of the bike reveals the telltale fact that the KH's frame and engine numbers still carry the S3 prefix, which must be some kind of pungent comment on Japanese model-change philosophies. However, there's no doubt that the KH incorporates definite modifications over its predecessor (apart from the power loss, that is!) The seat has been improved, and in fact the entire riding position was an excellent choice for European style biking, with a fairly wide but flat handlebar matching well with correctly located footrests. The gear lever linkage feels slack and floppy to the initial touch, but the shift action itself proves to be agreeably light and positive in operation. Switch location on the left handlebar could be improved, as the indicator control is lodged between the dip-switch above and the horn/flasher button below. Add to that the choke lever further down still, and you've got a fine gaggle of four controls to choose from in moments of crisis.

Detail niceties abound, including a locking fuel cap and seat, easily reachable engine and gearbox oil fillers, two very capacious mirrors, a reasonable 12-piece toolkit stashed in time honoured Kawasaki fashion within the rear hump (where it's also just possible to cram a pint of oil), and an under-seat plastic envelope for the owner's manual.

The bike's styling is among the best, although you pay for the sleek looks with a 3.1 gallon tank that, combined with the rapacious thirst for fuel, has you looking for service stations every 80 to 90 miles. Royce Creasey and the other members of the knackered British oldies club will have backed away gibbering by now (no offence meant, Royce), but the fact is that Japanese bikes like the KH400 are available right now, are reliable, and usually are not expensive in terms of what you get. It's generally pretty good stuff.

Mike Nicks

Kawasaki Z400

PERHAPS I'd never thought of it that way before, but somehow the timely introduction of Kawasaki's 400 cc sohc vertical twin a couple years back marked the beginning of another era. Here for the first time since the sixties was a machine for that new addition to the rank and file of bikers, the non-motorcyclist. By that I mean a person who buys a motorcycle out of a practical need for transport rather than a desire to get into the Two Wheel Trip.

Many test machines which pass through our hands are memorable. Some because they handle, go, and stop to a fine degree, others because they don't. Then there are those bikes which merely embed themselves in their own mediocrity, excelling at little, yet not failing, either. The Z400 is just such a bike. It's jack of all trades, master of none. It'll plod round town at 30 mph in top gear without transmission snatch, cruise restfully in the seventies, and still pull a top speed near the ton.

But it's all very low key, undramatic and, to those more used to Kawasaki's ball bustin' performance philosophy, downright bland. And that in itself is a statement which testifies that they've succeeded in completing the task they set out to do — create a middle-of-the-roadie for the ever growing number of central reservation bikers.

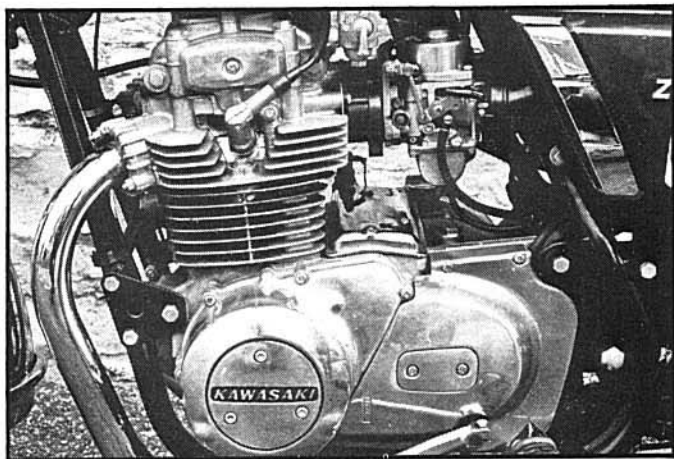
Introduced when the world was in the grips of Petrol Paranoia, the Z400 has since been modified, but by no means drastically. Kawasaki were apparently caught on the hop when European exhaust emission limits turned out to be more severe than American standards. Breathing and exhaust systems were hurriedly designed for the European model which consequently lost three bhp over its 36 horse American counterpart. For 1976 the European Z400 has recaptured those lost horses

with another redesigned exhaust system and a bigger air filter to allow slower and quieter induction.

New front forks and disc brake have been fitted as part of a standardisation policy (to ease dealers' parts stocking problems) and now the 250 two-stroke triple and both 400s display similar front ends, while another set-up is fitted to the 500, the 750 and the Z900.

Good ole Davick's supplied our test machine — their demonstrator — but only after some bright spark had let 398 cc of good times roll up the road. The rear suspension units damaged in the crash were, for various reasons, replaced with a pair from an S1 250, a machine renowned for soggy suspension. The crash had induced a left hand bias — caused by shot steering head races, according to Davick's — and the machine would drop into left handers and was reluctant to be pulled out.

Still, once I'd got used to the weirdness I proceeded to take advantage of its thoroughly compromising character without really realising just how competent a machine the Z400 really is. It trundled happily down the A1, indulged stop-start commuting, with passenger or without, and even accepted some low profile scratching once I'd beaten the



Twin carb, sohc engine bears some resemblance to earlier Honda twins.

handling. And it wasn't until I remembered that I was actually supposed to compile a road test that the scornfully easy and unhurried manner in which the Z performed every task asked of it dawned on me. Anyone can take advantage of its comparative simplicity, reliability and solid character.

At great risk of annoying the Triumph Owners' Club, the Kawasaki has a certain amount of Triumph appeal. It certainly sounds like one under initial acceleration, and it's not until the tach needle passes the 5,000 mark that the exhaust note becomes clearly Oriental. In fact, a couple bikers who hitched a pillion ride dubbed the Kawasaki "a Triumph without vibrations". Much of the Kawa's smoothness must be attributed to two chain driven shafts which help to counterbalance the inherent lumpiness of a 360-degree crank. That the system works is undeniable, although a minor amount of footpeg vibra-

tion was always noticeable, but not annoying apart from a patch around 7,500 rpm. Thereafter, vibration improved only marginally up to the red line at nine grand.

Quite frankly there's little to be gained and something to be lost by revving to the red. Despite producing maximum torque at 7,500 rpm lots of pulling power seems to come from as low as 1,000 to 1,500 rpm. In accordance with the rest of the machine the acceleration is adequate and uneventful, with no huge steps in the power delivery. Yet it's still good enough to cover the standing quarter in less than sixteen seconds, and we got a top speed of 98.68 mph with the rider in a racing crouch. But what was more impressive was the Z's 94 mph trip through the lights with the rider seated normally.

The acceleration and top speed figures are virtually identical to those obtained by *Bike* with last year's model, but it



Z400 was one of the best test machines at two-up duties.

'A bike for the two-wheel transport seeker'

seems likely that those claimed three additional horsepower may have given the Kawasaki more top end staying power. That earlier test complained about top end gutlessness on the road, which now seems to have been eliminated. The bike would easily cruise into the high seventies and hold that speed with little manipulation of the five evenly matched gear ratios. Seventy mph was achieved at fractionally under 6,000 rpm.

It's really impossible to comment objectively on the handling since the bike had been dropped and re-fitted with dampers intended for a machine 70 lbs lighter. But in view of the non-changes in frame geometry, damping and suspension it's realistic to recall the view expressed in last year's test — simply, that it was vice-free apart from a wiggle when it was pushed to the limit.

The Z400 may not possess the sporty charisma of the other test bikes, yet despite the handicap of obviously being a bread-and-butter machine, it's no bare necessities lash-up. Unburnt fuel is collected in a filter near the 36mm piston-equipped constant vacuum carbs, and recycled in an attempt to cut hydrocarbon emissions. Starting is by kick or motor. Seating for both rider and passenger is comfortable thanks to a wide forgiving saddle, good footrest positioning, sensibly shaped and sized handlebars, and a passenger grab rail. There's twin mirrors, a locking fuel cap, and the switches (starter button, kill and lights on the right and dip-switch, indicators and horn/pass on the left) are all gratifyingly easy to operate. The toolkit is large, the horn sounds like it ought to, and for this year an embarrassing shrieking indicator bleper is fitted.

Braking, too, must have been OK since I didn't notice any peculiarities. The rod operated rear drum obviously com-

plemented the now customary front disc, to provide simple, straightforward, no-nonsense anchorage.

By now you're perhaps thinking I've described one of the best big twins since Chesty Morgan, but you just knew there'd be one or two drawbacks. Like the petrol consumption which averaged just 50 mpg throughout the test. It seems that there's a price to pay for chain-hauled balancer shaft sophistication, especially when you consider that P. Watson aboard the Yamaha throttled 47 mpg on one occasion cruising in the eighties two-up. The Kawasaki spent most of its time cruising in the sixties, more often in the seventies. It wasn't difficult to get 55 mpg — or, for that matter, 45 mpg if unnecessary revs were used. Fuel consumption was a mild disappointment rather than a categorical fault.

Styling is by no means outrageously beautiful, but then again it's not offensive. The exhaust pipes sweep out of the chunky motor which bears strong resemblance to that of a CB450 Honda, neatly alongside the twin downtube frame, and into the silencers tucked high and well into the frame. In fact there lies one of the few other criticisms of the Z400. Kawasaki have made space too tight in the swinging arm/silencer area, and adjusting the chain can be a knuckle grazing task.

Stands can be grounded, but if you're that type of rider chances are you wouldn't buy the Kawasaki in the first place. Hot-shot racers stand clear. By enthusiastic riding standards the Z400 is perhaps a stone compared directly with a bike like the RD400, but that's missing the point. Chances are that it will only be truly appreciated for what it really is by the people to whom it's intended to sell — the two-wheel transport seeker.

Graham Sanderson

Suzuki GT380

ON THE FACE of it the GT380 threatened to be the least appealing bike in a class which, within the last few years, has produced some of the most popular and enjoyable machines on the market. Partly perhaps because of staid and heavy-handed styling, and partly because it lives in the shadow of its look-alike bigger brother, the GT550, the 380 somehow doesn't present the same strong image as the other 400s. It doesn't have the machismo of the RD, the KH and the CB lean 'n' mean performance bikes, and yet as a two-stroke triple, it doesn't slot in the commuter bike category alongside the Z400. And I suppose the fact that it's not a full-blown 400 added to the prejudice against it.

Such, I must admit, were my feelings about the Suzuki before I swung a leg over it. Just as well then, that I didn't let those thoughts warp the sense of fairness and objectivity *Bike* road tests are famed for (oh yeah?). 'Cos after almost 2,000 miles I have to admit I enjoyed 'em all. I still wasn't excited, but I'd grown kinda fond of the 380 over those miles for the way the motor just kept buzzing on, so smoothly and reliably.

And most of all I liked it because it turned out *not* to be the slug I'd expected. That mild-mannered 371 cc triple becomes quite a little screamer with suitable encouragement from your right hand and lots of footsie with the six-speed gearbox. In fact, as far as straightline performance goes, the Suzuki is up there with the rest of them. It'll reach the ton, cruise at 80, and accelerate fast enough to make life interesting.

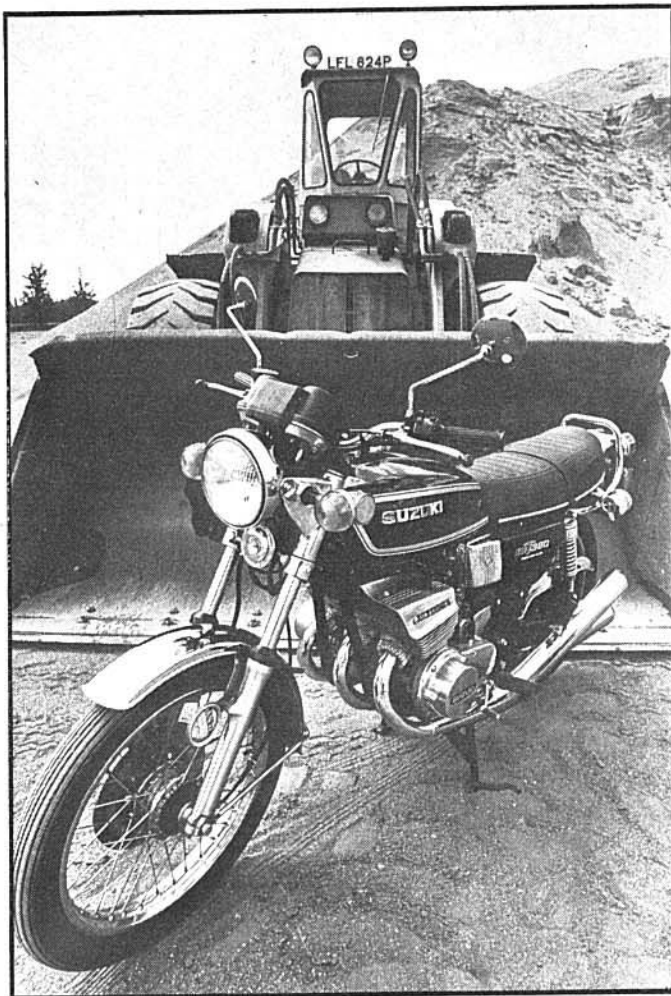
In spite of the ugly bit of Ram Air nonsense on top of the cylinder head, the motor is one of the sweetest two-strokes around. Rubbers in the engine mounting lugs insulate the frame from vibration, but in any case the power delivery is as smooth as the head on a pint of draught Guinness.

If you're an unadventurous rider you might happily amble around using the docile power available below 5,000 rpm, not realising it doesn't all happen until the tacho needle nudges up towards the red line. There's no fierce power band as such, but output increases considerably over 6,000 rpm. Keeping the motor on the boil is expensive in fuel though, as with any fast two-stroke, and consumption will drop into the 30s without the rider trying too hard.

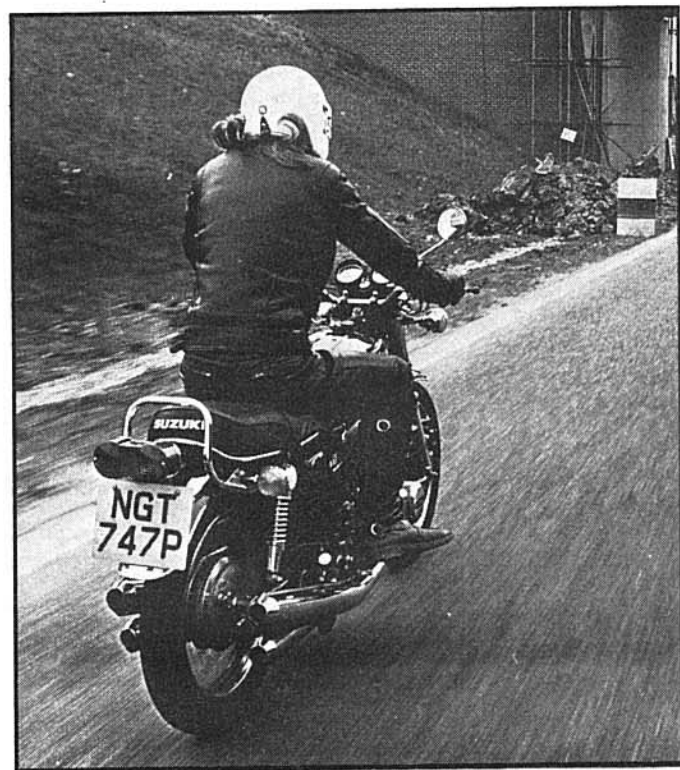
It's a pity that engine performance isn't matched by chassis performance, but that's the old Japanese story. It feels as though Suzuki have tried to improve matters by stiffening up the soggy suspension by taking the cheapest, easiest and worst way out — fitting heavier springs. That's just conjecture on my part, since the Japanese factory doesn't always seem to bother to tell importers details of mods they make from year to year. But judging by the harshness of the suspension, especially at the front, I suspect they've merely changed the spring rating instead of attending to the damping, which is what they should have done. The springing changes do stop the bike from wallowing in bumpy bends, but instead the front wheel hops and makes the ride uncomfortable. The Suzuki handles fine on billiard table surfaces, but that ain't much consolation in good ole UK, where such ideal road conditions are hard to find.

The harshness of the front forks has a curious side effect when riding at night. The headlamp flickers up and down as the forks transmit the bumps, producing a strobe light effect that can be quite disturbing.

Maybe Suzuki's designers were trying to stop riders pushing the 380's dubious road holding too far, by purposely mounting the centre stand so low that it grounds far too easily. On the other hand, maybe after designing that



GT380 has rather chunky lines, but black paintwork with gold pinstriping is very tasteful.



'Middle-of-the-road, but that's why it's good'

cumbersome three-into-four exhaust system, there just wasn't anywhere else to put the stand. Whatever the reason, I wish they'd pondered a little deeper about it. I don't like having my cornering line involuntarily modified half way round a bend when bumps put the bike's undercarriage into sudden contact with the road surface.

So long as these limitations are kept in mind, however, the Suzuki felt quite secure. Good brakes always lend confidence, and the 380's brakes are good, especially in the dry, and they're not so badly affected by rain as some disc units. The Bridgestone tyres are quite unpleasant in the wet though.

For its capacity, the 380 is a heavy, big bike. That contributes to the feeling of security, and also to comfort on a long ride. The seat is wide and well padded and the fat tank gives you something to get your knees around. Pity looks can be so deceptive though, as it holds only 3½ gallons, including reserve, and at between 30 and 40 mpg that means all too frequent fuel stops. The bars are unusually low and narrow for a Japanese bike, giving a riding position that's reasonably comfortable at sustained high speeds.

The instruments are clear and legible, but the Suzuki has the added refinement (?) of the digital indicator wot tells you which gear you're in. Ah well, I s'pose it's handy for those who find difficulty in counting above three.

Suzuki still persist with the misguided practice of locating the dip and the lights on/off switches on the same end of the bars, within about half an inch of each other. It can be quite traumatic if a groping Barbour-mitted thumb hits the wrong switch and kills the lights at 80 mph. As for the lights themselves, they're on the borderline of being adequate and that's about all — apart from the huge rear light.

I've already implied that I

don't like the styling, but I suppose that's a matter of taste. Actually, I'm probably being a bit unfair, because in a classic livery of black with gold lining the 380 doesn't look as cheap as it does in more gaudy finishes. But how I wish Suzuki wouldn't plaster idiotic stickers all over their bikes, with such edifying messages as, "Revving up to the red-zone, especially racing the engine, is prohibited in any case". Another warns us not to pour brake fluid over plastic components — what sort of morons do Suzuki think ride their bikes?

But when you can get more or less the same bike in 550 cc guise, with more poke and the added attraction of an electric starter, why buy the 380 in preference to the GT 550? Well, there's one very good reason — money. The GT380A sells at £649, £176 cheaper than the 550A. And even better value is last year's model GT380M, diverted from the sagging Stateside market and on sale here at a knock-down £587. In fact, the A version appears to be very little changed from last year's specification, although comparing performance figures with the 380M we tested last November, the A seems to have gained something in performance.

So, the GT380 is a bland, middle-of-the-road machine — and that's probably just what will make it attractive to a lot of people. Lined up against the other four, it may appear to lack a real identity, but it manages to do just about everything they do, while presenting a sensible, hassle-free compromise between moderately exciting performance, touring comfort and commuter reliability.

For those ordinary down-to-earth bikers who are more interested in packing trouble-free miles under their wheels than living up to an image, that's an endearing combination.

Bill Haylock

Yamaha RD400

PREGNANCY, as a gentleman who once tried to teach me the rudiments of philosophy was fond of observing, is an absolute condition. You can't be half pregnant; it's either yes or no. But *perfection* is altogether different: it's one of those slippery terms like objectivity which everyone from PR men to my local pump attendant have weighed up to the last ounce. Oh yeah.

So when one of the American cycle mags recently described Yamaha's RD400 as "the closest thing to a perfect motorcycle we've ever run up against", I began to feel just a mite dubious. You see, I can't stand perfection: women without a hair out of place or a crack in their nail varnish either irritate or terrify me. They're unreal, just like the perfect motorcycle.

The RD400 is in fact the current optimal development of the sporty air cooled two-stroke. It will pull 18 mph in sixth gear for as far and as long as you like and then, at the drop of a cog or four, zip up to a genuine 96 mph on the road. Its acceleration curve from 5,000 rpm is little short of frightening, but the brutal power's only there if you want it peaking. Fuel consumption can dip to 30 mpg, but more often I was returning high forties two-up, which is quite an improvement on the RD350 Yam. The 400 is civilised, exciting, refined and raw, but it ain't perfect. Thank god for small mercies.

Whenever we're about to gather together a large number of bikes for giant testing, paranoia stalks the corridors outside *Bike's* offices. This time the hassle involved the RD400 Mitsui found they weren't able to supply on the Friday before our Tuesday photo session, despite a month's old booking with their PR outfit. The man who prevented me beating my brains out against the nearest Yamaha tank was Arnold Fletcher of Melton Mowbray Yam dealers and

sparcs distributors Len Manchester Motorcycles. Yeah, sure we could have one for photography. Sorry it's only got wire wheels, but why don't you borrow it for the test?

Riding the RD after the angst of trying to assemble five bikes in one place was quite a relief. It made me realise once more that life can't be all bad when you can get out on the road, riding really hard, concentrating so fiercely that everything else just gets wiped clean away.

So much careful thought has gone into making the 400 a two-stroke of the late seventies that any comparison with the 350 seems almost useless. The RD400's power characteristics are really four-strokey way down low and even in mid-range. It feels way torquier than the four-cylinder, four-stroke Honda, so well does the reed valve induction set-up work. Yet when you want to whizz along country lanes after Wild Bill Haylock on a GT380, it lets rip with some lonesome howls and that 398 cc motor just picks the front wheel up and flies.

Left behind in the drift to 400s with their 347 cc twin, you could have forgiven Yamaha for merely hogging out the bores, doing a quick restyle and waiting for the pennies to come rolling in. Instead they've come up with a heavily modified power unit which is neatly rubber mounted and slung slightly farther forward in more or less the same old chassis. Can this really be the two-stroke on its last gasp?

The motor has been stroked to 62 mm to obtain the extra 51 cc which means, among other things, that there's no way RD350 freaks can do a simple 400 hop-up. It also means that, combined with a real overdrive sixth ratio and total overgearing, the 400 won't rev quite like the short-stroke 350. As power tails off noticeably past 7,500 rpm, chasing those final thousand revs to the bloodline is pretty



'It's the optimal air cooled 2-stroke'

pointless anyway. Seventy mph in top shows a lazy, fuel-sipping 5,500 rpm on the tach.

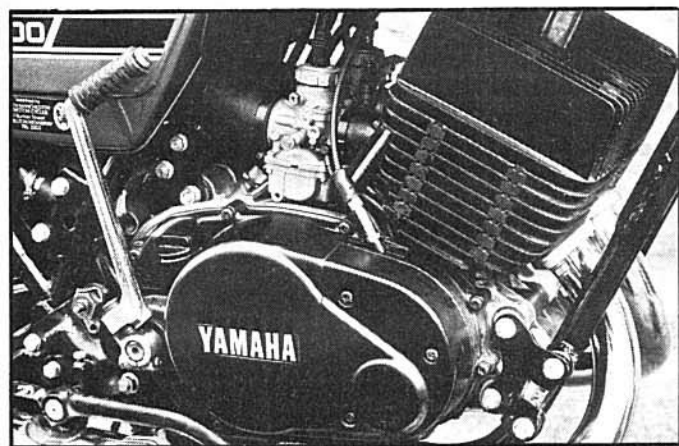
Low-down urge is improved by new porting, along with a remarkable quietening of the air cooled stoker crash-bang-tinkle we know and love. Mechanical noise is minimal by any standard, induction and exhaust silencing excellent. Reasons are a jumbo air filter/plenum chamber combined with clever bypass holes drilled through the cylinder walls and down to the exhaust ports. These drastically reduce crackle at low revs to a not unpleasantly dull burble. Each piston also features a small slot in the front of its skirt to achieve a direct crankcase-to-exhaust port passage around TDC, only really effective again at low revs.

Revised carburation — choke size is unchanged at 28 mm — and injector pump mods are claimed to clean up the exhaust, especially when pulling away hard. But our RD still smoked a lot under these

conditions, although it showed little trace of over-oiling normally. Okay, it's clean. Not as clean as Jimmy Carter maybe, but it made the GT380 and KH400 look as if they were running on diesel now and then. But why no electronic ignition? Even though we never even *looked* at the plugs and it started second prod every time, no-one needs all that dial gauge and strobe nonsense these days. 'Let's hope Yamaha make friends with Mitsubishi by next year.

It's the detailing, as well as those superb power characteristics, that make the 400 so much better than its predecessors: the good value aluminium alloy cast wheels; the neat rear disc set-up with its hinge-out master cylinder under the side panel; the screw-located front master cylinder so's vibes don't spread hydraulic fluid all over or kids heap crap into your brake lines; the larger (3.6 gallon) angular fuel tank with those comfy cutaways.

But it's when you reach the switchgear that you realise



RD mill has been given the long-stroke treatment to make it the two-stroke that pulls like a four-stroke.

where Yamaha are streets ahead. I used to think Suzuki led here — despite Mr Haylock's comments — but now Yamaha are way out front with their self-cancelling indicators. Flick the switch left or right while you're on the move and you get either 10 seconds' or 164 yards' worth of flashes depending on how fast you're travelling. You want to cancel before it's done for you? Just push the button home and it cancels. Waiting at traffic lights it just keeps blinking until you move off and cover those 164 yards.

Sounds complicated, huh? Well it's all done by a little black box linked to the speedo and indicators. All resistors, bimetallic strips and that sort of jazz inside, but Mitsui assure us that *if* it fails the indicators work manually without it in place. Yet basically the idea is so simple that you wonder why no-one ever thought of it before.

And why has no-one ever fitted an oil warning light before? The RD400 has one, plus a dipstick under the lockable seat. It lights up well before disaster is near and you can just pull over and slurp a pint into the underseat filler. I mean, those sort of touches make you think that the thing was actually designed by human beings who ride motorcycles.

Okay, so far we've had the superlatives out like this is the sports page of the *Sun* and England have just won the World Cup. What makes 364 lbs of new, blue, genuine 103 mph (ye gods!) bike so exciting is its lack of adequate suspension damping and, at times,

alarming behaviour under power. No messing, that frame handles. The bike tracks perfectly through smooth curves, but bop out of a bend two-up with 6,500 rpm on the dial in second or third and UP comes the front wheel and those silly high bars wave from side to side as the wheel skips and hops over the road.

At really high touring speeds — y'all know what we mean — a strange *rocking* sensation sets in on poor surfaces which does anything but send you to sleep. Those bars obviously contribute, but it's mostly down to harsh suspension and, well, naked, unashamed power. I'd throw the bars, rider's pegs and suspension units away and fit flat bars, rear sets, friction and hydraulic steering dampers and dual-rate sprung Konis. No-one would ever get me to fit a rear carrier or panniers to this bike, because it's front-light enough under power two-up without making things really tough. And as it is, the forward-mounted passenger pegs and lack of a grab rail make pillion riding extremely hazardous at times.

The RD400 has plenty going, lots stopping for it. Most folk found the rear disc too much, but it must be hard to fault the total package for sensitivity. Lighting is just about there up front, but extra good from that Suzuki-sized rear lamp.

Yamaha's finish remains — welding excepted — pretty near top Jap quality with superb castings, Allen bolted cases, deep shine paint and chrome. And I rather grew to like the RD's lines, too.

Peter Watson

Summary

'No longer do you need a 750 for "real" biking'

MARKETING strategies of the Big Four Japanese manufacturers probably had as much to do with the creation of the 400s as any belief in special benefits that a 400 cc engine size might offer.

It's a classic technique in both the motorcycle and car fields. If a model's sales appeal is flagging, revitalise its image with a boost in cubes. The Japanese are by no means alone in using this trick: BMW's have grown over the years from 600 to 900 cc, NVT had an 850 cc Triumph Trident ready to roll before their most recent factory closures, and even Harley-Davidson's semi-mythical Sportster needed a lift from 880 to 1,000 cc to meet the musclebike competition of the seventies on even terms. It's significant that three of the 400s in this test — the Honda, the KH Kawasaki, and the Yamaha — began life as 350s.

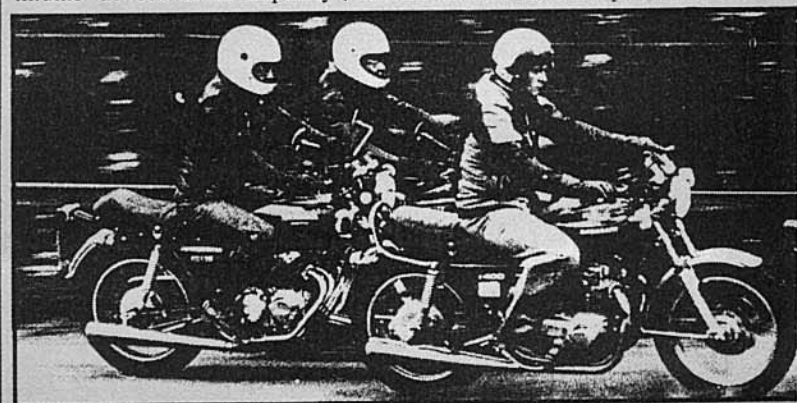
The obvious danger with this practice is that a bike can simply end up with a slightly larger engine and an inflated price tag without being a genuinely better motorcycle. This hasn't happened with the 400s. Each of them gives noticeably better performance than an equivalent 350 could offer, yet the prices remain very competitive.

One disadvantage that the 400s have incurred in Britain involves insurance. Once over the 350 cc barrier you pay premiums at unlimited capacity

rates. But generally, the 400s have evolved as one of the most exciting classes on the market today. They offer much of the speed and, in the case of the three- and four-cylinder models, much of the glitter of 750 cc powerbikes. Yet they're less intimidating to those who've just shaken off L plates or to bikers who don't require total performance. No longer does a rider have to venture up to a 750 before he feels he's finally arrived at "real" motorcycling.

Which 400 should you choose? All five are remarkably close in performance and appeal — except the Z400 Kawasaki. This one was designed as an all-functions tourer, and it succeeds. Being a four-stroke it offers superior fuel consumption than the two-strokes, yet the track tests indicated that as far as top speed is concerned the midi-Z loses little to the two-strokes and the multis.

The other bikes were remarkably similar in performance. In fact it would be foolish to judge that bike A is a better machine than Bike B simply because it tripped the lights two or three mph quicker on all-out top speed. To most intents the KH Kawasaki, the Yamaha, the Suzuki and the Honda are almost identical in speed — with the exception that the remarkable RD is almost half a second quicker



Summary

than its closest rival on the standing quarter. The difference comes from its low down torque, enabling it to move off from a standstill with less clutch slip than the other bikes.

In fact the Yamaha really has to be voted the pick of the performance-orientated 400s, and not only because of its dynamic motor. Japanese manufacturers have frequently been accused of gizmo-mania in some of their motorcycle fittings, but the Yamaha's self-cancelling indicators are a genuine step forward in safety. The biker who's never confused a motorist by inadvertently leaving his indicator flashing doesn't exist. The Yamaha's new system makes this a hazard of the past. And at £625 (£675 for the cast-wheel version) the RD is also devastatingly competitive on price.

The GT380 and the KH400 triples are beautifully smooth motorcycles stamped with an unmistakable pedigree of refinement. If the Suzuki looks a little less lean than the other 400s, it moves as well as any of them, and its combination of velvet power delivery and a compact riding position make it probably the most appealing motorway/main road cruiser.

The KH has the sophisticated brand of style that we've come to expect from almost every Kawasaki. The first Kawasaki triple, the 500 cc model of 1968, was an exercise in raw excitement. Subsequent triples have maintained that legend, with the rough edges hewn off (to the disappointment of hard-core speed freaks, it must be admitted). The 400's handling and power delivery is more predictable than the

KH500, yet it's still a dramatically fast bike, at the price of an expensive taste for fuel.

And finally, the CB400. Its list price of £745 makes it easily the most costly of the 400s, yet it represents a brilliantly engineered concept. When it was launched in 1975 it was probably the best newcomer to the British market that year. It retains its appeal now on several fronts: it's a four-stroke, and an awful lot of people are biased towards four-strokes; it's as quick as the two-strokes, yet on average road use it will give significantly better fuel consumption; its handling is noticeably better than the two-strokes; and who can dispute that it's easily the best sounding 400?

One final point should be made. At one time four-strokes were regarded as sloggers, and two-strokes as perfidious buzz-bombs. This 400 test destroys that maxim, certainly as far as middleweight machines go. Under fast cruising conditions the 400 cc two-strokes generate a less frenetic aura than the Honda and Kawasaki four-strokes. A point from the Checkout panel will illustrate this: the GT380 produces peak torque at 6,000 rpm. Both the CB400 and the Z400 deliver peak torque at 7,500 rpm. The two-strokes seemed to require fewer downward gear shifts to cope with changing road conditions, once again indicating the vast progress that's been made in two-stroke engineering.

So there we have it: five bikes and not a dull one among them. If you're in the market for a 400, it could even come down to the colour of paint you like.



Checkout



HONDA CB400

Engine	SOHC 4-cyl. 4-stroke
Bore x stroke	51 x 50 mm
Capacity	408 cc
Compression ratio	9.4:1
Carburation	4 x 20 mm Keihin
BHP at RPM	37 at 8,500
Max torque at RPM	24 ft/lbs at 7,500
Primary drive	Inverted tooth chain
Clutch	Multi-plate, wet
Gearbox	6-speed
Electrical system	156w generator battery/coil ignition
Lighting	50/35w headlight

DIMENSIONS

Wheelbase	53.5 ins
Seat height	31 ins
Ground clearance	6 ins
Kerb weight	392 lbs (with 1 gal fuel)
Fuel capacity	3.1 gals

EQUIPMENT

Trafficators	Yes
Electric starter	Yes
Trip mileometer	Yes
Steering lock	Yes
Helmet lock	Yes
Headlight flasher	Yes
Others	Lockable fuel cap

CYCLE PARTS

Tyres (front)	3.00 x 18 Bridgestone
(rear)	3.50 x 18 Bridgestone
Brakes (front)	10.5 in disc
(rear)	6.3 in sls drum

PERFORMANCE

Top speed (prone)	103.80 mph
(sitting up)	93.5 mph
Standing $\frac{1}{4}$ mile	14.68 secs
Speedometer error	
at indicated 30 mph	26.95 mph
at indicated 60 mph	57.36 mph
Fuel consumption (overall)	49.7 mpg
(ridden hard)	42 mpg
Braking distance	
From 30 mph	36 ft
From 60 mph	136 ft

PRICE	£745 inc VAT plus £6 delivery
Guarantee	12 months/unlimited mileage
Supplied by	Honda (UK) Ltd, Power Road, Chiswick, London W4 5YT.



KAWASAKI KH400

3-cyl. 2-stroke
57 x 52.3 mm
400 cc
6.5:1
3 x 26 mm Mikuni
38 at 7,000
28 ft/lbs at 6,500
Straight-cut gear
Multi-plate, wet
5-speed
CDI ignition
12v 5.5ah battery
35/35w headlight

54 ins
31.5 ins
6 ins
376 lbs (with 1 gal fuel)
3.1 gals

Yes
No
Yes
Yes
No
Yes
Lockable fuel cap, two helmet hooks

3.25 x 18 Yokohama
3.50 x 18 Yokohama
9 in disc
7 in sls drum

100.33 mph
92.02 mph
14.81 secs
30.92 mph
59.17 mph
31.2 mpg
26.3 mpg

26 ft
121 ft

£629 inc VAT, no fixed delivery
6 months/6,000 miles parts and labour
Davick Motique, 380 Boulton Lane, Allenton, Derby.



KAWASAKI Z400

SOHC 2-cyl 4-stroke
64 x 62 mm
398 cc
9.4:1
2 x 36 mm Keihin
36 at 8,500
24 ft/lbs at 7,500
Hy-Vo chain
Multi-plate, wet
5-speed
125w alternator
12v battery/coil ignition
35/35w headlight

54.5 ins
31.5 ins
5.25 ins
398 lbs (with 1 gal fuel)
3.1 gals

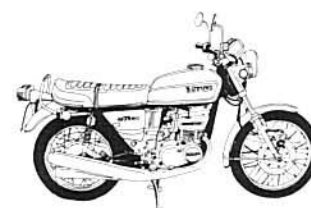
Yes
Yes
Yes
Yes
No
Yes
Lockable fuel cap, audible turn signals, two helmet hooks

3.25 x 18 Yokohama
3.50 x 18 Yokohama
11 in disc
9 in sls drum

98.68 mph
94.64 mph
15.67 secs
30.27 mph
58.37 mph
50 mpg
45 mpg

36 ft
—

£619 inc VAT, no fixed delivery
6 months/6,000 miles parts and labour
Davick Motique, 380 Boulton Lane, Allenton, Derby



SUZUKI GT380

3-cyl. 2-stroke
54 x 54 mm
371 cc
7:1
3 x 24 mm Mikuni
37 at 7,500
27.6 ft/lbs at 6,000
Helical gear
Multi-plate, wet
6-speed
alternator
battery/coil ignition
35/25w headlight

54 ins
31.5 ins
5.5 ins
400 lbs (with 1 gal fuel)
3.3 gals

Yes
No
Yes
Yes
Yes
Yes
Gear indicator

3.00 x 19 Bridgestone
3.50 x 18 Bridgestone
10.5 in disc
7.5 in sls drum

101.69 mph
95.54 mph
14.96 secs

26.95 mph
53.96 mph
43.3 mpg
35 mpg

34 ft
142 ft

£649 inc VAT plus £7.56 delivery
6 months/6,000 miles parts and labour
Heron Suzuki GB Ltd, Beddington Lane, Croydon



YAMAHA RD400

2-cyl. 2-stroke
64 x 62 mm
398 cc
6.2:1
2 x 28 mm Mikuni
40 at 7,000
30.31 ft/lbs at 6,500
Helical gear
Multi-plate, wet
6-speed
alternator
battery/coil ignition
40/30w headlight

52.5 ins
31.5 ins
7.25 ins
364 lbs (with 1 gal fuel)
3.5 gals

Yes
No
Yes
Yes
Yes
Yes
Locking fuel cap, self- cancelling indicators

3.00 x 18 Japanese Dunlop
3.50 x 18 Japanese Dunlop
10.5 in disc
10.5 in disc

103.09 mph
95.84 mph
14.29 secs

29.27 mph
57.47 mph
45 mpg
30 mpg

25 ft
144 ft

£625 inc VAT (£675 cast wheels) plus £8.10 delivery
6 months/4,000 miles parts and labour
Len Manchester Motorcycles, 17 Burton Street, Melton Mowbray, Leics.