

# INTO THE BIG TIME

Despite the obvious attractions of superbikes, most riders, once they've passed their test, look to the 400cc to 500cc class for their next machine, mainly because of the comparatively lower insurance rates. Top selling bike in that bracket is the Honda CX500 vee-twin, but the bulk of the rest are 400cc bikes.

The main appeal of 400cc machines is that they're invariably no bigger than 250cc models, yet offer much better performance. Trouble is they look like 250s, and who wants to be regarded as a learner?

The good news about 400s is that there's a wide choice. Here we feature the opposite ends of the 400cc spectrum: Suzuki's GN400T single and Kawasaki's Z400J four, respectively the cheapest and the priciest of the range.

## SUZUKI GN400T

Big singles are often described as being ideal for the enthusiast, the sort of bloke who'll find the rustic exhaust note appealing and won't be troubled by vibration and difficult starting.

Suzuki's GN400T single blows the stereotype wide open. Like the DR400 dirt bike from which its engine is derived, the GN road bike is one of the easiest singles to kick into life. Much to our surprise it was smooth, too, not just by single-cylinder standards but by modern multi criteria: at 70mph, the GN jiggled less than some fours do. Yet the bike has all the old-fashioned virtues that singles are noted for: light weight, ease of handling and miserly fuel consumption.

The most overwhelming argument in favour of considering the GN400T as a successor to a 250 is its price. At £795 including VAT, the GN is cheaper than some 250cc singles and around £100 less than the most popular 250cc twin.



## KAWASAKI Z400J SUZUKI GN400T

Once you've passed your test, the next step is to get a bigger bike.

These two 400cc bikes are at the two ends of their class, the cheapest being the Suzuki GN400T single and the most expensive the Kawasaki Z400 four.

Tests by John Nutting. Photography by John Perkins.

## INTO THE **BIG TIME**

But don't get the idea that the GN400T is any less of a motorcycle just because it's cheap to buy. True, its flat out top speed is nothing to get excited about – most of the better 250s'll give the GN a run for its money – but there's more to performance than top speed. The GN can cruise all day at the legal limit and you won't need to hack up and down through the gearbox to do it, either. Crack the throttle at low revs and you'll be rewarded with useful response. The combination of easy handling and broad tractability up to 50mph made the GN the ideal machine for urban riding or commuting.

Power plant is essentially the overhead-camshaft short-stroke (88 x 65.2mm) unit of the DR and SP400 trail bikes, allied to a five-speed gearbox that owes its tall appearance to the use of wet-sump lubrication (unlike the SR500 Yamaha that uses the frame spine as the oil tank). The overhead camshaft has chain drive that needs adjusting every 3,000 miles but the ignition is Suzuki's pointless electronic system that needs no regular attention.

To help kick-start the engine, there's an exhaust valve lifter which has a ratchet mechanism. When you fire up the bike it's best to position the crankshaft just after top dead centre – then you won't try and swing the piston through the compression stroke. To enable you to find the right position, you press the kick lever down until you find resistance from the piston reaching TDC (top dead centre) and then you pull the valve lever under the left grip on the handlebar. Since the exhaust valve is now open you can turn the engine past TDC and when the correct position for starting is reached, the valve-lifting lever snaps back. Now all you need to do is switch on the ignition, pull the choke knob on the carb if the motor's cold, and give a hearty swing. The motor fires up first kick practically every time. It's a process that takes longer to describe than to carry out and becomes second nature after a while.

The major departure in the specification of the GN from the SP and DR models is the use of a 36mm constant-

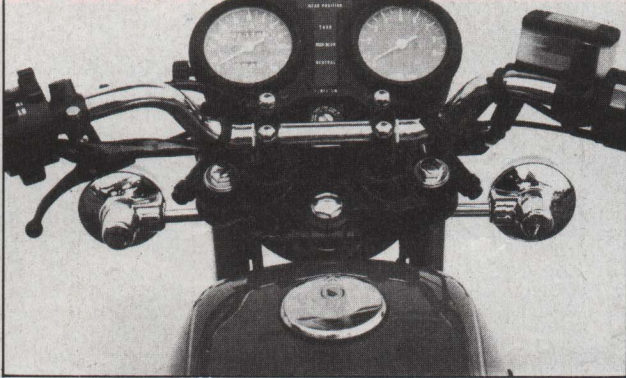
*...the Kawasaki is fun to ride in a concentrated and aggressive fashion...*



*...easy handling and broad tractability make the GN the ideal machine for urban riding or commuting...*



Though it's an economy model you still get full instrumentation and a locking petrol cap.



The decompressor lever helps starting.

To keep the economy Suzuki from using the tank and seat from the 250.



Because the bike is light, the GN handles fairly easily. But the suspension is crude by modern standards. The rear end is soft and underdamped and the front fork has too much stiction, affecting the ride.

The most significant feature of the machine is its slow steering. The geometry (60½degrees of rake and 4.06 inches of trail) reflects the models American custom cousins, meaning that at low speeds the steering is much heavier than it should be. Riding solo, cornering clearance is adequate but, with a passenger, the softness of the rear end allows the exhaust pipe on the right hand side to dig in too easily. By the way, the GN should have a passenger grab rail around the rear of the seat — our test bike was without one.

Naturally, because of the GN 400T's low price, cost cutting abounds, particularly

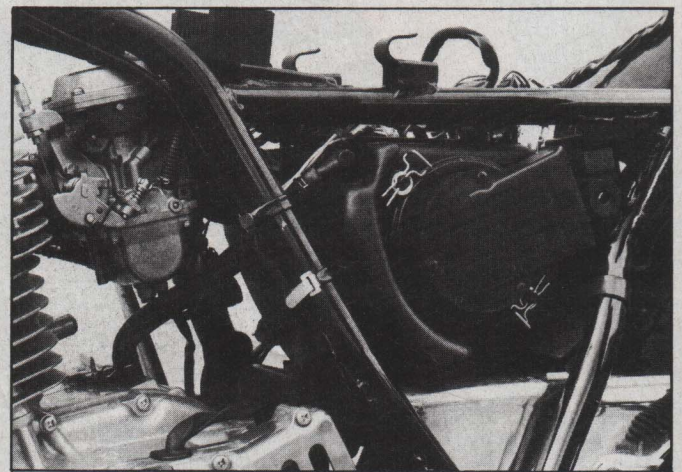
vacuum Mikuni carburettor. While offering more precise metering, this carburettor prevents the rider from stalling the engine through too much throttle, since the vacuum piston connected to the slide only allows the engine as much air as it wants.

Another bonus from the carb is that it boosts the

maximum claimed power from 27 to 27.6 bhp at 7,200 rpm — the eagle-eyed among you will note this is about the same as a CB250N Honda or a Kawasaki Z250 twin, but at much lower revs.

So top speed is about the same as the average 250. We saw 88mph, suggesting that the gearing is about right, since 7,200rpm in top gear equates to 85mph. Acceleration is brisk as the bike weighs only 311lb dry, but there's no need to buzz the engine to the 8,000rpm red line: rumbling to 4,500rpm is more than enough most of the time.

We've already said the bike's very smooth for a single; there's a band of torque pulsing at about 3,500 rpm, but this is hardly annoying. Both handlebar and footrests are rubber-mounted and vibration levels are about the same as for a Honda twin. In other words, pretty low. And, despite an average sort of



Air filter is neat with easy access.

riding position, it makes the GN400T fairly comfortable for riding over long distances.

Not that you should worry unduly about travelling very far before stopping because the fuel tank range is barely 140 miles on the main tap. Overall consumption worked out at between 57 and 63mpg, which is less than we'd have expected, and the tank only holds 2½gallons.

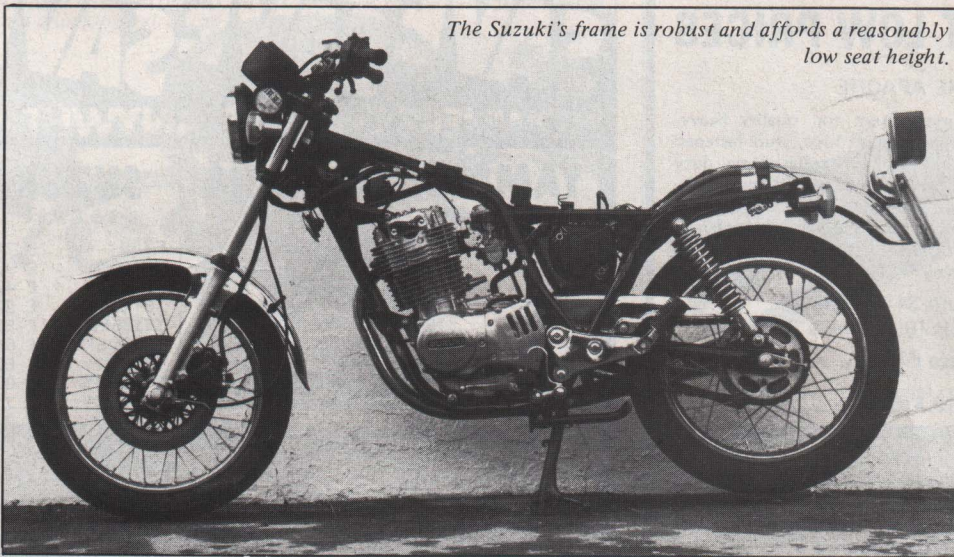
in the use of wire spoke wheels and the same seat and tank as the GS250T twin. Braking, as usual on the 1980 Suzukis, is excellent — disc front and drum rear.

There's no excuse for the abysmal standard of the electrics, however. The 6 volt 35 watt headlamp is fed directly from the flywheel generator, as on the DR400, and illumination is well below



The CV Mikuni carb improves performance all round.

*The Suzuki's frame is robust and affords a reasonably low seat height.*



par. The turn signals are supplied by a small 4amp/hour battery and the horn can be barely heard above the engine, which is fairly quiet for a plonker. A little money spent on the generator and a larger battery would have brought the electrics to an acceptable level of performance. As it is, they're a blot on an otherwise fairly clean sheet for the Suzuki.

Still, if you rarely ride outside town at night, or you're a dab hand with wiring, you might nevertheless find that the GN400T offers fantastic value.

## KAWASAKI Z400J

When the Kawasaki Z400 four was first shown at the launch of the 1980 range, the reaction of both press and dealers was to ask why Kawasaki Motors UK had bothered to bring the machine to Britain at all. In Japan and France, where easily obtainable licences for under-400cc machines has provoked hot competition in the class, the choice of a 400cc four makes sense. But in Britain, Kawasaki has the class well covered by its twins and the visually — identical, but more powerful, Z550 that costs only £230 more.

Kawasaki have nevertheless persevered to the extent that the Z400 four has carved some sort of niche for itself in the market; after all, it's the smallest and cheapest four-cylinder Japanese machine on the market. No doubt the factory hoped that the Z400 would have taken up where the defunct Honda CB400F left off.

In many riders' eyes that may be so. Yet the Kawasaki only has its capacity and four 44 February Which Bike?

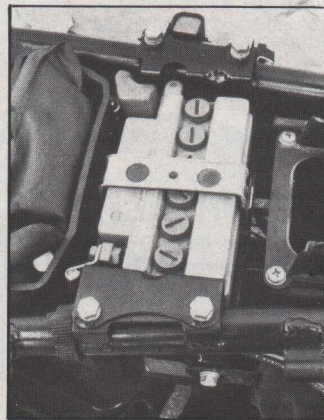
pots in common with the Honda. Like the undersized British 350 singles (based on 500s) of the Fifties heydays, the Z400 four has the weight and size of the Z500 four to haul around, and its performance suffers. So for all its double-overhead camshafts and six-speed transmission, the Z400 four is neither the fastest of the class nor the quickest through the quarter mile, and that's against much simpler twin-cylinder bikes.

Which is not to say the Z400 four hasn't got anything going for it. Everything that makes the Z550 such a fine-handling motorcycle also imparts upon the Z400 four a degree of stability and tautness that's uncommon for other 400cc machines. It's also a physically-larger bike, offering greater luggage and load capacity than other contemporary machines.

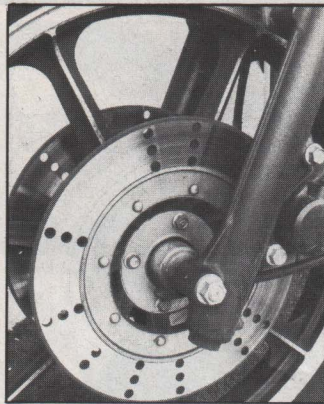
The chassis isn't too long, though, and, with a wheelbase of just under 55in, combined with a 64 degree steering head angle and 3.9in of front wheel trail, the Z400 four is nimble, either in traffic or on country bends. This is despite the soft suspension. Although the front fork, for example, has long travel, it uses leading-axle sliders which tend to stiffen the structure of the fork by enabling more slider-to-stanchion overlap. The rear shocks, too, provide good damping and free the bike from wallowing in bumpy corners.

The high quality of the chassis extends to the wheels and brakes. Seven-spoke cast-alloy wheels shod with Dunlop Gold Seal tyres (3.25H19 front and 3.75H18 rear) are more than grippy enough. Mounted to the front wheel are a pair of 10.75-

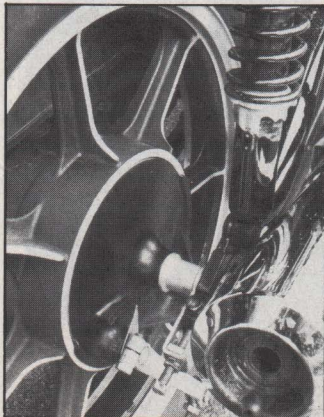
in discs with Kawasaki's sintered-alloy pads that could be argued as being far too powerful for the performance of the bike. But they've got feel and complement the rear drum-brake well.



*Battery is very accessible.*



*Twin discs and rear drum are almost too much.*

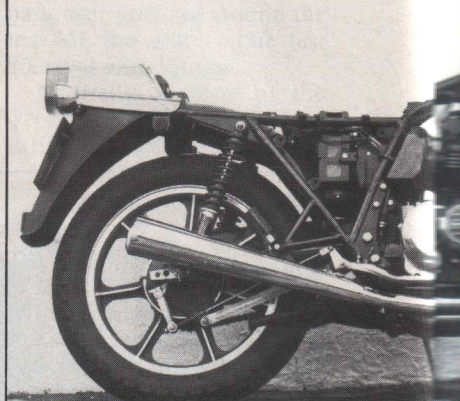


Provided you're prepared to work at it, the Kawasaki can give a pretty scintillating impression of high performance. The engine has to be revved hard and kept spinning between 7,000rpm and the 10,000rpm red line for the best throttle response, but the crisp gearbox helps the rider to keep it on the boil. Claimed maximum power is 43bhp at 9,500rpm, or about six horses more than that claimed by Honda for their CB400F four. But absolute top speed and acceleration are about the same as for the Honda because the Kawasaki's dry weight is 428lb — or about 50lb more.

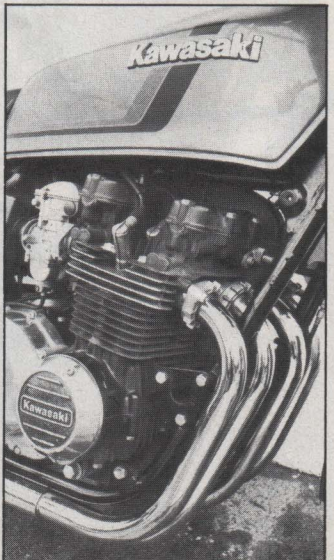
Overall performance of the Kawasaki might have been better had the designers opted for a wider power band. But it's more than likely they were lured by the glamour of peak power figures, even though this might be at the expense of flexibility.

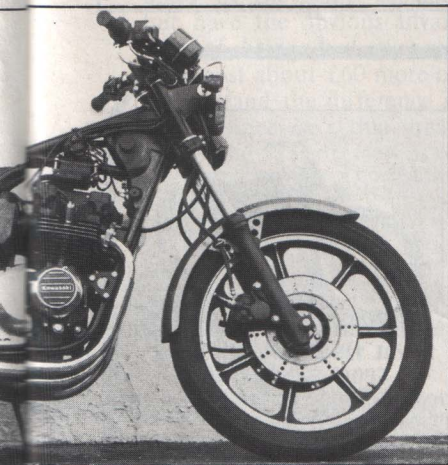
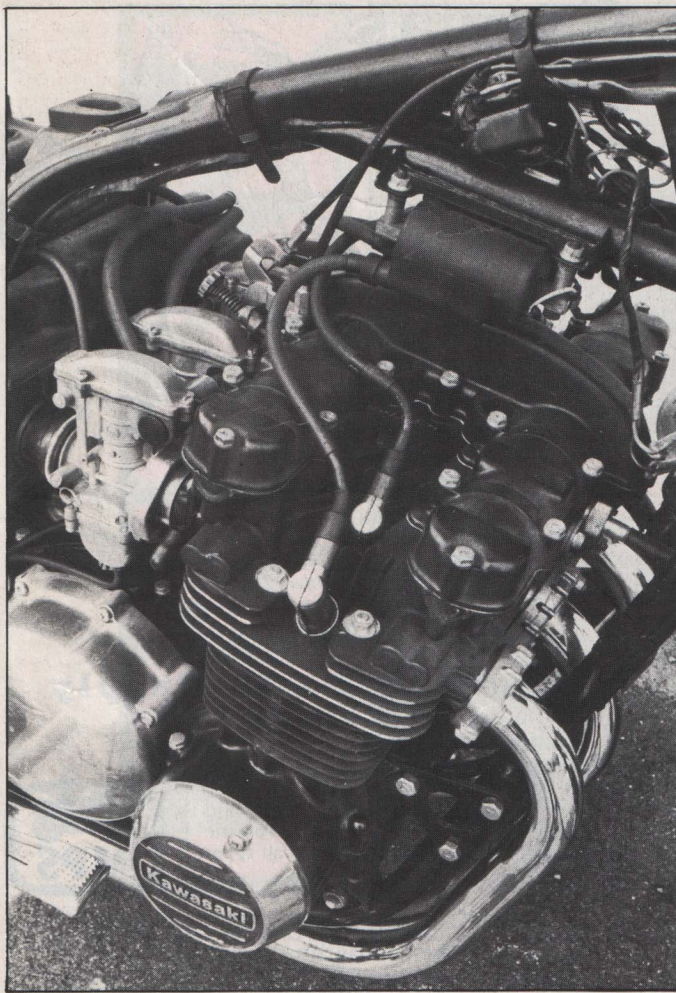
Not that it does the Z400 four much good. Top speed is about 104mph on the flat, or just over peak power revs in top gear. Using

*Chassis is more than tough enough for 400cc.*



*This is now the smallest Jap four cylinder available.*





10,000rpm through the gears gives acceleration of 14.8 seconds for the quarter mile which puts the bike behind much of the opposition, but ahead of Kawasaki's Z440 twin.

If the performance is wanting it's not because of any lack in the engine specification. Like the 550cc four, it uses double overhead cams driven by an inverted-tooth chain from the middle of the crankshaft and the valves are opened by bucket followers with adjustment shims under the buckets, a feature that, while ensuring valve gear security at five-figure revs, makes the adjustment procedure time-consuming. Reduction of the engine's

capacity to 398cc is achieved by cutting both bore and stroke to 52mm by 47mm, while carburation is through a quartet of 21mm bore TK carburetors. Starting, as always, is by an electric motor spinning the engine via the countershaft behind the crank that takes the drive to the clutch gears. Ignition, surprisingly, is by conventional contact breakers and coils running from the 12volt, 12amp/hour battery.

If, by now, you're wondering if it's difficult to justify the Z400, you're right. And it becomes more so when the bike is ridden in conditions that prevent the exploitation of the engine's heady powerband. If the bike is used in town or for less than head-down rushing about, it's frustrating at best. There's little torque below 6,000rpm and the engine baulks at anything over three-quarter throttle below 3,000rpm.

Like some peaky two-stroke twins, the Kawasaki is fun to ride in a concentrated and aggressive fashion. It'll hold 70 to 80mph cruising speeds but you've got to keep working at the throttle to do so. At lower speeds you'll be juggling with the gears to hold a constant cruising gait, which might be

more acceptable if the engine were smoother. A four as small as 398cc should be all but vibrationless, but the Z400 exhibited a high-frequency buzz at high revs that was unfortunately worse around 65mph in top gear.

Neither was the bike particularly economical to run. Our overall fuel consumption figure of 49mpg is no better than you'd get from the 550cc Kawasaki, giving the bike a range of about 160 miles on the 3.3 gallon fuel tank. You'll normally get about 140 miles before going onto reserve.

The Z400 four comes equipped with all the usual big-bike features including a precisely-focussed, if rather

underpowered, 45-watt headlamp. It doesn't boast the air-assisted front fork or the adjustable rear dampers of the latest Z550. Or the better paint job: the Z400 is decidedly dull in its gunmetal grey paintwork set off by red trim. Unusually, though, it does have a rear brake light repeater in the rev meter face that, presumably, is supposed to tell you (when it's not winking on all the time) that the brake light has failed.

If you want the maximum bike for minimum outlay, the Z400J is worth considering, particularly as you can get them discounted as low as £899 along with a cheap insurance deal.

	SUZUKI GN400T	KAWASAKI Z400J
<b>Price inc. VAT:</b>	£795	£1,149
<b>Warranty:</b>	6 mnths/10,000 miles	12 mnths/unlimited
<b>Engine:</b>	Ohc single	Dohc four
<b>Capacity:</b>	396cc (88x65.2mm)	399cc (52x47mm)
<b>Lubrication:</b>	Wet sump	Wet sump
<b>Comp. ratio:</b>	9.5 to 1	9.2 to 1
<b>Carburation:</b>	36mm Mikuni CV	Four 21mm TK
<b>Ignition:</b>	Capacitor discharge	Coil and cbs
<b>Max. power:</b>	27.6bhp @ 7,200rpm	43bhp @ 9,500rpm
<b>Max. torque:</b>	na	25.3lb-ft @ 7,500rpm
<b>Primary drive:</b>	Gear	Hy-vo chain & gear
<b>Clutch:</b>	Wet multiplate	Wet multiplate
<b>Gearbox:</b>	Five-speed	Six-speed
<b>Final drive:</b>	520 chain	530 sealed chain
<b>Mph/1,000rpm:</b>	11.9 in top	10.8 in top
<b>Fuel capacity:</b>	2.5 gal inc. 0.3 gal res.	3.3 gal
<b>Electrics:</b>	6v 4ah battery Flywheel magneto	12v 12ah battery 3-ph alternator
<b>Frame:</b>	35/35w headlamp	45/40w headlamp
<b>Suspension:</b>	Single downtube Telescopic fork (f) Swing arm with five-pos. spring preload adj (r)	Duplex cradle Leading axle telescopic fork (f) Swing arm with five-pos. spring preload adj. (r)
<b>Brakes:</b>	10.75in disc (r) 6.3in drum (r)	Dual 10.75in discs (f) 7.1in drum (r)
<b>Tyres:</b>	Bridgestone Mag-Mag-Mopus 3.00S18 L303(f) 3.50S18 S714(r)	Dunlop Gold Seal 3.25H19 F7(f) 3.75H18 K81(r)
<b>DIMENSIONS:</b>		
<b>Wheelbase:</b>	55.2in	54.9in
<b>Seat height:</b>	31.5in	32.0in
<b>H'bar width:</b>	28.5in	28.0in
<b>Grnd clmce:</b>	7.25in	6.5in
<b>Rake/trail:</b>	60½deg/4.06in	64deg/3.9in
<b>Dry weight:</b>	311lb	428lb
<b>EQUIPMENT:</b>		
	Mirrors, turn signals, speedo rev counter, trip meter, gear indicator, fuel cap lock, steering lock, toolkit, helmet lock	Electric starter, turn signals, mirrors, rev counter, speedo, brake light repeater, trip meter, steering lock, helmet lock, toolkit, fuel cap lock.
<b>PERFORMANCE:</b>		
<b>Top speed:</b>	88mph	104mph
<b>Speeds in gears at max. power revs:</b>	30mph, 41mph, 54mph; 70mph and 85mph	34mph, 49mph, 63mph, 78mph, 91mph and 102mph.
<b>St. ¼-mile:</b>	16.5sec	14.8sec
<b>0-to-60mph:</b>	7.5sec	6.0sec
<b>Actual speed at ind. 60mph:</b>	na	na
<b>Av. fuel consumption:</b>	59mpg	49mpg
<b>Tank range:</b>	140-160 miles	150-170 miles
<b>Importer/Manufacturer:</b>	Heron-Suzuki GB Ltd, 87 Beddington Lane, Croydon, Surrey.	Kawasaki Motor UK Ltd, 748 Deal Ave, Trading Estate, Slough, Bucks.