

## Kawasaki's potent 250-3 S1 C

BEFORE the superbike generation, two-fifties enjoyed the limelight as quick, reliable, adequate. Then came the oil crisis. Overnight, big bikes fell out of favour and world markets shuddered as petrol prices rose and boffins predicted definite supplies from a well thought bottomless. Uncompromising pressures forced the pendulum back, car sales dwindled and economy became the password.

The effect of recent events has been to extend the appeal of light, powered two-wheelers as many people, compelled to retrench, struggle to keep mobile somehow. The trade has watched the emphasis move from big-capacity machines to smaller types, and dealers report a boom for cheap and simple mopeds, which are selling as rarely before.

The enthusiast, however, holds out. Hemmed in by speed limits on all sides and strangled financially, but still wanting some performance, a slice of excitement. What to buy? Anyone who wonders may find the answer soon becomes obvious: the two-fifty is back.

If all this reads like a copywriter's blurb, our apologies, but we have been riding a perfect excuse, the Kawasaki S1 C. It is not a faultless motorcycle but if our senses do not mislead, it is a stimulating and very enjoyable one. That may not be surprising because it was sired by the Mach III and shares some of its deceptive qualities.

It is deceptive for a two-fifty on several counts, first in appearance. Viewed from any angle, it is bigger and more imposing than most other two-fifties and dwarfs some. Everything about it is expensive and done on the grand scale, whether one regards the size of the binnacles or the width of the rear tyre; and for its capacity class, it looks plenty. The impression grows on longer acquaintance. Whether wheeling it about the garage or using it, the rider is made aware that it is substantial, and on a weighbridge the S1 C, with a full complement of tools, mirrors and petrol and oil tanks full, clocked 387 lb.

Closer examination shows why. The headstem of the duplex tube cradle frame is lavishly gusseted, there is plenty of meat in the swinging arm, and there is invariably three of everything! The exhaust system is well tucked up, but there can be no disguising the amount of metal in it. The theme is continued in the strong front fork and mudguard. Battery and under-seat oil-tank hide behind push-on covers and these with many other similar touches of refinement, contribute bulk.

Controls and switchgear, in keeping with Japan's reputation for excellent electrics, appear made to last and the S1 C would generally seem to be, from our time with it, a sound proposition. The hint of caution is because we did not have it for quite as long as we would have wished.

A three-cylinder two-stroke can be expected to be potent and rapid, and this one

was. Agile off the mark, the S1 C leapt up to 70 m.p.h. which it held happily, but a flaw showed on shutting down after a 30-mile motorway run at high speed. The plug in the middle pot whiskered and this surprised us because the Japanese reckon to have long since mastered the two-stroke engine. That and a dud rear light were the only troubles during the test.

Other points noted were that the plugs fitted were Champion L77J, which may account for the bother, and there were three Champion "spares" in a container near the toolkit. When extracting the plug from the middle cylinder, it was all but impossible, using the Kawasaki box spanner provided, to avoid scratching the underside of the petrol tank.

The 15-piece toolkit included several



*Slim-line forks, narrow tank, wide crankcase. . .*

multi-purpose items and looked well made and reliable. Tools were provided for removing both wheels and adjusting the drive chain and altering footrest positions by means of serrations, a welcome touch these days when too many manufacturers have a like-it-or-lump-it outlook.

The writer is very much a two-stroke enthusiast but nevertheless was unable to

feel completely at ease with the power and suspension characteristics. With a lightning response from the throttle, progress in towns became a series of stop-start surges and another distraction was a transmission "whistle", piercing at 45 m.p.h.

Riding position is big. In the modern fashion, all footrests can be flipped up, but this inherent lack of rigidity magnifies the effect of high-frequency vibration approaching maximum speeds in the gears and black-mails the pilot into using less performance. Driving mirrors, mounted at least thirteen inches from the handlebar clamps, were next to useless.

When starting from cold, throttle setting was critical and the handlebar-mounted choke lever had to be closed fully. Re-starting with a hot engine was instant, one kick sufficing.

We blame the Americans for presenting riders in this country with a *fait accompli* in handlebars. Why must the British market suffer the taste of US buyers? The 'bars on the test machine resembled stag's antlers and were an aching thirty inches wide. With apologies to the suppliers, we substituted a lower and flatter pattern seven inches narrower and were then able to concentrate on assessing the bike's qualities.

Kawasaki must know all about the tingling from this power unit at high revs. and try to reduce the nuisance by using four widely-spaced engine bolts. Peering at the bike from all sides, we also noted that they have run an overflow pipe from the oil tank to, hopefully, feed the chain, but from our observations little, if anything, came through. Since the rear is pretty much boxed in anyway, why don't they fit full chain enclosure?

Great strides have been made in technology in the space age yet still motorcycle makers persist, one might say wilfully, in turning a blind eye to improvements they could so easily make. If the buying public united in a concerted effort . . . but riders never will and manufacturers know they can go on getting away with glaring omissions.

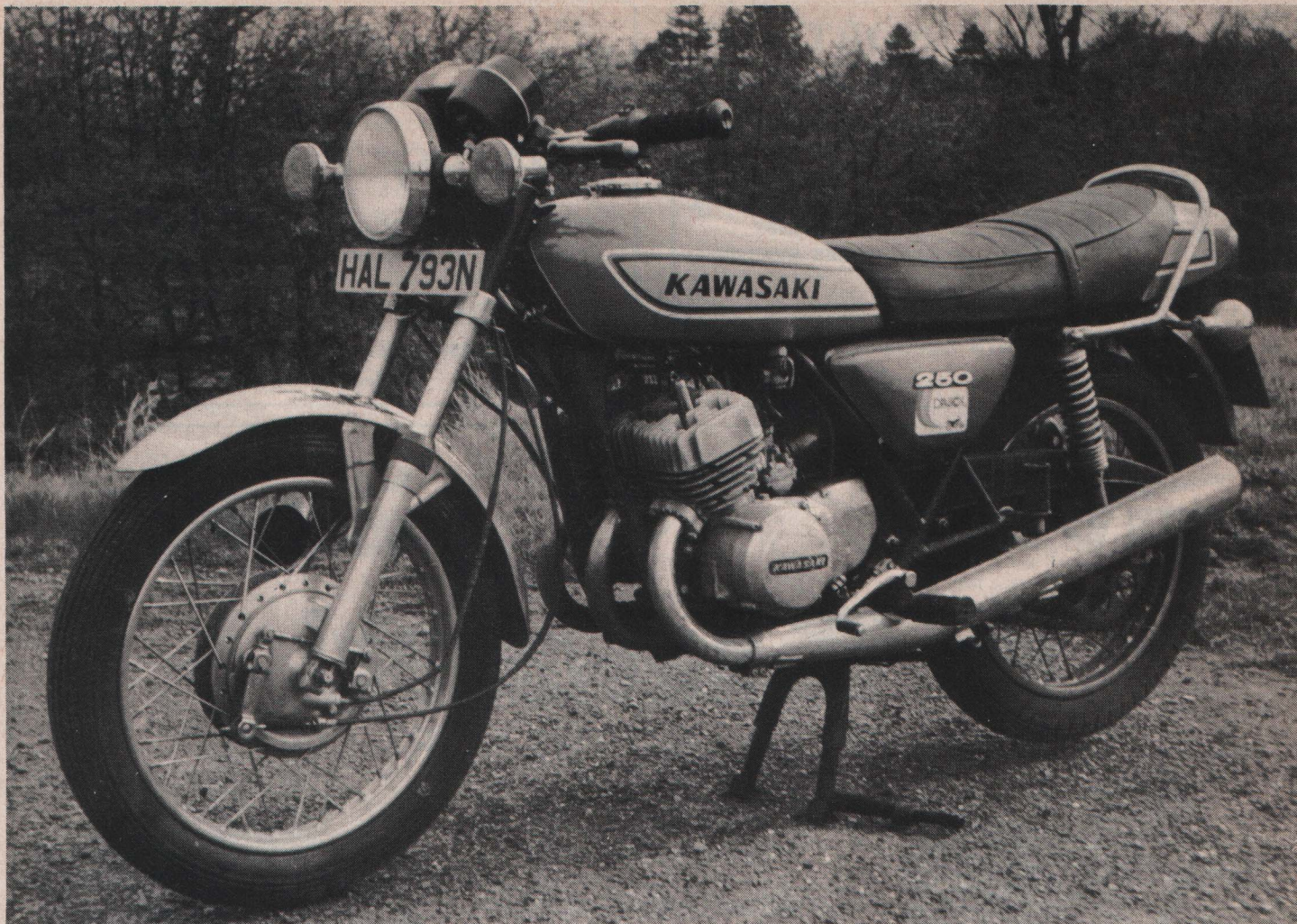
\* \* \*

Experience of the 250's big brothers led us to think its roadholding, handling and steering might be doubtful, but what a surprise they produced. With no danger of anything touching down in zestful cornering, it was re-assuring in all three respects. Lineholding never wavered, even in sharp S-bends, and hard suspension gave good warning of tyre grip. Only the merest suggestion of heaviness in the steering in traffic cut the marks awarded here to nine out of ten. Otherwise, we had no complaints. On thoroughly wet and greasy roads, the Yokohama "nylons" behaved very well.

The feel of the engine was deceptive. Several times during our first few days with the Kawasaki, we found ourselves trying for a gear beyond fifth because the motor seemed too "busy" in top (7.31 to 1). Gearbox/clutch operation was superb.

Forewarned, we found too that acceleration was astonishing while the unit was cold, and it was only slightly less remarkable when thoroughly warm. The 250 power curve, modified since the early versions, is not so sudden now but it still demands attention as the rev-counter needle nears





6,000, for if kept wound on the power comes in strongly without hesitation.

Anyone under 11 stone would probably prefer a front fork of softer action, though it suited us admirably and contributed to the firm roadholding. In contrast, the rear spring units were so unobtrusive as to excite little comment, the highest praise. They achieved the ideal compromise between the too-harsh and too-supple.

Most of the performance could be used after dark, thanks to excellent lights. The headlight main beam carried a long way, the only grumble being that we had to set the brake lamp switch permanently on when the back light failed. The intensity of the headlamp was appreciated on the blackest of nights.

With so many flick-type controls to use . . . turn indicators, horn, headlight flasher, choke control, lights High and Low . . . it was pleasant to find everything worked efficiently. Even with thick gloves, the rider could be sure, from the feel of the switchgear, there would be no embarrassing overshooting. And the horn note gave clear and unmistakable warning to other road users.

A deep-rooted distrust of side-stands prompted full use of the centre stand and we were glad of the chrome grab handle behind the seat when hauling the portly Kawasaki up on to it.

Night riding was blessed with easily-read dials—reflected glare was virtually non-

*The Kawasaki 3 is bigger, more imposing than many 250s*

existent and the worst weather, soaking everything, still left thumb-operated switches manageable. In these conditions, the bright lights of the turn indicators were much appreciated. Neutral, with a green facia light for confirmation, was always found with no fuss.

Kawasaki have toned down the styling treatment at the rear of their machines and we found the tail section acceptable, even attractive, after being initially in two minds about it. The current penchant for putting less important items—oil filler, battery, tools, etcetera under a lockable seat—lent a clean-cut line to the machine when viewed in profile.

Few other nations of motorcycle engineers approach the Japanese for careful attention to detail. The SI C had the now-customary cable guides and loops, plus brake lining wear indicators, tiny tabs on the rubber shrouds on the carburetors, two helmet hooks, adjustable brake pedal and gear lever—and drain holes to stop the rubber binacles from getting waterlogged. It was apparent that the left and right foot pedal positions were inter-changeable. The tachometer drive cable had a metal sleeve for a good third of its length, to keep it off hot engine castings/cylinder fins.

The exhaust noise level, at tick-over and

town speeds was deceiving—to the rider. We thought it quite enough but bystanders said it was reasonable, inoffensive. Incidentally, the idling speed on a closed throttle was a steady 1,600 r.p.m., perhaps faster than necessary.

General running and 30-limit work demonstrated that this 250 is a very sweet-running machine, notwithstanding our comments elsewhere on the rather jerky power delivery in stop-go-stop situations . . . and particularly in this respect, first gear was well-chosen being neither too high nor too low. Top gear flexibility was first-class.

Nothing fell off nor shook loose and at the conclusion of the test, a film of dust and some mud clogged beneath the engine were the only signs that it had worked hard and faithfully. Oil stains occurred about the final drive sprocket, where lubricant had flung against the housing and dribbled onto the main stand and smeared one side of the rear fork, rim and number plate.

As the gearing selected kept the needles of speedometer and tachometer in step as they moved round their respective dials, we think Kawasaki are optimistic in claiming top speed as 90 m.p.h. . . . because 8,500 revs on one clock produced 85 m.p.h. on the other, and the redline occurs at 8½. Allowing for speedo error, and keeping to this gearing, it therefore seems reasonable to suppose the 250 wouldn't do much over 84 true—but we plead guilty to the obvious



## KAWASAKI 250-3

charge because we had no opportunity to find out just what max. is.

The gear ratios felt appropriate for the engine with one exception . . . top (fifth) seemed just a shade too low during motorway runs; maybe another tooth on the f.d. sprocket would have been better, but then it would have made first less than ideal. The clutch, on further reflection, would benefit from a mite more "feel", for at times, it seemed to be very much a case of either in or out.

One realises just how thoughtful the thorough people at Kawasaki have been on filling the petrol tank to the brim: the snap-action cap (on this machine, not lockable) did not leak a drop and the tank itself was flexibly insulated, setting on rubber, from all vibrations.

### Miles per gallon

A subdued throttle hand, keeping revs below 6,000, and using no more than moderate acceleration, helped to return 56-57 m.p.g. Spirited riding halved the figure! The comprehensive engine lubrication system never gave less than 190 miles to the pint—not bad, bearing in mind it protects a very buzzy motor.

Braking disappointed. The 21s front brake was hard pressed when asked to stop the bike suddenly and quickly from high speed; but it was a comfort to know that, unlike some discs, it would work very well in rain. The rear brake, controlled by a heavy cable, was good and in part compensated for the other's deficiencies.

On the whole, the Kawasaki S1 C is an attractive proposition. Good economy can be achieved, given a patient throttle hand, but then who would buy such a package if not for the scintillating engine performance? Its weight and power graphs are likely to make it costlier to keep in tyres, brake linings and chains, than some other rivals. But we don't doubt that it will be welcomed by many, particularly the sporting motorcyclist who wants something different, with a dash of fire. We liked it a lot.

To Mike Volans, managing director of Davick Motique, go our thanks for the loan of the bike. Apart from a dry and squeaky rear chain, the S1C was supplied well set-up and special thanks are due to Davick mechanic Gary Ecclestone, who took some trouble to synchronize, perfectly, the action of the carburettors, after the settling-in period.

V.W.

### Kawasaki 250 S1 C specifications:\*

Three-cylinder two-stroke, bore and stroke 45 x 52.3 mm. Compression ratio 7.5:1. Maximum claimed horsepower: 28 at 7,000 r.p.m.

**Carburettors:** Mikuni VM22SC, with air cleaner.

**Engine lubrication:** Superlube oil injection pump.

**Starting:** kick. Ignition: battery and coil. Timing: 23 degrees BTDC. Spark plugs: NGK B-7HCS.

**Gearbox:** built-in unit with engine, constant-mesh/five speed. Primary reduction ratio: 60/27. Final: 48/14. Overall top gear ratio: 7.31. Internal gearbox reductions: 1st, 2.86; 2nd, 1.79; 3rd, 1.35; 4th, 1.12; 5th, 0.96. Clutch: multiple disc, wet plate type running in oil. Transmission oil. SAE 10W30 or 10W40; capacity of gearbox: 1.16 US quart. Final drive by heavy-duty chain.

**Price:** including delivery charge, number plates, road tax and VAT, £619.

**Electrical equipment:** Kokusan AR2101 generator, 5.3A, 12V minimum output at 1,500 r.p.m. Headlamp: sealed beam 12V 32/25W. Tail/brake lamps: 12V 5/21W. Speedometer, tachometer, neutral lamps: all 12V 3W. High beam indicator lamp: 12V 1.5W. Turn signal lamps (four): 12V 21W. City lamp: 12V 4W.

**Frame:** double cradle tubular type construction.

**Suspension:** Kawasaki telescopic front fork, stroke 4.3 inches. Rear: swinging arm controlled by hydraulically-damped spring units, stroke 2.8 inches. Front fork oil capacity (each leg): 210 c.c. SAE 10W.

**Wheels:** fitted with 3.00 x 18 PR front ribbed tyre and 3.25 x 18 4 PR rear studded tyre. **Brakes:** both 7.1in internal diameter x 1.2in wide, front 21s, rear 1 leading/1 trailing shoe.

**Dimensions:** overall length 80.9in. Width: 29.9in. Height: 40.7in. Wheelbase 54.1in. Ground clearance: 5.9in.

**Capacities:** petrol tank: 3.7 US gallons. Superlube oil tank: 1.16 US quarts (use two-stroke oil only, such as Shell 2T etc.).

**Dry Weight:** 339 lbs. (see text).

**Performance** (vide manufacturer's master manual):

**Max. speed:** 90 m.p.h. (144 k.p.h.).

**Fuel consumption:** 83 miles per US gallon at steady 25 m.p.h. Climbing ability: 40 degree gradients.

**Braking:** from 30 m.p.h., 39 feet. Minimum turning circle: 82.5in. Standing start quarter mile: 15.3 secs.

\*Data quoted verbatim from the official Kawasaki workshop manual (incidentally, an excellent "book"), available by post from Davick Motique, Service Department, Northfield Avenue, Sawley, Long Eaton, Notts., at £2.25 post paid.

# And then we went on to test more Kawasakis . . .

OVER THE PAST few months we have been using a variety of smaller Kawasakis. A mere 35 c.c. covers the three; the differences in character are much greater.

### Kawasaki 90 MC1

Is it a bike? Is it a toy? Is it meant for serious cross-country riding? Even Kawasaki themselves do not really know how to describe the bike, the term "Fun Bike" being an everything and nothing phrase. At any rate, it was a far more practical motorcycle than its looks suggested.

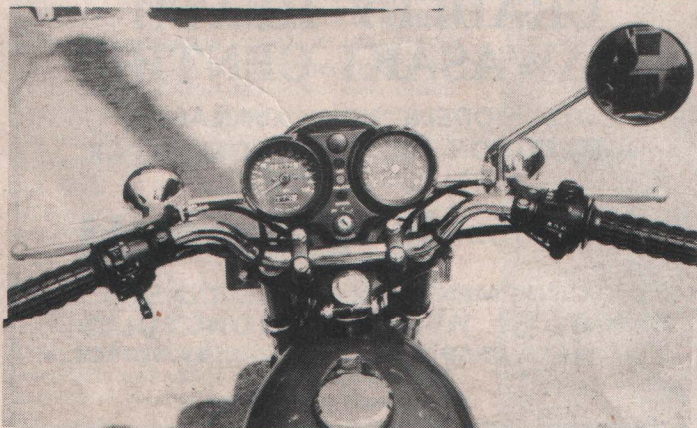
In concept it is a dual-purpose bike. It has an upswept, and far too noisy, exhaust system, upswept, braced handlebars, single, but ample seat and what passes for semi-sporting tyres. By Nitto, they were not deep enough to be any assistance on the rough but on the road they tended to drift even in the dry and they were the one unpleasant part of the machine. The sump is protected by a plate but the 6.3in. ground clearance suggests that the bike is not really intended to be used on anything but the mildest going. Particularly neat are the rubber covers on the clutch, front-brake levers and the flexible plastic mudguards which should survive tangles with trees and bushes.

"Isn't it small!" was the reaction of almost everyone who saw it. Indeed with an overall length of only 68in it is small. Fourteen-inch rear wheel and 16in front give the bike an ultra-low look. Even a medium-sized rider would view the prospect of riding it with some apprehension for the feeling is that one would look like an elephant on a peanut. Perhaps one does, but from the riding seat there is no feeling of being on a small bike. The eye level is not noticeably lower than on other bikes, there is enough knee room, but only just, the riding position is reasonably comfortable, although I found that initially the tops of my legs ached from the unaccustomed angle. In whole it felt just like most other commuter bikes of a like capacity. Where it was better was in its performance. Top speed was 55 m.p.h. and it would cruise at only slightly less for miles, surprising drivers of family cars.

One aspect of the gearbox that I was less enthusiastic about was its neutral-below-bottom arrangement. I'm a great one for keeping going until I run out of gears and after a sequence of rapid downward changes it was easy to finish in neutral instead of bottom. On the other hand, my wife, whose own bike has the same system, swears by it and at gearboxes with difficult-to-find neutrals between first and second. Obviously it is a matter of taste.

Performance was really quite remarkable and a bout of determined accelerating would have the front wheel aviating. A relatively high performance lightweight also needs good brakes and the MC1 has these. Although only having 4in drums, they really stop the bike, strangely without showing up the skittishness of the rear tyre too much.

The bike was a curious mixture of the elaborate and the ordinary. The light switches were very good plastic units that were precise and easy to use yet the ignition key holder was mounted on a bracket alongside the speedometer, a feature that it shares



Control layout of the 250 Kawasaki is impeccable, as regards switches, warning lights, and so on