

# THE X FACTOR

*This year you'll find Kawasaki's 250 four-stroke single in two of their off-road models as well as a road machine. The much revised KL250 trail bike and feisty-looking enduro style KLX250 employ the same power plant. Testers: Peter Furlong and Peter Watson*

## **Kawasaki KLX250A**

An interesting motorcycle this, and one which results from an unusual change in Japanese methodology. Instead of starting with a clean sheet of paper and creating a new model from the ground up to fill a particular gap in the market — a technique made feasible by the huge production volume of most Jap

models — Kawasaki have produced the KLX 250 from a judicious blend of existing components from very different model ranges. This is a bold move, with obvious cost-cutting advantages to the manufacturer in the areas of design and development, but a ploy which could go disastrously wrong if the end result was a mismatched 'parts bin special'. Despite such fears

the KLX is a very well integrated cycle indeed, with no obvious genetic defects to show for its distinctly mixed parentage.

The KLX pedigree is quite simple. Take the mild-mannered and totally conventional four-stroke single engine unit from the KL dual purpose street/trail 250 and graft into it the X factor, a slightly beefed-up rolling chassis from the 1979 model KX125 motorcrosser — a lightweight cross-country racer normally powered by a high-revving and peaky two-stroke. The result is a tractable and very lightweight playbike with modern





*KL/KLX side case has been modified for better access*



*KLX swinging arm is alloy*



*Enduro-style KLX folding gearchange lever*

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suspension which lacks just two things: power and identity.

The four-stroke engine is a good, straightforward unit. Overhead cam, of course, but with no fancy balance-shafts or four-valve heads. It has retained the KL's old compression ratio of 8.9:1 and stuck with a slide carb instead of the latest KL's CV item. Last year's KL ran a 28mm Keihin carburettor; the KLX has a slightly larger 32mm Mikuni.

The motor's oversquare dimensions allow a safe 8000rpm and conservative tuning produces a moderate 21.3bhp, and an equally uninspiring torque figure of 14.5ft-lb (2.0kgm) at 6500rpm. However, these figures fail to indicate the true attractions of the engine — namely the very wide spread of power and torque that's available in any gear, at any time. Here is a motor which requires absolutely minimal concentration when riding. Choice of gear ratio and throttle opening is totally non-critical, characteristics which would have obvious appeal to the rider new to off-road riding and which would allow him to concentrate on steering and path-picking without having to worry about how the engine will behave next time the throttle is banded wide open.

Engine maintenance is simple. The oil is contained in a sump beneath the crankcase, and the level is easily checked through a sight-glass in the usual Kawasaki fashion. The engine's right hand

side-cover has been modified this year to allow an oil filter change without the removal of the whole side-cover. This is an important improvement to all the KL derivatives — including the new Z250C road single — as the amount of work previously required could easily deter an owner from regular oil and filter changes. With only three pints of oil in the sump the oil will 'tire' rapidly anyway. Ignition is point-less electronic and combines with the carburation to produce first-class starting and a reliable tickover.

The frame and cycle parts of the KLX are best described as last year's state-of-the-art, and are much better than anything fitted to a Japanese four-stroke in the past. Suspension travel is the name of the game these days, and at 10in (254mm) front and rear the KLX is close to the practical maximum. The front forks are infinitely adjustable for

spring rates and damping characteristics and feature air assistance via Schrader valves in the fork caps.

The KLX's rear suspension utilises a pair of orthodox, though high quality, Kayaba shocks and not the latest Kawasaki Uni-trak suspension set-up. The units have good damping qualities and the remote reservoirs behind the side number plates insure against overheating, but the spring rates are too soft, even for my puny 10½ stone (66.7kg) and there is no obvious way of increasing the spring preload in the field.

The swinging arm itself is reputed to be made in America and is fabricated from massive alloy I-beams. The frame is made from a higher quality of steel than is the Japanese norm, a prudent move, perhaps, when fitting a heavier and more vibratory motor, though the load is spread over five mounting



*Above: Schrader valve in fork cap to inject/release air*

*Below: KL's box-section swinging arm is steel*



points. All of the minor items are of high quality and well fitted — in particular the exhaust system, which is well tucked away and is unlikely to burn you even if you drop the bike and trap a leg. The exhaust noise itself is splendid, a delightful soft bark that is neither offensive nor strangled. The footrests are serrated, folding — and well away from the ground. The rear brake lever has an adjustable stop and the brake a fully floating torque arm. All good stuff. A pressed alloy sump-guard and wide plastic mudguards complete the picture.

Initial riding impressions will vary, depending on whether you have any experience of 'long-travel' bikes. If you are a beginner, or are used to any of the popular small trail bikes, then you would be well advised to approach the KLX with caution and loose-fitting jeans. The seat height is such, at 36.5in (927mm), that you will literally have to throw a leg over to mount it successfully.

These bikes are high because of their vast suspension travel, and although the ride height settles a little under your weight the centre of gravity remains pretty high in most riding situations. The feeling of being a long way from the ground takes some getting used to. If you're the sort of rider who likes to use his legs a lot to prod the ground for support and balance, then you'll have to learn to keep your feet on the pegs where they be-

long, and improve your riding style in the process.

This technique is in fact easily acquired, because you soon realise that the KLX suspension is so good that nothing will deflect you from your chosen course. Cross-ruts, ditches and logs provide no problems: just wind on the power and let the bike do the work. Want to change direction? No problem here, as both tyres grip superbly. Braking presents no worries either, except that under hard braking the front dips and the rear rises so much that a trip over the handlebars seems imminent. Again it's just a matter of familiarity and you soon learn to move your body around to compensate.

Got the hang of it now? Fancy a few wheelies and power-slides to celebrate? Forget it. The engine has many good points, but is definitely slow. Not painfully, embarrassingly slow, but still definitely lacking in the explosive top-end power that competition two-strokes put out, and which a good rider can exploit. The KLX does not accelerate like a two-stroke in a series of sharp bursts, with the motor kept on the pipe with a frantic use of the gears. Instead it gathers speed evenly, with the bike always under full control. There are situations where this can be very useful; exiting from a slippery turn, for instance, the power can be applied hard and early with no fear of the back sliding out or the front end lifting. And climb-



*KL mods include high-level exhaust, plastic bash plate*

ing hills is pure joy. On a two-stroke great throttle finesse is required on hills and your body weight must be right over the front wheel, leaving less weight at the rear for traction. Well you don't want to loop it, do you? There is no such nonsense required on the KLX. Just gas it in third and up you go, and when you come down again leave it in second and the engine will take care of the braking.

The soft power delivery is also very reassuring when searching for grip in tricky situations such as trickling across a greasy camber or climbing out of a stream. The lack of top-end poke has its drawbacks of course, and the ability to loft, or at least lighten, the front end at speed would be missed by an experienced rider. Massive front fork travel certainly helps compensate for this failing, however.

But I also felt that the bike's ability to negotiate really twisty woods terrain and trials-type going is limited by its rather poor turning circle.

The riding position is just fine, once you're accustomed to the low, flat handlebars which usually accompany long suspension, and the gearbox and clutch controls are very positive and light. The throttle did give some trouble, however, in that it would not snap closed reliably to idle, often sticking partially open. As it was equipped with twin 'pull-push' cables it could be forced shut with wrist action, but it might be better with a single cable and a stronger return spring. On a dirt bike the simpler the arrangement the better.

So what is the KLX250? It was originally intended as a playbike for the US market, something to be trucked out to the wide open spaces and ridden off-road all day with minimum hassle and maximum fun. It was not intended to be ridden on the road, and strictly speaking this restriction still applies. Kawasaki (UK) are marketing the bike with a lighting kit which is optional in the US, and it now has a speedo fitted. These are the only concessions to street legality, however, and there are glaring omissions. The petrol tank is plastic and therefore illegal, thanks to a now outdated law intended to protect us from the dubious glass fibre tanks of the cafe racing sixties. There is no

chainguard and heavy questions might be asked about the mudguards, tyres and number-plate illumination.

Kawasaki (UK) see the machine as 'the perfect mount for the clubman enduro rider', and indeed it would be, especially if fitted with a few US go-faster bits for the engine. Again, however, street legality is required for most enduro events, as many still use a certain amount of public road. Green-laning is out for the same reason. So where do these bureaucratic hassles leave us? Are there many riders willing to spend a grand on a bike with good road performance — 60mph cruising and around 60mpg — and then resign themselves to carting it around on a trailer? Especially as it's not capable of winning an off-road event in its stock form. This country simply doesn't have enough legal off-road riding areas to support a market for 'playbikes', even top class ones like the KLX. So most KLX buyers will take a chance, running them on the roads and green lanes, hoping that wide-eyed innocence will see them through the scrutineers' bay at an off-road event.

I liked the KLX very much, even though I usually ride somewhat faster two-strokes. It handles well, sounds good, is economical and efficient and above all, *different*. As yet it has



Dunlop K150 rubber is good on the road, less so off it



KL's leading axle air sprung fork is excellent

no real competition, being 20-30lb (9.1-13.6kg) lighter than comparable four-stroke, street legal trail bikes and its suspension is infinitely better. But I do feel that it would have wider appeal with a lower seat height and some further concessions to the law, or alternatively a more powerful motor which would appeal to the serious enduro rider. At the moment I'm afraid it's a playbike with nowhere to play.

Peter Furlong

## Kawasaki KL250 A3

I've always felt rather sorry for Kawasaki's four-stroke trail bike. For it seemed that no sooner had Kawasaki dealers throughout the land ripped open large cardboard boxes to reveal a real XL250 masher in their KL than Honda upstaged it with a brand-new model.

The XL250S had better suspension, more ground clearance and carried less weight than the Kawasaki. Its four-valve, twin port head motor also came equipped with a pair of chain-driven balance shafts that smoothed the single's traditional vibes effectively enough for

70mph cruising on the road to call for nothing more than strong neck muscles. Strange looking new Honda-designed and Yokohama-produced variable pitch block tyres ensured that the machine clung to the tarmac at all angles with the grip of a Scotsman on a £10 note.

But all that was over two years ago, and in the meantime the men under the big green K sign have been sharpening their 3H pencils and applying their minds to the KL250 and its failings. The result is a radically revised and restyled model that should give the Honda — not to mention Yamaha's new quarter-litre XT — a tough time on the show-room floor this time around.

Kawasaki have discovered — like Suzuki — that trail bike buyers want something that looks like a real enduro machine. Hence the larger, humpy fuel tank with its competition-style screw-on filler and vent pipe and the overall uprating of the KL's equipment to suit its dirt role. If a KLX on the road actually has bikers running down the pavement just to take a look, then the KL turns a few heads.

Everything is up. Ground clearance has been raised 2in (51mm) to 10.25 (260mm),

largely by tucking the exhaust system — which is considerably lighter than the old item — up out of harm's way. The old pipe was partially protected by a steel bash plate, but still took a battering every time you tried rock-hopping on a tough section of green road. The gain is threefold: there's more ground clearance, less chance of burning yourself on a hot exhaust after a spill and the substitution of a lighter, plastic bash plate.

Suspension movement is also dramatically improved with the new gaitered and air assisted leading axle front fork and Kayaba gas shocks at the rear. You get 1.6in (41mm) more up front at 8.7in (220mm) and an additional 2.3in (58mm) at the rear gives the back wheel 6.9in (175mm) of travel. Yet it feels like much more because the quality of the suspension components has been tremendously improved.

With the ability to adjust the front fork's damping and spring rates by merely pumping in or releasing air — if you have one of those neat S&W pumps and a gauge, you don't get either with the bike — it's possible to have maximum compliance for the road and yet never bottom out

on the rough. At the rear the gas shocks enable you to obtain more traction for more of the time; their response to savaged tarmac surfaces makes for a supremely comfortable road ride. They're a far more important addition than the new box-section swinging arm. Don't be fooled by its finish, either. That's mild steel, not aluminium alloy.

There are only two problems which stem from these improvements. Firstly, the KL's seat height is now 33.5in (851mm) unladen, which is inevitable but cruel to small people. Before long Julian Ryder will just have to sell those motocross boots. Secondly, the suspension is so capable that when you do unload, you'll be going a whole lot faster and your fall to earth will be somewhat more violent on this year's KL.

The Kawasaki's new tyres aren't going to help you maintain an upright mode on dirt either, no matter how good they are on asphalt. Dunlop's answer to Honda's Varigrip rubber, the K150, wipes out high-speed road weave and grips well in the cut-and-thrust of commuting at which trail bikes excel. But in mud it rapidly fills up, failing to self-clean like the KLX's motocross tyres. This makes it difficult and sometimes near impossible to change direction quickly with a clogged front tread and loses you traction at the rear. Riding on the North Downs Way in Kent — wet clay over chalk — felt like trying to roller disco on Vaseline. But there's no easy solution to this one, for motocross knobbies feel weird on tarmac and are technically illegal for such use. We just let some air out of the Dunlops and slid on.

In losing just under 20lb (9.1kg) of excess flab the KL has had nothing pared off its chassis, although the steering geometry is slightly changed and you get tapered roller steering head bearings. Savings have been made all over, with a lighter exhaust, lighter brakes and plastic gearbox sprocket cover.

It feels better for the changes and sounds a lot crisper, too. The highly conventional little sohc single has been changed little. Valve size is up by 1mm, the cam chain tensioner is now automatic and the ignition electronic. Compression is down slightly, and a larger CV carburettor has replaced last year's slide item. It seems to be a lot more economical, but our figures unfortunately come from a machine that had barely covered 500 miles. The motor now comes in black, which looks great in the showroom and awful after you've rubbed areas of it off down the first green lane.

On the road, 75mph comes up on the speedo as the tachometer shows 8500rpm, or 500rpm short of the red line. However, you wouldn't want to keep that up for very long, as at anything over 60mph the vibration is intense. I'm afraid that as far as road use is concerned the KL comes a poor second to Honda's smooth single. And that's where dual purpose trail bikes — despite the annual improvement of their off-road potential — spend most of their time. Kawasaki's tacit admission of this fact is the provision of a useful little chromed rack for your sandwich box on the KL.

Off-road, the engine's wide spread of power shows up well on hills, where I was amazed to find it slugging away in third. In contrast to the KLX its serrated pegs may feel low, but as long as you stay out of deep mud slots — where the gearlever has a tendency to change up for you — you'll be okay. In its present form the KL feels to be more than a match for Honda's XL250S on the rough and if it comes to a choice between them you should seriously consider where you'll be doing most of your riding. If it's short hauls to work during the week and trailing over the weekends, then the KL will surprise you with its versatility and the keen balance it strikes between the amazingly different demands made on a modern dual purpose machine.

Its standard of equipment is impressive, even though there are still one or two minor failings here. The trip odometer is an enduro-style resettable item and the toolbox may hang off the bike opposite the silencer, but it is lockable and the lock combines in itself a helmet holder. However, the accessible toolbox is sadly not watertight and when you break it open you're liable to be met by a bag of tools floating in liquid mud. Likewise, while the front indicators are mounted on the handlebars and tucked well out of harm's way, the rear pair hang out, rigidly mounted. Yamaha have some very neat rubber-hung wipers which Kawasaki could usefully copy.

Despite such gripings, the KL remains a really quite remarkably improved motorcycle. Its pleasant motor, versatile enough to power both the KLX and a road single, has been sensibly changed very little while its cycle parts have been transformed. As the balance between road and off-road features on dual purpose machines continues to tilt towards dirt use, it will be interesting to see what happens. As things stand at the moment, the KL250 is a fine compromise.

Peter Watson

## READOUT

### Kawasaki KLX250A

#### ENGINE

Type	Sohc single
Bore x stroke	70 x 64mm
Capacity	246cc
Compression ratio	8.9:1
Carburation	32mm Mikuni
Claimed bhp at rpm	21.3 at 8000
Claimed torque at rpm	14.4ft-lb (2.0kgm) at 6500
Transmission	Helical gear primary drive, wet multiplate clutch, 5-speed gearbox, chain final drive.

#### Electrical system

#### CYCLE PARTS

Frame	Semi duplex cradle
Suspension	Leading axle air assisted telescopic front fork, pivoted aluminium alloy box-section rear fork with adjustable remote reservoir gas pressurised dampers
Wheels	Wire spoked anodised aluminium alloy
Tyres	3.00 x 21in Bridgestone M17 front 4.00 x 18in Bridgestone M20 rear
Brakes	4.7in (120mm) drum front 5.1in (130mm) drum rear

#### DIMENSIONS

Wheelbase	56.7in (1440mm)
Seat height	36.5in (927mm)
Overall width	34.6in (880mm)
Ground clearance	12.25in (311mm)
Weight (with 1gal fuel)	257lb (116.6kg)
Fuel capacity	2.09gal
Fuel consumption	57mpg
PRICE	£999 inc VAT
Warranty	None
Supplied by	Kawasaki Motors (UK) Ltd, Deal Avenue, Trading Estate, Slough, Berks.

### Kawasaki KL250 A3

#### ENGINE

Type	Sohc single
Bore x stroke	70 x 64mm
Capacity	246cc
Compression ratio	8.1:1
Carburation	34mm Mikuni CV
Claimed bhp at rpm	21 at 8500
Claimed torque at rpm	14.4ft-lb (2.0kgm) at 6500
Transmission	Helical gear primary drive, wet multiplate clutch, 5-speed gearbox, chain final drive

#### Electrical system

#### CYCLE PARTS

Frame	Semi duplex cradle
Suspension	Leading axle air assisted telescopic front fork, pivoted steel box-section rear fork with adjustable gas pressurised dampers
Wheels	Wire spoked aluminium alloy
Tyres	3.00 x 21in Dunlop K150 front 4.60 x 17in Dunlop K150 rear
Brakes	4.7in (120mm) drum front 4.7in (120mm) drum rear

#### DIMENSIONS

Wheelbase	56.5in (1435mm)
Seat height	33.5in (851mm)
Overall width	34.5in (876mm)
Ground clearance	10.25in (260mm)
Weight (with 1gal fuel)	272lb (123.4kg)
Fuel capacity	2.16gal
Fuel consumption	79mpg
PRICE	£869 inc VAT
Warranty	12 months/unlimited mileage
Supplied by	Kawasaki Motors (UK) Ltd, Deal Avenue, Trading Estate, Slough, Berks.