

KAWASAKI KE100



By
Peter Richardson

PRECONCEPTIONS. We all suffer from them to a greater or lesser degree — and the smallest trail bike from the Kawasaki stable proved a case in point. Fixed firmly in my mind's eye was that one-hundred cubic centimetres approximately equates with the performance of 'step-thru' machines like the Honda 90. You know, reliable, economical, practical — and so, so boring. Fine

for shopping trips around town, but nothing much more.

Which just goes to show how wrong you can be. Certainly the KE100 does have very little piston displacement, but the rotary disc valve induction system provides a very broad range of power and this, coupled with five well chosen (for the road) ratios, gave a far better performance than had been anticipated.

Co-inciding with the test period was the Earls Court Bike Show, and I

had been trying to arrange something a little more practical for the enforced daily commuting distance of around fifty miles each way. But it was not to be, so without much enthusiasm the KE100 was wheeled out of the garage, with the only consolation being that at least it would be better than using a car through London's rush hour.

Living in a relatively rural area, there was plenty of mixed going on this run — twisting country lanes (frequently potholed and with loose gravel on many corners) followed by mild townwork, then a short stretch of motorway before being hurled into the traffic-light Grand Prix of the metropolis. A long way at a 40 mph

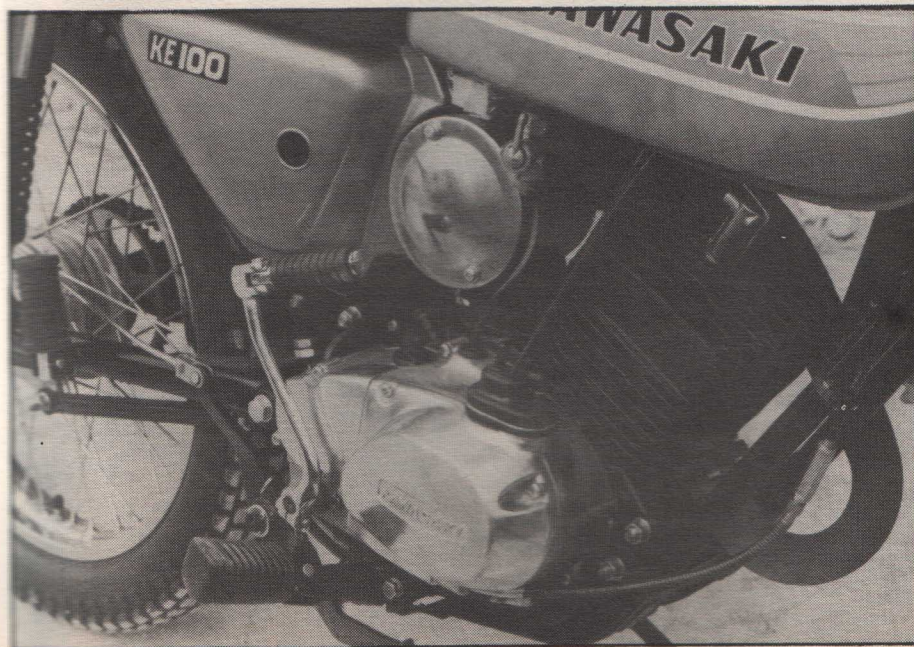
maximum cruise. It would have been too, except that the Kawasaki proved a real little flyer — a top speed of 60 mph being available despite my fourteen-stone bulk encased in two piece suit, and easy cruising at 50 mph and remember, it is supposed to be a trail bike, after all.

But the most endearing feature of the machine was the power spread — the torque was sufficient to tackle long, slow gradients without changing down a gear, while really steep hills could be sailed up with amazing ease. Anticipating such a small engine would have a really peaky power output, it was a pleasure to discover that constant use of the gearbox was not necessary. Fifth proved a really practical cruising gear, and it was certainly not a case of dropping a cog every time the wind speed rose a few miles per hour. Revved hard through the gears, the maximum in each proved to be approximately 15, 30, 45, 50 and 60 mph.

Nippy commuter

So what was the journey like? Remarkably quick — an *average* speed of 41 mph being achieved for the trip on virtually each and every occasion. Indeed, it proved such a practical commuter that some 700 miles were clocked up during the Show period. Although the motorway section was a little tedious, the quick steering and nimbleness always associated with trail bikes

Starting proved incredibly easy: just pull up the choke mounted on the engine cover, switch on and press down on the kickstarter. It never failed to start first kick, and could even be started by hand pressure alone! Air cleaner is readily accessible. Brake pedal rather vulnerable off-road, and sump shield not over-protective. Rotary valve engine provides lots of torque.



were very real assets amongst the traffic jams. Few gaps proved too narrow, and if at first the way ahead appeared blocked, the bike was so light that it could be lifted through ninety degrees past a car's bonnet, and another lane sought. Acceleration was quite adequate to keep out in front as the lights changed.

The only real complaint that such commuting brought to light was the fuel consumption — 72 mpg on average. Hardly impressive for a little 'un, and as the tank holds just 1.4 gallons, it meant refuelling with a daily pound's worth of juice. Inconvenient, but in fairness, how many KE100 owners would habitually record 100 miles per day?

With such machines, roadholding is rather an academic word — any frame should be capable of providing reasonable handling with this sort of power available. And it did. Being a lightweight it suffered the usual characteristics of being rather easily dislodged from the chosen line when road irregularities were met — but what else can you expect? Suspension proved adequate for road usage, though less satisfactory off-road, of which more anon.

Comfortable too

Actual comfort afforded was remarkably good, especially when you consider the relatively small dimensions of the machine and my own six foot frame. The spring



Chain guard hardly lives up to its name! No chain tensioner is fitted, but guide is fairly substantial.

loaded footrests were very broad and rubber covered, the seat is enormous and well padded, while the handlebars not too high. Very acceptable, and no aches or pains were received after 1¼ hours in the saddle. Although the exhaust pipe runs alongside your left leg, it never causes discomfort (or even excess warmth) and the exhaust note is well subdued without being stifled. Vibration? It would be untrue to say that none existed, but it was restricted to such a light tingle through the footrests and 'bars at high rpm that it never became intrusive, and in fact could be disregarded altogether.

Brakes proved to be rather disappointing. The front had sufficient feel but was hardly dramatic, while the rear felt spongy, despite the rod operation. The trail tyres fitted were fine in the dry, and were treated with caution in the wet. The gearbox I have already praised for the spread of ratios but the operation fell short of perfection, especially when changing down quickly, when it could tend to miss a gear or bind momentarily.

Lighting, being just a 6 volt affair, could hardly be expected to be spectacular, but it was adequate for the performance available. The indicators, however, were not overbright and personally I preferred not to place too great a confidence in them during daylight. Switchgear proved to be the 'usual' Kawasaki; again adequate, but not beyond improvement, especially with regards to the indicator switch. And while with the complaints department, why have the three warning lights below the ignition switch? That way, the key fob hides them rather too neatly!

Off road

Having thus been far more impressed with the road performance than expected, it was time to point it at the rough stuff. First a detailed study of the machine revealed that the trail bike side of its nature was stronger on looks than practicalities.

For example, both wheels are small (19 and 18in. respectively), no security bolts were fitted to the tyres so pressures could not be dropped, while the footrests were sheathed in rubber and would therefore be in the instant-slip category under muddy conditions. Both gear and brake levers looked very vulnerable, while the sump shield seemed rather tinny. However, the indicators were tucked well in (the rear ones being only semi-rigidly mounted) and the plastic mudguards looked the part, even if the rear one did have a large metal supporting plate.

Immediately it was clear that the gearing was all wrong for off-road use, first being much too high. In

practice this means that any steep climbs have to be tackled flat-out in first; any relaxation of throttle resulting in a stalled engine and yourself stuck with a 'dead' machine halfway up a mini-mountain! Likewise, serious muddy going was out of the question: the motor would either spin the wheel and provide no traction, or simply quit. Not that it wasn't fun off-road, it was — but with severe limitations if you really want to take to the rough.

Topping-out

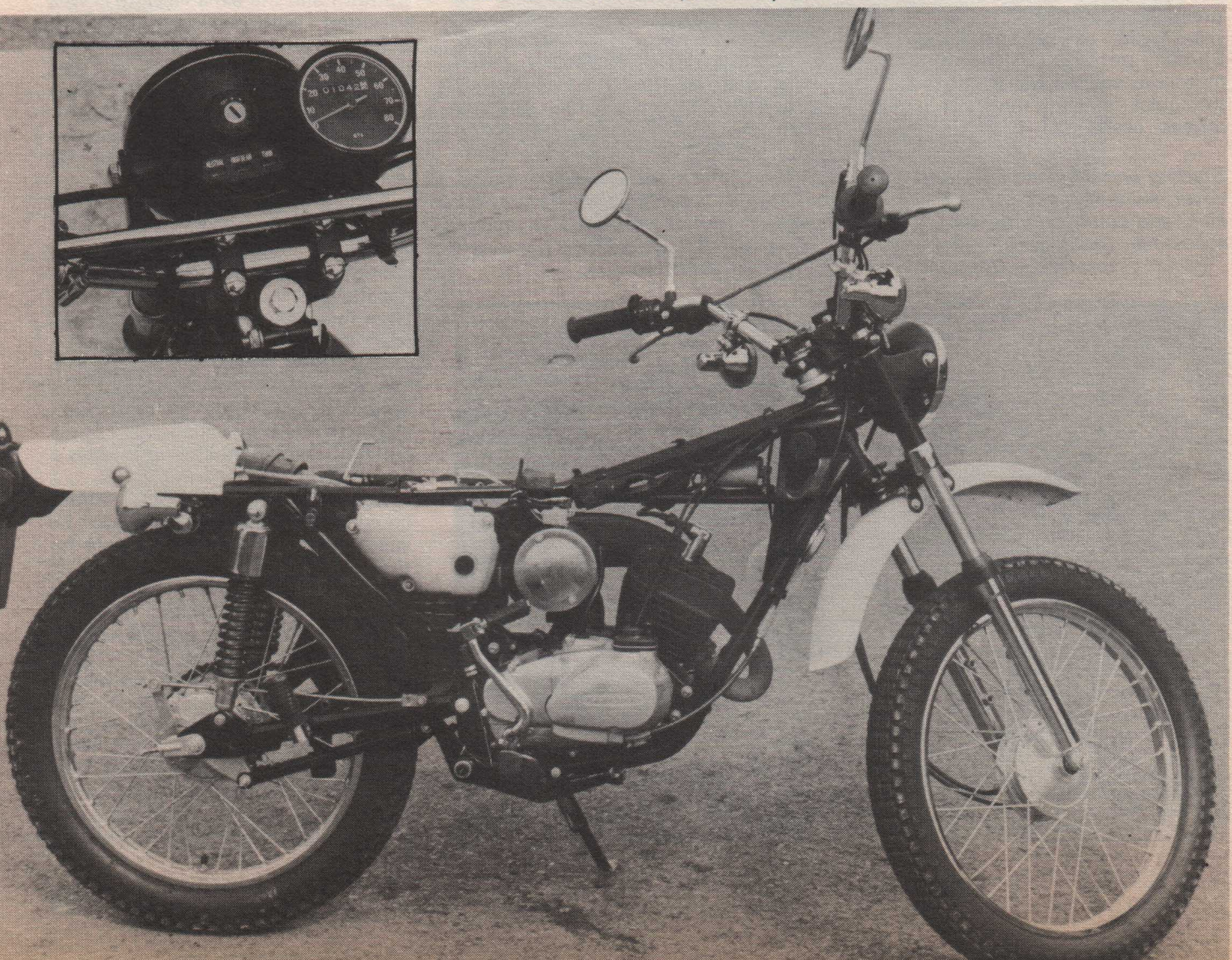
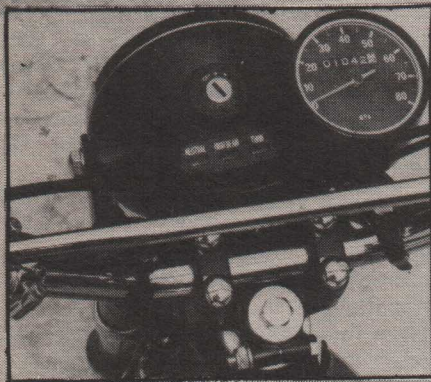
Charging over deeply rutted ground had the front suspension topping and bottoming out as we bounced from ridge to ridge, as did leaps over a small ridge — despite the rear shocks being set on maximum spring pre-load. At least we know that you won't get *more* than 5¼in. of fork movement! It was found to be far more practical to remain on the seat at all times as the footrests were rather too far forward and the bars too low for standing on-the-pegs

style operation. Ground clearance proved a little on the low side, especially when a large kerbstone removed the spring from the prop stand.

Home maintenance of this little two stroke should be quite easy, and it was nice to see how the seat, tank and side-covers could be removed so quickly and easily without tools — if only other manufacturers would follow suit. Rear wheel removal is very easy thanks to the high-level exhaust, but no centre stand is fitted in keeping with the off-road image. Lubrication is (of course) via separate oil pump, and a 'window' in the side panel provides a view of the lubricant's remaining level. Consumption proved to average out at 250 miles per pint.

It's a neat little workhorse, with enough zip in its performance allied with good comfort to make it an ideal commuter with scope for longer journeys should the need arise. And you can still have fun on the trails, if you don't mind helping out with some nimble footwork.

The seat, side covers and fuel tank detach in a couple of minutes without touching the tool kit to provide ready access to virtually all components. Specification is surprisingly 'de-luxe' for a small capacity trail bike. Speedo operates from front wheel. Rear number plate is rather vulnerable, but indicators are nicely tucked away. Note, too, the fully floating rear brake unit. A light bike like this one is much easier to pick-up when indulging in a little over-enthusiastic trail riding! Instrumentation is basic, but adequate.



SPECIFICATIONS

KAWASAKI KE100

ENGINE

Type: Single cylinder, air-cooled, all alloy two stroke with rotary disc valve induction. Roller big end bearing, needle bearing little end. Pressed-up crankshaft runs on two ball race main bearings.

Capacity: 99cc.

Bore and stroke: 49.5 × 51.8mm.

Compression Ratio: 7.0:1

Carburation: 19mm dia. Mikuni VM19sc instrument, breathing through washable foam air filter.

Lubrication: Pump-operated oil injection system with tank capacity of 2.1 pints (1.2 lit).

Electronics: 6v 4ah battery charged by flywheel magneto. Coil and contact breaker ignition.

Claimed Power: 11 bhp at 7,500 rpm. Maximum torque 8.0 ft/lbs at 7,000 rpm.

TRANSMISSION

Primary: Gear reduction ratio of 3.52:1.

Clutch: Wet multi-plate.

Gears: Overall ratios of 28.77, 17.34, 12.81, 10.74, top 9.46:1. Selected via left side, one down and four up, foot lever.

Final Drive: Exposed, unlubricated chain. Final reduction ratio 2.8:1.

FRAME

All welded tubular steel semi-duplex cradle with stamped steel sump guard.

SUSPENSION

Front: Two-way damped hydraulic tele-forks with 5¼in. maximum travel.

Rear: Pivotted fork with oil damped dual rate spring suspension units, five way adjustable for pre-load.

WHEELS

Front: Chrome plated, conventionally spoked steel rim with 2.75 × 19in. Trail pattern tyre. Cable operated 110mm dia. single leading shoe drum brake.

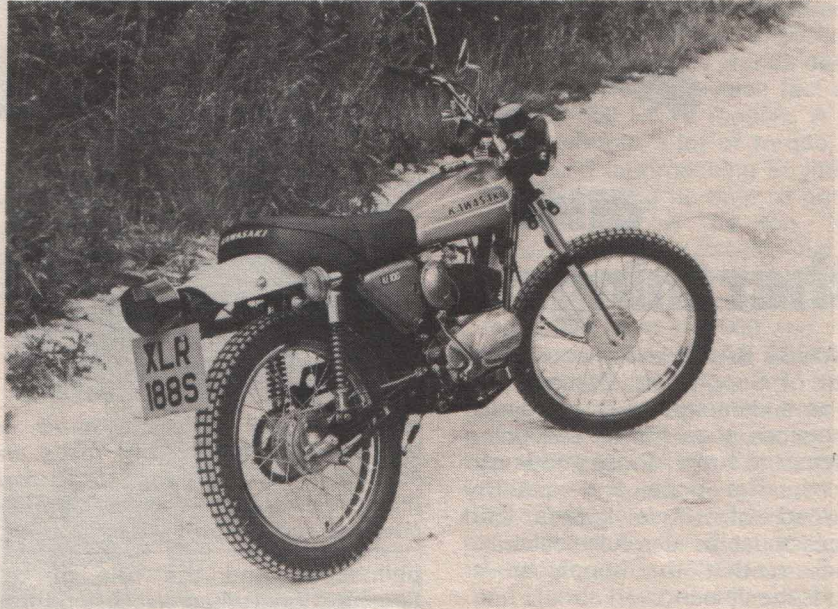
Rear: Chrome plated, conventionally spoked steel rim with 3.00 × 19in. Trail pattern tyre. Rod operated 110mm dia. single leading shoe drum brake.

INSTRUMENTATION

Single speedometer (without trip recorder). Warning lights for neutral, main beam and indicators.

EQUIPMENT

1¾ gallon (8 litre) steel fuel tank, prop stand only, primary kick start, indicators, twin mirrors, 30/30 watt headlamp, steering and seat locks, helmet holder.



DIMENSIONS

Weight (claimed dry): 201 lbs (91Kg).

Wheelbase: 49.6in. (1260mm).

Ground clearance: 9.4in (240mm).

PERFORMANCE DATA

Fuel consumption: Overall fuel consumption 72 mpg. Best achieved — 81 mpg, worst — 68 mpg.

Fuel quality: Two star.

Speed: Maximum speed obtained with 200lb. rider in two-piece storm suit, crouched, 60 mph.

THE COMPETITORS

	Price £	Max mph	Overall mpg	Fuel tank (gals)	Claimed bhp	Dry weight (lbs)	Type	Warranty
Kawasaki KE100	449	60	72	1.75	11	201	2 stroke single	6 months P & L
CZ 175 Trail	298	61	68	2.5	15	247	2 stroke single	6 months P & L
Kawasaki KE125	509	65	48	1.5	13	218	2 stroke single	6 months P & L
Suzuki TS100	449	n/a	n/a	1.4	10.8	205	2 stroke single	6 months P & L
Suzuki TS125	495	68	55	1.8	13.5	207	2 stroke single	6 months P & L
Yamaha DT100	450	58	71	1.6	10	206	2 stroke single	6 months P & L
Yamaha DT125E	495	61	66	1.6	13	229	2 stroke single	6 months P & L

CUSTOMER INFORMATION

Importers: Kawasaki Motors (UK) Ltd., 748-9, Deal Avenue, Trading Estate, Slough.

Colours available: Blue or yellow.

Price: £449. Delivery charge additional £11.50.

Warranty: Six months, parts and labour.

SPARE PARTS (inc. VAT)

Piston.....	£5.02
Ring set.....	£4.41
Clutch plates: friction (4), each.....	£1.05
steel (3), each.....	£0.57
Complete exhaust system.....	£37.60
Speedo cable.....	£2.27
Contact breakers.....	£2.65
Brake shoes: front, each.....	£2.22
rear, each.....	£2.22