



A BIGGER BANG

Don't believe for a moment that Honda's XR500 is anything like we've learnt to expect in the way of dirt-singles from Japan.

It's a pukka enduro racer, raw and deliberate, and if there are passing similarities with Yamaha's XT500 single then they are simply the retail price and the four-stroke engine that displaces 500cc.

Honda's own fully-kitted and road legal XL500S should satisfy the needs of the trail bike market and aims competently at the Yamaha. But the XR500, though it shares the same basic engine and chassis, is something else altogether; a competition machine with great technical credentials which if falling slightly short of the target

because of its nature (being a heavy four-stroke single) will be making a great name for itself as a beautifully enjoyable motorcycle to ride, and race, on the rough.

Look at the facts. The big Honda starts easily; is forgiving to ride is as fast as all but the very best 250cc enduro bikes and its handling is as good as many bikes that purport to be thoroughbreds. All this for a listed retail price of £1200.

Despite being less than enamoured with Japanese four stroke dirt singles, I was very impressed at first-sight of the beast. It doesn't look like a 500cc four-stroke single from Japan -- rather more like a CCM, lithe, neat and purposeful.

Sensibly the cold-start button is next to the speedo, which incidentally has trip meter digits big enough to be seen by the most short-sighted. Having the cold-start on the handlebar is essential because the 34mm Keihin carburettor is almost completely obscured by the fuel tank and frame. And thanks to an exhaust-valve lifter linked to the kick-start lever, the XR won't kick back. A good swing is needed, but all the rider's weight can be used, and one of our aces even started up the bike in carpet slippers. Not many Goldie owners would try that trick!

The easy-starting ideas are typical of the careful design of the bike's concept. The XR is very much a united

entity, rather than a package from various separated departments. For example, the four-valve cylinder head gives better breathing, as we know, but the reasoning behind the use of twin exhaust ports isn't just that they offer better cooling; they also permit the two pipes to be tucked in to allow clearance for the 23-inch front wheel.

In turn the 23-inch front wheel (which has been adopted to satisfy the needs of the American desert racer) requires a high steering head so to keep the weight low the fuel tank drapes over the cylinder head and carb, forcing the choke mechanism to be fitted to the handlebar. So every feature of the machine is interdependent on many

HONDA XR500

Wanna dirt bike that's nice to know? Take in the XR500 Honda, an enduro version of their new four-valve XL500S trail bike that delivers raw power without the prospect of fraying your nerves.

Hack McTurf reports, photography by Ian Dobbie.





Honda's XR500 is no look-alike enduro bike: it's the real thing with a super-smooth and tractable engine that'll find drive anywhere.





Twin ports on the XR500 makes it easier to tuck the exhaust system away giving room for the 23-inch front wheel; they also improve cooling between the valves and makes it simpler to tune for torque. Bulge on front of crankcase houses the balancing shaft. This gives a smoother engine which allows a lighter frame. But the bike is still heavy; are they worth it for a smooth off-road.

others. It's no exercise where a top engine designer has left the chassis to the blokes who lay out the two-strokes.

The same thinking has resulted in the use of counter-balancers in the engine. They wanted a smooth motor that wouldn't break the chassis, which in turn could be lighter because it is not subjected to the usual fatiguing vibration.

As on the road-going CB400N Super Dream, the balancers are chain driven from the crank, but in this case valuable space is saved by mounting the rear one on the end of the gearbox mainshaft opposite the clutch.

Though the appearance of the engine is very similar to the smaller XL250S trail the XR's motor (as is the less powerful and aggressive XL500S) is stronger in most of its component parts, from the ball bearing supported crankshaft to the five-speed gearbox.

After the first ride, it was easy to view the XR as a superior trail bike. But the XR is so incredibly good that I began to see it as a possible winner of national enduros. Therefore any criticism is

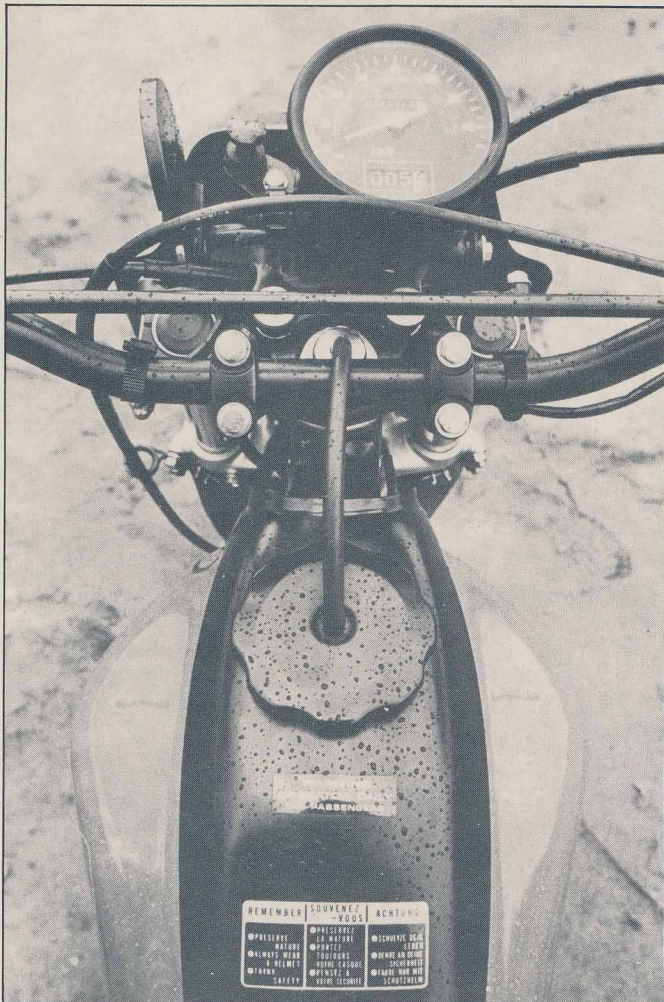
based on that, and not as a trail bike with go-faster stripes.

As a green laner, however, it has no parallel. It's quiet, pulls like a tractor and is very economical. On the rare moments it wasn't being thrashed off-road, the fuel consumption would approach 80 mpg on trail runs.

But what was most attractive was the XR's potential as a gold medal winner. It is possible on the enduros which would suit the XR, but in doing so it would show up its weaknesses.

Most important is its low top speed. And this is interdependent on the bike's handling. At over 285 lb ready to race it is heavy for the top class racer. But in practice it doesn't feel heavy.

Get the bike in a tangle though and things will get hectic. Suspension travel is limited too, with 8.8 inches at the front leading-axle fork and 7.8 inches at the rear compared to the 10 inches offered by the best bikes. The fork can't be faulted and the rear dampers are good but would benefit from stiffer springs to improve the hand-



ling on fast cross-moorland events.

Where it scores is on forestry tracks where its low centre-of-gravity and ability to find drive make it unbeatable. However, its top speed of 82 mph (on the clock) is no better than a 175cc KTM and a wider set of gearbox ratios with a higher top gear would allow the motor to be rested at 75mph.

No doubt Honda will say that most XR owners won't be bothered about drifting along forestry tracks at 75 mph and this would be true if the XR was just another pseudo trail bike. But many experts will be tempted because the bike is so very nearly competitive as it stands.

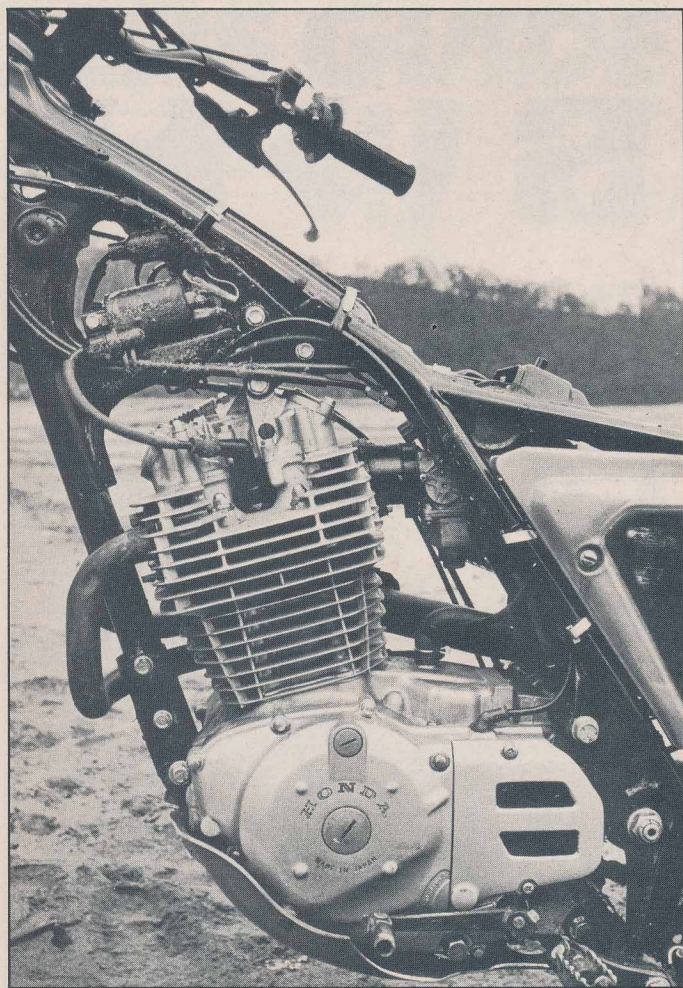
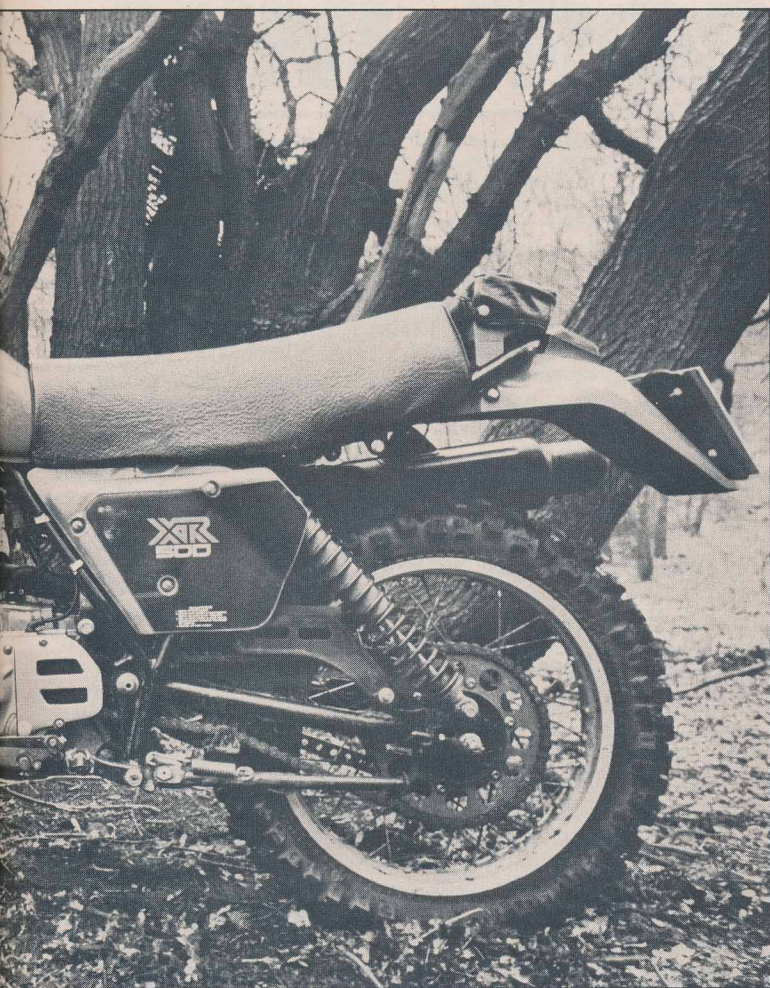
In the short term, an extra tooth at the gearbox sprocket will suffice as it can more than handle a higher bottom gear. Hopefully Honda will import the speed kit with difference ratios, a larger carburettor and a lighter exhaust system. Thus fitted the XR will be uncatchable with an expert in the saddle provided he doesn't overtax the suspension.

At the opposite end of the

scale, the XR's strength is its ability to find drive. It will pull smoothly from below 2,000 rpm and otherwise almost impossible hills or off-cambered slopes which normally tax the rider's skill can be tackled like motorways.

One question mark hangs over the use of a 23-inch front wheel. It means that the choice of tyres is limited, and the Bridgestone "claw-action" tyre isn't as good as a Metzeler. The effect of the tyre and associated geometry changes mean that instead of stuffing the bike into a corner and controlling the front end in a nice drift, the tyre hangs onto grip and a chosen line like grim death until it loses traction. When it does, it happens quickly and flicks the fork onto full lock.

Similar characteristics are exhibited by the rear tyre, but are less of a problem. With a Pirelli Pentacross or a Metzeler on the back the rear end could be hung out controllably, but at the moment the rider is conscious of the motor and chassis compensating for the shortcomings of the tyres.



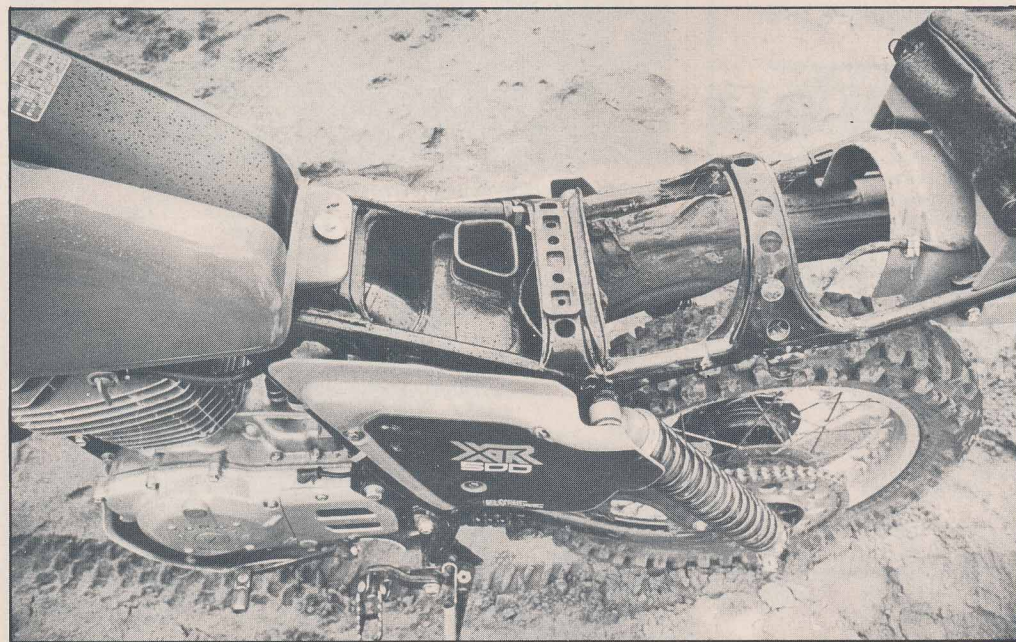
We've concentrated on the bike's few quirks compared to the best in the enduro world. Reason is there's not much else to say about the rest of the bike. Everything works beautifully — typically Honda!

The XR500 is the most exciting bike I've ridden for years. It has the basics to make a truly great racing bike, if Honda so decide. At

present it's not as good as the very best thoroughbreds but good for a first try.

Best of all it is the only serious enduro machine that will double as a pleasant green laner. As supplied it isn't road legal because it lacks a stop-lamp and horn. But we doubt if that will present a problem. Honda deserve applause for a magnificent effort.

Despite use of two balance shafts, the XR500's four-valve overhead cam engine remains very compact. Above: Though the steering head is tall, it's stiffened up by the use of substantial gusseting. Far left: Trip meter digits are large, like the tank filler. Below: Removing the seat reveals the high level air intake for the foam filter.



HONDA XR500

Price	£1200
Engine	Balanced ohv four-valve single
Capacity	49.7cc
Bore & Stroke	89x80mm
Lubrication	Wet sump
Comp. ratio	8.6 to 1
Carburetion	34mm Keihin
Ignition	CDI
Max. power	36 bhp at 6,500 rpm
Primary drive	Gear
Gearbox	5 speed
Clutch	Wet multiplate
Final drive	Chain
Electrics	Flywheel alternator
Fuel capacity	2.2 gallons
Frame	Simple loop incl. engine
Suspension	Telescopic fork, 8.8in travel (f). Swing arm, 7.8in travel (r)
Tyres	Bridgestone Gritty, 300 x 23 (f) 460 x 18 (r) on alloy rims.
Brakes	6in drum (f) 6in drum (r)

DIMENSIONS

Wheelbase	56½in
Handlebar width	33in
Seat height	34½in
Ground clrnce	11¼in
Kerb weight	288lb
Importer	Honda UK Ltd, Power Road, Chiswick, London W4.