

Motorcycling

On Test: Yamaha Turbo

Honda CBX550

Yamaha XT550

Honda VF 750



Plus Yamaha DT 125LC

Features: Superservice H-D Cagiva 175/ 250s

Eddie Kidd's Cunning Stunts. Air Suspension

Motorcycling

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Test Bikes

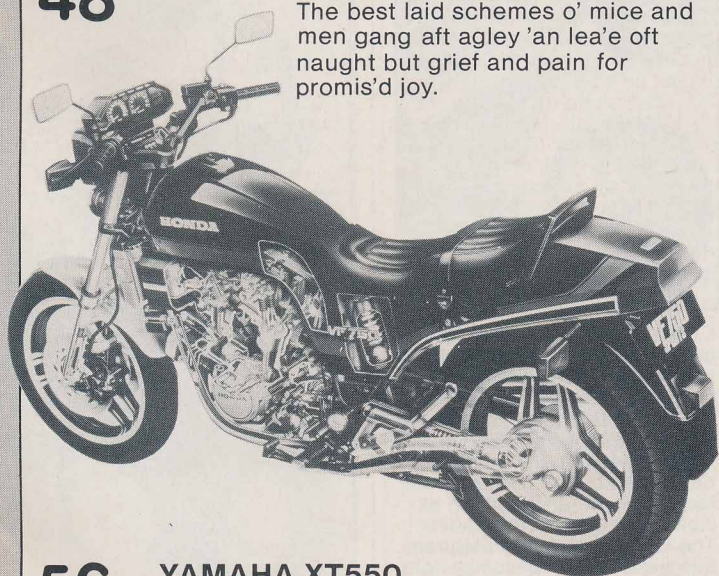
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I must confess, I'm in love.

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OK Anna, this is what you do - keep that little needle in the green and if it drops into the red open the throttle. Oh, and try to avoid corners will you?



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Mighty mini mud machine gets a beating at Bovingdon.

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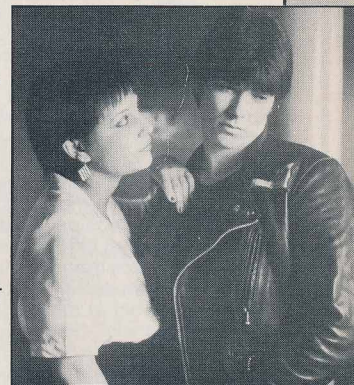
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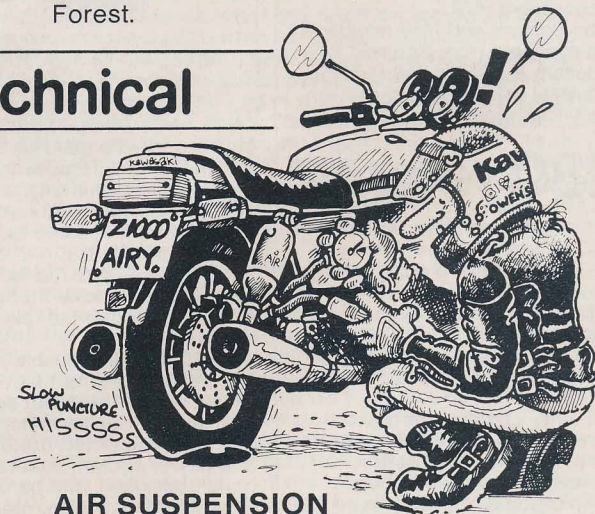
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VF VAYS

... of making you torque.
Honda's attempt at taut touring, the VF750.

PERFORMANCE CHART

MAXIMUM SPEEDS and SPEED RANGES

Gear		mph max	mph min	mph 1000rpm
1	solo	50.49	4.75	5
	prone	50.49	4.75	5
2	solo	70.13	6.05	9
	prone	70.13	6.05	9
3	solo	88.55	7.94	10
	prone	88.55	7.94	10
4	solo	105.49	8.67	11
	prone	105.49	8.67	11
5	solo	118.84	12.01	13
	prone	118.84	12.01	13
6	solo	125.14	"	"
	prone	125.14	"	"
6	solo	121.49	"	15
	prone	106.84	"	"
6	solo	120.29	"	"
	prone	120.29	"	"

Best one way speed: 126.04mph

SPEEDO

ind	true
30	*
40	-
50	-
60	-
70	-
80	-
90	-

BRAKES(both)

	solo		pillion
	mph	ft	ft
30	30	34	38
40	40	59	62
50	50	95	99
60	60	132	141
70	70	174	183

MPG

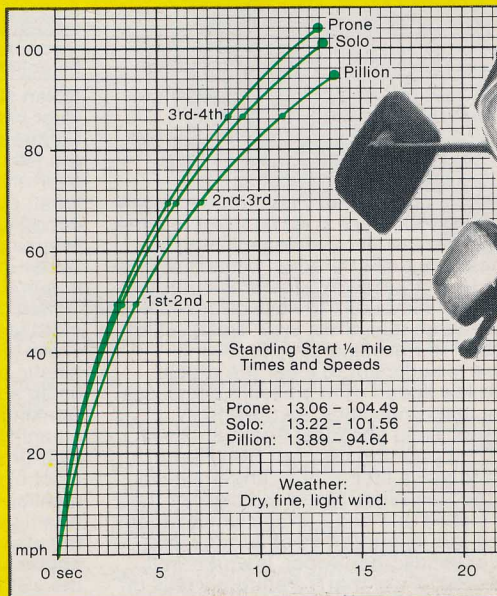
Milometer

Accurate

	Best	Worst	Overall
MPG	48	36	43

Performance figures obtained at: M.I.R.A.
Test Track, Nr. Atherstone, Works.
Test Riders: Bob Goddard, Tim Rumball

Oil used
2000mpp



* FLEXIBILITY IN TOP GEAR(sec)

*Figures not available due to damaged speedo.

COMPARISONS

Make	Speed prone	SS 1/4 mile prone	Dry weight	Claimed bhp	mpg	Price inc tax
Honda VF750	125mph	13.06sec/104mph	485lb	82 @ 9500rpm	43	£2495
Kawasaki Z750GT	127mph	12.29sec/109mph	485lb	78 @ 9500rpm	45	£2100
Yamaha XJ750 Seca	119mph	13.29sec/101mph	483lb	81 @ 9000rpm	48	£2095
Yamaha XV750SE	104mph	13.83sec/94mph	467lb	61 @ 7000rpm	46	£1945
Katana GS650G	117mph	12.70sec/102mph	481lb	73 @ 9000rpm	45	£1755
Guzzi Le Mans III	127mph	12.99sec/104mph	454lb	78 @ 7800rpm	46	£2899

Words by Bob Goddard

Honda won't thank me for describing their fabulous new 750 technobike as an overgrown CX500. But if the VF750's sales performance matches that much-maligned, often-bought V-twin then they ought to be delighted.

Essentially the new V-four is aiming at the same rider seeking a slightly up-market image. Similarities abound: shaft drive, water cooling, V engine in a comfy cruising package with little excitement to quicken the pulse.

An anti-dive device built into the left fork leg provides a degree of brake control and stability the CX never had. It also has Pro-Link - another version of the recent rash of pivot-linked, rising rate monoshockery. But the Pro-Link's air-sprung unit was a dismal let down. In place of the CX's taut, positive handling which allowed the rider to hustle the 500 at surprisingly high speeds through bumpy country bends is a soggy rear end which has the 750 weaving and wallowing badly if the surface cuts up rough in mid-turn.

This is a great shame, because the VF corners brilliantly on smooth surfaces and is a real scratcher's delight around town.

TECHNICAL SPECIFICATIONS

ENGINE

Type: In line, 90 degree V-four, water cooled, OHC, 16-valve fourstroke. Bore x stroke: 70.0 x 48.6mm. Displacement: 749cc. Compression ratio: 10.5:1. Carburettors: Four 32mm CV-type Keihin. Lubrication: Wet sump. Max bhp: 82 @ 9500rpm. Max torque: 47.1lb.ft @ 8500rpm.

TRANSMISSION

Overall gear ratios: 1st 15.62, 2nd 9.05, 3rd 8.19, 4th 7.52, 5th 6.28, 6th (top) 5.25:1. Clutch: Hydraulically operated wet multiplate. Final drive: Shaft.

FRAME and FORKS

Frame: Welded tubular steel double cradle. Front suspension: Telescopic forks with coil springs, adjustable air assistance, and oil damping. Anti-brake-dive on left leg. Rear suspension: Swinging fork controlled by single, oil damped, adjustable air shock via Pro-Link pivot rising rate system. Three position damping adjustment. Front travel: 5.5in. Rear travel:

4.2in. Trail length: 4.6in. Castor angle: 63 degrees 30 minutes.

WHEELS and BRAKES

Front tyre: 110/90 H18 tubeless Dunlop K527. Rear tyre: 130/90 H17 tubeless Dunlop K527. Front brake: Two discs with tandem piston calipers. Rear brake: SLS drum, 6.3in dia.

ELECTRICS

Ignition: Transistorised. Battery: 12V 14Ah. Alternator: 350W @ 5000rpm. Headlight: 55/60W halogen. Tail/stop lamp: 5/21W. Indicators: Self-cancelling 21W. Warning lights: Neutral, high beam, indicators all 3.4W, plus LCD display for gears, battery, coolant, oil pressure, fuel, headlamp and tail lamp.

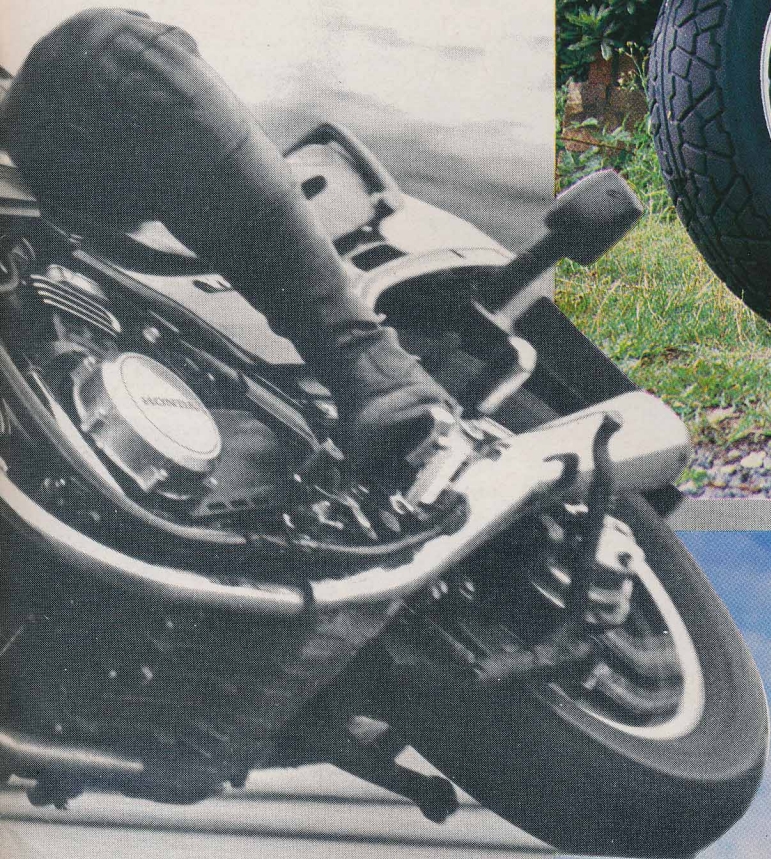
DIMENSIONS

Seat height: 30.8in. Length: 88.0in. Width: 30.3in. Height: 45.9in. Wheelbase: 61.4in. Ground clearance: 5.5in. Dry weight: 485lb. Fuel tank: 4.0 gal inc 0.8 gal res.

Pumping the unit up to its 57psi maximum and selecting the hardest of three damping settings reduced the wild behaviour of the rear end to an occasional tantrum, but it still felt soggy and undersprung, and *still* bottomed one-up.

But for many owners, perhaps less eager to discover the outer limits of cornerability, the all-new V-four motor will overshadow any deficiencies in the chassis. The 90 degree fore-and-aft four has reversed rear cylinder heads so the four CV Keihins can be crammed between the pots Harley Davidson style. This leads to Harley style bulbous airfilters on both sides of the motor, but thankfully clear of the rider's knees.

Four chain driven overhead cams operate sixteen valves which permit the motor to all the way to the ten grand limit. There is beyond in safety. And there's no mechanical noise. Water jacketing makes the VF's motor



one of the quietest built and, from its power delivery, it could be an electric turbine. The vibration-free mill whispers away from 1000rpm, building smoothly to firm pulling power by 3000rpm and maintaining its urge all the way to the ten grand redline. There is more go somewhere between mid and top revs, but with no detectable power steps the point of quickest acceleration is hard to define. The spread of power is such that there is always enough, whatever the gear or load, to overtake or power out of a bend.

Yet this much-strived-for flexibility is not to everyone's taste. *Motorcycling's* other scratcher-journos found the featureless power curve boring and the overall ride unexciting. On the motorway blast back from the MIRA test track I started to get the nods in the fast lane and had to pull on to the hard shoulder for a 10 minute kip on the grass banking – the first time that's ever happened to me on two wheels. Perhaps this machine is *too* refined.

One totally de-bugged department that cannot be over-civilised is the final drive. The Honda's shaft transmits the V-four's 82 bhp to the cast-alloy wheel (where have all the Comstars gone?) perfectly. There was no driveline snatch and only the slightest hint of a torque reaction when using the



Photography by Andy Mills

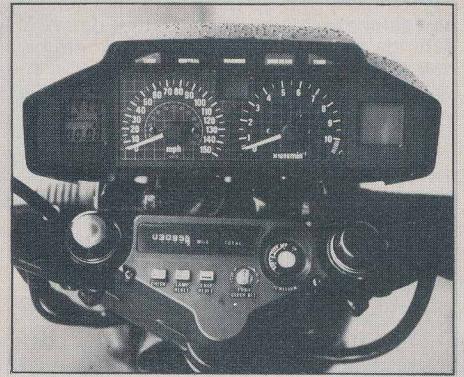
throttle fiercely or gearbox clumsily.

Gearshifts were light, swift and slick, especially when clutchless, but the box had an annoying habit of spitting out second gear. This happened most often when charging away from traffic lights, and made our standing start quarter mile acceleration runs a real headache. Number two cog finally popped out once too often during our prone top speed run, leaving the motor with an ominous ticking and robbing us of the last few mph. Even so the VF's 126mph best one way speed is respectable.

Speed testing dragged fuel consumption down to the mid 30s, but our normal heavy-fisted riding returned an average of 43mpg. We didn't ride slowly anywhere, so our best of 48mpg suggests owners will achieve 50mpg plus without too much trouble. The four gallon tank gives a reasonable range with about 140 miles before the on-board computer starts flashing a red warning light

confuse you, there is an LCD fuel gauge and temperature gauge on the right, and LCD trip counter and 24hour clock-cum-stopwatch on the left of the electronic tacho and speedo, all of which worked well until we dropped the bike while parking and, some motorway miles later, the instrument lens popped out.

Impressed? But there's more. Honda have caught up with the self-cancelling indicator craze and, as usual, had to do it different. The bike's steering angle, speed and turning time are monitored to decide when the winkers stop, and the result is predictably disastrous. Try indicating to leave a



Conventional instruments and warning lights were clear. LEDs and buttons weren't.



and little petrol pump symbol, usually only five miles before the tank runs on to its 0.8 gal reserve. During the 1000 mile test the motor's wet sump needed only one top-up of 10W/40 oil, and then only half a pint.

The Honda's video game warning system is one of the best. Between the square, graph-lined clocks in the centre of the impressive instrument panel is a liquid crystal display which creates little images of a petrol pump, oil can, battery, radiator, headlamp and tail lamp. You don't need me to tell you what these relate to. The symbol is flashed along with a red warning light if any of these needs attention, and whenever you start the machine the display runs through its act just so's you can see the clever, pretty pictures. At other times the same display indicates which gear you're in, including N for neutral and OD for overdrive, definitely OTT.

Within a few miles this had all become too much for the Honda's overburdened silicon chips, and the gear indication plumped for 3 and stayed there. This electrical hiccup was the only justification for there being another neutral indicator among the bank of lights above the clocks. And if that isn't enough to

roundabout and the brain in the bike's boot doesn't want to know; hold the button to override the cancelling mechanism and the bike panics audibly, with solenoids clicking and the winker switch struggling against your thumb. I sometimes resorted to hand signals. There's technology for you.

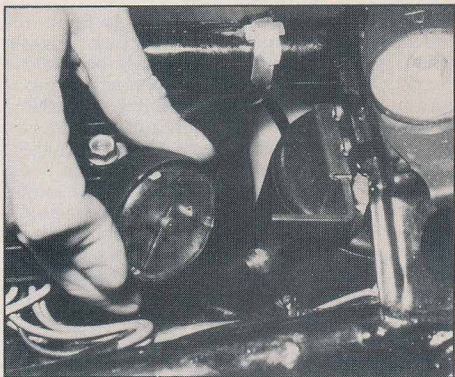
More worthwhile advances are the ignition switch steering lock, sensibly positioned past park so's you don't leave the lights on and drain the battery, and the handlebar choke lever - much better than the old push-pull buttons which seized up in no time. Wot, no automatic choke? Two and a half thousand pounds worth of electronic wizardry ought to include this, even at the expense of some of the gimmicky gizmos.

Not quite earth-shattering now, but still a worthwhile innovation, is anti-dive front suspension. The VF's device stiffens up the damping on the left leg only, a hefty brace joining the fork sliders above the front mudguard keeping the front wheel straight despite the uneven forces acting upon it.

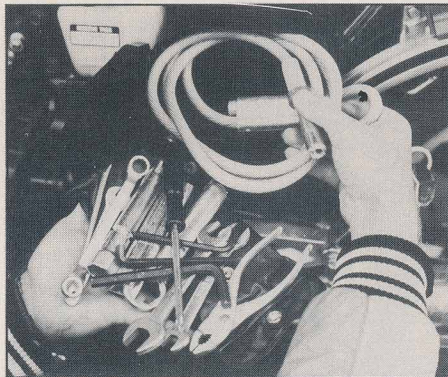
The system is operated by a torque arm from the double-piston caliper operating the left front disc, so the more the brake works

the more anti-dive you get. The effect is to keep the bike level and stable under hard braking with steering geometry and weight distribution remaining correctly balanced. Just as important, though, is the fact that anti-dive prevents the normal loss of suspension which makes heavy braking on bumpy roads a dodgy business. I found the third of the four anti-dive settings gave the best results with my normal heavy handed braking tactics, and that the Honda system is the best I've tried yet.

The front forks behaved very well, perhaps because their damping doesn't have to be a compromise to cope with the heavy loads of braking. The six-spoke cast wheel floated over minor bumps and ripples, the forks took potholes in their stride without jolting the whole bike, and yet exhibited none of the spongy softness of the rear suspension. We ran the forks on 11psi, (recommended range 7-14psi) but found checking and increasing the pressures a hassle because the forks are not inter-connected. There is a sensitive pressure gauge in the luggage box in the seat tail, but no pump. The rear



Rear suspension adjustment was simple using gauge supplied and garage airline.



Comprehensive toolkit included cable lock with built-in anti-tamper alarm.

suspension could be filled safely by garage airline, but the tiny capacity forks could not. Hand or foot pumps aren't always available.

While the suspension was keeping the wheels in touch with the road, the Dunlop K527 tyres honoured their part of the deal with excellent grip. Cornering with footrests stuffed into the tarmac and the bike lurching wildly over one particular lump at our photo-session roundabout was, um, exciting, but never worrying thanks to the super-sticky tyres. They worked OK in the rain too and twitched only moderately on whitelines.

Rain during the test was too brief to be certain, but I reckon there was a hint of wet-lag from the twin front disc brakes. Not the sickening several-seconds of nothing that early Suzukis became infamous for, but a 50 percent loss of bite for the first half second or so. Kawasaki's sintered pads are better.

The double piston calipers offer excellent feel with enough power to lock the front wheel with ease. Even the SLS rear drum made a major contribution to road safety. Between them the brakes make such light

work of deceleration, and the engine provides such effortless go, there is little to tire the long distance rider. Despite the suspension problem which made cornering on bumpy bends feel like the bike was hinged in the middle, high speed stability was excellent, and motorway curvey at 90, 100 or 110mph presented no problems.

But high speed cruising was limited by the riding position which, with a hint of the Yamaha's styling about it, sat the rider too upright for comfort. This is the American idea of a sports bike, but the bars need to be lower and footrests further back for European use. Vibration is non-existent thanks to a motor which has almost perfect dynamic balance and rubber engine mounts which absorb the remaining tingle.

The contoured dual seat was comfortable for both rider and passenger, the latter assisted by a substantial and well-placed grabrail, but for some crazy reason the seat cover is stitched so overnight rain soaks in to squeeze back down your thighs next morning.

A halogen, rectangular headlamp is good but lacks the penetration of a Cibie or Bosch unit through too much light being scattered. The sharp dip cutoff is made safe by a sliver of light aimed up the lefthand verge. The tasty wrap-around rearlight, moulded to fit the streamlines of the seat tail provided ample rearward illumination and brake warning from both ends.

Bike security is good for the VF750 owner. In addition to the ignition steering lock there is a hefty high-tensile steel cable underneath the left sidepanel which loops around wheel, railings, etc, and then plugs into a lock beneath the panel. Just in case anyone attacks it with bolt cutters there is an extra defence: Cutting the cable severs a fibre optic which sets off an alarm bleeper. Clever stuff eh?

The toolkit was average Jap big bike standard, with the addition of a double ended ring spanner for the hexagon-headed engine casing bolts. No more chewed-up crosshead screws. Yippee.

The twin mirrors gave a good rearward view which remained clear thanks to the vibrateless motor. Switchgear was novel, but worked OK for all its chunky butchness, and the standard of finish was good.

It's a shame those fat plastic airboxes spoil the otherwise sleek lines of the VF, and hide much of the magnificent motor into the bargain. Like the CX before it the VF is not conventionally pretty, but beauty is in the eye of the beholder.

The VF750 has got every right to be an excellent machine. If you add up all its components, the sum is very impressive: V-four motor, shaft drive, Pro-Link air suspension, anti-dive forks, six gears, and a very high standard of equipment. Sadly the reality on the road is rather too bland for my taste and the handling drawback would severely limit my enjoyment on country lanes. So why do I believe it'll sell like hot cakes? ■

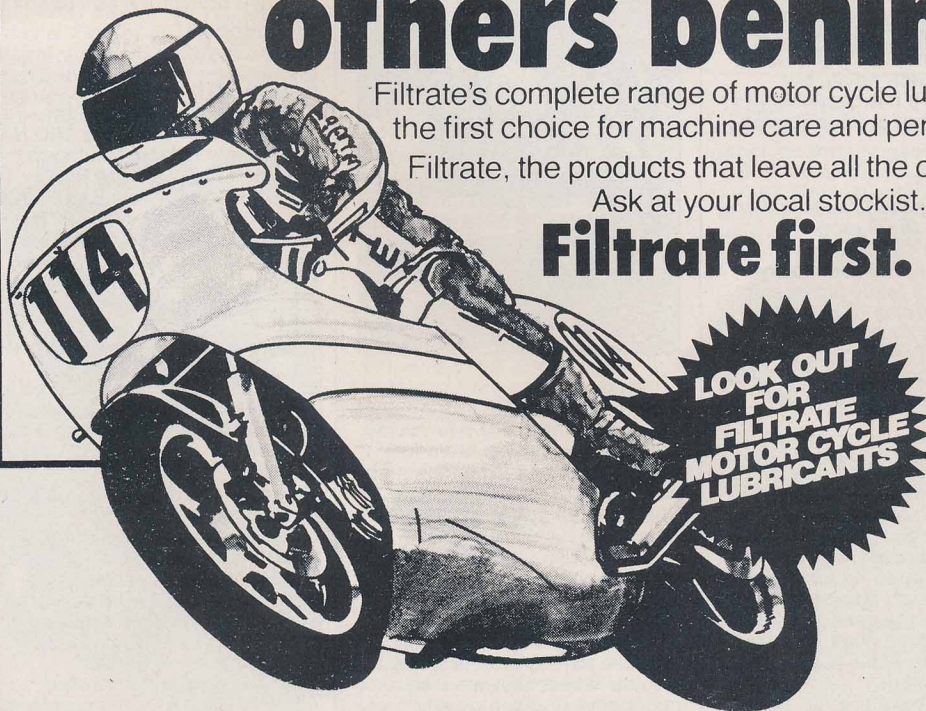
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