

JUNE 1974 20P

# MOTOR CYCLE MECHANICS

THE  
HOT BIKE  
MAGAZINE

# PASS 3-YEAR TEST!

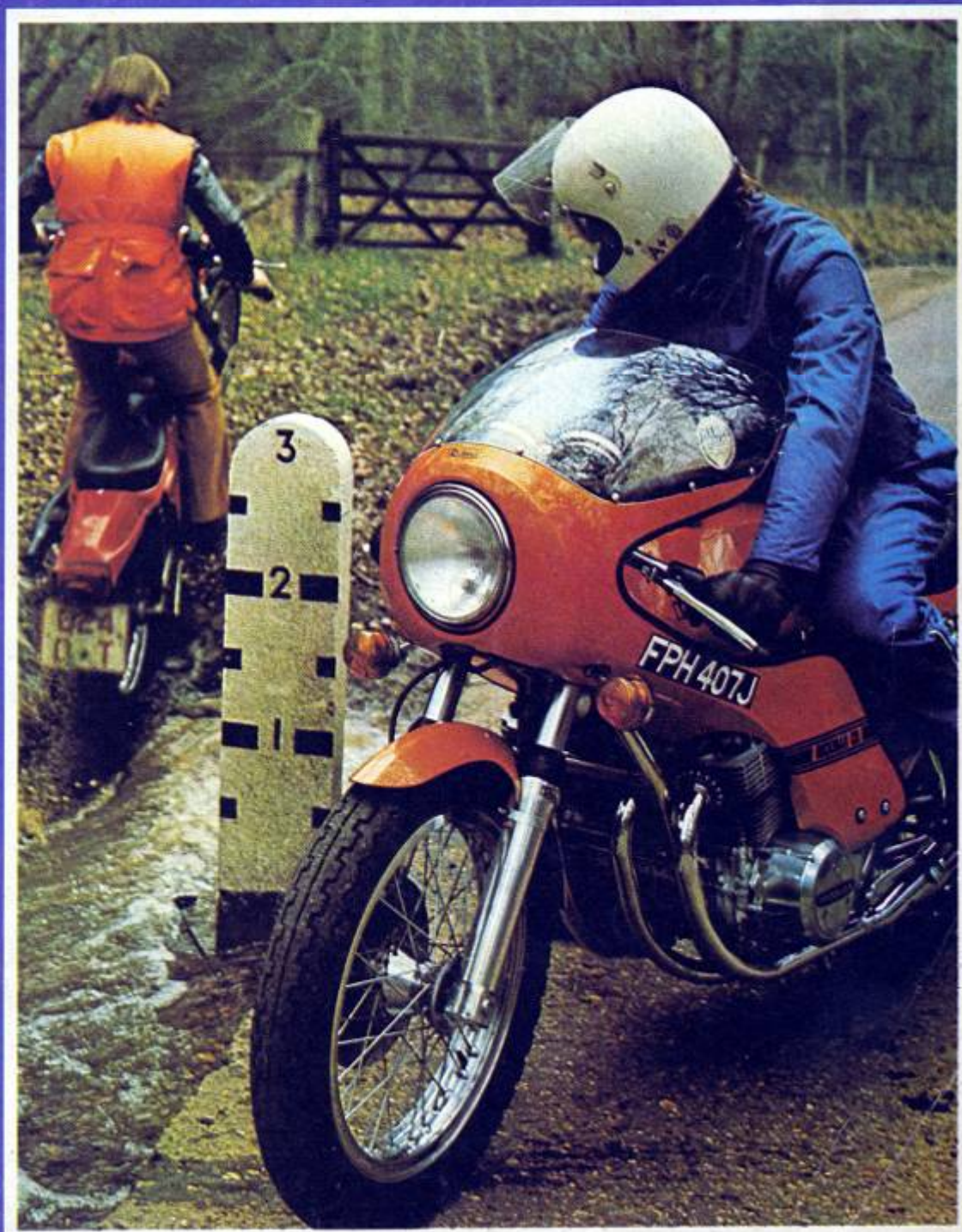
RICKMAN  
CR 750  
ON TEST

YAMAHA  
STORY

ISOLASTIC  
SORT-OUT

BSA A 10  
REBUILD

IGNITION  
FACTS





# MOTOR CYCLE MECHANICS



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While every care is taken in compiling the contents of the magazine, the proprietors assume no responsibility for any effects arising therefrom.

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June 1974

# in the Seat

## Yanks come back...



What a guy that Kenny Roberts proved to be in the recent, fantastic Anglo-American Match Race series. With only just over 40 road races to his credit, which would just about put him in line for an international road race licence in the UK, he comes to our short circuits and promptly puts it across riders of the calibre of Mick Grant, Paul Smart, Peter Williams, Barry Sheene, Dave Croxford, etc., all of whom have been scratching around Brands, Mallory and Oulton for almost as long as I can remember!

Also, don't forget that it was Kenny Roberts who finished a very close second to Agostini at Daytona and repeated the trick at Imola... now who says those Yanks can't road race? In fact, but for poor, old Gary Nixon running out of petrol in the last race at Oulton, the American team would more than likely have beaten the British team in this, the fourth in the John Player series of races.

I spent some considerable time talking to Gary Nixon, Yvon Duhamel, Gary Fisher and Art Baumann after the Brands Hatch meeting and I know that they were expecting to win the series. I also had quite a long discussion with Gary Nixon about the TT races and although he seemed interested, his one objection to competing was the length of time he would have to spend away from the States and the possibility of missing some of the AMA championship meetings. As far as he was concerned, a fortnight on the Isle of Man was far too long considering the rewards offered by racing there. Also, he didn't think he could learn the circuit in the practice time available in the week before racing and therefore, didn't stand much chance of doing very well on his first visit.

Obviously, both are genuine criticisms of the TT and unfortunately, until some golden-handed fairy in the form of a sponsor comes along to bring even more cash to the races, there is very little that can be done to provide the cash similar to that offered at Imola and Daytona. Of course, the answer to the problem of practice to learn the 37½-mile circuit is insuperable... there is just no easy way of winning anything worthwhile and, as far as I am concerned,





**Metisse, the French for crossbred or mongrel, has slowly taken on a meaning closer to thoroughbred. The Metisse frames built by Rickman have a long pedigree going back through a line of roadsters and motocrossers all with a reputation for fine handling.**

The latest in this line, the 750 CR, wears a similar chassis wrapped around an OHC Honda four.

It's not so long ago that the crowds flocked to see the exotic works racers, the then incredible fours, and the café racers ran around on pushrod twins. Now the fashions have changed, the circuit racers run two-stroke twins; the multicylinder exotica are still around but it's the street racers who use them.

The one difference is that the CR really has race performance, the kind that could be embarrassingly uncomfortable on the road. The first thing you learn about the Rickman is that it demands respect and gets it! But once you've established that relationship, it responds to the lightest touch and you can put it just where you want it.

Emulating road racers has always had its problems and the Rickman suffers its share. There are the usual things like the clip-ons being too wide, the tank too long, the controls awkwardly placed and so on. A racer is built around the guy who is going to ride it, so it's obviously difficult for a fitter to put a demonstrator together to suit a series of journalists in a variety of shapes and sizes.

### controls

Fortunately for the customer the CR is supplied as a chassis kit and is open to a fair amount of tailoring. The biggest problem lies in their understandable use of the Honda controls.

The twistgrip is heavy in operation, needs two handsfull to get it open and didn't shut off properly. The motor in ours was a well-used hack K1 and later

models do have a better twist-grip, although I'd still prefer a quick-action one.

When you're taking a lot of weight on the wrists, it's important to have light controls and have them adjusted properly. The front brake lever presented no problem, but because the clutch lever incorporates the switch-gear with wiring which goes through the handlebar, it was impossible to get the lever low enough to be comfortable.

The footrests and pedals suited me well enough, the gearshift could be tucked in a bit further, but I gather that they are producing a lever linkage to give more adjustment there anyway. I would have liked the seat a little further forward and a slightly shorter fuel tank.

### suspension

As far as comfort on this kind of machine goes, the CR wasn't too bad. The suspension is firm, but anyone who goes for this bike will obviously settle for handling qualities rather than more luxurious springing. At low speeds there is a strain on the wrists, which disappears as the speed goes up and the wind pressure takes more of the rider's weight.

Fairings are enough of a nuisance on a racer, with full street equipment, they're even worse, but the CR wouldn't be complete without one and you just have to live with tight runs on the cables and a steering lock which is best described as nominal.

These little grumbles were my introduction to the CR, a pretty uncomfortable ride up from the south coast after which I needed a good rest before taking the machine out on to the test track. There everything changed, minor problems like comfort paled into insignificance and even the weather improved as the Rickman settled down to some rapid laps.

Despite the hack engine, the CR turned out to be one of the quickest roadsters I've ever ridden. It quickly showed itself

**the mongrel shows its pedigree**

# STREET



quite capable of using a lot more power than the Honda was producing and, in places, a lot more than the rider was prepared to use. The Rickman always seemed to be well within its limits, no doubt helped a lot by the fat Dunlop on the back.

The gears were too widely spaced to get the most out of it on the track, but were reasonably well-suited to road use. For handling and rideability, I've no doubt that, given the power, we are talking about a 150 mph motorcycle.

The Rickman feels a little heavy, is deceptively fast and always smooth. It is forgiving up to a point, but you quickly get the impression that it's to that point and no more, that when it did decide to let go it would do it in a big way.

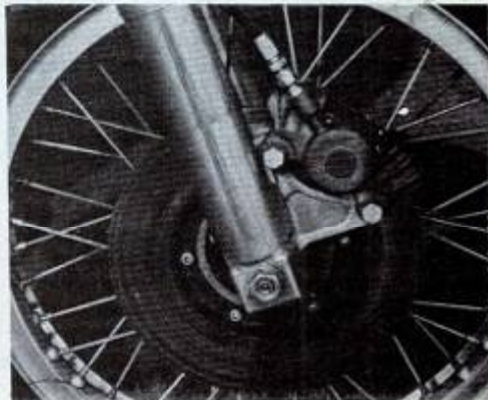
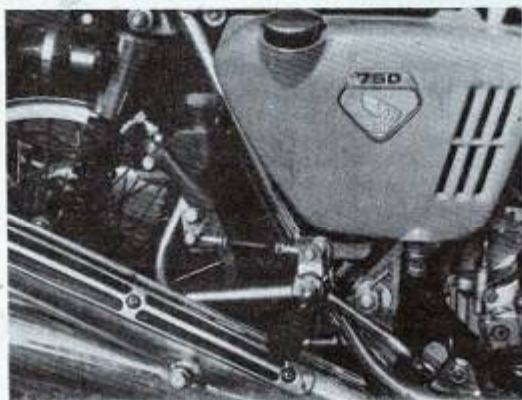
The suspension is firm but not harsh and copes with bumps very well. Even when well cranked over the CR's only reaction to a bump was to go light at the front, maybe skip a little at the back and immediately settle down again. Reaching for the brakes in the wrong place had much the same effect, but it always stayed on line, felt rock steady and you could brake hard deep into a bend.

While the machine remained steady and predictable one was always aware that the rider had to provide the margin for error. Possibly it's because you can ride it so hard that you don't realise how much you are loading it up.

## clearance

With this kind of riding position you'd expect everything to be tucked away and it is. The only points to ground were the prop stand and centre stand which would just graze the floor on left-handers.

If the handling on the track was its most pleasing feature, it got even better on the road. The CR is obviously more at home on fast roads, sweeping through long bends, but the most amazing thing was its behaviour in



slow, congested traffic.

I wouldn't have believed that a big, heavy machine with such a riding position could be anything more than a pain in traffic. But within the limits of its steering lock the Rickman kept its tight, precise handling all the way down to walking pace. There was not even a hint of a wobble and it could be eased through gaps so small that there wouldn't have been room to put a foot down anyway.

As the CR filtered its way to the head of a traffic queue it was no problem to simply sit there,

static, feet up, waiting for the lights to change. I'd have been pleased enough to be able to do that on a trials bike, let alone a street racer.

This basic steadiness also showed up under hard acceleration, with everything wound on there was no lift, no spin, just go. Only when the clutch was dropped hard did it show a tendency to weave slightly.

The motor was a hack one which has led a fairly hard life but it was smooth and running well. Everything we said about the big Honda applies to this one,

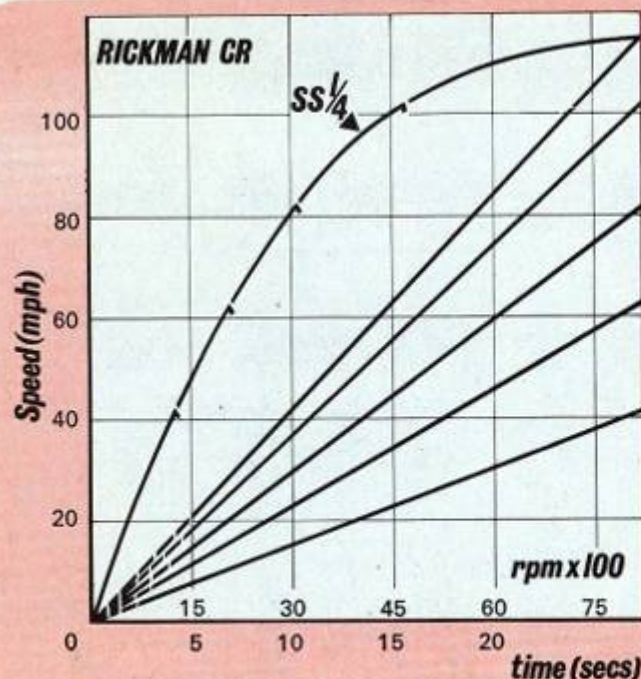
except now it is in a chassis which lets you use it.

The hydraulic disc brakes front and rear are more than up to the CR's performance and this is one place where Honda's original equipment is really worthwhile. The front lever cum master cylinder gives just the right amount of movement before it bites and also gives more feel than most other hydraulic systems. The powerful rear brake is nicely balanced with the front one, the pedal is more sensitive than most and lets you use more braking effort without either too

# John Robinson rides the RICKMAN CR

# RACER!





## RICKMAN CR SPECIFICATION

braking distance from 30 mph	28 feet
fuel consumption (average)	42 to 45 mph
engine type	sohc in-line four
(all the 750 Honda motors to K4 will fit)	
displacement	736 cm
bore x stroke	61 x 63 mm
claimed output	67 bhp at 8,000 rpm
ignition system	twin coil and cb
charging/lighting	12-volt ac/dc from 210 watt alternator via regulator to 14 a-h battery
gear ratios	14.01, 9.57, 7.47, 6.25 and 5.26
primary drive	triplex chain
secondary drive	simplex chain
wheel sprockets	48T standard 40T through 54T available
mph/1,000 rpm in 5th	14
fuel tank capacity	3.8 gallon (no reserve)
oil tank capacity	6 pint
tyres, front	4.10 x 18 TT100
rear	4.25/485 x 18 TT100
brakes front and rear	10 inch disc, hydraulically operated
wheelbase	56.5 inches
ground clearance	8 inches
seat height	31 inches
test weight	449 lb
front/rear ratio	48/52
suspension, front	Rickman 2-way damped telescopic forks
rear	swinging arm with 3-position Girling dampers
castor	61 degrees
trail	3.9 inches
speedo error	5 mph fast at true 70 mph
supplied as	rolling chassis minus engine, stands, battery, exhausts, wiring, hand controls, etc
list price	£425 plus VAT
manufacturer	Rickman Bros. (Engineering) Ltd., Stem Lane Industrial Estate, New Milton, Hants.

## STREET RACER!

much concentration or the risk of the back wheel hopping about.

Both brakes would make the tyres squeal and drag the CR down from any speed. There was no fuss about it and it would take a very ham-fisted rider to lock up the wheels.

Power, from even a hack motor, is all there. This one was wide and flexible, without any marked cam effect. On the gearing we used, under slightly favourable track conditions, the Honda instruments indicated 124 mph while we recorded a true 114. At the same time the tachometer was showing 8200, nearly into the redline. The tachometer cable broke before we could check the instrument error, but this was the point where the motor seemed to peak and gave the best gearshift point on acceleration runs.

I feel sure the CR could have pulled a higher gear on the power available. It could certainly handle more power anyway; this chassis seems to be crying out for a JapAuto 960...

On standing start acceleration the CR was quick, but not the quickest machine we've tried. Admittedly it wasn't trimmed or geared for this kind of work and proved difficult to get off the line fast enough. Compared to the 850 Norton, one of the fastest and easiest machines to run through the quarter mile, the Rickman felt as if it were picking up faster at the top end, although it was appreciably slower over the full distance. Its real punch comes in when you open the taps in the mid-speed range.

From performance testing on the track, through rush-hour traffic to open road riding, the fuel consumption didn't vary a lot. Overall we were getting around 45 mph, which is respectable when you consider that



most of the time we were using the performance. One thing the CR might need is an oil cooler, I don't know if the oil was getting anywhere near critically hot, but it certainly ended up warmer than usual.

While I can see room for a few improvements, mainly to tailor the machine individually, there's hardly a flaw in the styling and detail finish. From the brazed frame joints to the GRP mouldings the CR smacks of quality. The padded portion of the seat clips on to the base, is easily removed and refitted, but the base is solid. There is room in the rear hump for a useful tool compartment and it's a pity that this couldn't be used.

All in all this is a most impressive machine. Definitely an enthusiast's bike, but despite the café racer image it's the kind you could take home to meet your mother... and when Rickman's bring out their dual seat you could even take her for a ride on it. It's a machine for the rider who would like a Laverda but who happens to have a Honda engine lying around.



Neat lines improve top-end performance on the Rickman CR750



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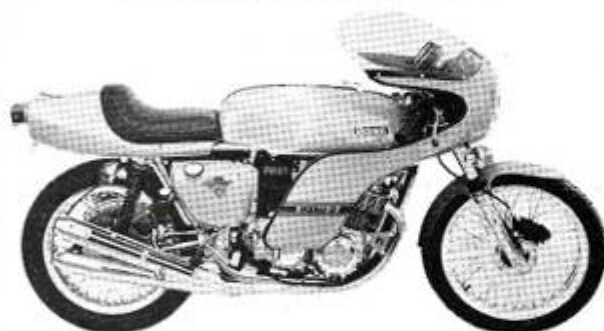


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