

Ray Knight

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KUHN-PENTHOUSE BMW Racer Test

Now you might think that I'd already tested a 900 BMW for 24 Hours at Bol d'Or and a couple of dashes on my own.



But those are very much the standard model and prepared in a very limited time; the first in just one week and mine has been 'assembled' rather than 'race prepared'.

Now it was rather amusing how this particular test came about. There was this preview in one of the 'comics' of who was riding what at Snetterton in the regional meeting there on the 6th. It mentioned that I was riding the Penthouse 900. Well I hadn't intended to, the plan was of course for me to ride my own bike. But it did give birth to the thought! The Gus Kuhn shop have been racing for many years and have scored some good wins and their '90' was certainly likely to be especially built for the job rather than a model taken off the road and modded in a short time. Their approach to the job of racing is nothing if not professional. A call to Vincent Davy and pie in the sky became reality.

I'd mentioned my efforts to get the wiring back to something like standard on my own bike. Well, the Kuhn mechanic, Dave Sleat, does things the other way round; he takes the bare bike and knits his own harness — one that includes wires only for the things you need wires for.



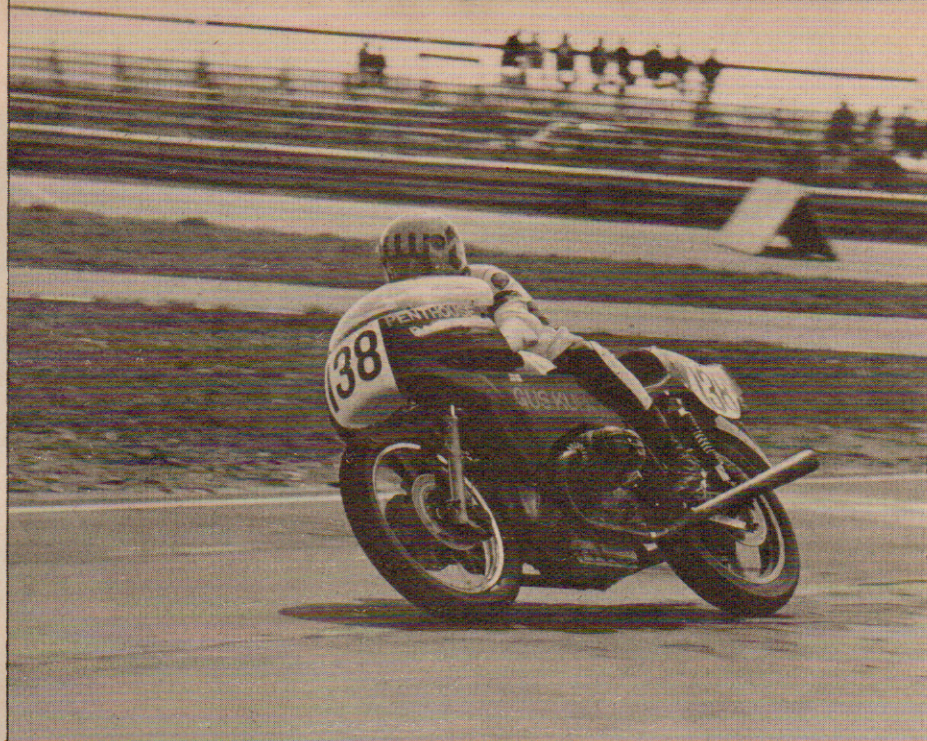
Speedos are not required by production racing regulations and Krober rev counters are on the homologation list, so that means you can remove the standard nacelle housing these items (not to mention the optional voltmeter and electric clock) though I suppose the last item might be useful in a 24 Hour Race! So, whereas the average nedly like myself takes these items off his bike, Dave builds his bike without them. That's the difference between a professional and an amateur.

But if that tells you basically how the bike is likely to differ from those you see around the roads, let's deal with the cosmetics of the bike: For starters it has a works style racing seat — except that this item is, a Gus Kuhn job and costs £30 if you want one, not the astronomical price straight from Germany. There is also the fully enveloping fairing which is a Norton production racing type. Clip-on bars with Norton control levers are fitted, but then that's just another item that you can vary. According to proddy regs these 'may be varied to suit the driver's preference'.

Again this is the difference between building a bike for the job and modifying what you find on there already. You build to what the regs permit and know full well that when you go in for International competition that's just what the successful entrant will also be doing. But I'm getting away from this particular bike: to go with the clip-ons there are 'English' style rear controls, Dave having made up a swapover linkage for the bike and gear pedals. This is because Dave Potter has got to be able to get straight off his Yammy and ride the BMW and you can't do a mental reprogramming job in between races — it just don't work. Inevitably you get into a tight spot when things happen too fast to think and then that's when you make a mistake.

At the front end you have the '75 pattern ventilated twin discs with the standard rim and this is shod with a Dunlop TT 100 4.10 X19. This is paired at the rear end with the Dunlop endurance boot, KR91 (4.25 in section). But back at the front end there is a Gus Kuhn top fork yoke surmounted by the Krober rev counter. The headlamp now sits in the front of the fairing since there are now no headlamps mounts, these being dispensed with when you fit clip-ons. The front fork has heavy rate springs fitted and the movement is damped down by Shell 10 grade telescopic oil and the springs are pre-loaded by alloy spacers.

Working back along the bike, air cleaners are items that are definitely not required *en voyage* and one of the first things to be taken off. On a BM this means removing the casting that performs that particular job — just a few



screws. The carbs are then fitted in place of the rubber air hoses with a pair of standard Amal plastic velocity stacks (which fit straight on). Incidentally, the chokes are retained, not just to aid starting, but because the thing won't even *think* about starting without them in a cold paddock on a cold morning.

While on the subject of the motor, this is fairly standard. The over-the-counter race cam is fitted and the compression ratio is around 10:25 says Dave. Naturally the carbs are standard because that's one thing you can't change under the regulations. Sparks are provided by courtesy of Champion grade N57R and the red line on the face of the Krober says 8,500. Lubrication is taken care of by BP castor racing oil and some additional cooling is given by the sump oil cooler; again you can buy — £35.

So much for all the nitty gritty about the bike but does it go? You'll remember that Vincent wanted to know that too, so it was off to Snetterton again to lay on the usual acid test of any racing bike — a race. The scene was a Regional ACU meeting for the Eastern Centre and, following on the previous week's National status production race, should give some useful guidelines on lap times and race times.

Dave Sleat chauffering the machine arrived in the paddock a few minutes before Hugh Evans' Transit did the same job for me and (I was still yawning from falling out of kip at 5.30) and after a quick scrutineering job and a shivering change into cold leathers, Dave had got my gloves warming up on the BM's cylinder heads. I bet if it was a water-cooled job he'd have made tea as well — he's well trained that lad. Next thing was to see if the ruddy thing went and with full chokes and a prod on the button a slow churning noise from the engine-

room soon developed into healthy coughs and settled down to a tickover as Dave opened up the chokes.

Sitting 'in' the bike, there was that feeling about it, everything came naturally to hand and foot and I had to make a mental reprogramming job to get the gears the English way round: one up and four down. I've only just got used to my own bike the other way round. Joining the collecting area which was filled with just about every sort of bike — the classes are not segregated, the marshal opened the gate and away we went up the slight incline to Riches corner.

The first impression was of the lightness of the controls and rightness about the whole setup. I find that I can tell within about two minutes largely what is to come and how the bike has been set up. It's surprising really that Dave gets so near the mark first time out because while he does take the bikes out on the road, he never actually races them himself. He even says that he builds them to fit himself and that seems to suit everybody. It nearly did me and I'm a bit long in the arms and legs.

You'd never guess that there were two pistons the size of dustbins whizzing to and fro under you, the motor was smooth. The Krober said 'seven' before changing from first to second to third and then I was up with the rest who all seemed to be wobbling about and jockeying for position round the almost double radius right hander, so that bend wasn't going to prove anything. A short squirt along to Sears' and the double disc up front seemed to function well enough — although racing pressure would really tell later — and then down the straight.

The first thing that showed itself was the very real powerband the motor had. True, it would pull like a steam train up to seven thou, just like a standard 90S in »

fact, but then the race cam came into its own and there was a real bump in the power curve from here until over eight. The bloodline said to stop at 8,500 but there seemed to be little profit in taking it over 8,200 as long as you could remain in the powerband, except when getting right down to second which you do at the yet-again revised corner at the end of the straight.

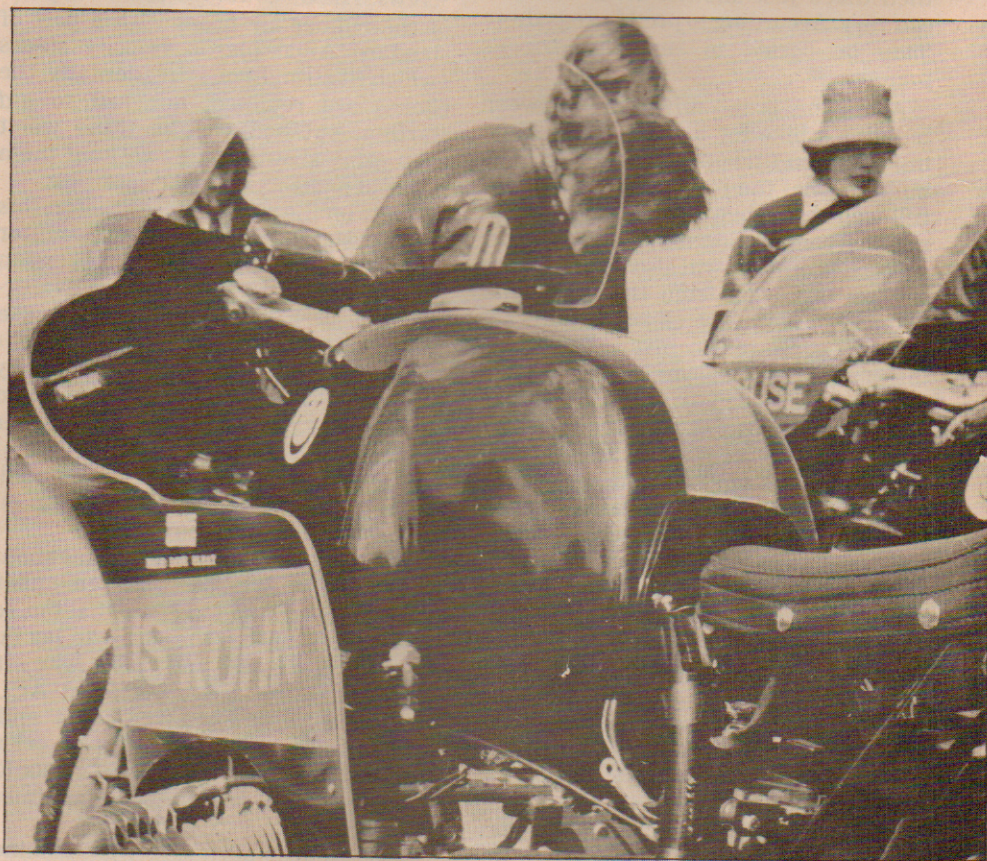
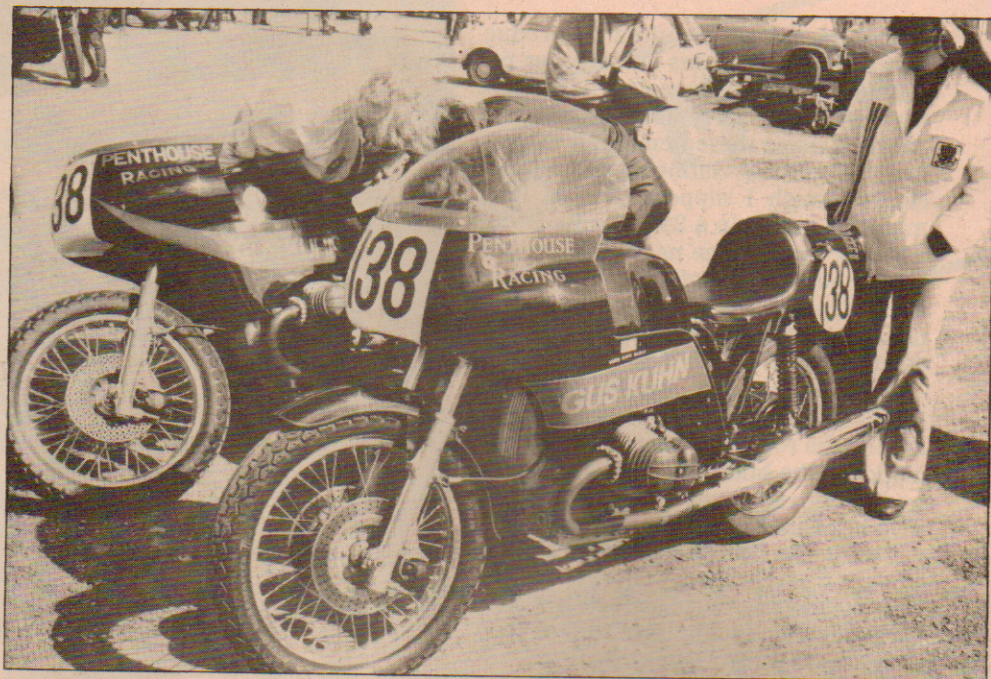
Now this used to be a sweeping left then slower right at the apex at which, when laid over to maximum, you seemed to be heading straight for the bridge that goes over track, and it looked very hard in spite of the straw bales. I can remember complaining to the ACU steward at the beginning of last year and sure enough, several blokes stacked it against the bridge, a couple in cars I'm told aint with us now. Anyway, now we have the same sweep left but it goes around a little further but the right turn is now practically a hairpin and on racers with a high bottom gear, bottom can be just too low and second too high. On the Kuhn BM, second was used and the motor's inherent flexibility apparently unimpaired at the bottom end by the tuning, pulled quite well enough to stop anyone else getting by before the Esses came up.

Tramping into Coram's boot-scraping long right hander is a fair test for any machine, with a ripple on the way in just as you lay the bike over hard, and if I was going to touch those cylinder heads anywhere, this was it. I needn't have worried, it was built for harder scratchers than I and although after the race proper R90 pursuers from close behind had said that there was precious little daylight between head and the road, the rocker covers remained uncathed.

So, tramping in and gaily tossing a couple of thousand quids worth of Munich twin onto the ends of the Dunlop treads, I was pleasantly surprised to find how easy it was to vary the line even when laid over. I could hold it in tightly on the inside and drive out and through really hard which gave me a few ideas for my own bike as that one seems to have a tendency to oversteer and take me out wide.

The last test is the right-left flick through Russells, really fast and capable of making many bikes weave about on the way through — again something my own does that this one did not. In fact it was a real delight on this section, the low centre of gravity really paying off when changing direction fast. Reckon I'd get through here just as quick as on my old Trident and that after riding it for three years, — and that old machine was good.

This session and the second practice

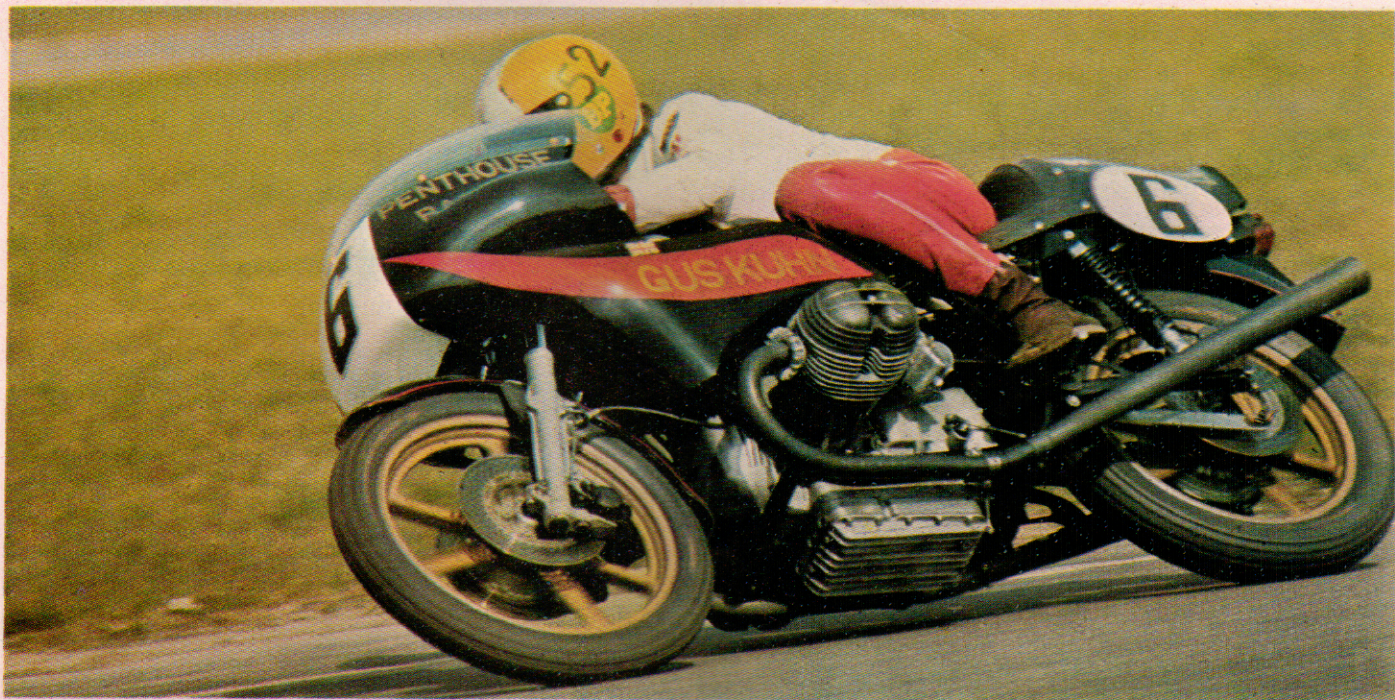


following went quietly enough and I had no qualms about telling Dave that he'd made a nice bike, that it really inspired confidence and it seemed really to quick to boot. The race would tell.

So there we were on the grid having drawn number ten I think, but on the second row anyway and with an electric start that should mean an unimpeded getaway. Flag twitches — so does thumb and the whirl from down below quickly develops into action but with noises all

round maybe I let the revs rise a little more than anticipated because when I did drop the clutch fully the front wheel reached for the sky and stayed airborne until grabbing second brought it down again. In spite of what had seemed to be a rapid commencement, there were a couple of bikes in front as we screwed the twistgrips off and bombed up to Riches.

First away and with a kick start was the ancient but incredibly fast Bon-



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neville of *Ruggs of Woodford* — it's the ex-works Malcolm Uphill model, then there were a couple of triples, Triumph and Kwacker 500, and yours truly heading for Sears and the straight. Tom Pemberton's little three made it first and hummed in pursuit of the twin as I pointed the BM after Alan Walsh's Trident. The end of the straight saw no change in positions and I found that trying to get down low as much as possible my elbows overlapped my knees which must have added at least 0.0001 to the drag coefficient. Through the start/finish in the same order and the passage through Coram this time had been really good, confidence in the Kuhn 'bikeability' was soaring as I began to hold my own with blokes who had been dicing those particular models for several seasons.

Next passage down the straight and another R90S came by. This one with Hugh Evans at the controls, has a similar specification to the one I was riding, but with some six thousand miles on its clock instead of being brand new, was quicker than mine and he closed on the Trident. But another bike came through with him — John Boman's Triple. There hardly seemed to be a gnat's between us in performance on top end but the others did have a shade in the middle — say pulling hard in third and fourth, mine seemed the same flat out.

Now Bowman's three got clear of us and we certainly never saw the other two again but Hugh's *Ongar*-sponsored model and Alan's *Motorcycle Centre* job had a right set to. We all had twin discs on the front and gained little on braking except the Kuhn model seemed to be so stable that I could just pull back a little advantage braking while laid over the

far left hand at the end of the straight. I managed to retrieve what little I'd lost down the straight. Even with the thought that I dare not drop a race test model (wouldn't make a very good story would it!) and that it was worth two grand, it inspired confidence to the extent that I lost no ground round the corners.

It seemed to go faster and faster but there were only six laps and Dave's stopwatch had said that we were all a shade under 1m 23 seconds and the fastest time turned out to be 1.22.4 by Osborne, so we weren't exactly hanging about. On the last lap Alan was just in front of Hugh with me in close attendance when Hugh left his braking for Sear just a shade late and took Alan out wide with him so I grabbed the advantage to nip in front. However, the Evans/Ongar BMW was not to be denied as it came out of my slipstream down the straight and by, and in the final run up to the flag Walsh and I dead heated on time but he had it by a tyre for fifth.

The second race was less 'busy' than the first as I managed to wheelie it off the line again to hold third behind Walsh and Osborne, but in the reverse order and 'Ozzie' again did a disappearing act with the Walsh Trident in pursuit. Hugh had got sandwiched in the middle of a furious pack and I did manage to scratch a little harder this time to hold off the Pemberton Kawasaki which is ridiculously fast for a 500 — stroker or otherwise.

Soon it was the last lap for action as threequarters way down the straight, John pulled his Trident out of my slipstream to ease by going into the left hander, making fourth spot, although knocking seconds off the total race time,

the lap times were in fact a shade slower, which is an interesting comment on what scratching in a group does for you.

A summary of the performance made an interesting comparison with last week's National race when the winner had a fastest time of 1m 23.8 — Tony Smith on his *Commanado* and the actual winner was Colin Braddick with a race average of 78.96mph the race average today had been over 81mph. So the performance was certainly fast. For its first ever race the bike handled beautifully and is most competitive. That it's going to get faster goes without saying as it loosens up and as the fine edge is put on carburation, ignition timing and mechanical fine tuning I'll put money on it winning sometime this year, especially with the sort of scratcher that normally rides for Gus Kuhn. Hmm. I'd rather hoped to be the first to win a race with a BMW in this country. I was with a Trident. Maybe there's still time — back to the workshop.

As a sort of postscript to this test, I went to Brands Hatch the following week assuming the role of spectator for a change to see how BMW really can be scratched because the same bike was being ridden by Martin Sharpe in a National event there. The handling enabled Martin to work his way through from sixth, bevelling the rocker boxes on the way to second spot. This and my own experience suggests that while BMWs have had a high reputation for many other qualities in the past they can be, and are likely to be, just as good scratching machines as any one elses, and with the talent of the Gus Kuhn shop and the the glamour of Penthouse behind them, BMW are in for a good season. «