



AUGUST, 1976

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Two wheels

THE MAGAZINE OF MOTOR CYCLING

STAY
WARM & DRY

**CYCLE
SUITS**

YOUR BIG
GUIDE

SCOOP TEST!

HONDA'S MR250 ENDURO

PLUS **YAMAHA IT400 ...**

**THE NEW-BREED JAPANESE TRAILSTERS
OUT TO BLAST THE EUROPEANS!**

PHOTOGRAPH BY ...



TWO WHEELS

THE MAGAZINE OF MOTOR CYCLING

Editor: Mac Douglas

Tech Editor: Mike McCarthy

OUR COVER: That's right — a scoop test of Honda's enduro 250 two-stroke — and it's the best Japanese off-road bike we've ridden! Match that up with our workout of Yamaha's not-so-secret IT400C (against our own Yamaha enduro project) and inside it's a damn good coverage of the Japanese bikes settin' up to challenge in European territory! You'll be surprised how good they are! Gone cold on riding? Check out page 37. Our special accessories feature this issue covers all the oversuits we could find in Australia! On page 46 there's the good oil on motorcycling's pollution-free four-stroke future, but part of tomorrow might be automatic. See page 16.



Freelance contributions are welcomed by this magazine and submissions should be addressed to The Editor, TWO WHEELS, 142 Clarence Street, Sydney, 2000. Submissions must be accompanied by a stamped, self-addressed envelope for their return. The editor accepts no responsibility for unsolicited manuscripts, photographs or transparencies.

Annual subscription rate to addresses in Australia \$10.60. Other countries \$13.50. Back copies: 12th Floor, 168 Castlereagh St, Sydney, NSW.

ADVERTISING: General Advertising Sales Manager, Michael Wright. National Advertising Manager, Ray Berghouse. Representative, Chris Ferguson, 142 Clarence St., Sydney, 2000. Phone 29-3761, 29-5606. **MELBOURNE,** Manager, R. W. Lachberg, 259 Collins St., Melbourne, Vic. 3000. Telephone 63-2294 and 63-7221. **ADELAIDE,** H. F. Hastwell, 399 Glen Osmond Rd., Glen Osmond, 5064. Phones 79-1869, 79-5956. **BRISBANE,** Dick Coates, 27 Atkinson St., Hamilton, 4007. Phone 262-5384. **PERTH,** Cliff Thomas, ADREP Advertising Representatives, 62 Wickham St., East Perth, 6000. Telephones: 25-6395 and 25-9395. **LONDON,** Peter Holloway, Ludgate House, 107 Fleet St., London EC4A 2AL. Telephone 01-353-1040. **JAPAN,** Yoshio Washizu, Business Dynamics International Incorporated, 207 Yotsuyaken Daini Kyodo City Corp., 3-37-17 Miyasaka, Setagaya-ku, Tokyo. Phone (03) 325-3733.

Printed by Kenmore Press Pty Ltd, 50 Derby St, North Lidcombe, NSW, 2141. Published by The K. G. Murray Publishing Company Pty Ltd, 142 Clarence St, Sydney, 2000.

*Recommended Price.
DISTRIBUTORS: GORDON & GOTCH (A/SIA) LTD, MELBOURNE.
THE K. G. MURRAY PUBLISHING COMPANY PTY LTD, SYDNEY.

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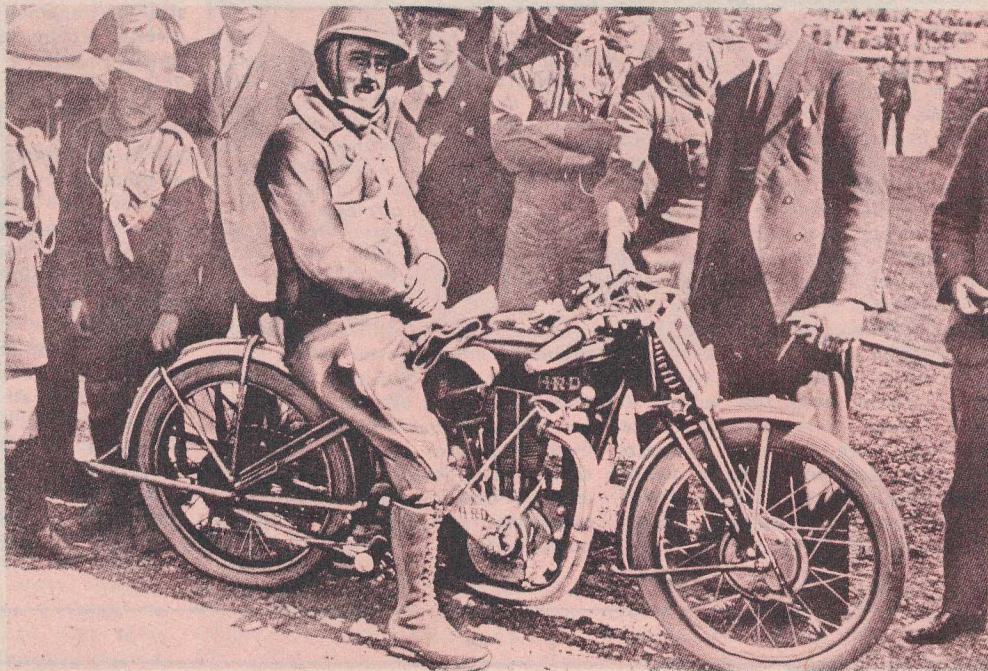
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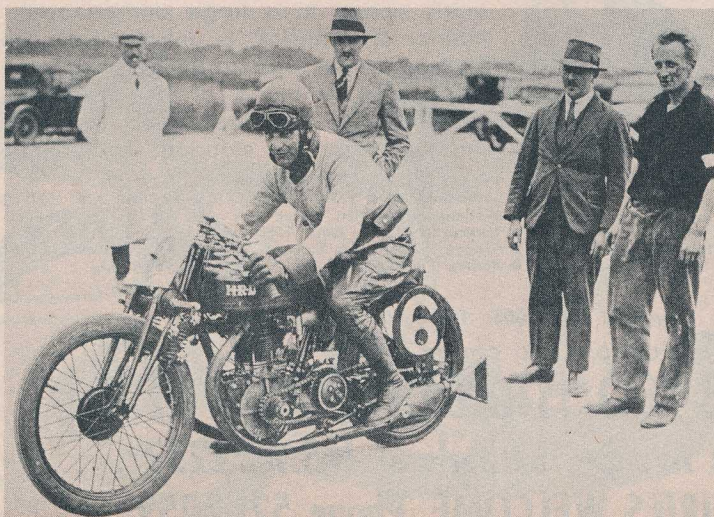
The astonishing debut of the youthful Davies in the Sunbeam racing team had led to further sensational successes aboard a 350 Ajay – which outlasted the much-fancied and faster 500 to win the IoM Senior TT! But that historic victory of 1921 preceded a string of disappointments – determining factors which launched the young TT winner into manufacture of the most stylish bikes of the era – forerunners of the Vincent!



THE HOWARD RAYMOND DAVIES STORY ~ PART II

THE HRD

RACER-BUILT FOR RIDERS!



First time out the HRD was a winner. In the shot above Howard Raymond Davies sits posed on his '25 Senior TT-winning mount in a carefully retouched photo used for post-race publicity. Standing behind the front wheel is Bert le Vack, engineer from the JAP engine firm which supplied the HRD motors.

Left:
In 1925 or thereabouts facilities for TT entrants and riders were far removed from those available now! Davies is far right in this shot.

Right:
The last of the great HRD racers. This is the twin-port built for the '27 Junior TT using a twin downtube full cradle frame. But HRD went into liquidation the same year.



BUT WHAT were the disappointments? In brief, a long and gloomy list of retirements, too long almost for sheer coincidence — and so many through nothing more than a tiny fault such as a broken petrol pipe. In 1922 Howard left the employ of A. J. Stevens, moving to the Hutchinson Tyre Company, where, of course, he was no longer able to keep an eye on “his” machines.

His mounts in '22 were again Ajays — two retirements; '23, two more Ajays — two more retirements; and in '24 Bill Osborne, boss of the Osborne Engineering Company, makers of the Gosport-based OEC machines, offered him a pair — a 350,

together with a full-sized 500. These were powered by a proprietary engine, the Blackburne. But again the bitter result — two more retirements!

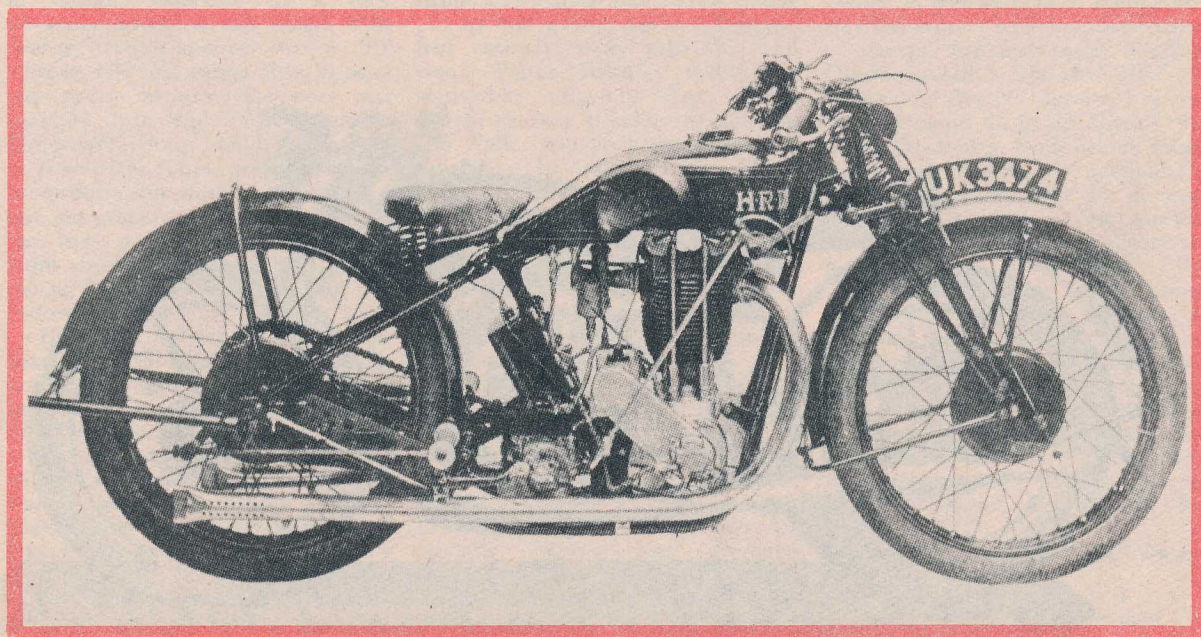
Six races in three years — and six retirements. You're getting old, Howard, they said — you're getting old!

Understandably disillusioned with the products from other factories which in most cases came from a non-riding management, Howard felt he was in a better position to design a motorcycle which would win. In those days very few manufacturers actually *made* everything — it was a *bitsa* world. Quite reputable makers were, more accurately, assemblers,

Jack Emerson, famed for his ABC exploits, also had success with HRDs. In '26 he won a 320 km solo race at Brooklands on this 498 cm³ twin-port JAP-engined model.

buying in all kinds of components and in some cases everything except the frame. So Howard really only needed good contacts with the various parts makers, and then someone to actually make the frame to his design.

Almost invariably before HRD, all machines were tall, with an equally majestic seating position. The single-cylinder engines of the period were very long of stroke — not for many years did the square engine become popular. Because



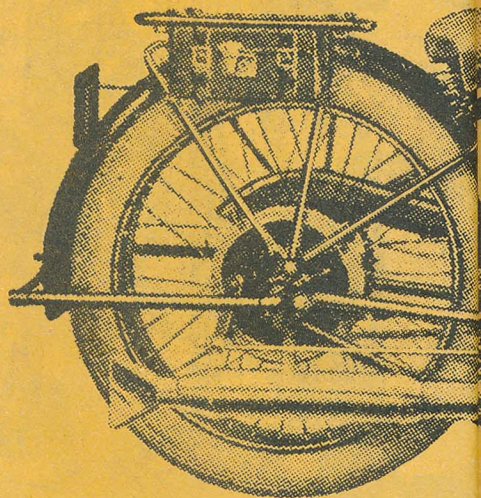


the engine itself was tall, everything kind of sat on top, which did little for the navigational department. Howard's idea — one which was to be copied by practically every other maker — was to lower the saddle position by angling the rear section of the tank downwards and by craftily saddling the tank down over the frame tube. This brought the saddle so low it was almost under the bottom line of the tank! It did mean that a great deal of the engine stuck up well into the underside of the tank and make it difficult to work on, but the improvement in steering, road-holding and ease of riding were enormous.

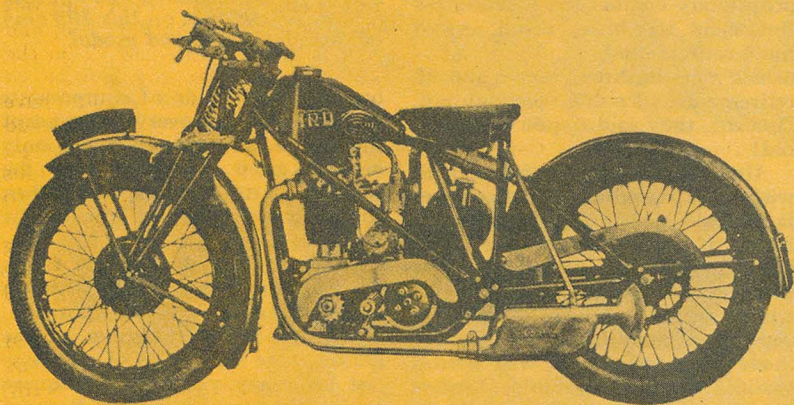
Where other manufacturers

concentrated on the engine department and left the frame an almost neglected ancillary, Howard strove for perfection with his frame. He was able to produce one which was far more rigid than most others. A massive lug linked the saddle tube with two of the rear frame tubes, and fittings were all cast up to give freedom from flexing, an all-too-common fault in some machines of that era. In-built too were such items as fully adjustable footrests, this action in particular being one which few other manufacturers considered necessary.

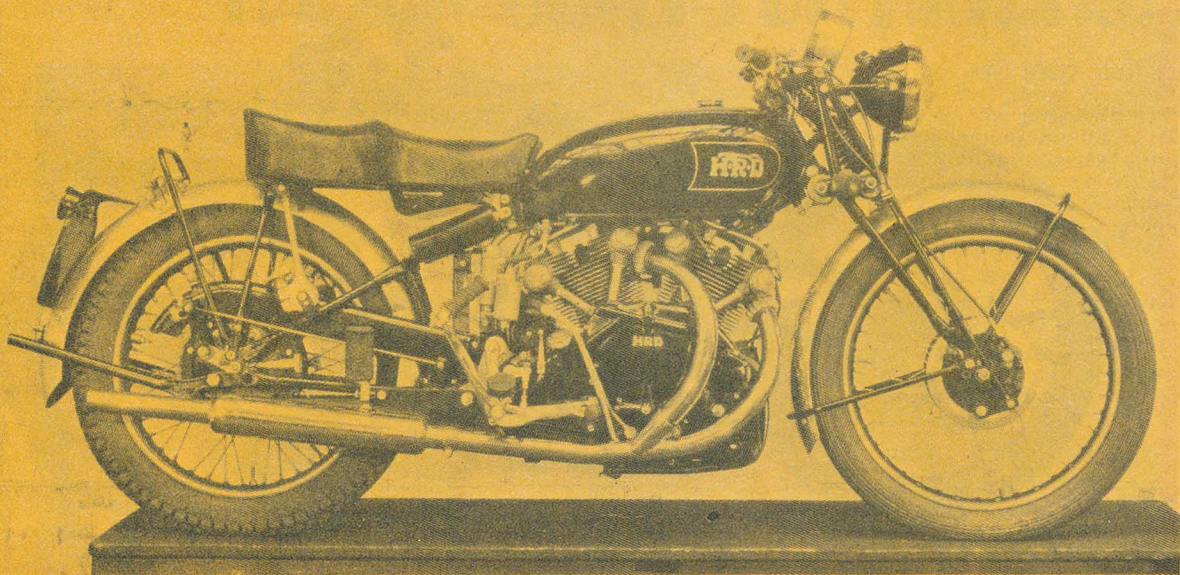
However, Howard had no experience in actually building frames, nor did he have the necessary equipment. But for a lucky or chance meeting with Bert Massey, who made Massey Arran Motorcycles, they may well have been stillborn. Between them they evolved one of the great machines of the Vintage period. There was no question of using anything other than the very best of "bought in" parts — Webb girders, which gave a much longer and softer movement

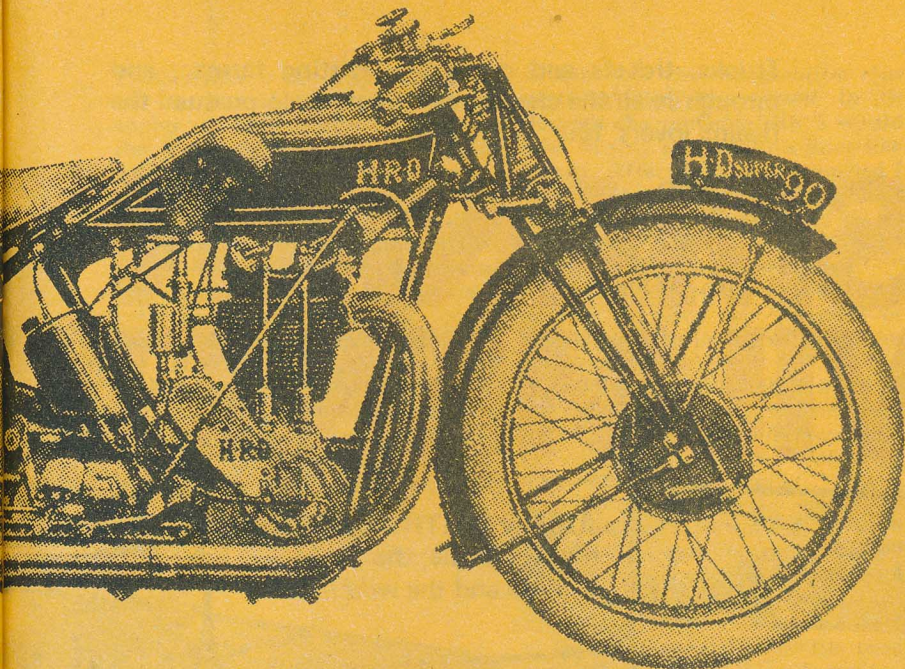


Above: HRD's "Super 90", the most interesting and last of Davies' bikes. It was intended to be the over-the-counter version of the racers which filled so many places in the 1926 IoM TT, and had many features common with them, including roller bearing hubs and steering head. Both brakes were foot operated.



Twenty years later Phil Vincent-manufactured bikes still carried the HRD name he had bought. It was only in 1951 when Vincent went to America and discovered "HRD" was being confused with Harley-Davidson that he changed the name. The single at top was Vincent's first bike. It still bears the HRD insignia with JAP powerplant, but note the triangulated sprung rear frame. The V-twin is the very first 1947 Black Shadow, still on its assembly bench.





than others like the Druid, and J. A. Prestwich engines — of course. JAP at that time had the brilliant engineer Bert Le Vack in its employ. It was backed with a Burman gearbox, and Howard insisted on decent-sized brakes.

Most makers were keen to get things going faster — slowing down seldom rated much thought then, but Howard fitted 177 mm (7 in.) brakes to the front and rear of his racing machines (the Model 90), and even on the road bikes he fitted 152 mm (6 in.) to the front and 177 mm (7 in.) on the rear. Surprising as it may seem, most riders used their rear brakes far more often than the front, so it was only natural that the front brakes were nearly always the smallest.

In so many ways Howard's professional riding skills showed up in design, resulting in a very advanced machine and racers with precise requirements for a TT winner. His first range of both road and sports motorcycles were just sneaked into the 1924 Olympia Motorcycle Show, held in London in November. These were obviously pre-production models as HRD had not yet gone into production — but the first production bikes sprung from show orders, and were made during December and January the following year.

Howard's determination was fixed on a TT race win, demanding not only a superb frame, first-class brakes and so on, but the necessity of a fast and reliable engine. Where a number of manufacturers used engines from the same factory — as was the case with JAPs, Blackburnes and Pythons, the Rudge engine sold under a pseudonym — the engine manufacturers would pass the "quickest engine" along to the rider they felt

had best chance of pulling off a win. The resultant publicity would be valuable for both.

During practice riders were under a close eye and le Vack must have been impressed with Howard for certainly he was given one of the faster engines. In the practice periods Howard was never out of the first six in either the Junior or Senior classes, and often was up to either second or third fastest. With a brand-new, never-before-raced, machine such as the HRD — which only had about six months' construction time behind it, few tipsters felt Howard had a chance, though most commented on his speed, and particularly on his cornering ability.

As expected, Freddie Dixon tore away to an early lead in the Junior race on his Douglas, but in Fred's hands everything had to be strong... by the fourth lap the Douglas had retired! Away into the lead went Walter Handley riding the somewhat ungainly Rex Acme, which used a Blackburne engine, and Walter had both the speed and reliability to hold off the HRD, which in turn proved to be too fast for the maker and breaker of lap records, Jimmie Simpson, on the AJS. It was a far from spectacular race, but for Howard it must have been a tremendous experience — second place on his own machine in its first race!

Some idea of the speed of the Rex can be gauged by its race-winning time: Three hours, 28 minutes, 56.4 seconds. The previous year the winner, Ken Twenlow, riding a New Imperial took four hours, four minutes, 21 seconds. Where Ken averaged 89.5 km/h (55.67 mph) for the race, Walter kicked the Rex around to average 104.6 km/h (65.02 mph)

— some 6 km/h faster than the existing Senior race record!

If Howard was pleased with his Junior placing, even better was to come. In the prestigious Senior race, run the following Friday, Howard achieved the distinction of winning that TT in his first attempt on a machine of his own manufacture!

All the fast and fancied men faded from the scene — the Nortons of Jimmie Simpson, Joe Craig and Alec Bennett particularly were expected to dominate the winners' circle. But it was not to be. Howard, aided by a remarkably quick refuelling stop, thundered around with amazing precision, almost as though he was in a reliability trial. There was only one minute difference between his fastest and slowest laps, yet he still had almost four minutes over second place man Frank Longman at the finish.

What a brilliant beginning for the firm! In an age where the Tourist Trophy races were so important to manufacturers success on the Island guaranteed big business. It was regarded as a testing course, ideal for seeking out weak points in a motorcycle, and even to finish in the top 12 on the leader board was a guarantee of publicity — which should have meant that Howard's firm, backed with his ability and knowledge, together with such a tremendous opening, should have gone on to great things.

But finances were slim, allowing nothing for contingencies. Three years later Howard Raymond Davies was bankrupt.

He was destined never to win another TT, though in 1926 HRDs certainly filled the places. Fifth, eighth, ninth, 16th and 21st in the Senior as well as 11th in the Junior. But the winner's circle eluded them — except for just once. Freddie Dixon hauled a 350 cm³ HRD to victory in the '27 Junior, but the best he could do in the Senior was sixth. Gradually, firms which made their own engines — particularly Norton — were able to develop them and produce a few specials just for the TT which were just that bit faster.

Howard still rode in the races, but increasingly the pressure of building up his business began to take the edge off his skill. In two years he had achieved much more than many larger factories had achieved in a score of years. His fame was such that, in common with other equally famous men he became known simply by his initials — HRD.

But success does not always

(Continued on page 78)

THE H.R.D.

Continued from page 55

follow fame. A general strike brought industrial Britain almost to a standstill, and many small firms were unable to find the finance to cover the bad patch. The HRD was a luxury machine, with a price in the upper class bracket, and this was unduly emphasised when a price war developed between other manufacturers. Inevitably sales fell, and at about the same time there was a vehement newspaper

campaign about the dangers of motorcycles — just as Australia suffered a similar anti-motorcycling period in the '50s, so did Britain in the late '20s. When a rider died after an accident, and especially if it happened in a race, editorials would be vitriolic for days after.

In late 1927 Howard Davies went into voluntary liquidation, and Ernie Humphries bought the HRD concern. Ernie then made the OK Supreme, and obviously intended to manufacture a high quality machine, but the depression, though still a year away, was

having its effect, so late in 1928 Ernie sold the name HRD to a young undergraduate who had his own ideas on the proper way to build motorcycles. His name was Philip Vincent, who of course later went on to considerable fame with his own remarkable magnificent machines. But that is another story.

Howard Raymond Davies never again entered the business of motorcycle manufacture. On the 25th anniversary of the founding of the Vincent Owners' Club in January, 1973, he died, aged 77. *

HONDA MR 250 ENDURO

Continued from page 66

consideration by Honda. The exhaust is double-skinned for less amplification in the chamber, but while the engine is very quiet the front does resonate and it seems about the same as many other enduro bikes that are not so heavily restricted.

We removed the rear box muffler from one MR and ran the two together for comparison. Both were exactly the same until the upper levels of the rev range where the one without the muffler ran out a little better — not really enough to justify leaving the rear section off though.

Honda has a strong 13-plate clutch in the Elsinore and MR and the single possible point of criticism has been symptomatic of Hondas for as long as we can remember. The take-up point is far too short and it is difficult to slip the clutch when riding over harsh, slow rock ledges or fallen trees and logs. The clutch either jerks into full operation or frees entirely. But with a lower overall gearing and the bikes sound low end (not the best, but certainly good value) one should not have to work the clutch very often.

Front end performance impressed us — the rear end was not quite the same. It varied a lot. In the wet greasy clay where nothing works well the MR did okay. In the rough chattery washerboard type trails it was so-so. And over tough rocks and really bad stuff the action was twitchy and hard to control. The frame should not be at fault. We tend to blame the units or

even just the springs, which we considered too soft.

We would also qualify this criticism by pointing out that the sections ridden were among the most demanding rocky going from a competitive two-day reliability trials course.

The MR is quite easy to ride up to medium pace. The power is fine and the bike gets traction fairly well in all but the worst type of terrain. It can be stopped on steep inclines and started again without problems and is easy to steer through downhill rocks and logs and washouts. The seat is soft and comfortable — possibly too soft — and we felt the handlebars were too high for a comfortable seated riding position. The footpegs are too high also and create a cramped sit down position for medium-height riders. The standing position felt the best and was certainly the easiest way to ride the MR. Standing up for most of the day was not at all tiring, the only bike apart from the Ossa which we can say that about.

But the stand-up style limits flat out riding through wooded terrain and with the limited top end one would be unlikely to rate as the fastest rider in the "special" test sections of the two-day trials.



In more general riding and on the average trail the MR is stable and predictable to ride fast, and if the going is smooth the bike is a fine feet up slider! The low centre of gravity helps but the ground clearance suffers. You can't have everything. The MX frame leaves only 233 mm between skid plate and the log you have to cross. It also means the seat height differs from the Elsinore at 858 mm to 865 mm.

The MR is similar to the Ossa in low-down power and accurate steering and this extends to absolute power. The MR would not be entirely suited to fast desert riding, but enduro bikes do not have to be fast and peaky and powerful; just look at the results and the type of models which win trials and enduros.

The red tank MR drew a lot of interest at the Qantastic Two Day event at Orange — remember that the price will be approximately \$1100 and that is a lot better than the real top shelf stuff. And the Honda uses parts from the MT and Elsinore models so there should not be a shortage. Add the excellent waterproofing (we know having spent the day in deep water and mud) instant starting, good traction, light feel (although it is slightly heavier than the opposition) good brakes and forks and you have a fine all round trail/play enduro/two-day machine. Also the lack of vibration is a good point, meaning less wear on a rider's hands and arms and legs.

The MR 250 is the ideal replacement for the DT250 rider or XL3250 owner who nearly expires trying to ride enduros. Or the Sunday trail rider who wants something better than the dual purpose machines offered.

It is unlikely to attract top-liners off their Fronteras, modified Huskies and European marques. But it could, like the big enduro Yamaha (the only other real enduro machine from Japan, but a lot more expensive) bring a new era of safer and more enjoyable form of trail and occasional enduro rides to many riders who want to stick with Japanese machinery. *



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