

MM staff-men
try out two
of the famous
AMC glory racers

WOOLWICH WONDERS!

● The sharp, staccato crackle beneath you reaches a droning climax: the rev-counter needle climbs over 5,000. Another handful and the overhead camshaft motor suddenly slips into its power band—and whoosh, the acceleration smacks you in the back and you realise that you are aboard a real racer. And real racers they are—the AMC 350 and 500, known respectively as the 7R and the G.50. The first, under the AJS label, is known all over the world as "the Boy Racer", a name coined when the machine first flooded on to the race tracks in 1948; the second, the Matchless G.50, is a more recent arrival.



WOOLWICH WONDERS



Editor John Houslander on the G.50 leads assistant editor Ian Speller, 7R mounted, round Brands Hatch

These Woolwich wonders have dominated road-racing scenes for years, and although the last of these production racers—which means a piece of racing machinery which can be bought complete over the counter—was made in 1963, there are plenty still around winning races.

MM, determined to sample the delights of these two glory racers while they are still at their peak, selected two from the big stock of racing machinery kept in the Hampton Road, Twickenham showrooms of sporting dealer Geoff Monty, of Monty and Dudley Ward. Both were immaculately prepared and being offered at £365 for the 7R and £360 for the G.50.

Gearing on these mounts is critical, as with all high-performance singles. Editor John Houslander and assistant editor Ian Speller both found the Matchless G.50 overgeared when out on a track test on the short circuit at Brands Hatch.

This bigger machine is almost identical with the 350 7R, except for a bigger bore carb and associated breathing equipment. The inrush of power once the motor revs ran up into the power band was much more noticeable, however, and despite the engine size, some pretty frequent cog swapping was necessary to keep it buzzing "on the megaphone".

One poor point

Gearchanging unfortunately revealed the one poor point on an otherwise perfect machine, for the movement was stiff and far from precise. There also seemed to be an alarming number of neutrals available, too, which led to some interesting lines on certain of the Brands Hatch corners.

In the braking department, however, things were quite different, with some first rate stoppers at both front and rear. Housed in conical magnesium alloy hubs,

the 8½ in. drums really do their job. The front brake is a twin leading shoe type, but it has been fitted since the first bikes appeared from the factory well over ten years ago. The front stopper on the 7R was the most powerful brake yet tried by MM.

Handling and roadholding were quite good, too, although the bigger bike could be something of a handful on the really tight turns of the short circuit.

The 7R, however, seemed much more at home on the "tviddly bits", and could be wound into the corners as readily as it could be "screwed on" coming out of them. On the AJS, the front drum was fitted with a machined cooling disc, and this seemed to bring about a dramatic improvement in already first-class braking.

Sensitive plugs

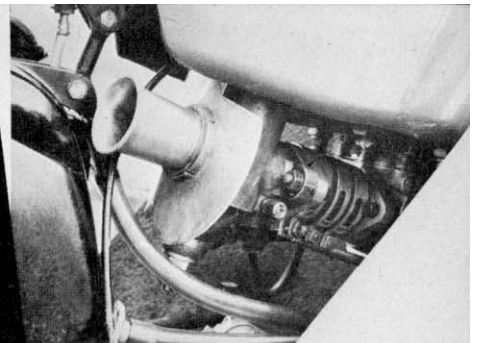
Although the 350 obviously had less power than the 500, its top speed was still nearly 110 mph, with a surprisingly tractable spread of power. The only real difference was that it seemed sensitive to plug grade, and could oil them up if the revs were allowed to drop too low too often.

Externally, the motors of both appeared the same, although only the 7R had the Electron crankcase, chaincase and cambox covered with the customary protective gold paint to prevent the typical Electron corrosion.

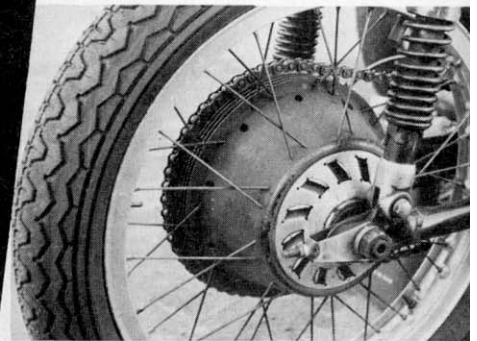
Both machines were five years old, but like the thoroughbred racing machinery they are, they were well maintained and still in the prime of condition.

One of the questions everyone is tempted to ask is whether either would make good road bikes. Generally the answer is "no", for all the power characteristics are suited to full-bore running on an open megaphone.

AJS 7R

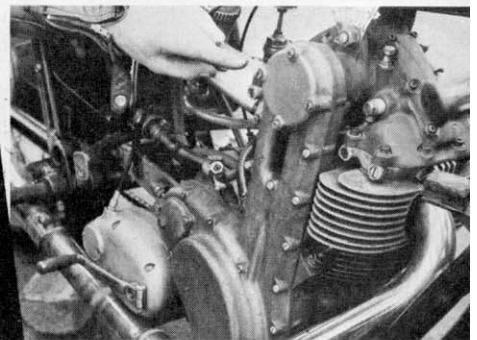


Long-angled induction manifold links the combustion chamber with the 1½ in. GP carb. Shielded end deflects hot air stream away from the carburettor intake

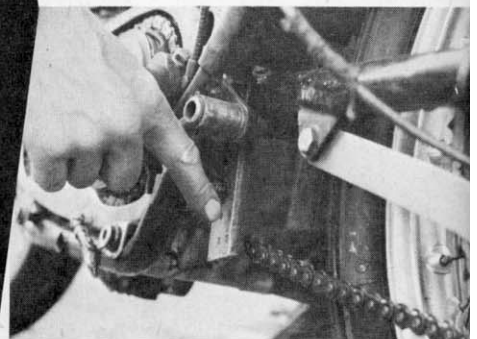


Like the front, the rear hub is a light alloy conical unit, equipped with a similar 8½ in. brake drum. The brake plate is made of magnesium alloy, too

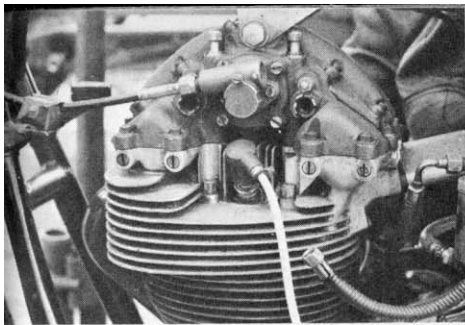
MATCHLESS G.50



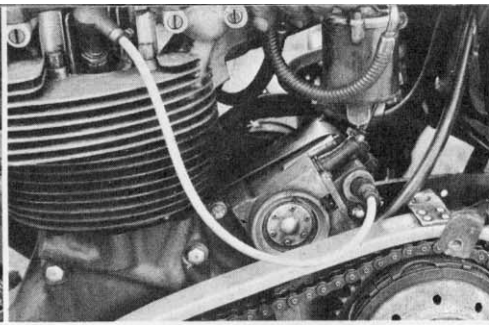
Similar in many respects, the G.50 has same chain-driven overhead cam as 7R. Cover, crankcase and cam box are all made of super light Electron material



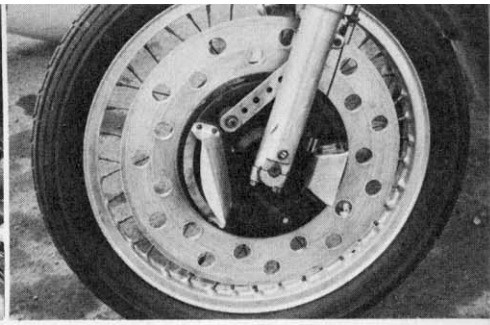
Careful preparation of these machines shows in beautifully engineered friction pad to cut chain weave at high speed. Another pad fitted underneath top run



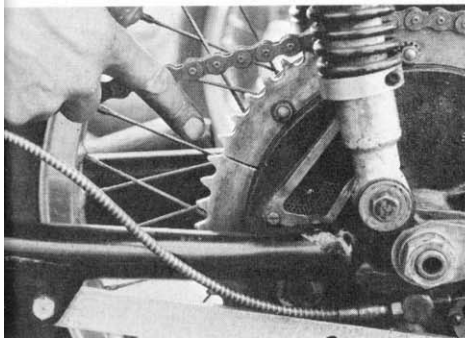
Enormous rocker box houses the single overhead cam, twin rocker shafts and hairpin valve springs. Rocker spindle ends project and turn to adjust tappets



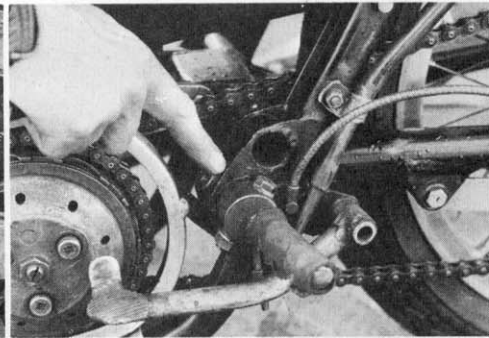
A Lucas racing magneto is used and is strap-fixed to back of webbed alloy crankcase. Remote float chamber for the big-bore carb has two petrol supplies



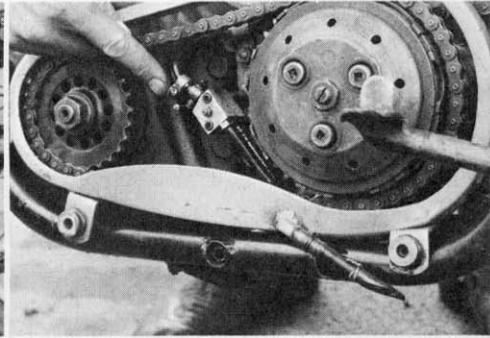
Later mod. on the already potent front brake is the large alloy cooling disc, which dissipates heat quickly and evenly and prevents the main drum distorting



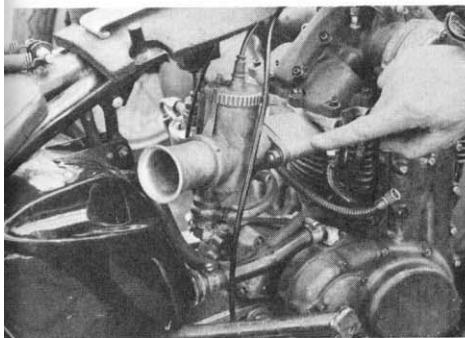
Split sprocket is another mod. to speed up cog swopping when different ratios are called for. Openings in hub draw cooling air right through hub centre



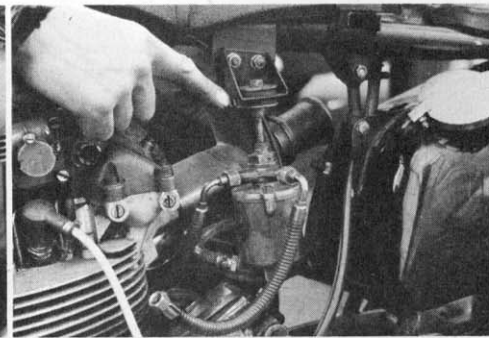
Eccentrically mounted footrest gives a wide variety of positions. Bolt slips out and lets rest rotate to new spot. Screwed brake-stop adjuster is underneath



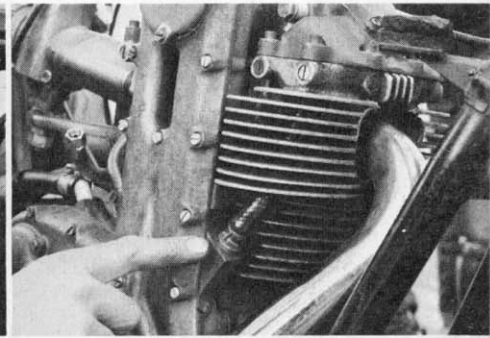
Primary chain lubrication is by a special drip through twin pipes. Oil is stored in the upper frame tubes and runs to tap in block, and then to each side of chain



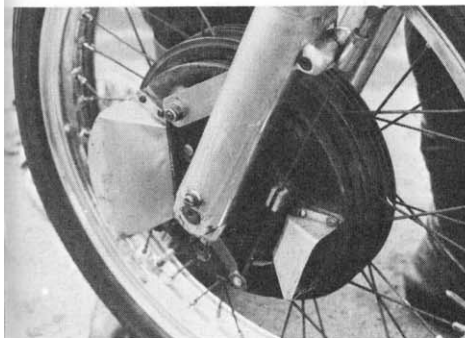
Bigger bore GP carb on Matchless has long induction spacer to get correct length. Oil tank—made of alloy—is specially shaped to clear inlet path



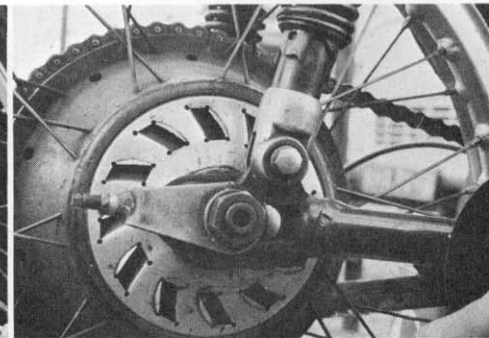
Remote Amal float chamber mounts from solid bracket with rubber washers to cut frothing. Good solid engineering was all-over keynote with these AMC racers



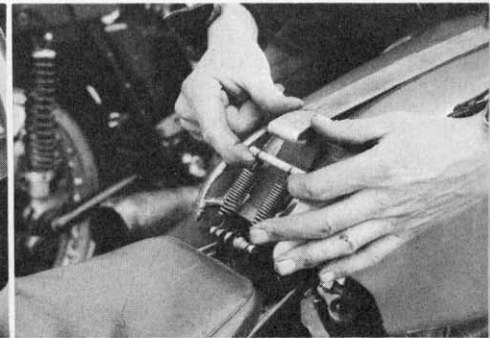
Nearly all lubrication ducts were internal on these machines, which helped well-known clean appearance. This rocker box drain runs neatly inside cooling fins



G.50 front brake was un-modded with disc, but picture clearly shows the effective air scooping arrangements. This twin leading shoe was a massive stopper



Rear wheel spindle moves in a loop of the frame and while this gives really rigid rear end, wheel removal is a big chore. Adjusters are left-hand threaded



Five gallon petrol tank is all aluminium and held down by a single, spring-locked strap. A masterpiece of panel beating, these tanks cost something like £40