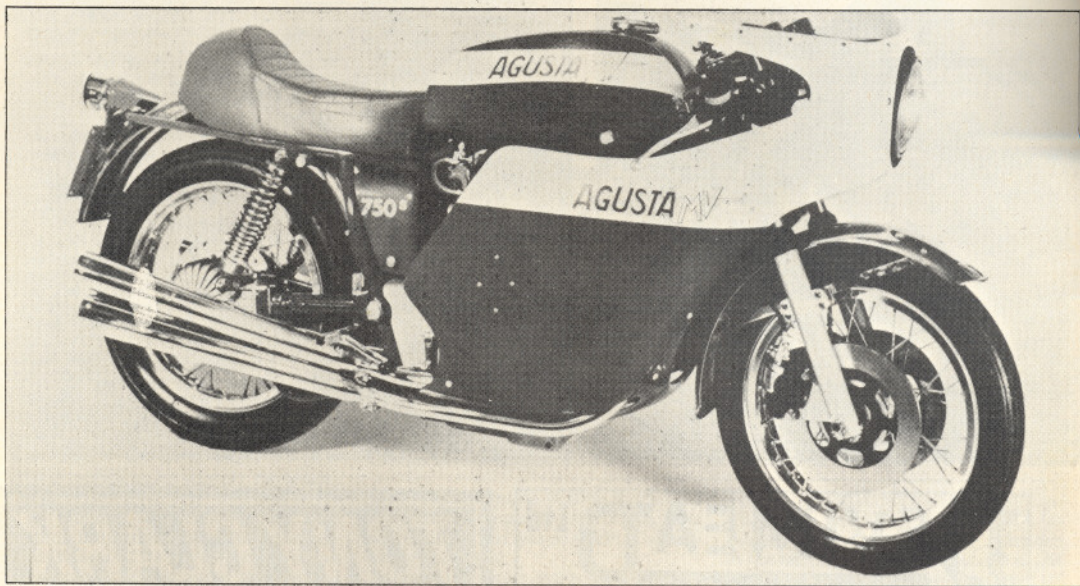


# MV Agusta 750S



**If ever a name spelled magic, it must be MV Agusta. The 750S is a true, GP — developed roadster.**

ONE OF the very few motorcycles in current production to have actually improved during its lifetime is the MV Four. Most bikes undergo change, but as this is generally to facilitate production it rarely benefits motorcyclists, and whatever apparent improvements are incorporated are usually off-shoots from the cost-cutting theme. The Gold Flash and its derivatives; the Honda Four, the Aermacchi singles, so many, viewed from a distance of years, so obviously deteriorated towards the end of their lifetime.

Not so the MV. It started life as a scrappy hotch-potch of bits and bobs from around the Italian industry into which was plumped the detuned and very slightly revamped racing four of the Fifties. It was a mess in all its various 500 and 600 forms. Then the first 750 came along a few years ago with all the necessary style and specification to get it moving on the world's bike markets. Even so, the first machines were

disappointingly slow, badly made (except for the power unit and transmission) and held the road dismally.

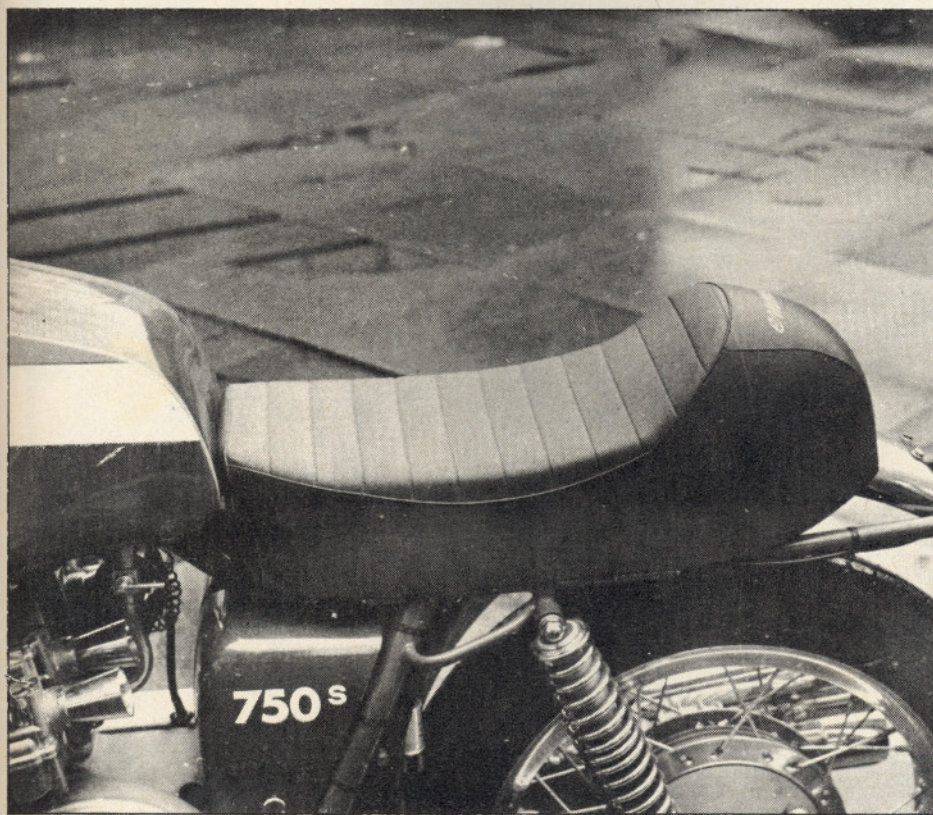
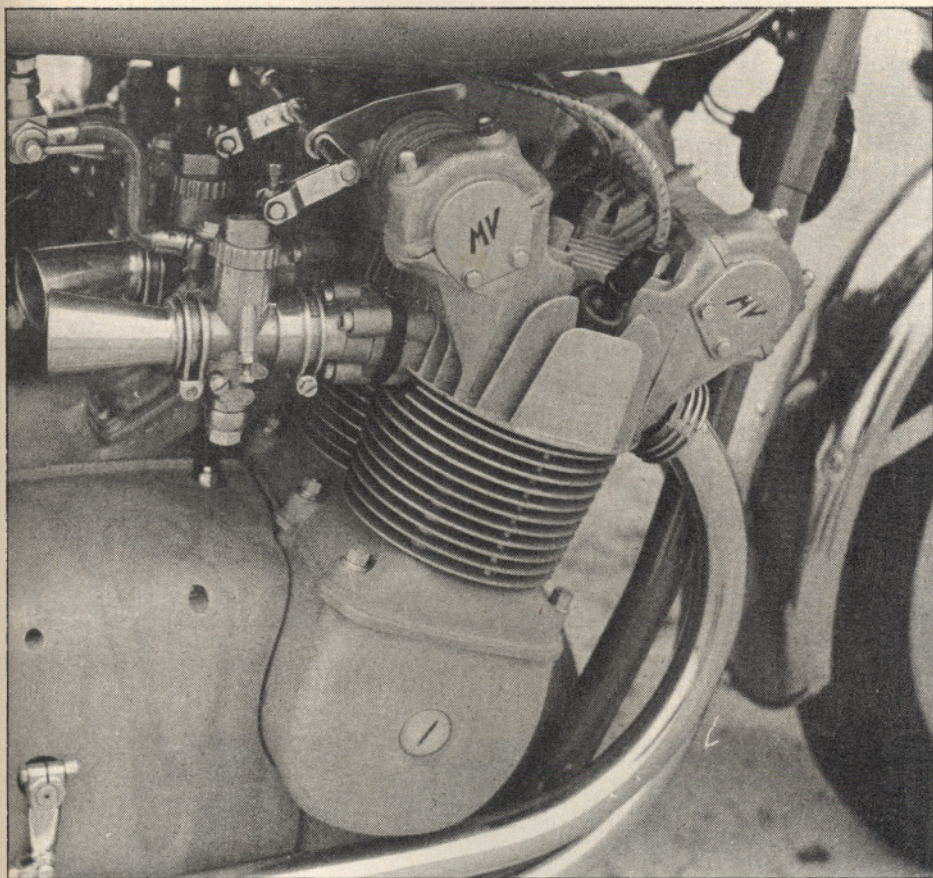
Within a couple of years however, things have changed. The 750 is now one of the very best sports motorcycles available anywhere in the world, although its cycle part quality still leaves a lot to be desired, and the factory appears to be serious at long last about selling roadsters.

That it's incredibly expensive cannot be denied, and in practical terms even whether or not it is good value for money is debatable, for no road rider could ever hope to use all the inbuilt quality of the MV, but what the man who buys an MV has, even though he might not appreciate it, and what he is paying for is around 25 years of racing development.

However, things pricey apart, what does the machine hold for the better shod bike buff?

First impressions, so it is said (and I believe it) count for a lot. The first ones





## mci road test

that went through my head are those made by the sheer functional beauty of the power unit, so obviously a creation of racing engineers. Fast, exciting, and every bit the racer it once was, but even its potential dynamism has been spoiled by the adoption of low grade ancillaries that clash horribly with the quality of the engine and transmission.

Probably MV have attempted to keep costs down by budgeting tightly on all bought-in ancillaries such as, well, all the cycle parts frankly, because without a shadow of doubt the engine must be prodigiously expensive to manufacture.

The crankshaft is built up by hand from components specially made for the one crank alone. This method is essential on racing engines in order that the ball and roller bearings might be fitted during assembly. Such practice is essential for high speed reliability on air cooled racing engines when ultra high engine temperatures are liable to rapidly deteriorate lubricant to a state where plain bearings would suffer.





Two ball bearings at the extreme ends of the crank take up side play, as well as turning loads. These are further supported by three roller races spaced between each of the four cylinders inside the crankcase.

Valve drive is by a bevel geared shaft driven from the crankshaft between the two central cylinders at the front of the engine, while behind the same two pots

Two ball bearings at the extreme ends of the crank take up side play, as well as turning loads. These are further supported by a distributor handles the spark placing. However odd distributors might sound to motorcyclists ears, it should be remembered that they provide some of the world's fastest cars with highly efficient ignition.

To inhibit contact breaker spring bouncing at speed, the spring strength is increased on fast revving engines. Double this and the drag on the cam is increased; quadruple it, as happens, and the retardation effect is enough to slow the cam on its auto-advance springs and

depress engine power by ignition retardation. Problems are also found in the human element required in tuning so many contact breaker points.

A distributor, although appearing to be a Heath Robinson whirlygig is in fact a much better bet under most road conditions. What MV have done is to utilise the old magneto drive from the racing engine.

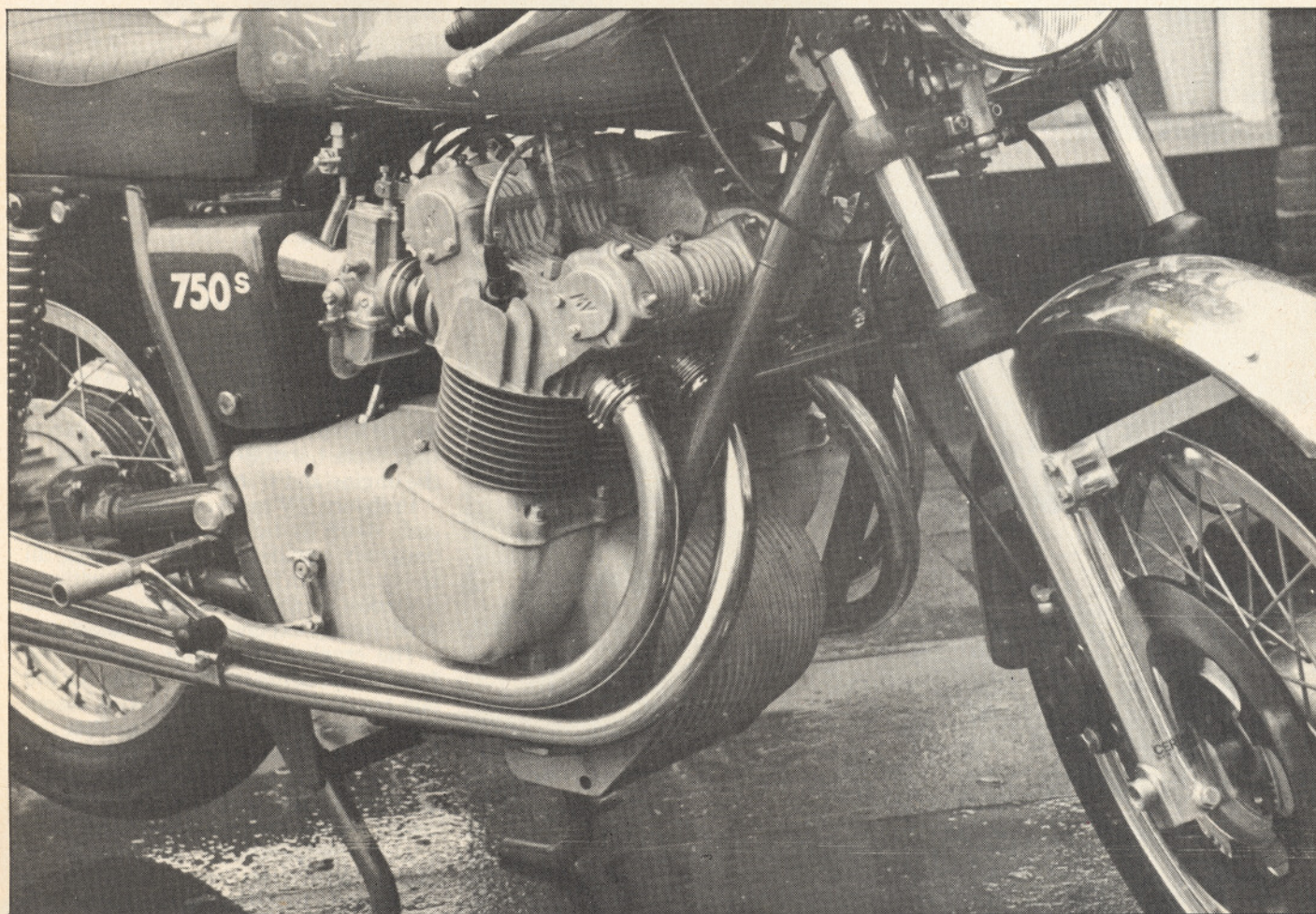
By the sound of the engine the cams are pretty sharp, and whatever flexibility does occur is due primarily to the small carbs used. Four tiddly little Dell 'Ortos, entirely without the familiar bulk of air cleaners behind them trumpet up steeply into a gap so deliberately engineered around them that it seems only MV remember the rules about allowing an undisturbed air space around the bell mouths on fast engines.

They match with four small diameter exhaust pipes, each one exactly the same length as the others and leading into a silencer identical to its brothers, even if it is a cheaply made item. This is

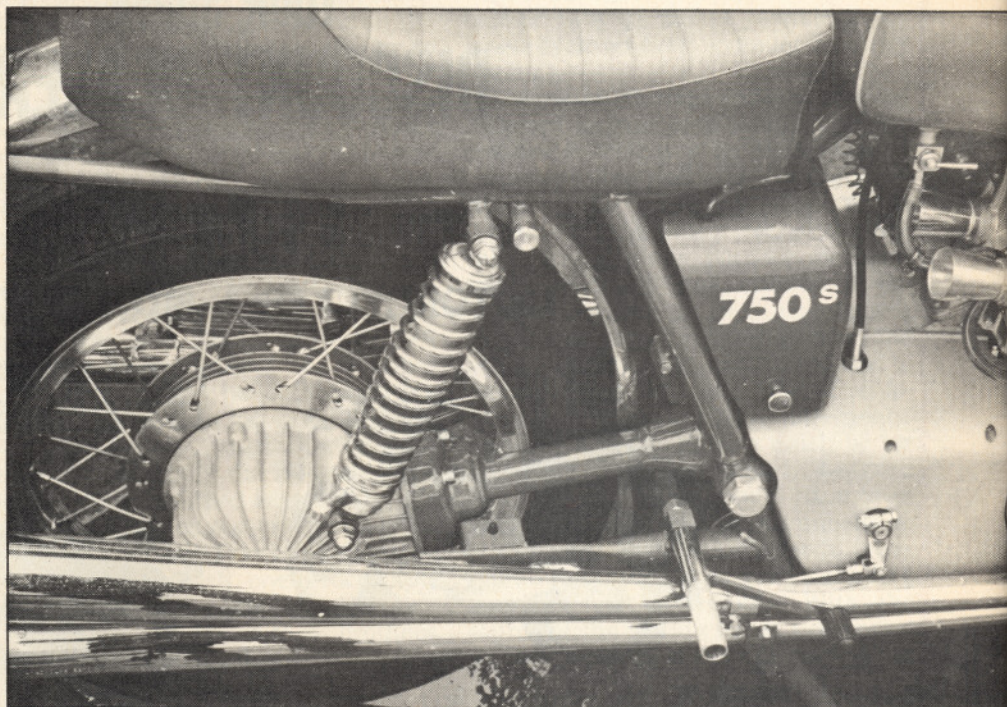
where MV get their speed from: by blue-printing as far as possible every power cycle on every cylinder on every machine.

The racing heritage appears in many different aspects of the 750 Sport. Its crankcases are no wider than those of most twins; the undersides of them uncluttered by anything that might ground, and the widest part of the machine is not in the familiar electrical system bodge at the crankshaft extremes, but hidden away underneath the engine. The broadest part of the engine is at the cylinder fins, and that to me says more than any amount of apparently vital road going requirements.

Fast line chopping was much better than with any other similarly designed bike. Fast cornering should have been much better than it was, but unbelievably the suspension system let it down. For an Italian bike maker such a failing is completely inexcusable. With the source of the world's finest suspension makers available at their fingertips, the







choice of inadequately damped and softly sprung rear units can only be due to an oversight to be rectified as soon as the supply of current units dries up.

It was so bad, on the machine tested, that high speeds were inferior to those of competitor's bikes simply because of the horrible lurching that resulted from high speed cornering on anything but the best roads.

The front end, by Ceriani, was as good as only the best Italian components can be. Stiff, certainly, and come to think of it, the alien performance of the spongy rear end and the stiff front end might have had something to do with the inferior roadholding that resulted from the bad handling.

On a lesser motorcycle such strong criticism would not be brought against it, but on such an expensive piece of engineering with the combined talents of what is probably the world's finest racing team behind it, excuses for any sort of inferior performance characteristic are simply not on.

Apart from the engine — a jewel among motorcycle power units — the transmission showed itself as about the best currently available.

Whether or not the complete lack of torque reaction under power changes was due to MV's intensive research and development, or whether it's merely a

manifestation of a transverse power unit coupled to a shaft I don't know. What it does do is to kill off the argument that transverse torque reaction is a child of power being turned along a shaft rather than that from the crank. Obviously, some torque must be transmitted by the revolving shaft, but it was not enough to materially affect the big MV in any way at all.

Gear changing was perfection itself. A crawler bottom for town and traffic and from there on four beautifully selected ratios successively closing up as they reached top. At all speeds they snicked into place with a short foot lever movement and little more than an imperceptible click, so obviously included to let the rider know that the gear had actually engaged. As for meshing cogs, they might as well have not existed.

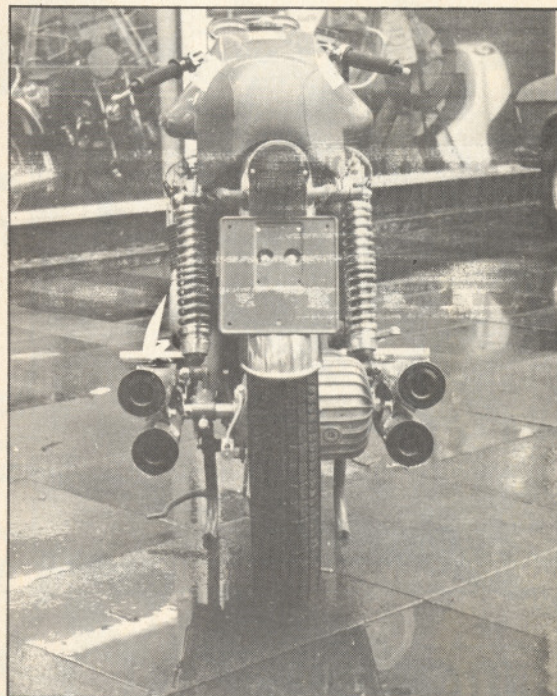
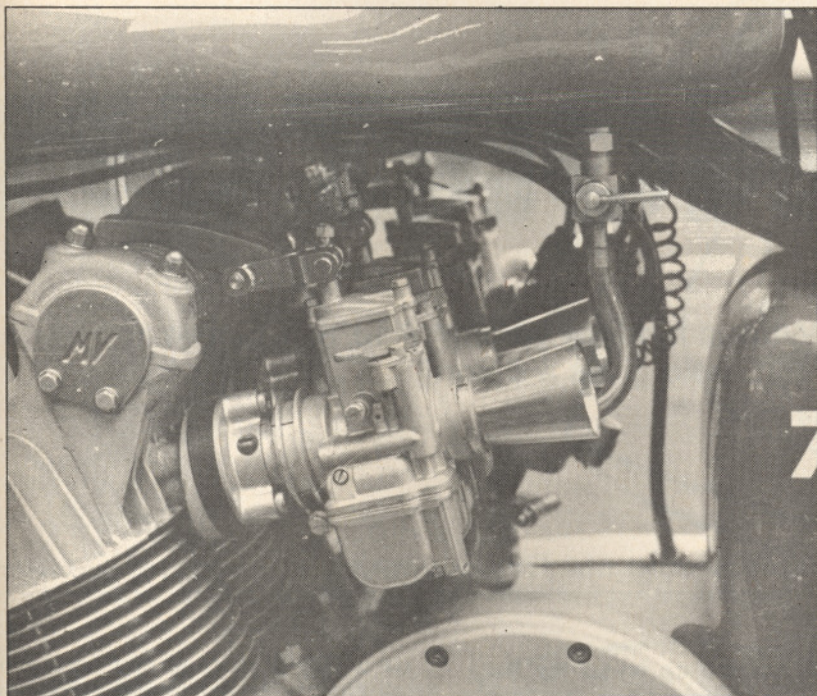
Like the engine, the gearbox finish is what most people call "rough cast". How unjustified. As with a few other progressive bike makers, MV are more concerned with performance than polish so have bead vapour blasted their magnificent alloy castings to ensure maximum heat dissipation. That it works so well can be seen in the lack of an oil cooler. The engine never overheats, no matter how fast it is driven, despite its low pressure and slower circulation and wet sump reservoir.

As might be expected, total comfort at speed is assured by a superb riding position offering what all too few machines do these days — a forward tilted rider stance, easing the weight onto his arms until roadspeeds over 60mph are approached, where from the wind does all the work of supporting the rider. The pity of it all is that so many men who can actually afford the MV Four have only reached affluence comparatively late in life and will never fully appreciate the performance of the bike they own, but merely understand its potential, a very different thing altogether.

As I said earlier, the MV is one of the few bikes that have improved during its production run. The first 750s I rode were 110mph roadsters, the latest models appear to be five miles an hour up on that, with an ultimate potential of 120, which falls into line with the Italian method of gearing to suit top speed rather than cruising ease, something that I fully agree with on sports bikes especially.

As high engine speeds approach so the engine stops its clickety chuffling and takes on a shrill whine so reminiscent of racing engines as generously spaced components fall into line with their designed performance optimum. Even at the highest speeds, mechanical





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noise, by no means unpleasant, takes on a gnashing rhythm of its own, blending with the hollow rasp of the four exhaust pipes and suck of the carbs. Nothing makes a noise like the MV; nothing. Whether from saddle or roadside, it's a noise that instantly saturates a motorcyclist in grands prix.

Braking was good, and suited the machine perfectly although the new twin discs are no better than the recently abandoned drum brakes. No kick start is fitted, thank goodness. Emergency starts needed little more than a paddle in second gear to fire the engine. The tool kit was rubbishy and because of this fitted in well with so many thoughtlessly finished cycle parts. Lifting the seat opened up many weld spatters, thinly painted joints.

Its paint and chrome finish is poor, the electrical controls stupidly inadequate, but with the soul of a grand prix machine as well as the basic requirements of a fast roadster, the MV has, at grass root level a quality denied to almost any other machine. I will never agree to its generally lauded sophisticated or even civilised achievements. Its attraction lies wholly in its raw, almost crude appeal of pure speed suitability. Perhaps the one word that sums it up is sensuality.



## SPECIFICATION

### ENGINE

*Type and construction:* All alloy transverse inclined four with steel cylinder liners and built up crankshaft and ball and roller bearings throughout.

*Capacity:* 743cc.

*Bore and stroke:* 64 x 56mm.

*Valve operation:* dohc.

*Compression:* 9.3:1.

*Lubrication:* Wet sump. Low pressure, high capacity gear pump. Metal gauze filter.

*Electrics:* Twin V belt operated DC dynamo - cum - starter. 12V 18ah battery. Distributor and coil ignition.

### TRANSMISSION

*Primary drive:* Straight cut gear.

*Clutch:* Wet multi-plate.

*Gear ratios:* 1st 11.26:1; 8.01; 6.11; 5.17; top 4.74:1. Selection by right side foot lever one up and three down foot pedal.

*Final drive:* Shaft through right side pivoted fork leg via bevel gears.

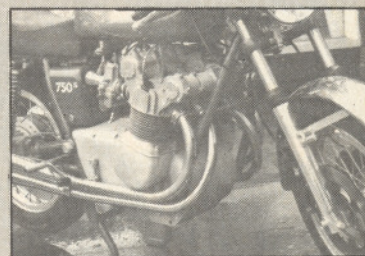
### FRAME

*Type:* All welded tube steel full loop duplex cradle.

### SUSPENSION

*Front:* Ceriani two way damped tele-fork.

*Rear:* Ceriani nominally damped load adjustable pivoted fork.



### BRAKES

*Front:* Twin 9in discs.

*Rear:* Gri Me Ca 8in sls drum.

### INSTRUMENTATION

*Type:* Matched illuminated speedometer and rev' counter. Warning lights include ignition, oil turn repeater and main beam.

### EQUIPMENT

Centre and prop stands. Turn signals. Clubman seat. Clip on handlebars. Tool kit. 6in 45045W headlamp. 4½ gallon steel petrol tank.

### DIMENSIONS

*Ground clearance:* 5.5in.

*Wheelbase:* 55.9in.

*Kerb weight:* 528lb.

*Seat Height:* 31in.