

**6-PAGE
SPECIAL**

BEAT WINTER!

NOVEMBER 1970

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MOTORCYCLE

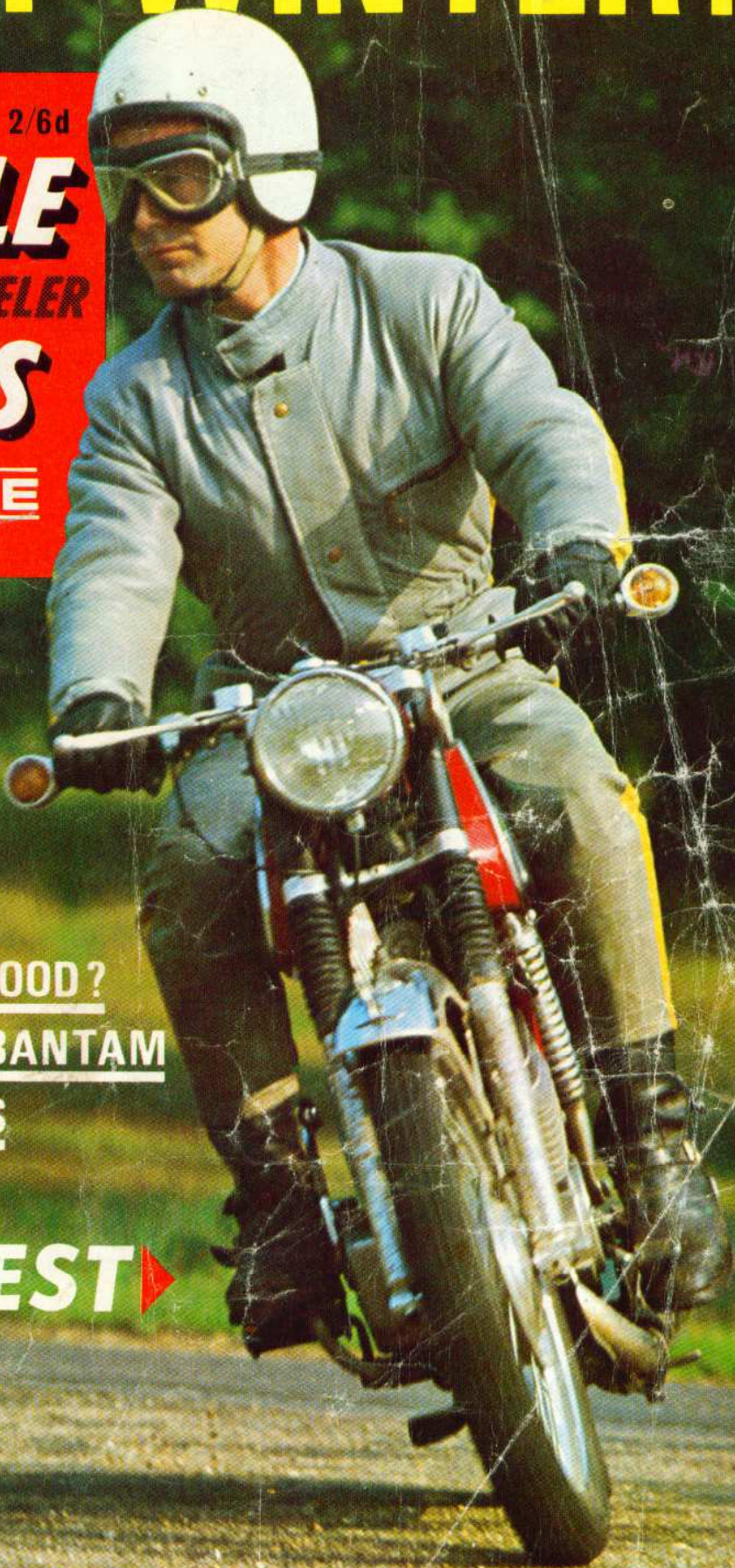
SCOOTER & THREE-WHEELER

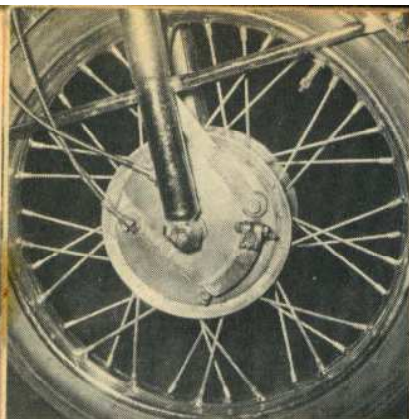
MECHANICS

LARGEST SALE

- ▶ **BSA 650 OVERHAUL**
- ▶ **ENGINE FAULT FINDER**
- ▶ **PAUL DUNSTALL STORY**
- ▶ **SUPERCHARGING : HOW GOOD ?**
- ▶ **ENGINE ANALYSIS : BSA BANTAM**
- ▶ **HOW TO BALANCE CARBS**

PUCH 125 TEST ▶





The single-leading-shoe front brake is surprisingly powerful and gives good degree of feel. Rear brake is equally good



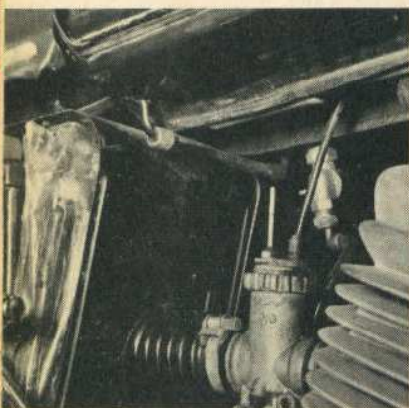
Flat handlebars give comfortable riding position, but front brake lever fouls fork leg. Speedometer is almost hidden



The exhaust pipe is the first thing to ground on corners—some enthusiastic ear'oling broke the silencer clamp!



Dual seat and matching strip on tank improve looks. Seat is also comfortable and easily large enough for two riders



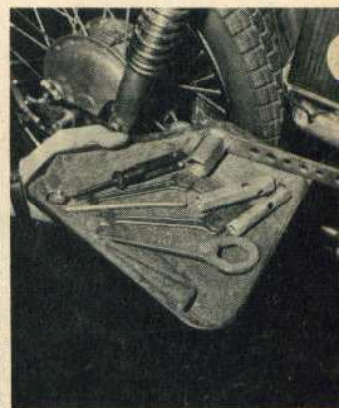
Petrol tank has a large reserve and unusual feature in this connecting pipe between the two flanks of the "saddle" tank



The engine-speed clutch is operated by this simple external lever. Cable may be changed in a mere matter of seconds



New feature on the Puch is battery lighting. Compartment and covers are well made and lined with felt . . .



. . . as shown here to deaden any rattles. The toolkit is adequate for running repairs and routine adjustments on the machine

John Robinson reports on the M125S

► **Reliability, power and comfort are rarely found at the same time in a 125 cc motorcycle.**

More often than not you find power has been built in at the expense of flexibility, or that the engine is hypersensitive to ignition timing or carburation changes.

Most lightweights that are comfortable are also too heavy for the engine. Or, in order to keep weight down, comfort has been forsaken.

The latest Puch 125 manages to blend these three important factors together without detracting from any one of them.

The engine and machine as a whole is reliable and may be thrashed mercilessly without complaint. It develops enough power and a wide enough spread of torque to give quite a lively

and useful performance.

In fact the performance would probably be good enough to satisfy the manufacturers of some 250s.

And lastly, the saddle and riding position are comfortable. The styling of the upholstery is the biggest difference at first glance from the M125 which we tested two years ago.

The other notable difference is the change from direct lighting to a battery supply.

Steyr Daimler Puch have obviously got a good thing going for them and with typical thoroughness, the Austrian factory has retained the good points and added to the rest.

The result is better and more luxurious styling, more efficient lighting and a different riding position; a de-luxe version of the M125.

There wasn't a lot wrong with the riding position on the last 125 we tested, but the tank and handlebar arrangement has been changed to give the classic English layout of short flat bars with a wide tank.

This gives a good position when riding—one grips the tank with the knees and the handlebars make for a straight-armed, slightly leaning forward position which encourages quick cornering.

The only flaw in this set-up is that the front brake lever fouls the top of the fork leg. This means that the lever has to be set too high for comfortable use—a point which becomes painfully noticeable after a mile of town driving.

If the riding position inspires fairly hard riding, the rest of the machine can certainly cope with

it. The handling is good and the suspension gives quite an easy ride while still keeping both wheels firmly on the floor. There is just one "but"—the handling can lead the rider into a false sense of security, and the weak point in the suspension is the tyres.

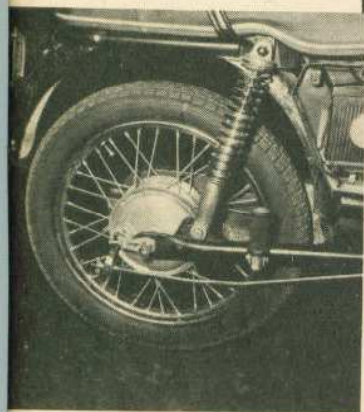
It is quite easy to make one or both wheels break away, and quite frankly I don't feel that the original equipment, 3.00 × 17 and 2.50 × 17 tyres, are up to the job.

I would suggest that larger sections all round would improve the roadholding quite a bit.

Using the bike to the full clearly shows the engine's ability. It is easy to start and only takes a few seconds to warm up. Once under way it is tractable and gives plenty of torque for acceleration.



Puch power and reliability are stored away here! Massive fins may be cause of the high level of engine noise. Unit is oiltight



Rear end shows off the clean lines and good accessibility of the M125S. In our opinion, the tyres could be improved

PUCH PLEASURE

ROAD TEST

There is a noticeable step-up in power around the 3000 mark; as a non-motorcycling friend said, "It seems a bit cammy!"—quite a description for a two-stroke!

A brief description of the performance on the road would list a top speed of over seventy, easy cruising in the sixties, with brisk acceleration, considering the size of the engine.

There is a trace of tingling vibration as the revs go up and the engine gets a little noisy. This is possibly something to do with the extra-large finning on the barrel and head. The exhaust is well silenced and gives quite a pleasant note.

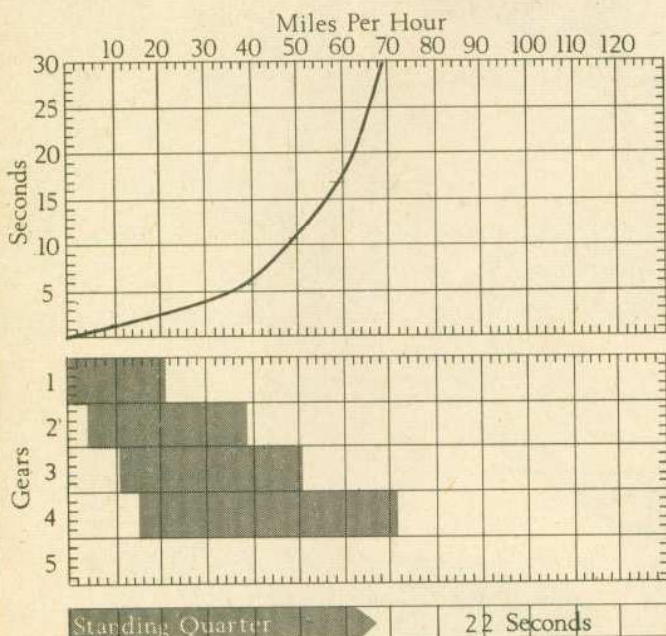
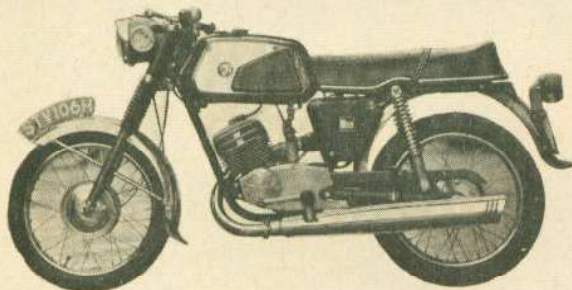
controls

All the controls, apart from the front brake lever, are well positioned and light to use. One odd



ROAD IMPRESSIONS TEST

PUCH



fuel consumption (average figure)
braking from 30 mph

74 mpg
29 ft.

SPECIFICATION

Engine: Single-cylinder two-stroke with piston-controlled ports and petroil lubrication. Bore x stroke 55 x 52 mm, giving capacity of 124 cc. Compression ratio 10:1, claimed power output 12 bhp at 7000 rpm. Carburettor, single Bing.

Transmission: Primary reduction by helical gears, secondary by chain. Four-speed gearbox driven through multiplate clutch mounted on crankshaft. Gear ratios, 1st 23.26, 2nd 13.48, 3rd 8.98 and 4th 7.91:1.

Electrics: Bosch 6-volt flywheel magneto ignition, with battery

lighting. Flashers fitted as optional extra.

Wheels: Front 2.50 x 17, rear 3.00 x 17, both brakes 6.3 in. single leading shoe.

Suspension: Front, telescopic forks, rear, swinging arm with non-adjustable damper units.

Dimensions: Wheelbase 49½ in., ground clearance 6½ in., seat height 31¼ in., weight 218 lb.

Price: £216 19s., including £2 delivery charge and UK purchase tax.

Importers: Steyr Daimler Puch (GB) Ltd, Steyr Puch House, Lower Parliament Street, Nottingham.

'a useful lightweight'

thing, almost an anomaly, is the combined ignition and lighting switch.

This takes the form of a "jack" which is pushed into a socket to give ignition. If you want lighting as well, you turn the "jack" clockwise.

This strikes me as being an elaborate and costly switch, and it can be replaced by a piece of bent wire.

In other words, it has no thief-proofing quality, so why bother to fit it?

The speedometer, which is just behind the switch, is not placed prominently enough to attract attention. When you want to see how fast you're going, you have to search for the speedo!

Riding in town or on the open road is straightforward enough and the Puch handles equally well when being chased around the countryside or when nosing through traffic.

The gearbox ratios seem to be too wide, particularly between first and second, but this would probably be an advantage when fully laden and climbing steep hills.

It is also possible to "beat" the gearbox on upward changes, resulting in the odd crunch or missed gear. This may have been due to the engine-speed clutch, or the design of the gear selector.

As long as the gearchange was made deliberately and not in a hurry, the gears could be swapped around quite easily.

Fuel consumption is about what you'd expect, driven hard around town we got 65-70 mpg, while on a long steady run this could be improved dramatically to give something approaching 100 mpg, under favourable conditions.

Here there is another bad point, but one which is no fault of the manufacturers. Petroil/oil mix is an expensive way of buying oil, and it's also becoming more and more difficult to get the stuff.

On the most direct route between home and the office I pass 12 filling stations, and can find more by going slightly out of my way.

Only three of these actually have a device to meter out the correct amount of two-stroke oil and a couple more are prepared to sell the odd half-pint of multigrade.

Of the first three, it's usually a fair bet that one of

the pumps will be empty or out of operation.

The rest of the garages will only sell multigrade oil in pint cans and this is usually more than you want to buy. On top of that, if you need a certain ratio, say 20:1, there's no way of measuring the right amount of oil.

This seems to be one of the difficulties that a conventional two-stroke owner has to live with.

good feel

Meanwhile back on the bike, the brakes are well up to standard. They are both single-leading-shoe types and look small and unimpressive, but they work well and that's what counts. The rear one has a long pedal and so requires only a light pressure. It also gives good feel and seems better than the front one. This is probably because the front brake is less comfortable to use, as the hand has to be bent upwards at an unnatural angle.

The electrics have been changed somewhat—a six-volt system with direct ignition is still used, but a trickle-charged battery now supplies lighting and handlebar-mounted flashers.

The lights, particularly the rear one, are better than before, but still don't come up to 12-volt performance. It would be fair to say that they are adequate for the bike's performance.

All in all, the Puch M125S is quite a useful lightweight to have around. From the décor to the engine it shows all the signs of quality and precision which we have come to expect from the Steyr Puch factory.

