

Centaur road tests the

ITOM DEBRAMATIC

An exclusive road test report of this revolutionary
two-speed automatic

A TWO-SPEEDER with an automatic clutch—that's the Itom Debramatic, technically the most interesting moped we have tested for some time. And, unlike like most revolutionary models, there is little to distinguish it from a perfectly normal two-speeder, as it would take a sharp eye to detect that the nearside lever on the handlebar operates a brake and not a clutch.

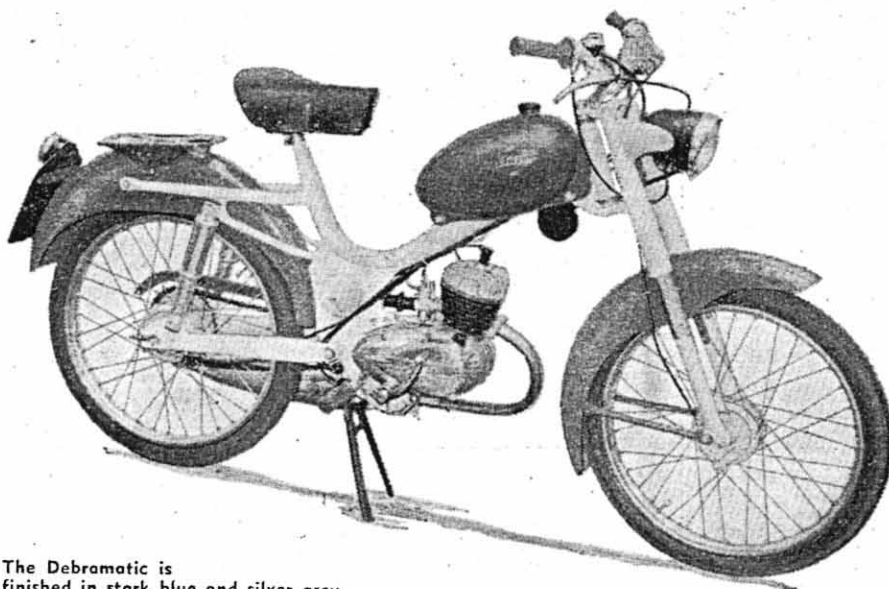
The Debramatic is in fact a "noped" or "mo-kick" since pedals have been dispensed with and a kick-start substituted. Certainly there is no necessity for pedals for the engine on the test machine was undergeared and offers a top speed of less than 30 m.p.h. However, machines that have been sold to the public have a 33-tooth rear sprocket against the 45 teeth of the test machine, and are capable of about 40 m.p.h. Undergearing, however, was an advantage since most of the test miles ridden were urban rather than rural, but for normal use the larger sprocket is needed.

Delightfully Simple

The procedure for operating the Debramatic is delightfully simple. With the petrol on and the carburettor flooded, the engine usually responded to the first depression of the kickstart. At this point the twist-grip gear change should point to "O," meaning neutral. Once a reasonable tick-over had been established, the twist-grip could then be turned to "1"—the first gear.

Providing the engine was still only ticking over the moped would remain immobile until the throttle was opened. Changing up required a brief halt at the centrally-placed neutral to avoid "clunking."

The engine was full of power and provided urge to the back wheel at all throttle openings. Acceleration in the upper rev. range was exceptionally good. Possibly associated with this, however, is a point of criticism. The engine is definitely silenced in that there is an expansion chamber in the exhaust system, but although the note is altered from that on "open pipe" the amount of noise could hardly be less strident. On down gradients in particular, where the undergearing caused the wheels to drive the engine, there was a very audible scream.



The Debramatic is finished in stark blue and silver grey.

SPECIFICATION

Engine: Itom two-stroke; 40mm. bore x 39.5mm. stroke gives 49cc.; compression ratio, 7 to 1; output, 1.5 b.h.p. at 5,200 r.p.m.; Dell 'Orto carburettor
Gearbox: Two-speed, handlebar twist-grip controlled; automatic oil-immersed clutch.
Tank: 1.1 gallons with reserve.
Suspension: Telescopic front forks, swinging arm rear.
Wheels and brakes: 18 x 2in. rims, both brakes handlebar operated and internally expanding in full-width hubs.
Lights: Flywheel generator; 15 watt headlight with side-light, 3 watt rear.
Equipment: Pump, tool kit, centre stand, carrier.
Finish: Stark blue and silver grey, two-tone.
Weight: 90lb. approx.
Concessionaires: Adimar, 222 Brixton Road, London, S.W.9.
Price: £70 8s. Od. including £11 8s. 8d. purchase tax.
Extras: Speedometer, £2 17s. 6d.; legshields, price not decided:

Sturdy swinging arm suspension and better-than-average telescopic form the cushioning and I found that the combination of the two led to good road holding. Without thinking I laid the Debramatic well over on my first run and it stayed on line without a trace of wavering.

The general lay-out of the spine frame is conducive to rider comfort rather than flat-out speed, and in fact the Debramatic is manufactured to conform to a 40 k.p.h. (25 m.p.h.) maximum speed regulation in Italy, and so there is little reason to lower the frontal area. As a six-footer I found the moped very handily proportioned and was pleased to note that the saddle could be raised by the simple method common on pedal cycles. The handlebars, which are adjustable for angle though not for height, are neither too wide (causing difficulties during "infiltration" in tight columns of traffic) nor too narrow (offering too little control at low speeds). The saddle was a little on the hard side, but then perhaps I am over-sensitive on this matter.

Cable Adjustment

There was some slack to be taken up on the rear brake when I rode the machine for the first time and it is perhaps a tribute to the simplicity of the cable adjustment system, that I was able to make a rough though effective "take up" waiting at a traffic light. Even so, the rear brake was never quite so effective as the front one and although the performance of both brakes in unison seemed about average (although I was hampered by the lack of a speedometer for an indication of 20 m.p.h.—the speed I normally employ for braking tests) the rear brake seemed a little below par.

In a field not fraught with good examples, I would praise the Debramatic's lighting. The full beam was certainly as effective as possible for such a small diameter lamp. I liked the switch, too, which is handily placed on the bars instead of on the body of the headlamp.

Various other good points come to mind. The accessibility of the engine is one of them, for it is hard to see how this could possibly be improved. The spine frame helps here of course, but the makers have resisted the temptation to effect any type of "streamlining" by bringing the engine nearer to the frame.

The petrol tap can be used by the most clumsily gloved fingers and the tank takes just over the gallon mark to accommodate a gallon of petrol together with oil without spilling over.

A good strong stand is fitted although it is rather difficult to find from the nearside.

The kickstart appears suspiciously small but is perfectly capable of performing its job without causing the foot or ankle to foul anything when depressing it.

Tools are kept in a horizontally-mounted cylinder integral with the frame and there is a small carrier at the rear. The mudguards are adequately valanced.

IceniCAM Information Service



www.icenicam.org.uk