

49 c.c. Rex Cyclemotor

Fascinating German Unit With Belt Drive to the Front Wheel

A 49 c.c. Rex cyclemotor, one of the most popular units on the German market, was recently made available for test by *The Motor Cycle*. The Rex is unusual in that the drive to the front wheel is by means of a vee-belt which is automatically tensioned by a spring-loaded pulley mounted on an arm attached to the unit. A light-alloy belt rim is clamped to the spokes of the front wheel.

Another out-of-the-ordinary feature of the Rex is a dog-clutch which allows the engine to be disengaged from the drive. The two-stroke engine has a bore and stroke of 38 x 35 mm. The cylinder head and barrel are of light alloy, and a flat-top piston is used. Ignition is by flywheel magneto which incorporates 6-volt lighting coils. A decompressor valve, for starting purposes, is fitted to the detachable cylinder head.

The exhaust system on the Rex extends downward and has an outlet pipe which reaches to within a few inches of the ground; this is to ensure that exhaust gases and oil are kept away from the rider's clothing.

The engine is attached to a mild-steel sub-frame which is clamped at the top to the steering stem and at the bottom to the fork legs immediately below the fork crown. Slotted bolt holes in the sub-frame provide a wide range of adjustment for individual fixing requirements. There are three handlebar-mounted controls for the Rex. On the right is a twistgrip throttle control; on the left, clutch and decompressor levers.

Starting is so easy that the expression "child's play" is literally true. It is necessary only to turn on the fuel and push the machine with the throttle approximately half open and the decompressor raised. After two or three steps have been taken, the decompressor is released and the engine fires immediately. Alternatively, the machine can be pedal-started.

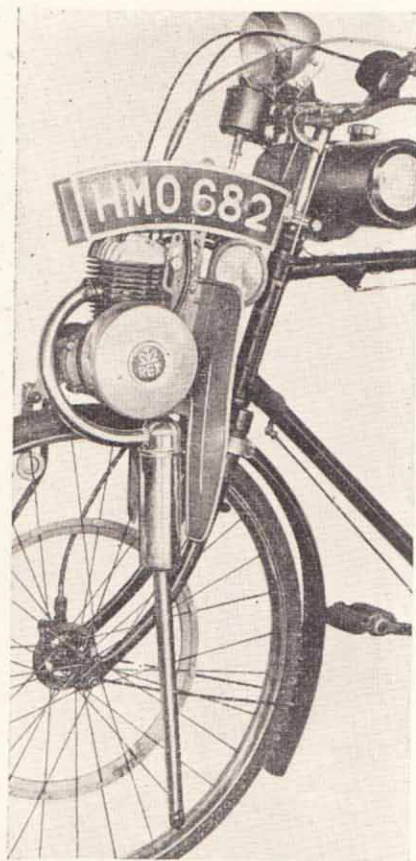
A few minutes' practice with the dog-clutch sufficed to ensure smooth take-up of the drive. The clutch cannot be slipped in the usual fashion. The drill was to pedal the machine until it was just under way. Then, with the throttle set to give a moderately fast tickover, the clutch could be engaged with no snatch. As soon as the engine was pulling, the machine could be accelerated to 20 m.p.h.—its normal maximum and cruising speed. This gait could be maintained over long periods with only a slight reduction in speed on hills.

Superb Flexibility

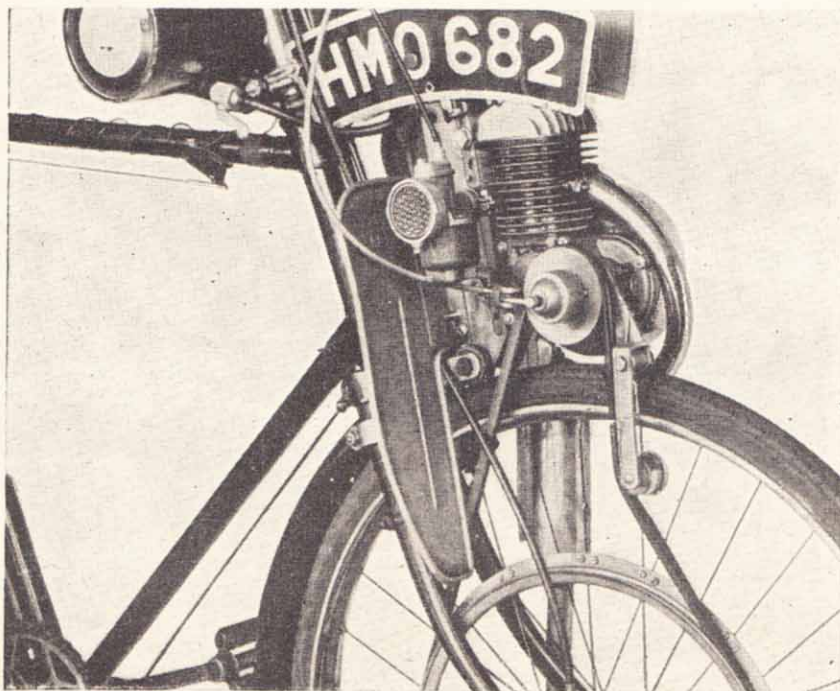
On gradients of the type that force cyclists to indulge in heavy pedalling in a low gear, the Rex would burble along at 15 m.p.h. quite happily. It was unusual to have to resort to light pedal assistance. The outstanding charm of the Rex was its superb flexibility. No matter how low the road speed, the machine could be accelerated away without snatch or pedalling. This characteristic was especially appreciated in town traffic.

When a stop had to be made, with the clutch disengaged the engine would run at a slow, reliable tickover that never once faltered. Indeed, two-stroking was uncommonly good. Except for a period near the top end of the engine r.p.m. scale, four-stroking was never experienced at all. At speeds up to 18 m.p.h. the exhaust note was limited to a subdued murmur that could just be heard by the rider. At full throttle the note was more pronounced, but not enough to warrant the slightest criticism.

At no time could vibration be felt at the handlebar or pedals, although at about 18 m.p.h. a tremor ran through the number plates. Fuel consumption was roughly 150 m.p.g.—this on largely full-throttle town and



The long exhaust pipe is a distinctive feature of the Rex cyclemotor



Drive to the front wheel is by a vee-belt which is automatically tensioned by a spring-loaded pulley

country riding. Belt-slip was experienced only if the drive was brutally maltreated; even then the slip was so slight as to be of no account. Altogether the Rex is a delightful little engine that possesses nearly all the virtues desirable in units of its kind.

Although the Rex is not immediately available in this country, it is expected that it will be imported. Inquiries should be made to A.F.N., Ltd., Falcon Works, London Road, Isleworth, Middlesex. It is anticipated that the price will be in the region of £25.

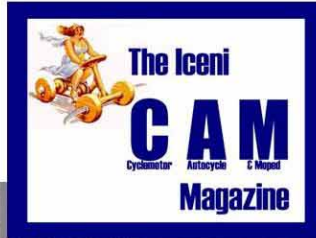
Black Spots

DURING the first six months of the year the R.A.C. received and investigated 187 complaints concerning the need for road improvements. In 106 of these cases, R.A.C. representation resulted in action by the authorities concerned. The remaining complaints, after investigation by R.A.C. road staff, were not considered justified or the required improvements were already being carried out.

Most of the reports concerned dangerous road surfaces; 42 cases were dealt with. Other interesting details are 26 cases of lack of signposting, seven regarding obstructions which obscured visibility, three on dangerous road junctions, and two on dangerous kerbstones.

All road users are asked to report "black spots" to the Royal Automobile Club (83, Pall Mall, London, S.W.1) for investigation. Pending a full-scale programme for the improvement of roads, much can be accomplished quickly, and at no great cost, by the elimination of certain deficiencies in road construction and equipment which directly or indirectly cause accidents.

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