

## 32 c.c. CYCLEMATE

Britain's smallest moped in 1959 form

CMALLEST moped built in Britain is the S Cyclemate, which is equipped with a 32 c.c. two-stroke engine with rotary-valve induction, based on the unit which powers the famous Cyclemaster wheel, that most rational of the early cyclemotors. In the Cyclemate, however, the unit is slung beneath the frame, to which it is attached by clamps, driving the rear wheel by a long chain drive. Light in weight; unsprung; and intended for a degree of pedal assistance on hills, it represents the true "powered bicycle" approach to travel.

Though the specification is reduced to basic

essentials, there is nothing skimped about the Cyclemate. The frame, forks and wheels are sturdy; the engine tough, and equipped with an efficient, all-enclosed clutch; the chain shielding comprehensive. The links shielding comprehensive. The lights are operated from the flywheel generator, and have been altered for this year to include a substantial Britax rear lamp which gives enhanced appearance and enhanced tail-end lighting.

To start, you pedal away as you would with a bicycle, and then drop the clutch. A few more turns of the pedals will suffice to bring the engine to life, and thereafter halts are made by drawing out the clutch, which is retained in this position by a spring trigger, and applying the brakes. To re-start one

pedals, at the same time releasing the clutch trigger to "bring in" the engine. For all practical purposes, on the move, the throttle is either open or closed, so there is very little more in riding a Cyclemate than in controlling a roadster bicycle.

Great things in the way of speed can hardly be expected from so small an engine, and the The Cyclemate has brought its rider comfortably and safely to his destination.

Cyclemate folk have wisely set their faces against any attempt to produce a "freak" top speed at the expense of economy or reliability. Thus the best speed which can be maintained on level roads is in the region of 15-20 m.p.h.; on hills, this will fall rapidly to about eight m.p.h., at which point the unit settles down to pull hard and steadily. If the hill is not too steep it will slog its way forward at this rate without assistance; if the gradient is too much for it, pedal assistance from the rider will keep it going. The sensation is much the same as pedalling a bicycle on a level road.

If the hill is a "killer," of course, there is

another alternative. This is to hop off, and walk alongside, with the engine running.

So far as comfort is concerned, the Cyclemate is again much like a heavy bicycle, with a spacious riding position, plenty of adjustment for saddle and handlebars, and sturdy pedals upon which one's weight can be placed now and again to ease any incipient saddle-soreness.

Handling, too, is cycle-like. The machine rides comfortably enough on most normal surfaces, and though bumps can definitely be "felt" through the handlebars, they are not of sufficient force to cause either discomfort or misgiving. Downhill, of course, it is inadvisable to push the machine up to too great a speed, though it will accelerate on the overrun willingly enough, and steers well.

Brakes, of course, are an important point on a machine of this type, which will spend a considerable part of its working life in city traffic, or dodging cows on country roads. In this department the machine shows up very well indeed, both front and rear brakes being of a good standard, neither unduly "sudden" in operation, nor spongy. Hand control is used for both, with inverted levers. Though at first these felt unfamiliar, I soon became accustomed to them.

Economy with a machine of this type obviously depends to a greater-than-usual extent upon the territory in which it is operating, but as the Test Panel figures indicate, the Cyclemate is abstemious.

Its lighting is of good cycle standard at the front, coupled with an excellent tail lamp.

Finally, I may add that it is possible to pedal the machine without undue effort, even when it is fitted — as was this test model — with a large Britax windscreen. This certainly protected me from the cold, but of course the forward speed was too low, most of the time, to enable the screen to be really effective.

CENTAUR. .

## Performance

Speed:
Maximum, 23 m.p.h. in 34 sec. from rest.
Flying 1/10th mile, 21 m.p.h.
Standing 1/10th mile, 16 m.p.h.

Acceleration :

0-10 m.p.h., 4 sec. 0-15 m.p.h., 10 sec. 0-20 m.p.h., 26 sec.

Economy: At 20 m.p.h., 196 m.p.g.

Hill Climbing:
Time for hill, 3 min.
Pedal assistance required from 0.1 miles.
Test hill 0.5 miles long; max. gradient 1 in 10; av. gradient 1 in 16.

Braking At 20 m.p.h.

Both 10ft.

Pedalling:
Comfortable pedalling speed, 6 m.p.h.
Tester's rating: fairly easy to pedal.

Tester's Weight : 2001b.

## Specification

Engine: Cyclemaster two-stroke; 36 mm. bore x 32 mm. stroke = 32 c.c.; rotary-valve induction; c.r. 6.2 to 1; 0.8 b,h.p. at 4,500 r.p.m.

6.2 to 1; 0.8 b.n.p. at 4,300 r.p.m.

Gearbox: None. Countershaft clutch built in unit with engine; chain primary and final drives; separate pedalling gear for starting.

Frame: Tubular, of brazed and welded construction; rigid rear end; cycle-type front forks.

Tank: 5½ pints capacity.

Tank: 54 pints capacity.

Lights: Head and tail lamps fed direct from WicoPacey flywheel magneto-generator.

Wheels and Brakes: Both brakes 4in, internal-expanding; chromium-plated rims and rust-proof spokes;

2.00-in. x 26-in. Dunlop tyres.

Equipment: Bulb horn; luggage carrier; prop stand; number plates; licence holder; tool kit; tool bag; tyre pump. Windscreen an optional extra,

Finish: Polychromatic green enamel, with chromium-plated details.

Weight: 84 lb.

Makers: Proctor Industries Ltd., Proctor Works, Chertsey-road, Byfleet, Surrey.

Price : £44 2s. inc. P.T.

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