



## CENTAUR TESTS . . .

# The RAP Imperial

ACCORDING to the Oxford dictionary, the word "imperial" may be defined as "majestic, befitting an emperor," and after testing the RAP Imperial I have reached the conclusion that it is the perfect description for this super-modern moped from Rotterdam.

To give a really unbiased opinion of a machine it is necessary not to allow oneself to be too impressed by the appearance before it has proved itself. But, hardened critic though I may be, I nevertheless fell for the RAP completely at first sight. Perhaps because of that I subjected it to an even more exacting test than usual—and it is sufficient to say that I am unable to report one single fault.

Riding the RAP is a most pleasant experience. In fact, I have rarely enjoyed riding a moped so much. So smooth, as barely a tremor reaches the rider from the roughest surface, and so silent as the Frankfurter Topf silencer reduces the exhaust note to a hardly discernible murmur, while the air intake, which is channelled via the frame tubes, becomes a soft whisper.

Its size is the first thing one notices and appreciates. So often do I feel that I am merely perching on a moped, but here is a machine which one can really bestride with confidence. Superb suspension induces one to believe that our roads are not so bad after all. Earls-type full swing leading-link front forks magically convert the most rustic of surfaces to an M1-like smoothness, while a swinging-arm fork continues the good work at the rear. A sensibly sized dual-seat (24 inches) is dual in the real sense of the word, and I appreciated the fact that the passenger's strap situated halfway along the seat is removable for solo riding. Height adjustment is about one and a half inches.

For road holding surely there can be no better moped. Heavy 23 x 2 x 2.25 tyres grip the poorest surface with the tenacity of a leech, and thanks to the sturdy forks I experienced no uncertainty of steering at any time. A welcome item is a steering damper, which really is indispensable on a machine which may be called upon to carry two up.

The pressed steel frame is of stylish yet intelligent design and is as strongly constructed

as it is well finished. There is a total absence of "tinyness" sometimes associated with this type of frame. Well valanced mudguards gave me good protection from wheel spray, and I was impressed by the thick gauge of steel used.

Barking was smooth, progressive and steady, and showed no signs of fading. The figures in the performance data indicate this.

A large fuel tank—capacity 2 3/5 Imp. gallons—is of conventional motorcycle tank design and means, of course, fewer trips to the filling station. Chromium plated panels on either side contribute towards the general appearance of the machine.

Perhaps the RAP's best single feature is the streamlined headlamp cowl. Perfectly in proportion, it conceals the junction of forks, frame and handlebars, and at the same time houses the speedometer (0-45) and the steering damper. Needless to say, the handlebar layout is neat and attractive. I liked the combined horn and dip switch which has two buttons on either side for the horn, so situated that it is possible to press one or the other without moving the hand. An automatic choke control is also provided set on the throttle control, and is clicked forward for starting if necessary and disengaged when the twist-grip is turned up. All control

cables enter the headlamp cowl and are led to their various destinations out of sight behind panelling, which is easily removable should it be necessary to get at the cables.

Protecting the rider completely from oil and dirt, the engine fairing presents no obstruction to the air flow to the cylinder and is removed literally in a couple of seconds. Two screws only have to be undone and the uncomplicated engine cover is exposed. I have met few mopeds where the carburetter is more easily and quickly accessible. The air intake is guided via a stout rubber nozzle up through the frame tubes, with the result that it is practically inaudible.

The 3-speed Rex engine behaved with the best of manners. Bottom gear will go up to 15 m.p.h. without any signs of distress, while second is quite happy between 11 and 25 m.p.h. In top anything goes from 13 m.p.h. onwards. Although the choke is very handy on the twist grip, I did not find that it was needed, the engine starting first kick every time. Gear changes were so smooth that it was difficult to realize that they had taken place, and a safety gear shift makes it impossible to clash gears. Acceleration is most marked in bottom gear, 10 m.p.h. being reached in 3.5 seconds, and in second gear, 20 m.p.h. is attained in 9.5 seconds. Maximum speed of 30 m.p.h. takes 20.5 seconds.

The top speed of 30 m.p.h. is not quite as high as that of some other mopeds, but this is more than compensated by the RAP's performance throughout the lower speeds. Hill-climbing is effortless without the slightest suggestion of pedal assistance, and similarly the standing starts. Too often one finds that machines which can do a couple of miles per hour more are disappointing at lower speeds due to large differences in the gear ratios.

Lighting on the RAP is satisfactory, with a good dip beam. The horn, situated on the underside of the down-tube over the engine, is well out of the way, and has a penetrating nasal tone. Tools are kept in a spacious compartment, set in the middle of the frame, which is in the form of a couple of blisters set on either side with a securing bolt through the centre. An excellent luggage rack is fitted as standard equipment and is really big enough to carry a fair-sized suitcase.

The machine which I tested was finished in blue and silver, but alternative colour schemes of red/grey and light grey/dark grey are available. White plastic piping is used to line bare metal edges and at the same time gives a decorative touch. A generous amount of chromium plating has been used, on the tank, the luggage rack and the forks, and the result is that the appearance of the RAP is as pleasing and impressive as its performance.

### Performance

**Maximum speed:**  
Flying 1/10th mile, 30 m.p.h.  
Standing 1/10th mile, 18 m.p.h.

**Acceleration:**  
0-10 m.p.h., 3.5 secs.  
0-20 m.p.h., 9.5 secs.  
0-30 m.p.h., 20.5 secs.

**Economy:**  
At 20 m.p.h., 150 m.p.g.

**Hill Climbing:**  
Time for hill, 1 min. 48 secs.  
Bottom gear (from 2nd) engaged at 0.25 miles.  
Test hill 0.5 miles long, max. gradient 1 in 10, average gradient 1 in 10.

**Braking:**

	Front	Back	Both
At 25 m.p.h.	26ft.	27ft.	18ft.

**Peddalling:**  
Maximum pedalling speed, 13 m.p.h.  
Comfortable pedalling speed, 6 m.p.h.  
Tester's rating: Fair.  
Tester's weight: 200lb.  
Conditions for test: Slightly damp road surface.  
2/3 m.p.h. breeze along the course.

### Specification

**Engine:** Rex two-stroke, 40mm. bore x 39.5 stroke=49c.c.; c.r. 6.8 to 1; 2.1 b.h.p. at 6,000 r.p.m.

**Gearbox:** Three-speed in unit construction with the engine; total gear ratios from crankshaft to rear wheel: 29.4:1, 18.5:1, 15.6:1.

**Tank:** 2 3/5 Imp. gallons capacity.

**Lights:** 17 watt lighting installation fed by Bosch generator incorporated in engine.

**Wheels and brakes:** Front and rear full width hub brakes. Chromium plated 50mm. rims and 23 x 2 x 2.25 tyres.

**Equipment:** Speedometer; horn; luggage rack; centre stand; tool kit.

**Finish:** Red/grey, blue/silver, light grey/dark grey.

**Weight:** 139lb.

**Wheel base:** 4ft. **Overall length:** 6ft.

**Concessionaires:** RAP Motor Co., Stoke Heath Works, Stoke-Heath, Bromsgrove, Worcs.

**Price:** £96 inc. P.T.

# IceniCAM Information Service



[www.icenicam.org.uk](http://www.icenicam.org.uk)