

ROAD TEST REPORT:

The new RALEIGH "AUTOMATIC"

BRITISH built by *Raleigh* to the world best seller designs of the French *Motobecane* range, the new pair of *Raleigh* mo-peds offer the best of both worlds to many potential buyers. The subject of this test is the cheaper and simpler of the two models known as the RM.4 "Automatic" mo-ped and it is designed and produced as a means of reliability workaday transport, the biggest section of the mo-ped market.

The power unit is a conventional single cylinder two-stroke of 50 c.c. with a chromed bore alloy cylinder. It produces 1.35 b.h.p. at 3,400 r.p.m. On the left hand end of the crankshaft is mounted a double acting automatic clutch that will take up the drive either by engine or road speed. Primary drive is by Vee-belt and final drive by chain with a separate chain, jockey pulley tensioned, for the pedalling gear.

At the other end of the crankshaft is a *Novi* flywheel magneto providing A.C. current for the head and tail lamps and electric horn and low tension ignition current. The High Tension coil is mounted in a waterproof container under the main frame member.

The all-welded pressed steel frame is rigid at the rear end and has telescopic front forks. A saddle type

fuel tank holds 14-gallons, including a quart Reserve.

Dunlop tyres 23-inch x 2-inch are mounted on chromed rims. Both brakes are of the full-width type and both are hand operated. Whitewall tyres are an optional extra as are the headlamp mounted speedometer, screen, legshields and pannier bags. Our test machine had only the speedometer of these.

Handlebars are adjustable for angle and the saddle, a soft mattress design, can be adjusted both for height and angle. It is a point worth noting that the lowest saddle position should suit riders down to the region of the five feet in height standard. Twin tool boxes mounted on the frame with a kit in one of them and a sturdy carrier are standard fitments.

Efficient

From the first start-up the test *Raleigh* proved itself an efficient tool. With the machine on its stand a single firm push on either pedal produced a start, using the handlebar operated choke device only from a stone cold overnight restart during the mid-Summer spell of test weather. Immediately on starting the tick-over stays positive and is slow enough to keep the clutch absolu-

tely free from drag.

To get away the throttle is opened fully, the engine speeds up and the machine glides off very smoothly indeed. Two or three turns of the pedals help to speed the getaway but these are not necessary and a rider who is incapacitated from pedalling can rely on the engine doing all the work without trouble. It is possible to start by pedalling away with a dead engine and the throttle twist-grip rolled right back to the decompressing position but this is harder work than "kick" starting on the stand and, as the engine cannot stall, there is no point in using that method.

When slowing down with the throttle shut the clutch disengages itself at about 4 m.p.h. and the machine can be walked around with the engine running—surprisingly useful when the traffic jam is really solid or when there are steps to be negotiated.

Speed pickup is slow for the first few yards unless helped by two or three quick turns of the pedals, but once over 10 m.p.h. acceleration is good right up to maximum which was 31 m.p.h. on the machine tested. Pulling power is at its best at revs corresponding to a road speed of 15 to 20 m.p.h. and this shows itself on hills. Ordinary main road grades of up to about 1 in 10 can be taken with a run between these speeds but on steeper hills or moving off from standing starts much of the work is done through the automatic clutch.

When the speed drops below the level of effective torque the clutch slips, allowing engine speed to rise and the machine will keep on climbing that way at about 3/4 m.p.h. We deliberately permitted the *Raleigh* to climb a long, steep hill in this way as a sample of the toughest kind of treatment it might get. The clutch did not protest and picked up solid drive again smoothly at the top of the rise.

The correct thing is to give light pedal assistance that will just keep the drive above slipping point under such conditions and this can be done, but the pedal gearing is too low for really effective assistance without violent "twiddling".

The frame is rigid and steering first class but the telescopic front forks are on the hard side and deal with big bumps better than small ones. Tyres have to be kept at not above recommended pressures, so that they look slightly soft under load, for good roadholding and reasonable comfort.

Braking is very good. Either brake will stop the machine effectively alone



and the two together stop it very quickly indeed. Finger adjustment at the levers is provided so that brakes can be adjusted while actually riding and near perfect control maintained under any conditions.

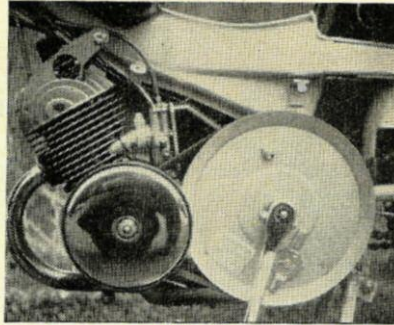
We found the soft-topped saddle comfortable for short runs but liable to get hot and tiring after some miles. This is, of course, largely a matter of personal taste and in any case saddles are not expensive things to replace. Otherwise comfort standards are good.

The engine can be both felt and heard when being worked and we found things much smoother and quieter if the cruising speed was kept below 25 m.p.h.

Modern Standards

In classification the RM.4 is best described as "Quality/Utility". Designed primarily as a simple ride-to-work, get-the-shopping, run-down-to-the-local machine, it is nevertheless built to good modern standards of efficiency, appearance the finish with nothing skimped.

The tool kit is more comprehensive than most British machines offer but lacks the grease gun essential for that important countershaft point, the lights are effective and the horn emits a rather more chirpy note than



With the shields off everything is accessible

most mo-ped fitments. The handlebars are not adjustable for height to the disadvantage of tall riders but the low minimum saddle position will be appreciated by many shorter legged riders. We found the French made speedometer on the test machine a pretty useless fitment, but this extra is not a necessity anyway.

Good mudguarding and firm attachments for the removable side panels, the sturdy carrier and such often-forgotten items as number plates indicate some care and thought in design and we believe that this machine will serve a large percentage of the potential mo-ped market excellently in all normal conditions both urban and rural. Only in ter-

ritories with really steep hills is the single geared unit at a disadvantage and the simplicity and ease of handling are a fair compensation.

Anyone who can ride a pedal cycle can ride the *Raleigh* without effort or risk, which is what a mo-ped should be.

SPECIFICATION:

ENGINE: Two-stroke single, all alloy with chromed bore. 39 mm. x 41.8 mm., capacity 49.85 c.c. Gurtner carburettor.

TRANSMISSION: Double action automatic clutch, Vee-belt primary drive, chain final with separate pedal chain. Engine disconnecter on countershaft pulley.

FRAME: Pressed steel, welded up single unit with telescopic front forks. Saddle tank, capacity 1½-gallons, including Reserve.

WHEELS: 23-inch x 2.00-inch. Dunlop tyres (whitewall optional extra), Chromed steel rims on full full width light alloy hubs.

ELECTRICS: Novi flywheel magneto, 6-v./6-w. headlamp, 3-w. tail. Electric horn.

EQUIPMENT: Tool kit, carrier, pump, plates, licence holder. Extras: Speedo, panniers, legshields, screen.

PRICE: £59.17.0. (including P.T.).

WEIGHT: 90 lbs.

MAKERS: Raleigh Industries Ltd., Nottingham.

50 c.c. INTERNATIONAL RACING

THE first race of the new European 50 c.c. FIM Cup took place on May 7th, at Sankt Wendel, Germany, a place near Saarbrücken, and was the opening event of the first West German championship meeting.

The race was dominated by two works teams: the German *Kreidler* and the Yugoslavian *Tomos*. The latter, based on a Puch license, surprised enthusiasts by winning a race at Hockenheim last year. In practice (on dry road) a *Tomos* under German rider H. Rosenbusch had put in the best lap with an average of 87.35 km.p.h.; second best was a works *Kreidler* under H. G. Anscheidt, winner of 1960 50 c.c. Moto Cup of Germany, with 86.9.

On race day the weather was abominably cold and stormy, with heavy rain. Number 7, Anscheidt, went into lead immediately after start, gradually increased his lead and rode to an unchallenged win, averaging 82.4 km.p.h. On the twisting and mountainous Sankt Wendel circuit that is a quite honourable speed, comparing quite well with the 100.8 km.p.h. average which Degner (MZ), winner of the 125 c.c. class, rode!

The Start at Sankt-Wendel. Georg Anscheidt (KREIDLER) is already in the lead which he held throughout the race

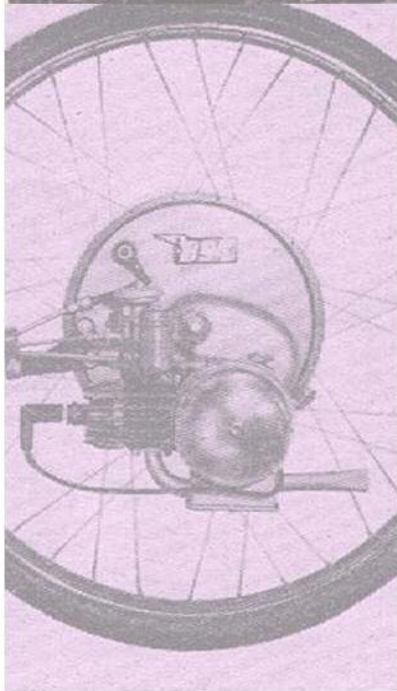
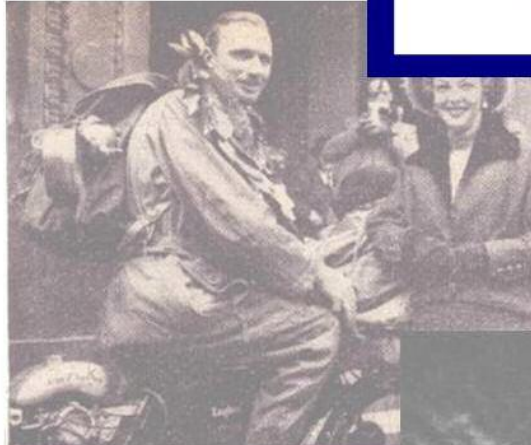


Rosenbusch on the *Tomos* tried everything he knew to catch Anscheidt. He lapped the fastest lap of the race, but the *Tomos* did not go as regularly as the *Kreidler*, so he fell back in spite of several record laps. With an average of 79.2 he was second. Third man home was W. Gedlich on his privately prepared *Kreidler* which surprised by its incredibly quiet exhaust note. A *Kreid-*

ler under Scheidhauer was fourth. The two other works *Tomos* under Yugoslavian riders S. Stepanjic and M. Zelnic lay well in the field after retiring with ignition troubles apparently caused by the rain. Several privately owned *Benellis*, *Motoms*, *Itoms* and *Ilo-Gritznern* ended down in the field.

It was interesting to note the different technical trends: whereas

IceniCAM Information Service



www.icenicam.org.uk