

IMPRESSIONS OF CURRENT MODELS



(Left) On the road the machine handled well. (Right) The speedometer is built into the head lamp; also seen is the neat anti-theft lock.



MADE by one of Germany's leading motorcycle manufacturers, the 49 c.c. two-stroke Zündapp "Combinette" cycle-motor is being handled in this country by the Ambassador people who, of course, have been importing and assembling "Bella" scooters from the German concern for some years. It was through the courtesy of Comerfords, Ltd., Portsmouth Road, Thames Ditton, Surrey, who are Surrey distributors for the "Combinette," that a model was recently placed at *Motor Cycling's* disposal for a road test.

The machine tested differs somewhat from the example shown at Earls Court in November last, the most marked change being in the position of the petrol tank, which is now situated under the seat, an improvement on the original position, which was on top of the main frame tube just behind the steering head.

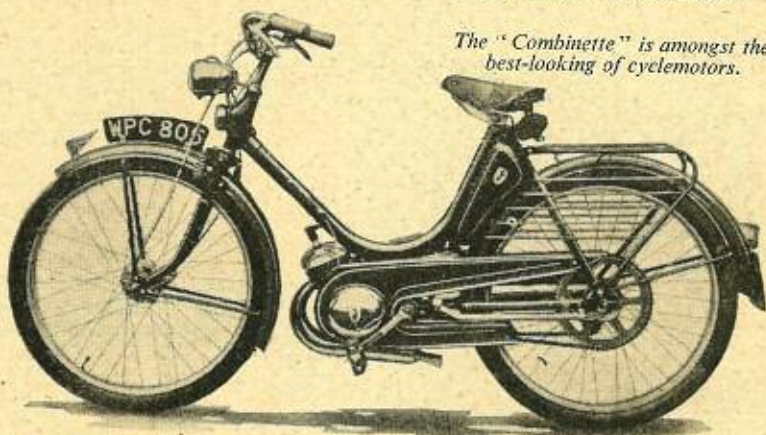
The finish of the machine is really outstanding; the general colour is a greyish bronze with broad gold lines on frame, forks, mudguards and shields. Many of the parts are of polished aluminium or chromium plated—especially neat is the small head lamp which has a 45 m.p.h. speedometer, which is driven from the front wheel, built into it. The switch on top of

head is a very efficient anti-theft lock. Other points of interest are a comprehensive toolkit, a sturdy lifting handle to enable the machine to be carried into a house, "aero-elastics" which form an effective dress guard, a spring clip on the carrier to retain small parcels, and a highly efficient prop-stand; from this list it will be gathered that the machine bristles with what can be termed "rider's features."

Tried on the road, the "Combinette" (Continued on opposite page)



A useful carrier is standard.



The "Combinette" is amongst the best-looking of cyclemotors.

BRIEF SPECIFICATION

Engine: 49.9 c.c. Zündapp two-stroke; bore 39 mm. by stroke 41.8 mm.; iron cylinder barrel with chromium-plated liner and light alloy head.

Transmission: Handlebar-controlled clutch and chains final drive.

Frame: Welded-up steel-tube construction.

Lubrication: By petrol; 20:1 petrol-oil mixture.

Electrical equipment: Flywheel mag-generator; 4-in. diameter head lamp; tail-light.

Suspension: Rigid rear frame; front forks, undamped, pivoting at lower end of steering column.

Wheels: Plated hubs, front incorporating 4-in. hub brake; rear with back-peddalling brake; 26 in. by 2 in. Dunlop tyres.

Tank: Welded-up, steel pressings; 3/8-gal. capacity.

Finish: Bronze-grey enamel with gold lining; alloy parts polished; bright parts chromium plated.

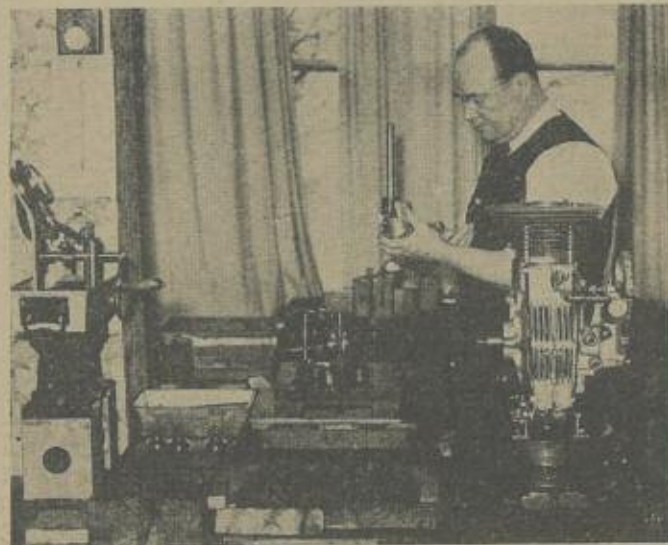
General equipment: Toolbag and full kit of tools; speedometer; inflator; prop-stand; carrier; dress-guard; anti-theft lock.

Price: £56 10s., plus £11 6s. P.T.—£67 16s.

Manufacturers: Zündapp Werke GmbH, Nurnberg 20, Germany.

BACK TO THE OLD LOVE

Steve Lancefield Returns to Tuning Motorcycle Engines



Steve Lancefield at work in his S.E. London workshop tuning a Norton racing engine.

AFTER an absence of nearly five years from the technical side of top-line motorcycle road racing, Steve Lancefield has begun once more to concentrate his abilities on the tuning and preparation of Norton engines for racing machines.

Lancefield, who has worked on engines for no fewer than seven I.O.M. T.T. winning machines, is a man with determined views on the future of Britain's part in International racing. "We haven't the right kind of circuits in this country," said Steve when visited in his South Norwood home last week. "So far as road racing goes, as everyone knows, we are now at a crossroads. Although Nortons and 'Ajays' have the most experience in this sphere, it is no more up to them to defend Britain's prestige than any other concern. Other firms should chip in with brains and money to help restore the International position which we held up to two or three seasons ago.

"We must face the fact that the four-cylinder engine has proved to be formidable and the Italians are beginning to beat us at what we have long considered to be our own game. It takes many years to design, build and develop a proper racing engine. The Italians have spent about nine working years in developing their multis to their present state and any British-made engine produced in the future must lead itself to at least three years' further development after its first racing success."

"Singles" Not Dead

Lancefield is a great believer in the future of the "multi" for International racing by works teams. "The single is by no means dead," he said, "but the ratio of return is less than can be obtained from a first-class multi design."

For privately run machines the "multi" would almost certainly prove too costly in

upkeep in the case of most riders, and the single-cylinder power unit therefore has a niche of its own. Individual riders must have the right kind of machinery if they are to prove their true worth. "If we are not careful," says Steve, "we shall come to the stage where British road racing is for purely standard machines only!"

That, broadly speaking, is one of the reasons why he is returning his attention to the motorcycle field. Already he has half a dozen double-knocker units in the course of preparation for next season and, to emphasize that he means business, Steve says that if he could find the right rider, he would be prepared to supply and maintain two machines for International competition.

However, on the question of riders, too, Lancefield has strong views. "A rider," he says, "must learn to walk before he can run. It is wrong to entrust a top-line motor to a man who has not proved thoroughly promising as a novice." Whether it be in the workshop or on the track, Steve's motto is "There is no substitute for experience."

And when it comes to experience, he is well qualified to talk. He began his interest in motorcycles some 30 years ago. His first machine was an A.B.C.; next he bought a Norton, and since then this *marque* has always commanded his attention.

At the start of his career, he travelled to all parts of the country, gaining engineering experience in numerous industries and, in his early days, he was himself a racer, and his last appearance on a circuit was in a 100-mile Grand Prix at Brooklands in 1933. On that occasion he had a collision with "Middle" Les Archer and finished up as the latter's pillion rider! Since then he has tuned and prepared the machines of many outstanding riders, including those of the great Harold Daniell, Ken Bills, Eric Briggs and Johnny Lockett, and his most recent success in the motorcycle world was when Harold Daniell won the T.T. in 1949. After that Lancefield turned to 500 c.c. car racing and his long experience of the Norton engine has helped a great deal to provide success for drivers like Don Parker, Bob Gerard, Ken Carter, Bill Whitehouse, Jim Russell and, at one period, Stirling Moss.

THE ZÜNDAPP "COMBINETTE"

lived up to its high initial promise. Starting, for which a self-opening choke lever is provided on the carburetter, was simple in the extreme; the machine was given a few twirls of the pedals, the clutch engaged and the response was invariably immediate. The engine very soon warmed up and settled down to a steady hum. Exhaust noise at all engine speeds was subdued.

On the level, the machine could be throttled back to little faster than walking pace and accelerated away again without any fuss or need to use the clutch. When pulling, the engine two-stroked right down the range; at about 25-30 m.p.h. it would occasionally break into four-stroking, which served as an excellent "speed governor."

Hill-climbing was good—very good. Starting on a steep main-road gradient could be effected by merely using the clutch, although a few digs at the pedals aided the acceleration, needless to add. Braking was well above average for this type of vehicle; the

Continued from opposite page
4-in. diameter front brake was good, whilst the back-peddalling rear brake could lock the wheel if need be.

The final assessment was that the

SERVICE SERIES

than .010 in. and not more than .012 in. Trued in vee blocks, the rim of each fly-wheel must be accurate to within .002 in. at least. The oil pump, its driving spindle and locating pin should be refitted and all oilways inspected for final cleanliness.

Fit the oil-flinger washer to the driving side mainshaft and note that this washer is bent over in one place to provide self-anchorage. Assuming that all crankcase components are ready for assembly, fit the drive-side shaft carefully into the crankcase, taking care not to disturb the oil-flinger washer. Now fit on the gear-side crankcase; bolt up the two halves and check that the

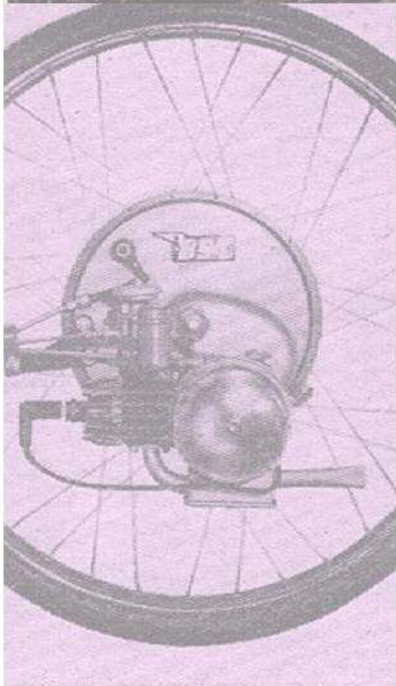
"Combinette" would provide the answer for those who require a cheap, reliable and economical means of everyday transport, possessing also the ability to tackle a long distance when the need arises.

Continued from page 383

flywheels spin easily; fit the sprocket centre; tighten up and check that the connecting-rod is properly centred and that there is no end-play in the assembled mainshaft.

Work on group 2, the piston, cylinder and valves, is a reversal of the earlier dismantling procedure and, likewise, there is no difficulty in building up the components in group 3 and finishing the job with the fitting of the head and auxiliary components. Most amateur mechanics working single-handed will find it best to fit the renovated crankcase in the frame and build up the top half *in situ*, finishing with the primary transmission.

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