



HEINKEL "PERLE"

A test conducted over a distance of 2,000 miles and a period of a year

JUST twelve months ago, in CYCLING's issue of November 28, 1957, I reported upon the performance of a Heinkel "Perle," the unusual German, alloy-framed moped. This machine impressed me considerably, and I resolved to buy it for my personal use. At the same time, I planned to report upon it again at the end of a year's riding.

During the period since I first collected the machine it has covered a total of 2,134 miles. Of this, only five or six hundred miles can be attributed to longish trips — of distances over 30 miles, that is. The rest have been mainly "taxi" journeys... short runs to the shops or the neighbouring town; the sort of work which is toughest on any engine, since it involves constant stops and starts, and the engine is often working at less than its optimum temperature. In the course of the year, then, the Heinkel has covered some 1,700 miles under these conditions, much of the time in the hands of a novice — my wife.

Maintenance has been my responsibility, and, with the exception of curing a bout of gear-slipping (which was undertaken, under guarantee, by the retailers) all the work has been carried out by me, personally.

It has not been a formidable catalogue. I have twice changed the gearbox oil and, at 1,000 miles, carried out a quick decarbonization. The filters have been cleaned once or twice, and the carburettor stripped for cleaning once. Brake adjustments have been made twice, clutch adjustments once, and one cable replaced after the original had snapped. The horn has been re-positioned, with a modified bracket, to cure an annoying rattle... a rattle, incidentally, which I mistook for primary transmission noise and attributed it to that cause in my original test!

Only two failures have occurred. The first — a total lighting black-out — resulted from an incident which is unique in my experience. The "dip" filament of the main bulb is of the hooded type — i.e., it has a small metal hood attached to the wires bearing the filament. These wires fractured, causing the hood to fall against the main filament, and as soon as the current was switched on the inevitable hap-

pened — the lights were short-circuited. Soon afterwards, the carrier arm of the tail lamp (a British fitment, not the original lamp) fractured. This lamp was replaced — by one of another make, needless to add! The same applies to the licence holder, which also broke after 2,000 miles. My expenditure on spare parts over the year has, therefore, been limited to one inner cable; a tail lamp; one head lamp and two tail lamp bulbs; and one licence holder — a matter of less than a pound, of which the bulb expenditure can be rated as sheer bad luck. In terms of time, I have spent no more than four or five hours on the machine, including cleaning it, which hardly bears out the old tale that "mopeds constantly need to be worked on."

The engine, gearbox and oil-bath chain-case have remained completely oil-tight, but there has been the tiniest of seepages from the fuel tap. The finish has stood up well, despite the

THE HEINKEL AT A GLANCE

Maximum Speed: 36 m.p.h. in 21 sec. from rest.

Economy: 155 m.p.g. at 20 m.p.h.
140 m.p.g. at 30 m.p.h.

	From	From
Braking:	20 m.p.h.	30 m.p.h.

Both brakes	13 feet	36 feet
Front only	20 feet	62 feet
Rear only	18 feet	50 feet

Load carried during test: 200 lb.

Engine: Heinkel two-stroke; 39 m.m. bore x 41.8 mm. stroke = 49 c.c.; c.r. 6.5 to 1; 1.5 b.h.p. at 5,000 r.p.m.

Gearbox: Two speeds in unit with engine; multi-plate clutch; handlebar twist grip control; gear primary drive; chain final drive; kick starting.

Frame: Of cast light alloy, with integral fuel tank; swinging fork rear suspension with integral oil-bath chain case; telescopic front forks.

Tank: 1-gal. capacity.

Wheels and Brakes: Both brakes 3-in. internal-expanding in conical hubs; light alloy rims with rust-proof bused spokes; 2.00-in. x 23-in. Dunlop tyres; wheels have knock-out spindles and are interchangeable.

Equipment: Electric horn; speedometer; tool box built in; tool kit; pump; prop stand; luggage carrier; steering head lock; number plates.

Finish: Blue and silver enamel with chromium-plated details. Alternatives: maroon and silver or yellow ochre and brown.

Weight: 72 lb.

Makers: Ernst Heinkel a.s., Stuttgart, Germany.

Sole retailers: Pride and Clarke Ltd., 158 Stockwell-road, London, S.W.9.

Price: £59 19s. 6d. inc. P.T.

Exactly a year ago, "Centaur" reported upon the performance of this Heinkel moped. The machine has remained in his possession, and on this page he records his impressions after 12 months ownership.

fact that my home is reached along an unmade and very muddy country road. Only the exhaust pipe shows signs of wear. The only serious oil leak has been from the right leg of the front fork, where the oil seal appears to be damaged, and the rubber bellow on this leg has, consequently, perished. Both pedals have sustained damage through being grounded on the rough road, but they are still serviceable.

So far as performance goes, the machine has improved! The top speed has jumped from 33 to 36 m.p.h. and the acceleration to this higher speed takes only two-thirds of the time previously taken to reach the lower maximum — 21 sec. now against 35 sec. a year ago. The fuel consumption at 30 m.p.h. has improved from 110 m.p.g. to 140 m.p.g., but at 20 m.p.h. it has decreased from the 180 m.p.g. of 1957 to 155 m.p.g. now. The brakes have slightly improved their power.

With tax, insurance for two riders, spares and fuel accounted for, my estimate of the cost of 2,100 miles riding is £8 7s. 6d., or rather less than one penny per mile, rising to just under 2d. per mile if one allows a depreciation of 15 per cent in value for each year of use. Fuel costs per mile, at a steady 130 m.p.g., average out at approximately 4d. per mile.

So there are the answers for those who like to know more about mopeds than the usual short test can tell. And so far as the Heinkel itself is concerned, I can only repeat my conclusions of last year, now fully confirmed. This is, as I said then, a moped which is "clean to use, easy to ride, safe, smart, and years ahead of its time."

CENTAUR.

LOOKING FOR TROUBLE!

by Centaur

A NEIGHBOUR asked me to diagnose his moped's trouble the other day. It was a very second-hand machine, and it had "just stopped." Examination showed that:

1. A previous owner had damaged the exhaust flange, and had attempted to make good the damage by inserting into the exhaust port a large washer with a small hole. The result had been to reduce the area of the exhaust port by 50 per cent. Not surprisingly, back pressure had been causing the ignited mixture to blow back into the crankcase.

2. The engine was held by only one of the two fixings at the top and one fixing out of three at the bottom, since three engine bolts were missing, and one top fixing plate was completely fractured. Another 100 miles and the motor might, literally, have fallen out!

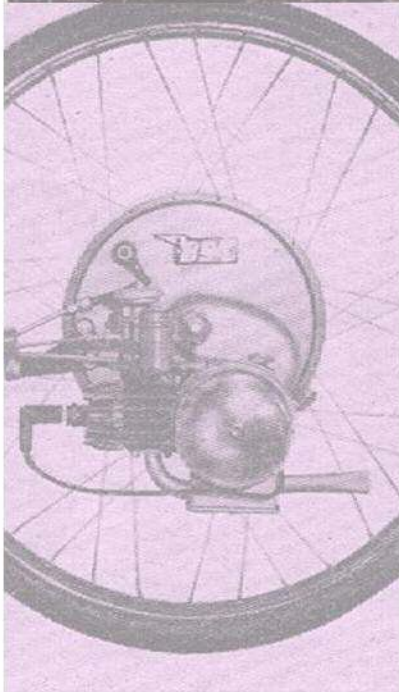
3. The decompressor valve was leaking.

4. Every fitting in the rear lamp was

so corroded that the light could not possibly have worked, and the glass had been lost, and replaced with a scrap of red fabric.

As a matter of interest, it cost little more than £1 to purchase the requisite new engine plate, exhaust pipe, bolts and rear lamp, and took an afternoon or two to fit them in place and decarbonize the engine. Yet for the sake of twenty shillings, somebody had been content to run a machine which was in dangerous condition, and to sell it to somebody else in that state. Nobody comes out of the story with much credit. The seller knew the machine's condition; the buyer should have consulted somebody who knew something about mopeds before buying it. The only credit due is to the moped—that it could run at all in such a neglected state proves, perhaps better than any other test, just how tough and reliable these machines are.

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