



Swedish Apollos

Range of Neat Lightweights : Autocycle with Levis Engine

APOLLO machines are rapidly gaining popularity in Sweden. The range now comprises an autocycle and three small-capacity motor cycles; in addition, there is the Apollo speedway frame in which riders usually fit the famous J.A.P. engine.

The autocycle has a robust, all-welded frame of the semi-open type; the front fork is of cycle pattern and unsprung, but is braced by two additional tubes running from the wheel spindle to a lug on the steering stem. Housed between the frame top tube and front down tube is an 80 c.c. (48mm bore by 48mm stroke) Levis two-stroke engine manufactured at the Levis Stetchford (Birmingham) works and exported to Sweden.

This engine has a light-alloy cylinder head retained on the cast-iron barrel by three studs, and there is a four-stud fixing for the barrel to the crankcase. Other features are a light-alloy piston with two rings, a roller-bearing big-end, and a die-cast, light-alloy crankcase which also forms the housing for the clutch and primary drive. The clutch is of the cork-insert type and operates in oil; primary drive is by non-adjustable chain. On the left-hand end

of the crankshaft is a Miller flywheel magneto with lighting coils. The carburettor, which faces forward, is an Amal with a strainer for cold starting. Exhaust system comprises an expansion chamber formed in the exhaust pipe and positioned close to the exhaust port. Silencer baffles fitted in the pipe are readily detachable for cleaning.

As fitted to the Apollo, the power unit is shrouded at the sides by neat, detachable covers cast in Silumin—an aluminium alloy giving a very smooth finish. The petrol tank (capacity approximately $\frac{1}{4}$ gallon) is fitted behind the steering head between the top tube and front down tube of the frame, and is covered by a steel pressing which also conceals the top of the engine unit.

Specification includes an internal-expanding front brake and a Neve kick-pedalling rear brake; $2\frac{1}{2} \times 2\frac{1}{2}$ in. tyres; a central stand; and a robust, tubular carrier to which is fitted a tool container. Attached to the seat stays is an anti-theft device which, when in use, locks the rear wheel. Weight of the Apollo autocycle is approximately 97lb.; the price is 76 Kroner (about £50).

Panther Prices

WITH effect from last Monday, April 30, Panther prices have been revised as follows:—

Price Price

metre course in 1h 6m 59.30s (94.61 m.p.h.), beating Featherstone, on the A.J.S. twin, by over a minute and a half. Dorian, on a second A.J.S., was third, some 17s. behind Featherstone and Dickie Dale (Norton), fourth a lap behind Duke.

In the 10-lap race Dorian (A.J.S.) took the lead from the start, and, despite a puncture, maintained his position, finishing first in 1h 6m 59.30s (94.61 m.p.h.), beating

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Smallest motor cycle has a tubular loop frame welded at the joints, and a telescopic fork incorporating coil springs and rubber buffers. The engine is the well-known 118 c.c. two-stroke Husqvarna, with foot-operated three-speed gear in unit. This model is also available in competition trim (it is called the "Competition") with high-level exhaust system, sparse mudguarding, lower gearing and other appropriate modifications. Prices are approximately £87 for the standard model and £100 for the Competition.

These two machines and, of course, the autocycle, weigh less than 76 kilograms (about 168lb.), and thus rate for special low taxation and insurance in Sweden; such machines are not permitted to carry a passenger.

The 200 c.c. Zundapp two-stroke engine is fitted to the largest Apollo. The frame is similar to that employed for the 118 c.c. model, but the fork is of more robust construction, and the brakes are larger. Another difference is that whereas the smaller machines have a flat-spring mounting for the saddle, on the 200 c.c. model the saddle suspension is by means of a single, large-diameter coil spring with the nose-pivot attached to the top tube of the frame and concealed by the tank.

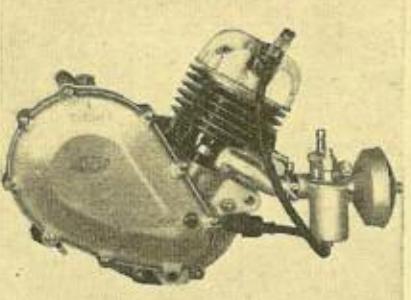
The Zundapp engine has two exhaust ports and a hand-operated three-speed gear box in unit. Norton lighting equipment includes a battery. Production of this model is just about to begin, and the price has not yet been fixed.

Makers of the Apollo machines are M. Berlin and Co., A.B., Värnamo, Sweden.

and the drive spindle is mounted in ball bearings, thus reducing the power absorption. For this year supplies are limited to manufacturers' machines, but next year the instrument will be on a production basis and supplies readily obtainable.

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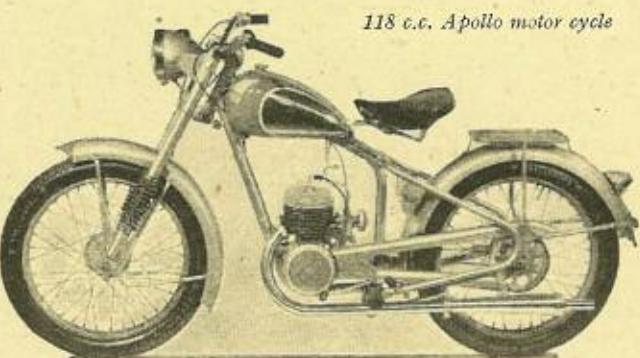
... of the 1951 Manx Nortons (both 348 c.c. and 499 c.c.), described in *The Motor Cycle* dated April 22, 1951, is £320, plus Purchase Tax (in Great Britain only) of £86 8s; total, £406 8s.



The 80 c.c. Levis two-stroke engine unit



80 c.c. Apollo autocycle



118 c.c. Apollo motor cycle