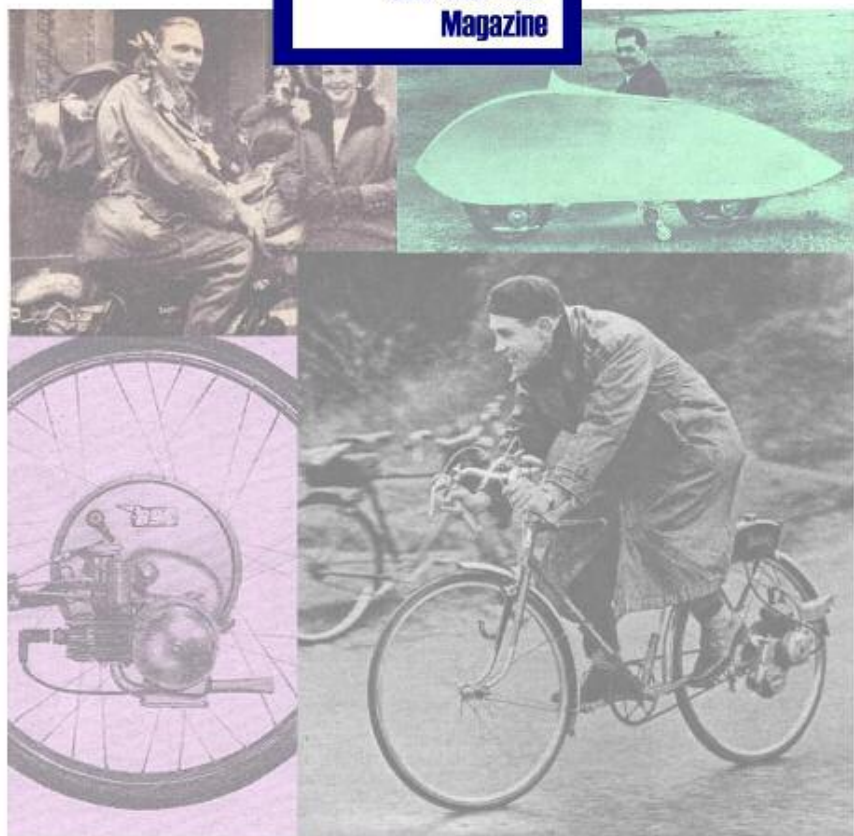
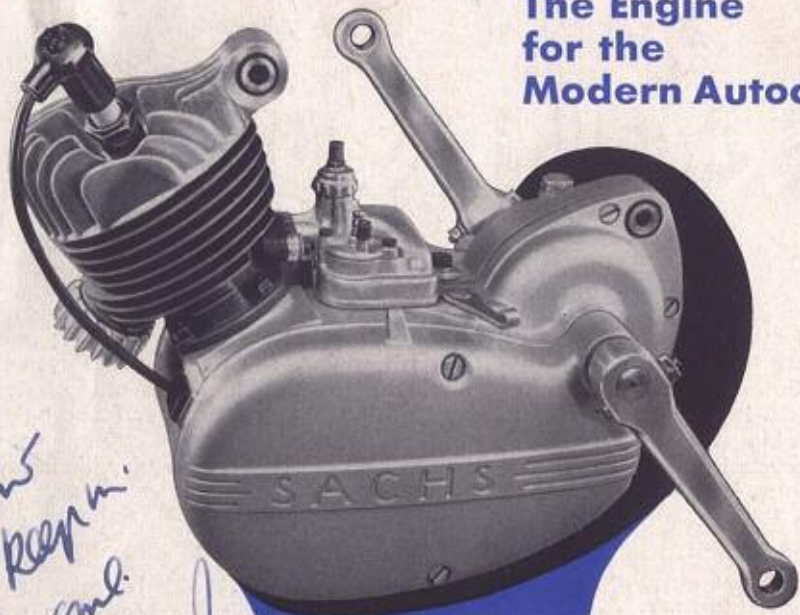


IceniCAM Information Service



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The Engine
for the
Modern Autocycle



*Mustn't
Please keep in
your engine.
Jill
1/14 J*

SACHS 50

Small and light, but **complete** like a big one.

Engine, clutch, gearbox, magneto, pedal crank bearing complete with freewheel and coaster-brake mechanisms all form **one integral unit**.

Only **one chain** to the rear wheel.

Two speeds for climbing any normal grade without having to pedal.

Sturdy **motorcycle clutch** permitting starting from a standstill on power only.

Engine and gearbox completely disconnected in neutral, thus assuring easy pedalling.

Maximum mechanical efficiency of freewheel and coaster-brake mechanisms mounted on the pedal crank permits the use of a hub having **maximum braking power**.

SACHS 50

Seldom has an engine enjoyed such a triumphal success from the very beginning as has the SACHS 50, the latest SACHS engine. The perfection of even the smallest details has made it from the first the engine for the modern motorized bicycle. It is not designed for speed, but it has amazing power found only in much bigger engines a short time ago. Equipped with a SACHS 50 engine, an auticycle is an ideal means of conveyance, not only for everyday life in town but also for pleasant trips in the country.

SPECIFICATIONS

Engine

Develops 1.25 b.h.p. at 4100 rpm; bore 38 mm (1.4961 in.); stroke 42 mm (1.6535 in.); swept volume 47 cc (2.8682 cu. in.); compression ratio 6 to 1; fuel consumption approximately 210 miles per gallon (Imp.), or 175 miles per gallon (U.S.) running at an average speed of 15 to 18 mph.

Housing

Light-alloy gravity die-casting made in four sections which, when assembled, form one integral unit for engine, gearbox, clutch, magneto, pedal crank bearing, freewheel and coaster-brake mechanisms. Each individual member thus operates under the best conditions imaginable for mechanical efficiency. The sturdy lugs to fasten the housing to the frame are equipped with rubber bushings which effectively prevent even the slightest vibration from being transmitted to the frame.

Cylinder Block, Piston and Crankshaft

Each member is built on principles which have proved their superiority in 1 1/4 million SACHS engines. A light-alloy connecting rod joins the light-alloy piston to the crankshaft. The reciprocating masses are thus reduced to a minimum. The crankshaft runs on deep groove ball thrust bearings making repairs a simple matter.

Gearbox

Amplly dimensioned - built for hard service. In low gear which is 1.6 times lower than high gear, grades of 16% or more can be climbed without pedalling. In neutral the engine and drive shaft are so perfectly disconnected that no effort is lost in overcoming unnecessary friction when pedalling.

Clutch

Equipped with the same type of cork disks as the SACHS 100 permitting starting under power from a standstill, even on a moderate grade, without having to pedal.



Pedal Crank Bearing

Contains the freewheel and coaster brake mechanisms. Sixty years of experience in the manufacture of bicycle hubs have resulted in this simple and dependable arrangement.

Power Transmission

Primary transmission from engine and pedal crank to the gearbox by means of short roller chains positively noiseless in operation. Final transmission of engine and pedal power to rear wheel by means of a single $\frac{1}{8} \times \frac{3}{16}$ in. roller chain.

Carburetor

Compact and snug-fitting, the carburetor looks like part of the housing. It forms no angles and corners to catch dust and dirt. Even when using the tickler the carburetor does not overflow. A patent starting device assures easy starting in all kinds of weather.

Flywheel Magneto

Bosch magneto, extremely simple and dependable, supplies current for ignition and lighting system. Standard equipment is with a 6 v, 3 w lighting system conforming to German regulations for autocycles requiring no driver's license. For other countries a 6 v, 17 w lighting system can be furnished upon request.

Spark Plug

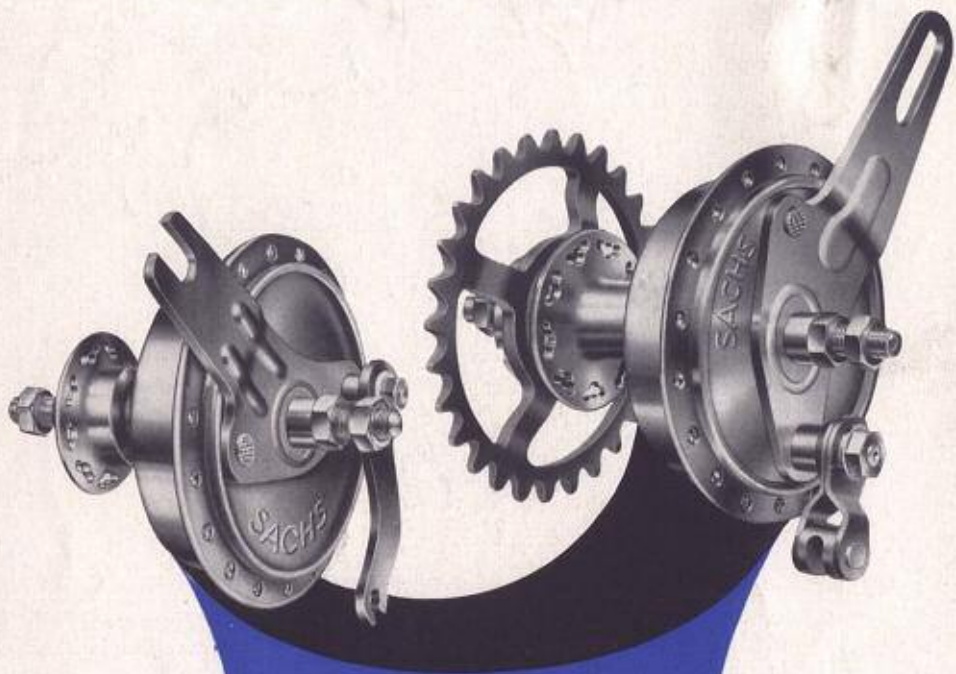
Bosch W 175 T 11 special spark plug for two-stroke engines.

Lubrication

Engine lubricated by mixing lubricating oil with the fuel in the proportion of 1 to 25 parts of gasoline. Automatic pumpless oil circulation system for transmission gears and chain from engine to gearbox.

Use with the SACHS 50





SACHS Hubs for Autocycles

Model V 90 for front wheel, model H 90 for rear wheel

A real motorcycle hub on a smaller scale.

Every feature built for extra strength.

Thirty sq. cm. (4.65 sq. in.) of effective braking area on each hub.

Optimum braking action assuring absolute control in heavy traffic.

Cone adjustment assuring smooth, true-running action throughout years of service.

Easily interchangeable sprocket wheel delivered with 23, 25 or 28 teeth as desired, chain-line 48 mm (1.8898 in.)



F&S

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WESTERN GERMANY

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