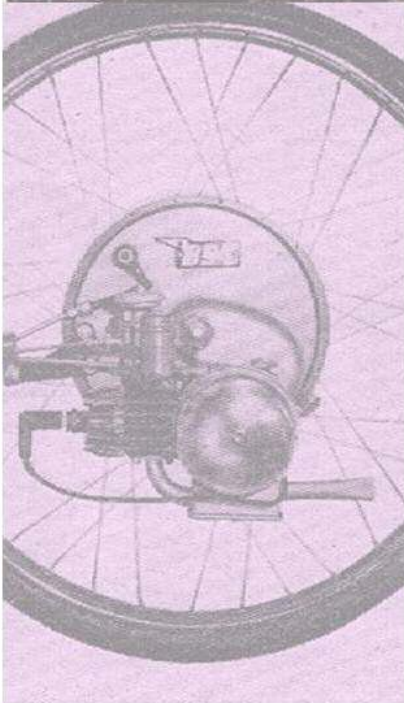


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For shopping, as a tender to a car or aircraft—for all manner of purposes the Corgi can be a boon. At Continental seaside resorts Corgis are available for hire by the hour

CORGI MAKES ITS

Ingenious Little Runabout of 98 c.c. with Folding Handlebars and Footrests, Telescopic Saddle Machine of Many Uses

van ready for immediate use at the other end of a train journey—or it will go in the back of a car or in an aircraft and act as a tender. At least one famous General took a Welbike by air wherever he went during the war. At another extreme, it can be packed in almost any odd corner at home and used as a runabout for shopping, for going to and from work, or merely for posting a letter; or it can be employed by executives at large factories for visiting distant departments, as is the practice in many factories in the United States.

When folded, the new machine, the Corgi, is only 53in long, 20in high and 13in wide. The wheelbase is 39in, and there is a minimum ground clearance, under the footrests, of 4in. The tyres are 12½ × 2¼in—special Dunlops, mounted

simplicity. A child seven years of age was shown the controls on the machine submitted to *The Motor Cycle* for test and for the next half an hour he and his little friends were enjoying themselves hugely, riding the Corgi around a tennis court. Other than the two brakes, there are only the clutch lever (left handlebar), the twistgrip throttle control on the right handlebar and, used solely for starting from cold, a strangler lever on the carburettor.

Starting is by pushing the machine and then releasing the clutch lever. Quite a gentle push is called for and, provided weight is applied to the machine either on the saddle or by placing a foot on a footrest scooter-style, the 98 c.c. two-stroke engine is set in motion.

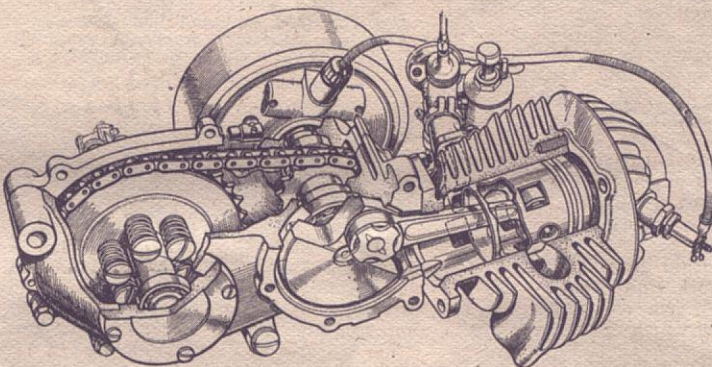
The engine is the Excelsior-designed

BEHIND the Corgi lies not merely a story, but history. Its forerunners went ashore on the Normandy beaches in the hands of Commandos—D-day pictures showed the Commandos leaping ashore with them under their arms and, later, crouching down beside the machines while under mortar fire; over three hundred of the machines were taken by the 1st Parachute Brigade on the invasion of North Africa; the ingenious little mounts went to every war theatre. Called the Welbike, they were designed in 1941 for the use of the British Airborne Forces for packing into a container to be dropped by parachute.

Most Compact

Why "Welbike"? It was designed at a secret establishment near Welwyn.

It was a most ingenious design and, developed from it, there is now the Brockhouse "Corgi," a new machine based on the knowledge gained which has been on sale abroad and to-day is available in Britain. Like its famous forbear, it has folding handlebars and footrests and a telescopic seat tube. It is impossible to imagine a powered two-wheeler more compact. When folded the machine will go in a hold-all—be luggage in a guard's

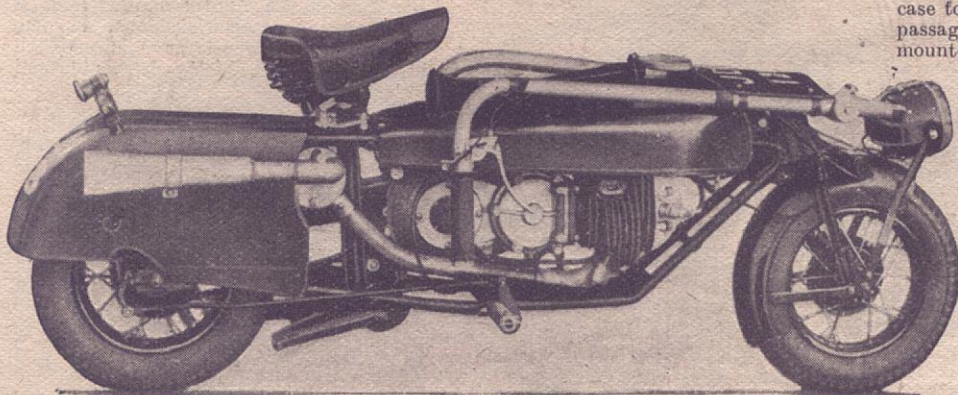


Detail construction of the 98 c.c. Brockhouse-built Spryt engine unit

on wire-spoked or disc wheels (these latter, which are interchangeable with the spoked wheels, are just going into production). Weight of the machine, fully equipped, comes out at approximately 95lb.

Thus, for storage or transport, the machine is in a class of its own. But, small though it is, there is nothing of the toy about it. The Corgi is a thoroughly practical machine, designed and made for hard work. An outstanding feature is its

"Spryt," made, like the rest of the Corgi, by Brockhouse Engineering (Southport), Ltd. This is a little single-cylinder (of 50mm bore and 50mm stroke) in unit with the primary drive and a single-plate cork-insert countershaft clutch. Ignition and lighting are by a Miller or Wico-Pacy flywheel mag-generator. The carburettor is an Amal 259 with a simple finger-operated air strangler. The engine is interesting in its special arrangement of the ports. Transfer of the fresh gas from the crankcase to the combustion chamber is by two passages, one beneath the horizontally mounted cylinder and the other on the top offside; the gas is pumped from the crankcase through ports in the domed-crowned piston to the transfer passages, which, at their outlets, have light-alloy deflector plugs designed to cause the two streams of gas to impinge and sweep towards the cylinder head, keeping clear of the outgoing exhaust-gas stream. With this



In the folded position the Corgi occupies a space of only 53 × 20 × 13in and will go in the back of a car or may be taken by rail in a hold-all

BOW IN BRITAIN

design there is excellent power output and good idling and two-stroking. Fuel consumption is some 120 miles per gallon.

A light-alloy cylinder head is employed; the two-ring piston is also of aluminium alloy. The connecting-rod, a nickel-chrome forging, has a roller big-end bearing—alternate steel and bronze (spacing) rollers of $\frac{3}{8}$ in diameter—and is mounted on an overhung crank, carried in two ball journal bearings. Drive to the counter-shaft clutch is by a Renold and Coventry 0.225, $\frac{3}{8}$ in pitch, non-adjustable roller chain; final drive, to the back wheel, is by a 0.192, $\frac{1}{2}$ in pitch chain, with cycle-type adjusters in the rear fork ends.

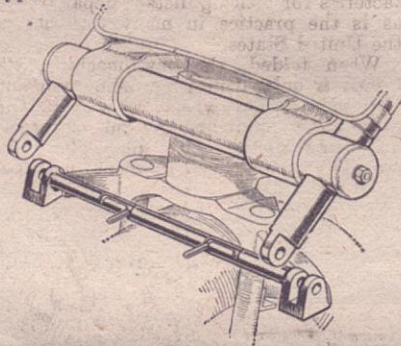
Frame Rigidity

The engine unit is mounted at three points in the duplex tubular frame—near the base of the seat-pillar tube and on two cross-members which link the horizontal top frame members. The frame itself is a bridge-like structure of unusual strength and rigidity. It is constructed of $\frac{3}{8}$ in diameter tubes, furnace brazed. Two tubes run, one each side, from the sturdy $3\frac{1}{4}$ in long steering head right to the rear fork ends and, underneath the engine unit, back to the steering head again. These members are cross-braced by the engine mountings, a steel engine undershield, the upper and lower mountings of the telescopic seat-pillar tube and, at the front down portions, by a steel strip.

Single-tube rigid front forks are employed. The fork crown that carries the fork blades is swept outwards and provides yokes into which fit the eyes at the

bottom of the folding handlebars. The bars are arranged to pivot about the top of the steering-head and the eyes and yokes are linked by simple, hand-operated spring-loaded plungers, held for double security by bayonet catches.

A spring-loaded pin engages in holes in the telescopic seat pillar which provide two different saddle heights—the upper one approximately 26 $\frac{1}{2}$ in and the lower 24 $\frac{1}{2}$ in. This pin also provides automatic alignment of the saddle relative to the handlebars. A hand-operated cam locks the split outer tube to the seat-pillar tube. The saddle is a supple-top motor cycle type.



How the handlebars are arranged to fold

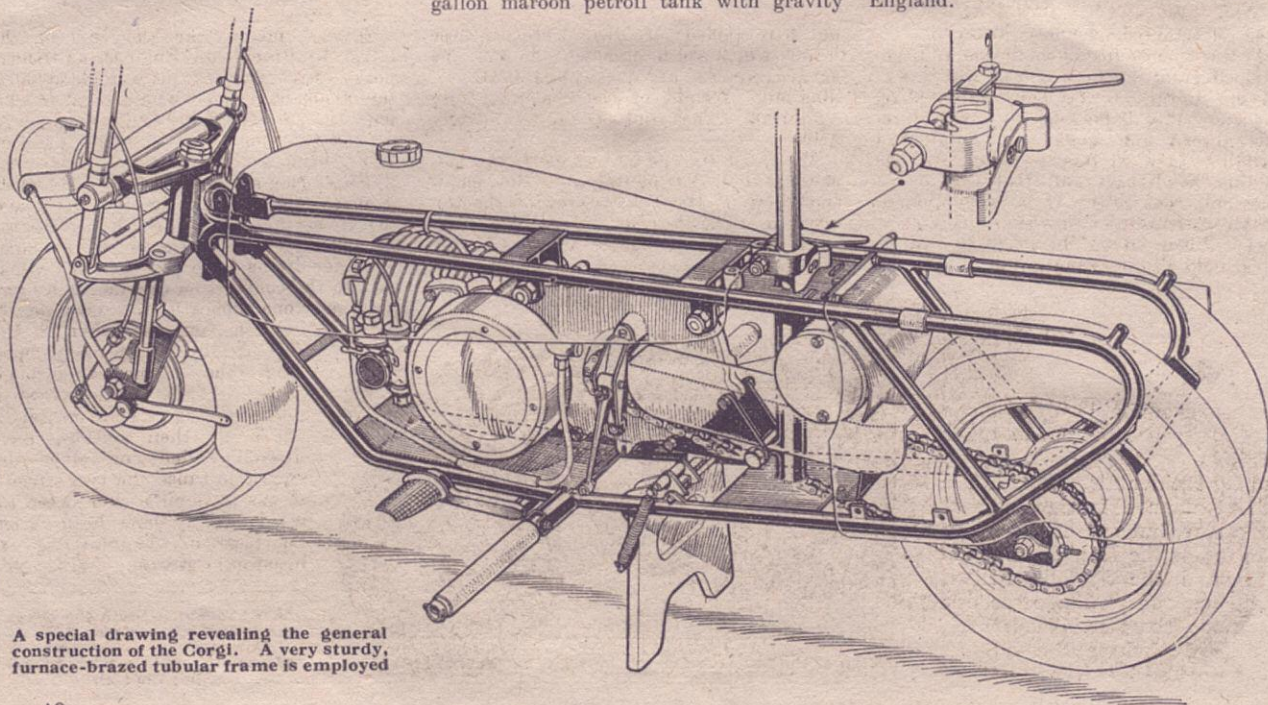
A deep D-section mudguard is fitted to the front wheel. The rear wheel is covered by a sheet-steel pressing which is quickly detachable and has a flat top for parcel carrying. Both wheels have 4in diameter Ferodo-lined internal-expanding brakes. Other features of the machine are: A 1 $\frac{1}{4}$ -gallon maroon petrol tank with gravity

feed (the Welbike had pressure feed) and a screw-type air vent in the filler cap to prevent leakage during transit aboard some other vehicle; well swept-back handlebars finished in silver sheen; a spring-loaded central stand; 4in headlamp arranged for dry-battery parking light; and a twin silencing system designed for ease of cleaning. The ratio provided by the single gear is 5.8 to 1 (the overall diameter of the tyres is approximately 13in).

Much thought has obviously been expended on the detail design, particularly in order to ensure that no special tools shall be necessary for normal servicing. An excellent feature is the use of aircraft-type lock nuts and high-tensile screws and bolts at all important points, and locking washers such as those holding the rear-wheel cover.

Encourages Confidence

A full road test of the Corgi will be published later. Sufficient has been learned about the machine to confirm its practical nature, that with its low centre of gravity it affords the tyro a feeling of confidence, that it is far more comfortable than the uninitiated might expect and that, subject to the recommended tyre pressures of 20 and 35 lb sq in being employed, the machine handles well. The machine is designed to be ridden at speeds not exceeding 30 m.p.h. The price is £52, plus £14 0s 10d, and the sole concessionaires for Great Britain and Northern Ireland are Jack Olding and Co., Ltd., North Audley Street, London, W.1. Makers are Brockhouse Engineering (Southport), Ltd., Crossens, Southport, England.



A special drawing revealing the general construction of the Corgi. A very sturdy, furnace-brazed tubular frame is employed