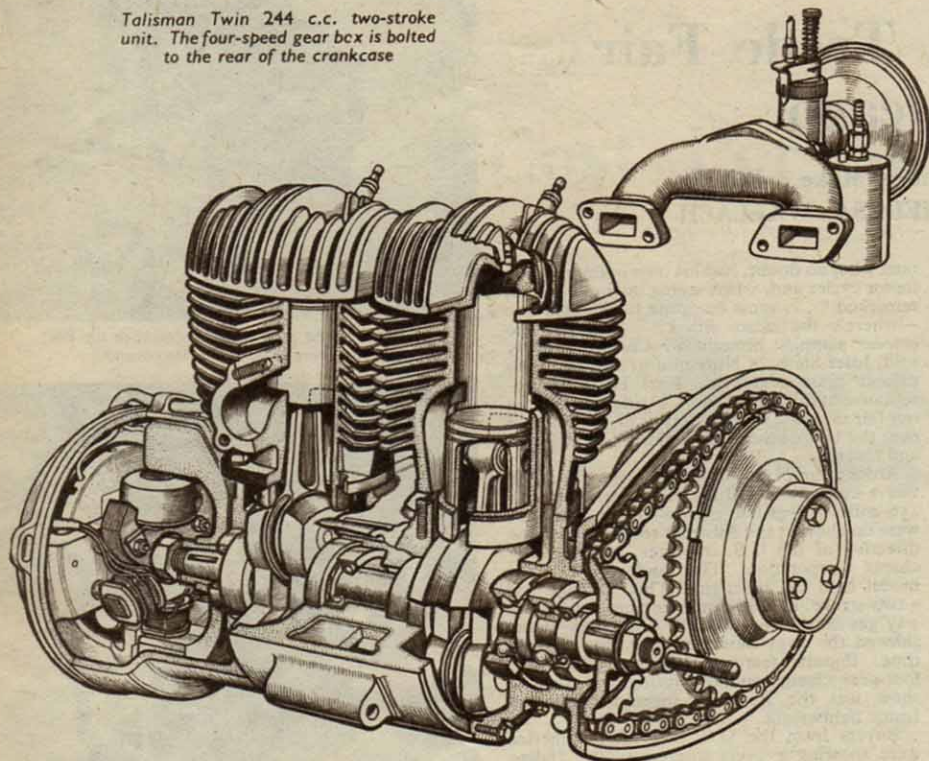


Talisman Twin 244 c.c. two-stroke unit. The four-speed gear box is bolted to the rear of the crankcase



## Excelsior's 1951 Programme

Interesting Range of Luxury Lightweights  
Headed by the 244 c.c. Talisman Twin

**T**HERE will be seven Excelsior models available for 1951. Heading the range, of course, is the Talisman, the 244 c.c. parallel twin which caused such a furore when it made its debut last year. Among the engine's features are the use of entirely separate cylinders and heads, crank throws disposed at 180 degrees and a five-bearing crankshaft.

Bolted-up semi-unit construction of engine and gear box is another feature—one which makes for compactness and permits the use of two pairs of small-area engine plates for carrying the engine-gear unit in the loop-type frame. All five main bearings are ball journals, two of which are located in the middle section of the crankcase, two on the drive side and one on the other side. A Wico-Pacy, 36-watt mag-generator, the outer casing of which is bolted direct to the crankcase, is driven by the offside end of the crankshaft. Roller bearing big-ends with alternate steel and bronze rollers are employed, and the connecting rods are of nickel-chrome steel.

The aluminium-alloy pistons are of the flat-top type, each carrying two rings. "Swirl" of the transfer charge is aimed at by clever port directioning, the object being to direct the gases to the rear of the half-pear shape combustion chambers.

Cylinder heads are cast in light alloy. Both cylinders are fed by a single Amal carburettor, mounted on a light-alloy, T-shaped manifold designed to give a downswept effect to the charge.

Primary drive is by means of an endless,

1/2 in x 3/16 in chain running in a die-cast, light-alloy oil-bath case. Gear changing is of the positive-stop foot-change type and the gear ratios are 5.5, 7.42, 9.9 and 16 to 1. A two-plate, cork clutch is employed.

As has been mentioned, the frame is of loop type. It is constructed of cold-drawn, weldless steel tubing and gives a 49 in wheelbase. The front fork is of the undamped, telescopic type, with helical springs to resist shock and rebound. Deep, phosphor-bronze bushes, protected by seals, support the sliding members.

Total up and down travel provided by plunger-type rear springing is 1 1/4 in. The arrangement is such that the spindle fork-end plates are welded directly to the spring boxes which themselves slide on centre posts fixed rigidly in the frame lugs. Each spring box has two springs (one within the other) and, in addition, a shorter rebound spring. The layout is extremely simple and has the big advantage that the rear wheel can be removed without the need to undo the chain, since removal of the chain adjuster allows the spring unit to be swivelled round.

### Two-speed Autocycle

The petrol tank has a capacity of 2 1/2 gallons. Tyres are 3.00 x 19 in Dunlops, front and rear; brake dimensions are 5 in diameter front and 6 in rear. Lighting is of the battery and rectifier type; an electric horn is standard. Weight of the Talisman is given as being about 220 lb.

Other machines in the Excelsior range are the Roadmaster and Universal models, which are of 197 and 122 c.c. respectively, and have spring frames and telescopic forks as standard. Each is available with direct lighting or with a battery and rectifier set. Lastly there are the two autocycles, the Autobyks, each of 98 c.c. capacity, one of them, the model G.2, having a two-speed gear.

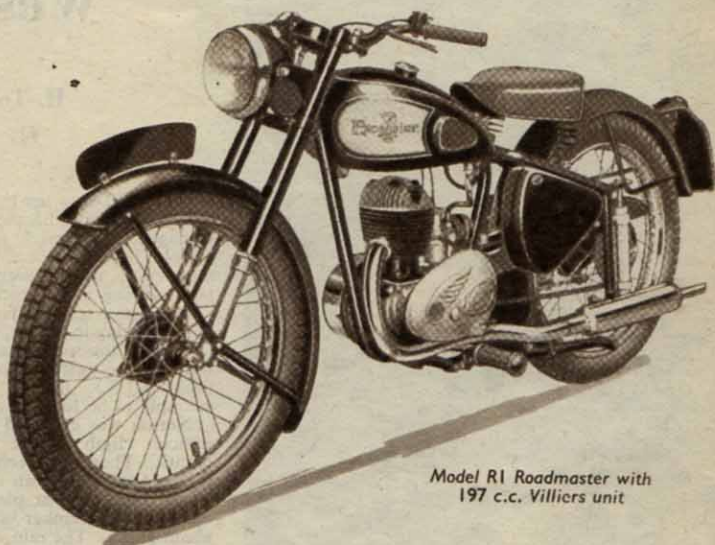
Briefly, the specification of the 197 c.c. Roadmaster includes a Villiers Mark 6E engine-gear unit, and tyres, brakes and fuel tank are identical with those of the Talisman. Chief features of the Universal, too, are similar, except that the engine is, of course, the 122 c.c. Villiers Mark 10D.



An autocycle with a two-speed gear—the 98 c.c. Super Autobyk

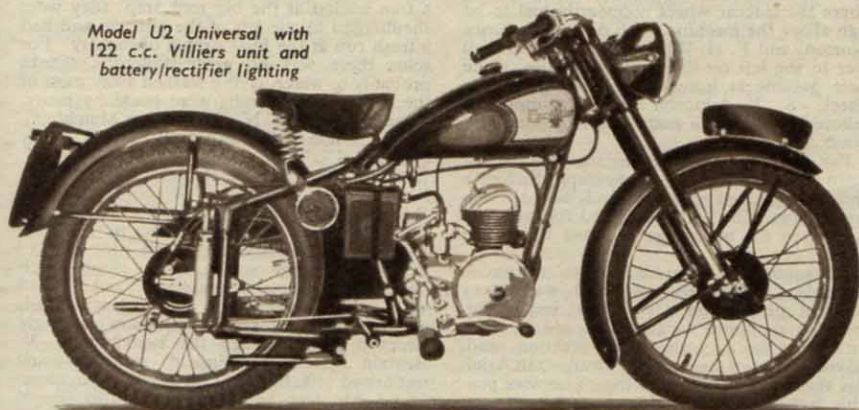


Model S1 Autobyk with  
98 c.c. engine



Model R1 Roadmaster with  
197 c.c. Villiers unit

Model U2 Universal with  
122 c.c. Villiers unit and  
battery/rectifier lighting



machines is, of course, being continued next year.

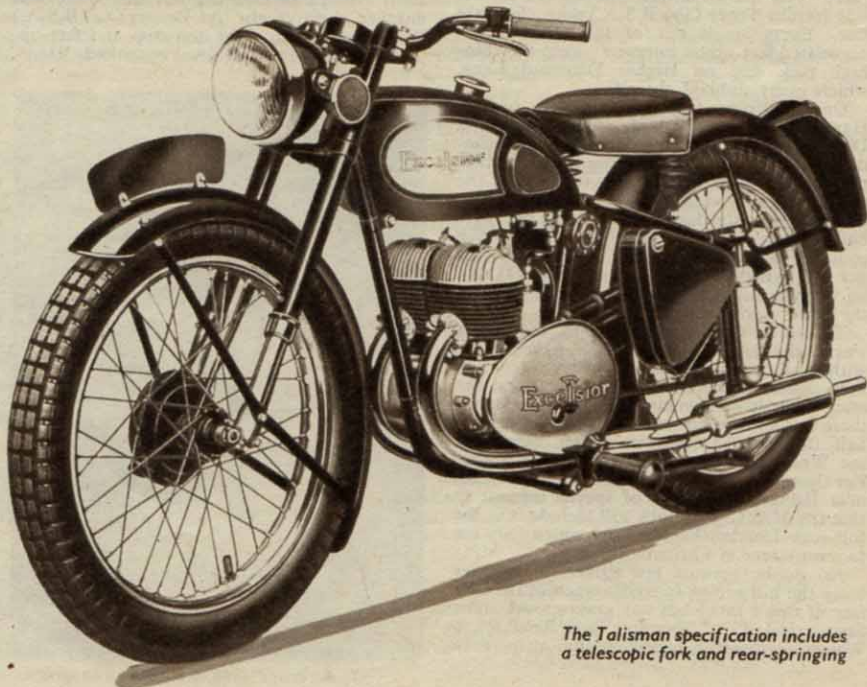
Makers are the Excelsior Motor Co., Ltd., Kings Road, Tyseley, Birmingham 11. Prices are as follows (total price includes Purchase Tax, which is applicable only in Great Britain) :—

	Basic Price			Total Price		
	£	s	d	£	s	d
51.S1, 98 c.c. de Luxe Autobyk	45	0	0	57	3	0
51.G2, 98 c.c. Super Autobyk (two speed)	55	0	0	69	17	0
51.U1, 122 c.c. Universal	75	0	0	95	5	0
51.U2, 122 c.c. Universal (with rectifier lighting and charging set)	80	0	0	101	12	0
51.R1, 197 c.c. Roadmaster	84	0	0	106	13	7
51.R2, 197 c.c. Roadmaster (with rectifier lighting and charging set)	89	0	0	113	0	7
51.TT1, 244 c.c. Talisman Twin	113	3	6	143	14	8

Both Roadmaster and Universal models are available with Villiers direct lighting sets or with battery and rectifier sets and Miller head lamps.

The de Luxe Autobyk is fitted with an Excelsior Spryt, 98 c.c. two-stroke engine. Capacity of the rearward sloping fuel tank is 11 pints. Tyre sizes are 2.00 x 26in and brake diameters are 4in front and rear. The flywheel magneto is a Wico-Pacy with 21-watt output coils for direct lighting. On both autocyces, deep shields are provided to protect the rider's clothing from petrol messings; and they are designed also to act as shields against spray from the front tyre.

Fitted with a 98 c.c. Goblin engine, the Super Autobyk is the two-speed model. In the main, the specification follows similar lines to those of the de Luxe model but the tyres are of larger section, 21 x 2.25in, thus providing increased comfort. Both models have link-action forks with rubber as the resilient medium. With the exception of the de Luxe Autobyk, which is finished in black and cream, the standard colour scheme on the 1951 models will be maroon with cream tank panels. Handlebars, exhaust pipes, and the usual detail parts are chromium plated. Production of the well-known Excelsior-J.A.P. speedway



The Talisman specification includes  
a telescopic fork and rear-springing

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