

A New 148 c.c. Excelsior

Fine Range of Single- and Twin-cylinder
Lightweights : Autocycle Prices
Materially Reduced

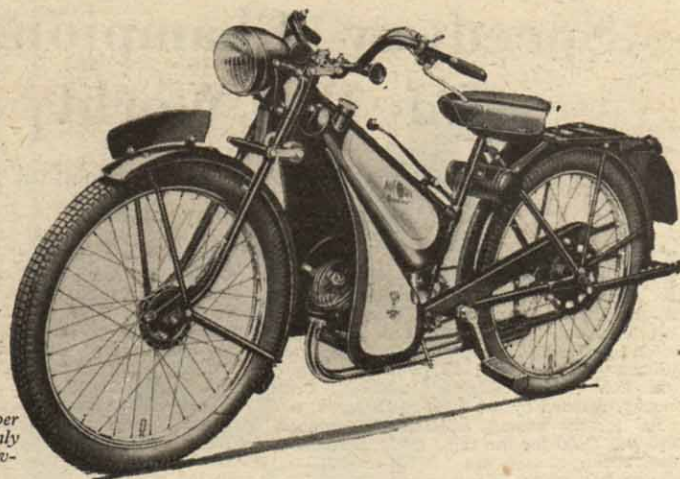
AN Excelsior two-stroke engine of 148 c.c. is the power unit of a new model to be included in the Excelsior range of lightweights for 1953. To be known as the Courier, the new machine has a general specification similar to that of the present 125 and 197 c.c. Villiers-engined Excelsiors. It will, in fact, displace the existing one-two-five from the home market, but will be an addition to the range for export. Deliveries of the Courier to dealers in Great Britain are expected to start before the opening of the London Show.

Remaining models in the Excelsior range are virtually unaltered. They are the standard and sports versions of the famous 244 c.c. twin-cylinder Talisman, the two 197 c.c. Roadmasters, and the two 98 c.c. Autobyks. An important point in connection with the last-mentioned

The G2 98 c.c. Super Autobyk is the only British autocycle having two speeds

machines (which are, of course, autocycles) is that the prices are reduced by approximately £13 in each case; this reduction has been effected without any pruning of the specifications or sacrifice of quality.

Bore and stroke measurements of the new 148 c.c. engine are 55 x 62 mm. The compression ratio is 7.8 to 1. Cast in Y-alloy, the cylinder head provides a combustion chamber of unusual shape. Centrally disposed within the hemisphere



is a pear-shape recess. At the narrow end of the recess is located the sparking plug. This shape, it is said, imparts a swirl to the incoming charge in the direction of the plug.

Orthodox twin transfer ports are incorporated in the cast-iron cylinder barrel. The light-alloy inlet pipe, on which is flange-mounted an Amal two-lever carburettor with handlebar-lever air control, is downswept. A pancake-type air filter is fitted to the carburettor. Four setscrews attach the cylinder head to the barrel; the latter is held to the crankcase by four orthodox studs and nuts. The crankcase is a clean-looking casting in D.T.D. 424 light alloy.

Forty-five ton, nickel-molybdenum steel is the material used for the forged, built-up crankshaft. It is carried in three 1½-in-diameter LS8 ball journal bearings—two on the drive side, one on the timing side. A double-roller big-end bearing is employed.

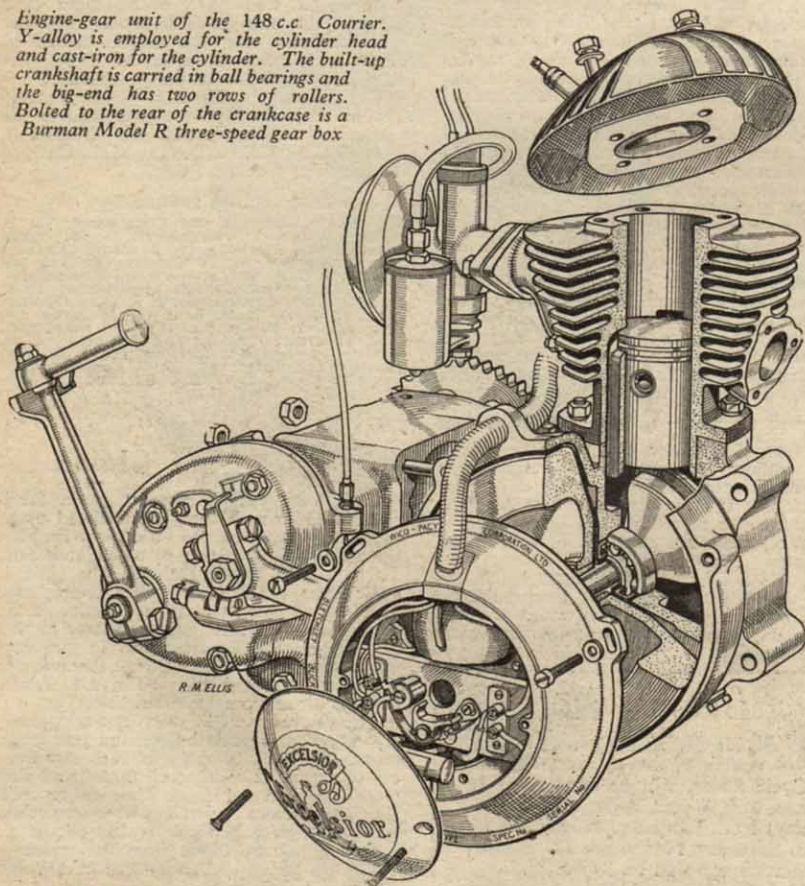
Compact Appearance

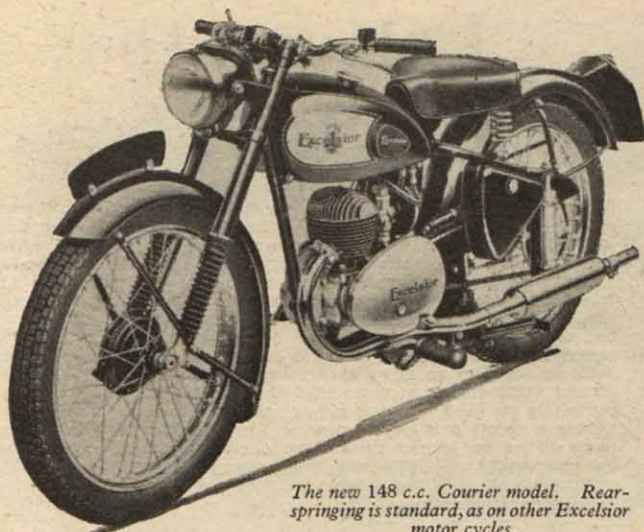
The connecting rod, a 65-ton nickel-steel forging, has a phosphor-bronze little-end bearing to carry the fully floating gudgeon-pin. Very slightly dome-shape at the crown, the piston is fitted with two compression rings. Ignition and lighting current is supplied by a Wico-Pacy fly-wheel mag-generator; battery and rectifier are provided.

A Burman model R three-speed gear box is bolted to the engine; the gear box outer cover is a special casting which blends neatly with the engine to form a compact engine-gear unit. The positive-stop selector mechanism operates in the orthodox fashion with a pawl, ratchet and bell-crank lever. A ¼ x ¾-in chain forms the primary drive to the two-plate, cork-lined clutch running in oil. Disc-type rubber shock-absorbers are integral with the clutch.

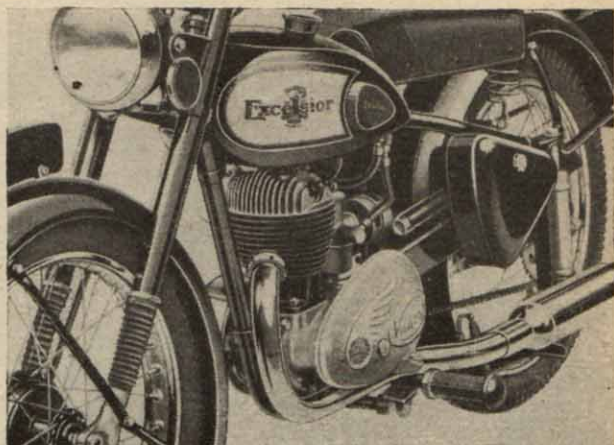
Dunlop Universal tyres, 3.00 x 19in, are fitted on the Courier. Rubber gaiters are employed to protect the telescopic front fork sliders; the gaiters are now standard equipment on all the Excelsior motor cycles, which, of course, also incorporate plunger-type rear springing. Fuel-tank capacity of the Courier is 2¼ gallons. Brake dimensions are 5in diameter front, and 6in rear.

Engine-gear unit of the 148 c.c. Courier. Y-alloy is employed for the cylinder head and cast-iron for the cylinder. The built-up crankshaft is carried in ball bearings and the big-end has two rows of rollers. Bolted to the rear of the crankcase is a Burman Model R three-speed gear box





The new 148 c.c. Courier model. Rear-springing is standard, as on other Excelsior motor cycles



Close-up of a popular 197 c.c. model—the R2 Roadmaster, which has rectifier and battery lighting

Both the Talisman Twin models are virtually unaltered for 1953. Both employ the Excelsior 244 c.c. vertical twin, two-stroke engine, with four-speed gear box in semi-unit construction. A notable feature of the engine design is that rigidity of the built-up crankshaft is ensured by supporting it in no fewer than five ball and roller bearings.

Separate cylinders, with detachable, light-alloy heads are employed; the light-alloy pistons are of the flat-top type and each has two compression rings. The Sports Talisman (STT1) differs from its fellow mainly in that it is fitted with twin Amal carburettors, an Excelsior dual-seat and a Smiths 80 m.p.h. speedometer with trip recorder.

The 197 c.c. Roadmaster models R1 and R2 are powered by the Villiers three-speed engine-gear unit. Fuel-tank capacity, tyre sizes and brake diameters on these models and on the Talisman Twins are identical to those for the Courier. The main difference between the R1 and R2 models is that the former is provided with direct lighting equipment, while the latter has rectifier and battery lighting.

Power units of the De Luxe and Super Autobys are respectively the Excelsior Spryt and Goblin engines. Both are

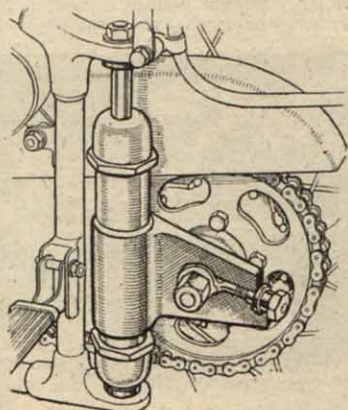
98 c.c. two-strokes, but whereas the Spryt engine provides a single gear ratio, the Goblin has a two-speed gear box. A neat engine shield is provided on both models to protect the rider's clothing from possible oil marks and from any road filth thrown up by the front tyre. Four-inch-diameter brakes are fitted. Tyre sizes are 26 x 2.00 in on the De Luxe model and 2.25 x 21 in on the Super model. Direct lighting from the magneto is provided, plus dry battery for parking lights.

With the exception of one model, the standard finish on the motor cycle range is maroon enamel, with cream tank panels; the Sports Talisman is finished in beige enamel, and the tank lined in red. An alternative colour-scheme may be available on the twins; it is polychromatic blue, with cream tank panels.

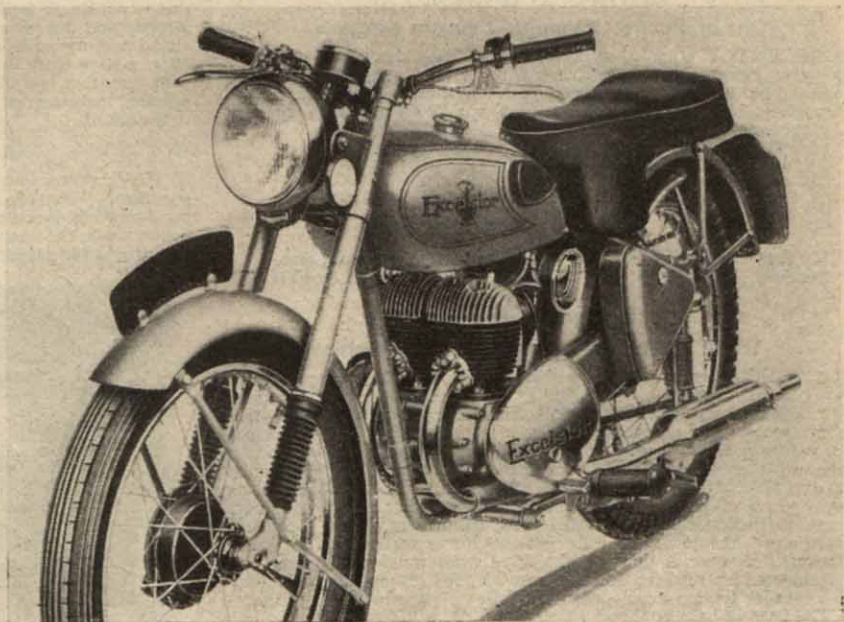
Makers are the Excelsior Motor Co., Ltd., King's Road, Tyseley, Birmingham, 11. Prices (in which total price includes Purchase Tax, payable only in Great Britain) are as follows:—

	Basic Price £ s d	Total Price £ s d
S1, 98 c.c. De Luxe Autobyk	45 0	57 10 0
G2, 98 c.c. Super Autobyk (two-speed)	54 0	69 0 0
C2, 148 c.c. Courier	94 0	120 2 3
R1, 197 c.c. Roadmaster	97 10	124 11 8
R2, 197 c.c. Roadmaster (rectifier lighting)	102 10	130 19 5
TT1, 244 c.c. Talisman Twin	125 0	159 14 5
STT1, 244 c.c. Sports Talisman Twin	136 0	173 15 7

Prices include speedometer and spring frame, except in the case of the S1 and G2.

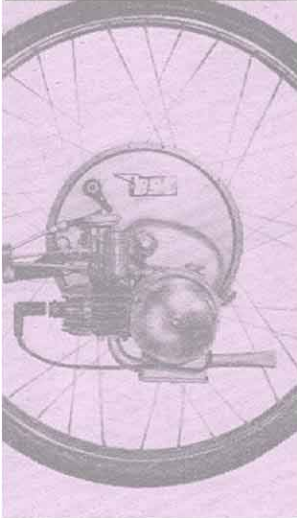


Spring-frame details—cast spring-plunger and chain adjuster unit



Finish of the handsome 244 c.c. Sports Talisman Twin is in beige enamel, with the tank lined in red. Two carburettors are employed

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