



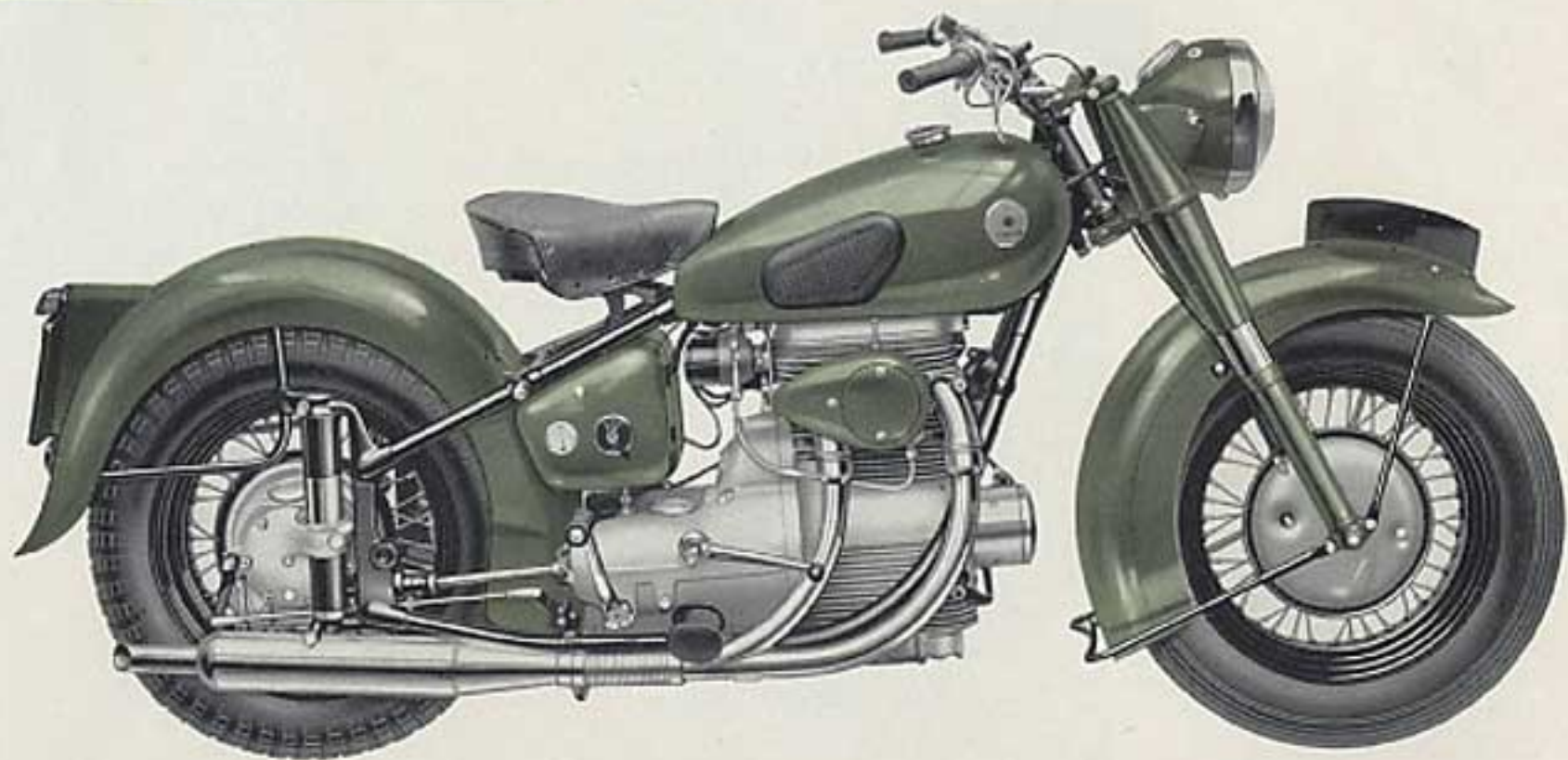
SUNBEAM

MOTORCYCLES



The epitome of luxury coupled with superlative design and dignified appearance have long been recognised as the traditional hallmark of the name Sunbeam. That the S7 and S8 have enhanced this enviable reputation has already been appreciated by the enthusiastic reception accorded to them by motor cycling connoisseurs.

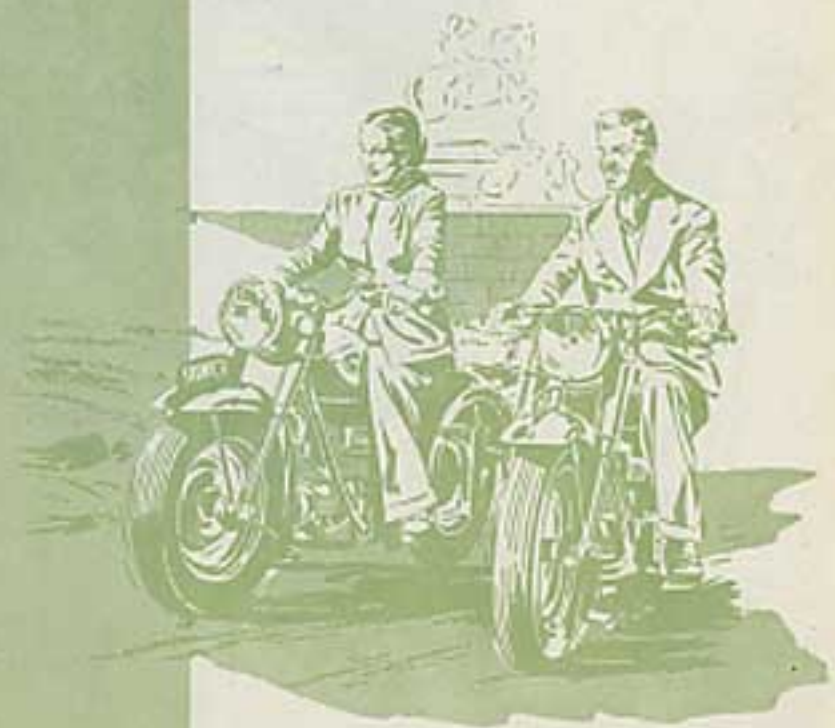
Nor does appearance belie performance. Chosen by the New Zealand police, the Khartoum police, and many other public organisations for long and arduous patrol work, the Sunbeam, with its splendid manoeuvrability, robust engine and low maintenance costs, has proved itself a workmanlike as well as a luxurious machine. Truly, the aristocrat of motor cycles.

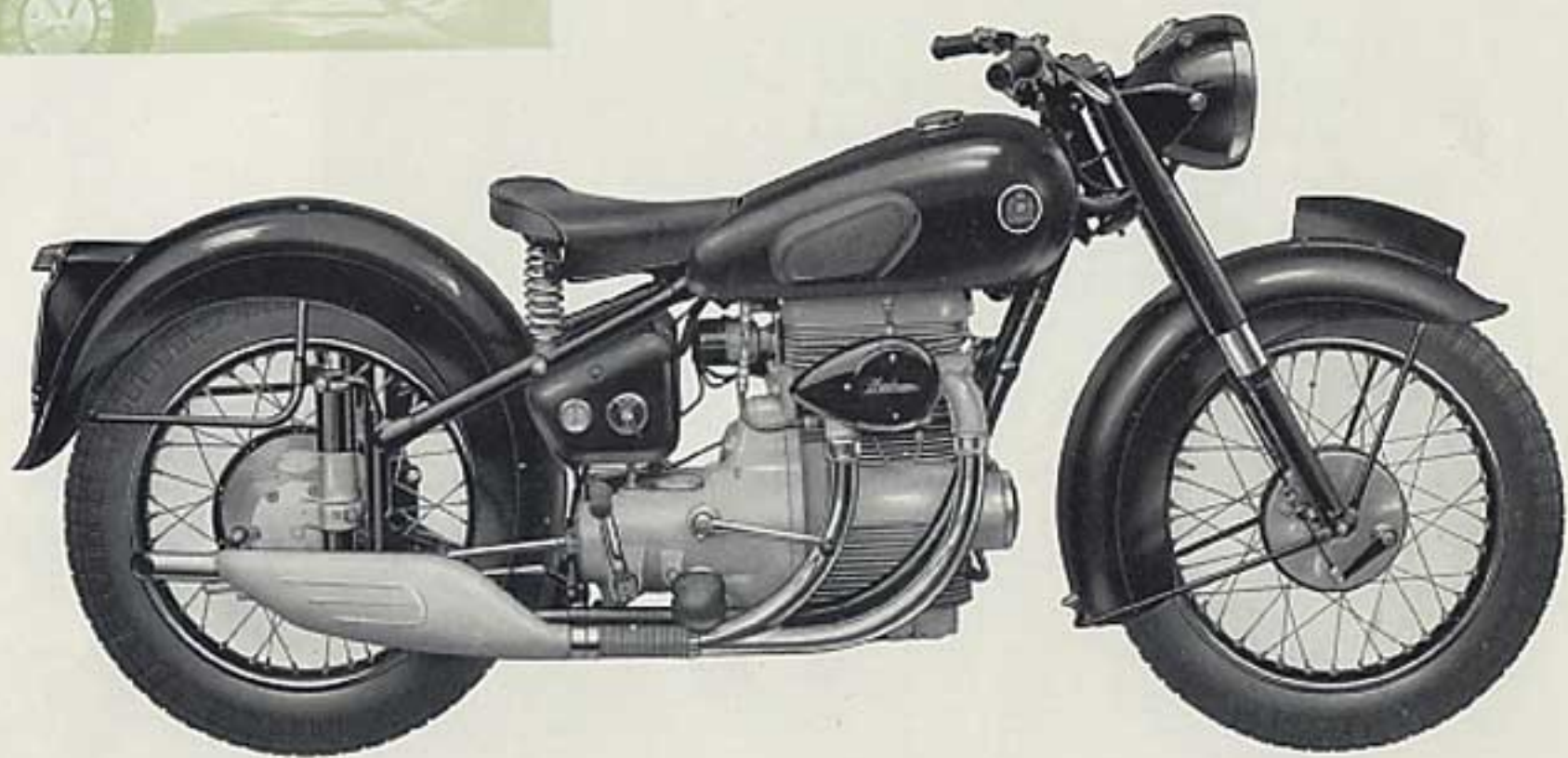


SUNBEAM 500 OHC TWIN MODEL S7



A motor cycle designed for the most discriminating rider, the S7 embodies all the refinements of comfort and mechanical perfection. The saddle, mounted on a spring cradle which is adjustable for the rider's weight, is especially constructed for superb riding ease. The unique shaft drive, excellent springing and rubber mounted engine ensure a quiet, smooth flow of vibrationless power. The telescopic front forks with automatic progressive hydraulic damping give an ease of handling which, together with a maximum of road comfort and a minimum of maintenance, combine to make even the longest trips both effortless and troublefree.





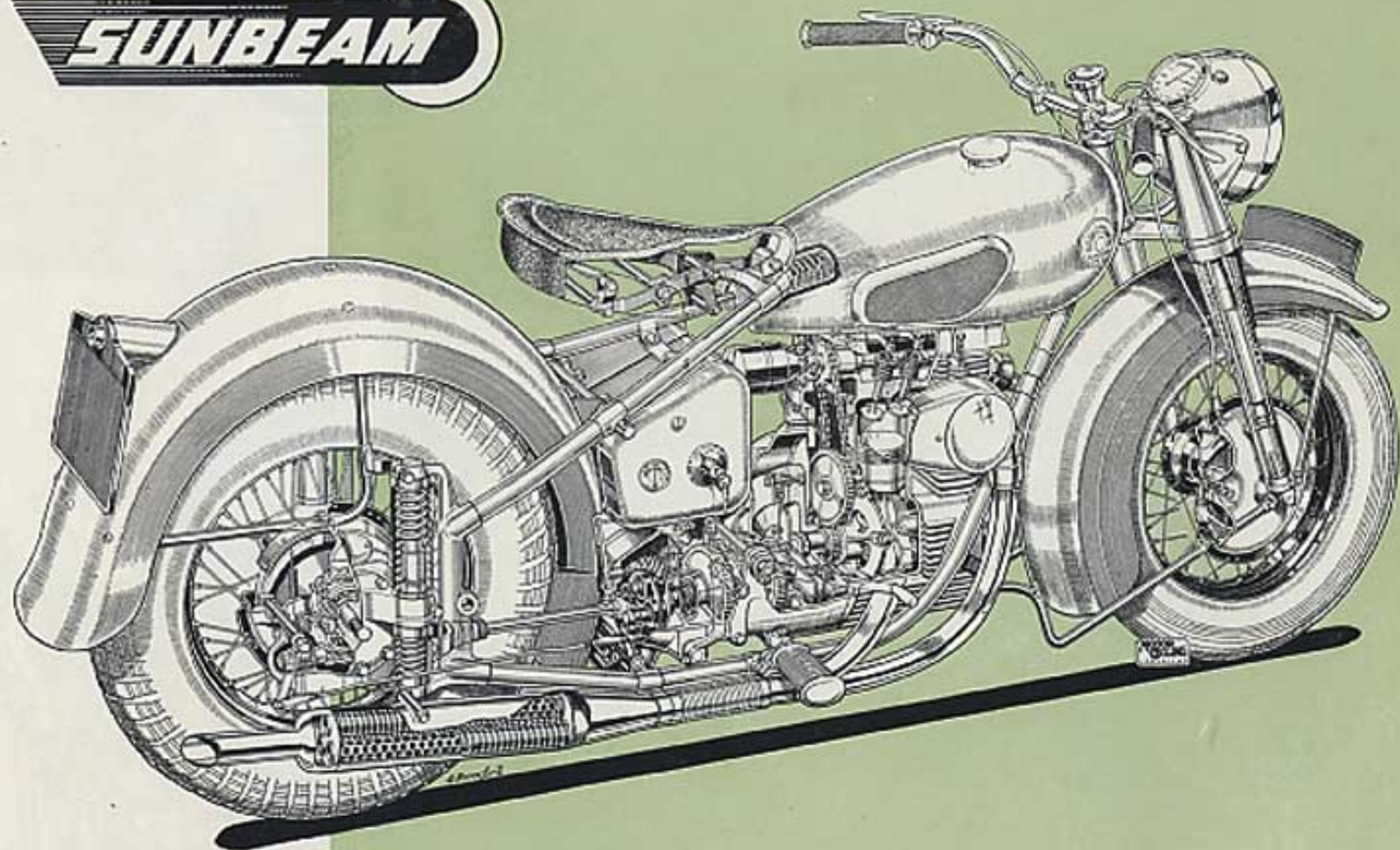
SUNBEAM 500 OHC TWIN MODEL S8



Planned for the motor cyclist who desires an appreciable gain in performance but, in return, is willing to sacrifice a fractional degree of comfort, this lighter version of the S7 has met with universal acclamation. The specification varies little from that of its famous companion model, but weight is reduced by the introduction of smaller section tyres of stud pattern, and the 7in. front brake. A three-point spring attachment saddle has been substituted as a more desirable design for the sporting rider, but apart from this, and one or two minor items, the S8 has all the famous attributes of the S7.



SUNBEAM



This excellent sectioned drawing of the Sunbeam S7 gives a good idea of the internal layout of the main parts of the machine.

The sturdy construction of the essential engine and transmission features will be noted.

It is this robust construction — plus traditional Sunbeam craftsmanship — which gives that superb performance and comfort for which these modern Sunbeams are justifiably known.

FEATURES

1 The chain driven overhead camshaft is mounted on plain bearings of generous dimensions, pressure fed direct from the oil pump.

2 A smooth flow of power from the engine is ensured by its rubber mountings, the upper one being shown in the illustration. They are both oil and petrol proof.

3 Supple steering is provided by the telescopic front forks fitted with automatic progressive hydraulic damping.

4 Shaft drive is now accepted as the ideal form of power transmission. The Sunbeam design is of sturdy construction and incorporates a needle roller universal joint at the rear.

5 The worm reduction gear is of robust proportions, requires little maintenance, and is unaffected by the removal of the rear wheel.

6 A four-speed gearbox and a single plate dry clutch are in unit construction with the engine.



GENERAL SPECIFICATION MODELS S7 AND S8

POWER UNIT: Fully floating power unit, mounted on rubber, with high frequency vibration damper.

ENGINE: Unit construction vertical twin, 2½ in. bore x 2½ in. stroke; crankcase and cylinders in one-piece aluminium alloy casting and detachable 'Brivadium' cylinder liners; one-piece aluminium alloy cylinder head; overhead camshaft drive by chain with automatic tensioner; totally-enclosed and specially lubricated cam and rocker gear; light alloy connecting rods with special 'Vandervell' plain shell big-end bearings; crankshaft main bearings—front, deep-groove ball; rear, 'Glacier' plain shell white metal; Amal carburetter; Vokes (oil dip) air cleaner.

LUBRICATION: Car type engine lubrication; separate oil supply for gearbox and rear drive; other parts by grease gun.

TRANSMISSION: Direct drive from engine through single plate car-type dry clutch to gearbox; four speeds with positive stop foot gear change; shaft drive to rear wheel from gearbox layshaft through one shock absorber and one needle bearing universal joint; final drive from shaft to rear wheel by totally enclosed worm gear; gear ratios: solo 5.3, 6.5, 9.0 and 14.5 to 1; sidocar 6.13, 7.4, 10.3, 16.6 to 1.

FRAME: Tubular duplex cradle; telescopic front forks with automatic hydraulic damping; rear suspension by totally enclosed plunger springs; rubber mounted petrol tank (capacity three gallons with half gallon reserve); easy action central stand; integral frame lugs for L.H. or R.H. sidocar attachment. Domed and valanced mudguards, rear hinged.

CONTROLS: Twist grip throttle, front brake and horn button on right bar; clutch and dip switch on left bar. Handlebar and footrests adjustable to suit rider.

EQUIPMENT: Dunlop tyres; Lucas 6 volt 60 watt dynamo lighting set with compensated voltage control; 8in. headlamp with integral speedometer, ignition and oil warning lights; new style rear number plate with combined stop and tail lights; coil ignition with automatic advance. Coil, cut-out, switch, ammeter and spare bulb holder in offside box protected from weather; battery in rubber buffers in nearside box. Electric horn; spring seat saddle; metal toolbox complete with toolkit; tyre inflator; licence holder; folding prop stand. Saddle type pillion seat and folding pillion footrests extra.

MODEL S7

SILENCER: Absorption type, chromium plated.

WHEELS: Instantly detachable and interchangeable.

TYRES: Front: 4.50—16 ribbed. Rear: 4.75—16 studded.

BRAKES: 8 in. diameter.

SADDLE: Spring cradle mounting, adjustable for rider's weight.

FINISH: Mistgreen with black frame and chromium plated handlebar, exhaust system, etc.

MODEL S8

Baffle type, cast aluminium.

Instantly detachable.

Front: 3.25—19 studded. Rear: 4.00—18 studded.

Front: 7 in. diameter. Rear: 8 in. diameter.

Three-point attachment.

Black lustre with chromium plated handlebar, exhaust pipes, etc. Alternative colour, silver grey.

SUNBEAM CYCLES LTD., Birmingham 11

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*Sunbeam Cycles Ltd. reserve the right to alter the designs or any constructional details of their manufactures
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