



New B.S.A. Golden Flash embodies a number of attractive design features which make it the outstanding machine for 1950. The completely new engine has a remarkable performance throughout its entire speed range. At the same time it is so flexible and the machine so versatile that it provides an unprecedented sidecar performance, and will satisfy the most ardent high speed solo enthusiast.

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The cylinder head, showing the air flow round the exhaust ports. The arrangement of the finning around the three valve spring chambers encourages a generous flow of cooling air right over the vital surfaces of the combustion head.



Underside view of the rocker box showing how the airflow channels are designed to follow that of the cylinder head. This also shows the easy access for tappet adjustment.



The new 8-inch front breke, with super ribbed shoes for smooth, progressive straight-line stops.



The car-type tappets, with greatly increased bearing areas, giving long life and silent operation, are one of the notable features of the new B.S.A. Golden Flash engine. Note the "siamesed" pairs of tappets providing perfect constant alignment.



The low expansion aluminium alloy piston, with duplex oil control grooves and slightly concave crown for most efficient combustion.

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BSA GOLDEN FLASH

650 c.c. (40 cu. in.) O.H.V. TWIN Model A 10

ENGINE: Vertical Twin Cylinder O.H.V. 70 mm. bore by 84 mm. stroke; 646 c.c. (40 cu. in.). Forged steel crank-shaft with integral bobweights and bolted-on central shaft with integral bobweights and bolted-on central flywheel. Roller journal bearing on drive-side mainshaft. Plain bearing big-ends with indium-flashed lead-bronze liners. Plain bearing for mainshaft timing side. Forged light alloy connecting rods; low expansion aluminium silicon alloy pistons. Twin cylinders cast in single unit with specially cored air passages. Unit cylinder head-casting with narrow angle valves, two per cylinder, operating in shallow combustion chambers specially developed for maximum efficiency.

Overhead rockers operated by push rods from a single camshaft at rear with large car type tappets. Camshaft gear-driven from engine-shaft through idler pinion, and incorporating timed mechanical breather. Absorption type silencers.

LUBRICATION SYSTEM: Engine lubricated by dry-sump LUBRICATION STSTEM: Engine lubricated by dry-sump system with twin gear-type pump, driven by skew gear from engine shaft; pressure feed to timing-side main bearing and big-ends, with by-pass oil pressure release. Pressure feed to overhead rocker spindles. Camshaft operates in specially-designed oil trough. Capacity of oil-tank—four Imperial pints (approx. 5 U.S. pints).

INDUCTION SYSTEM: Bifurcated inlet manifold cast in cylinder head; Amal carburetter; large capacity built-in air cleaner, mounted on seat tube between oil tank and tool box.

IGNITION: Lucas magneto, gear driven from camshaft with automatic advance.

TRANSMISSION: Primary drive from engine by #" duplex roller chain, running in cast aluminium oil-bath chaincase. Chain tension correctly maintained by adjustable slippertype tensioner with hard-chrome bearing surface and external adjustment. Engine shaft cush drive. Rear chain 📲 x 📲 roller, lubricated by breather-pipe from oil tank. Five-plate clutch with oil-proof fabric inserts.

The **BSA**

"It can truly be said that it offers the

Di Bantam

CII de Luxe

B 32 Gold Star

B34 Competition

B 32 Competition

DI Competition

most comprehensive and widely differing range of motorcycles that have emanated from one factory since the 'boom' days

Every machine in the catalogue is modernised right up to the minute."

CII

B 31

B 33

500 O.H.V. B 34 Gold Star 500 S.V. M 20 600 S.V. M 21 500 O.H.V. M 33 500 O.H.V. Twin A 7 650 O.H.V. Twin A 10

125 2-stroke

125 2-stroke

250 S.V. 250 O.H.V.

250 O.H.V.

350 O.H.V.

350 O.H.V.

350 O.H.V.

500 O.H.V.

500 O.H.V.

500 O.H.V.

ING says

range The British Journal

GEARBOX: B.S.A. four-speed constant mesh gearbox with built-in positive stop foot change.

FRAME: Duplex triangulated cradle of ample strength for solo or sidecar work. All frame lugs including those for sidecar and pillion footrests are of forged steel. B.S.A. telescopic front forks with automatic progressive b.3.A. relescopic front forks with automatic progressive hydraulic damping. Wheels quickly detachable, front with 8" brake; rear of straight spoke type with 7" brake; Dunlop tyres, front 3.25-19, rear 3.50-19. Petrol tank capacity 41 Imperial gallons (5 U.S. gallons); adjustable handlebar; generous mudguards; tail portion of rear guard detachable for easy wheel removal; spring-up central stand: adjustable footrests.

EQUIPMENT: Adjustable spring-seat saddle; Lucas 6-volt c.v.c lighting set with sealed-beam headlamp and high frequency electric horn; metal toolbox under seat tube with complete toolkit; tyre pump; rubber knee-grips.

CONTROLS: On left handlebar, clutch lever and headlamp dip-switch; on right handlebar, front brake, air lever and horn button; ignition cut-out button on nearside back stay; rear brake operated by left toe pedal; kick-Starter and gear-change pedals on right. Twin petrol taps at rear of tank, both with reserve levers. Finger adjustment for brakes and clutch controls.

FINISH: All bright parts including the exhaust system heavily chromium plated; frame, mudguards, etc., lustrous black enamel; petrol tank, black and chrome with distinctive motif; wheel rims chrome with black centres; polished front chain case, gearbox cover, timing cover. Spring Frame, and beige and chromium finish as illustrated extra.

B.S.A. CYCLES LTD., Birmingham 11, England

B.S.A. Cycles Limited reserve the right to alter designs or an constructional details of their manufactures at any time without giving notice.