OVERSEAS EDITION

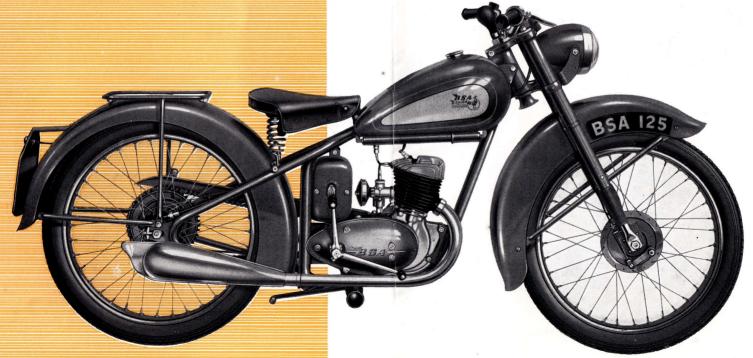


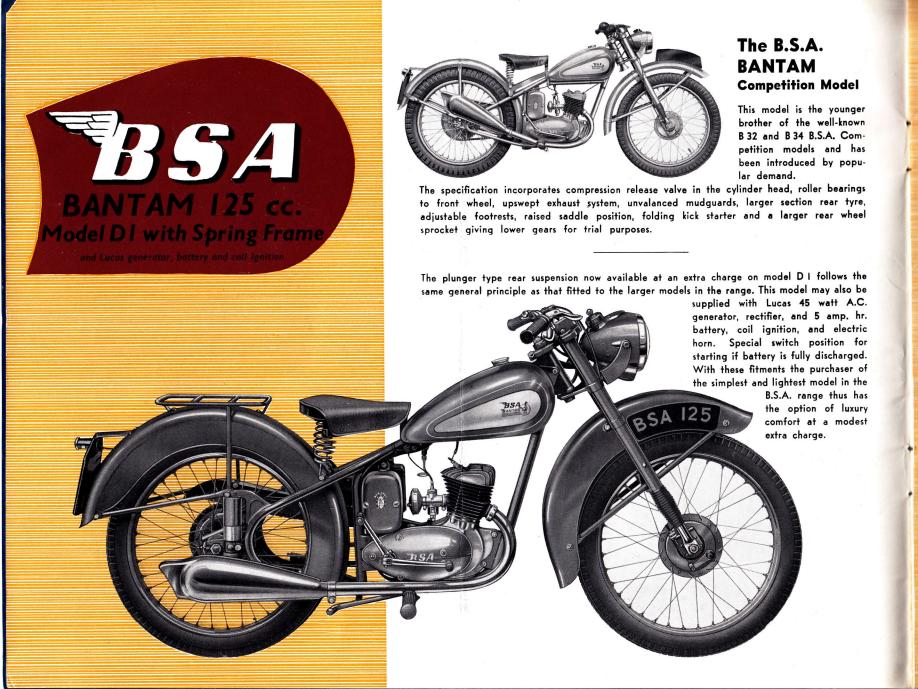


The B.S.A. Bantam is now firmly established as "Cock o' the Lightweights." It is attractive in appearance, amazingly economical, has a brilliant performance, is comfortable to ride, and easy to handle. In every way the perfect lightweight.



The B.S.A. Bantam Model BD I has a specification identical to the standard model, but has black tank with chromium strip on top and cream side panels; black frame and mudguards; chromium plated rims; polished primary chain cover, and is equipped with crash bars, legshields and larger carrier.

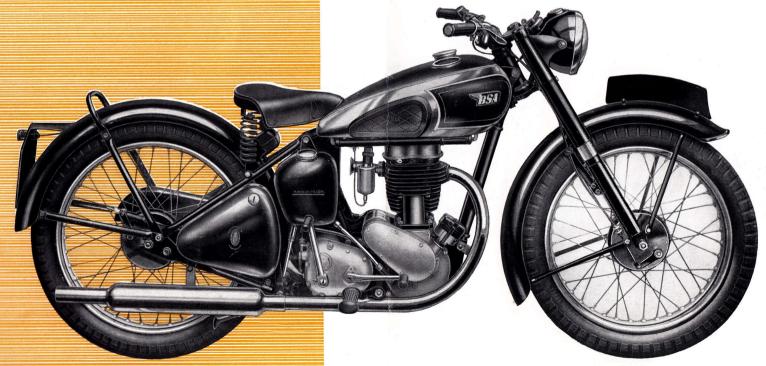


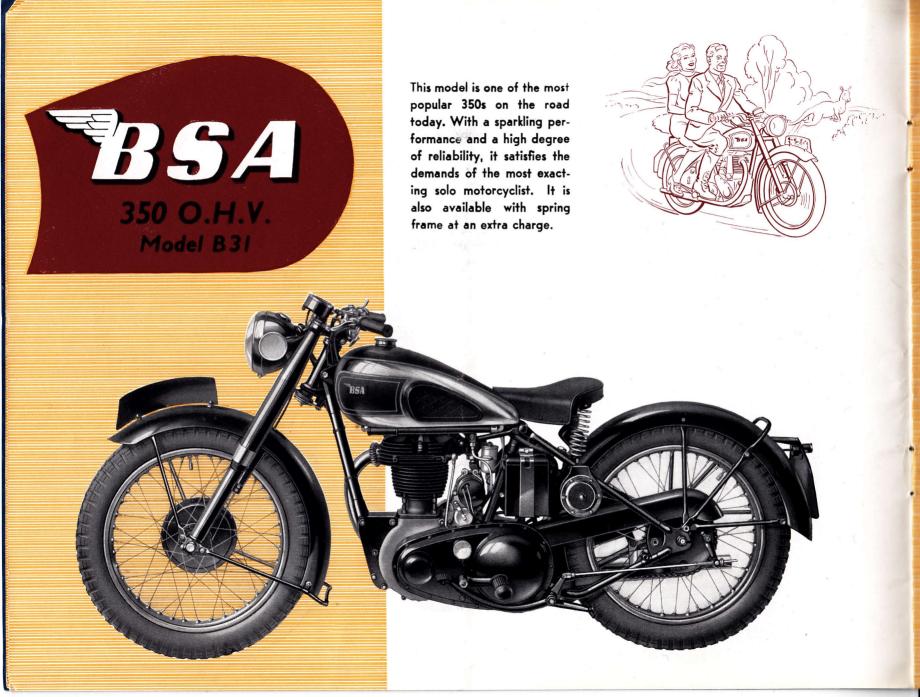




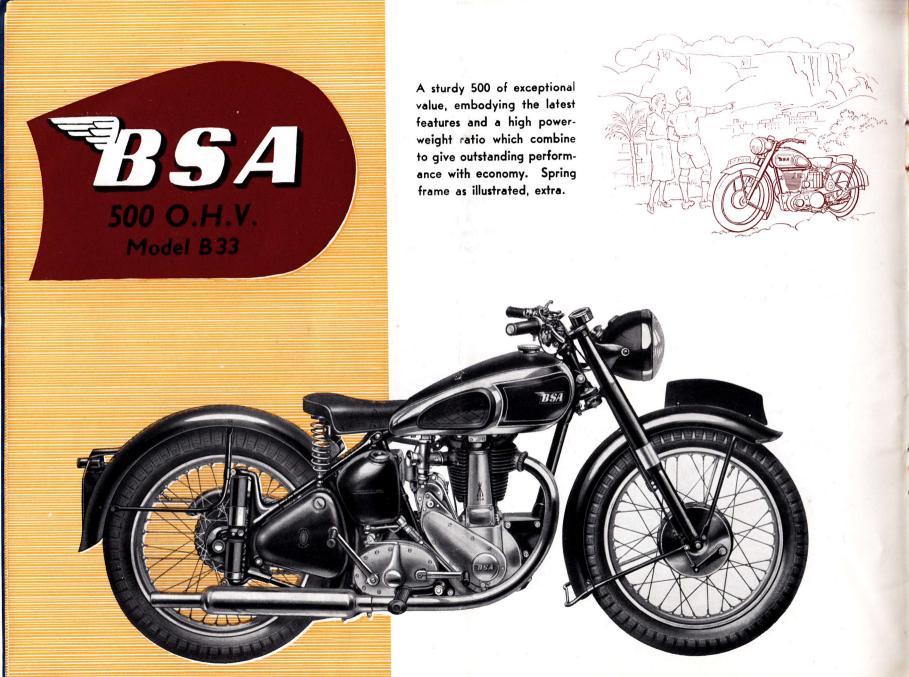
The B.S.A. 250 c.c. models are ideally suited to the requirements of the everyday utility rider. They are economical to run, easy to maintain, and in the true B.S.A. tradition completely reliable. You have a choice of three models in this class —the side valve model C10, the standard O.H.V. model CII with matt silver and chromium tank, and the de Luxe O.H.V. (illustrated) with blue and chromium tank and wheels.













BSA 350 B32 GOLD STAR 500 B34 GOLD STAR

Since its introduction for the 1949 season model B 32 Gold Star has amply fulfilled its early promise, and a 500 c.c. version is now added to the range for 1950. These two machines are similar in specification except for engine capacity, and follow the now well established Gold Star tradition. Their specification, which includes B.S.A. rear suspension, is extremely versatile, for the purchaser can select cams, gears and compression ratios to suit the type of sporting event which he favours. For road racing purposes the foot gear change pedal can be fitted in the rearward position with the mechanism inside the box modified to give the normal movement—i.e., pedal raised to engage a lower gear, and conversely.





RSA GOLDEN FLASH 650 Twin Model A 10

The 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.

ENGINE. Vertical Twin O.H.V. 70 mm. bore by 84 mm, stroke; 646 c.c. Forged steel crankshaft 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 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 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.

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

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

TRANSMISSION. Primary drive from engine by 3/8" duplex roller chain, running in cast aluminium oil-bath chaincase. Chain tension correctly maintained by adjustable slipper-type tensioner with hardchrome bearing surface and external adjustment. Engine shaft cush drive. Rear chain \(\frac{5}{8}'' \times \(\frac{3}{8}'' \) roller, lubricated by breather-pipe from oiltank. Five-plate clutch with oil-proof fabric insert.

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 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 44 Imperial 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-arips

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: kickstarter 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. Finished in beige and chromium as illustrated, extra.



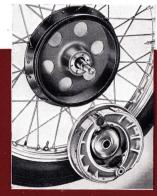
Cylinder head showing airflow round exhaust ports and over Note fin combustion head. arrangement to direct air round valve spring chambers.



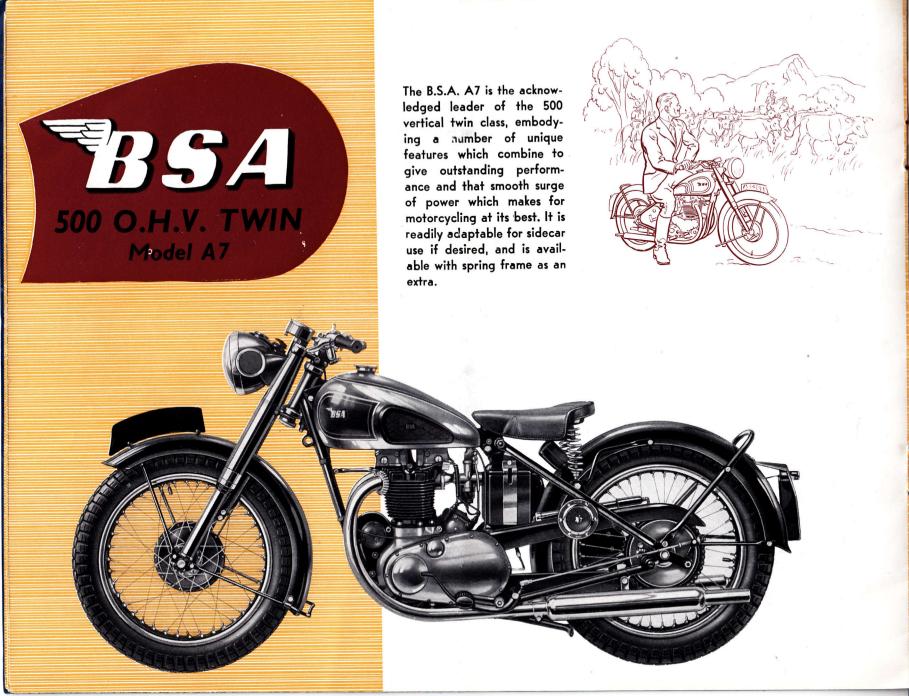
The car-type tappets with greatly increased bearing area, and "sia-mesed" in pairs to ensure perfect constant alignment.

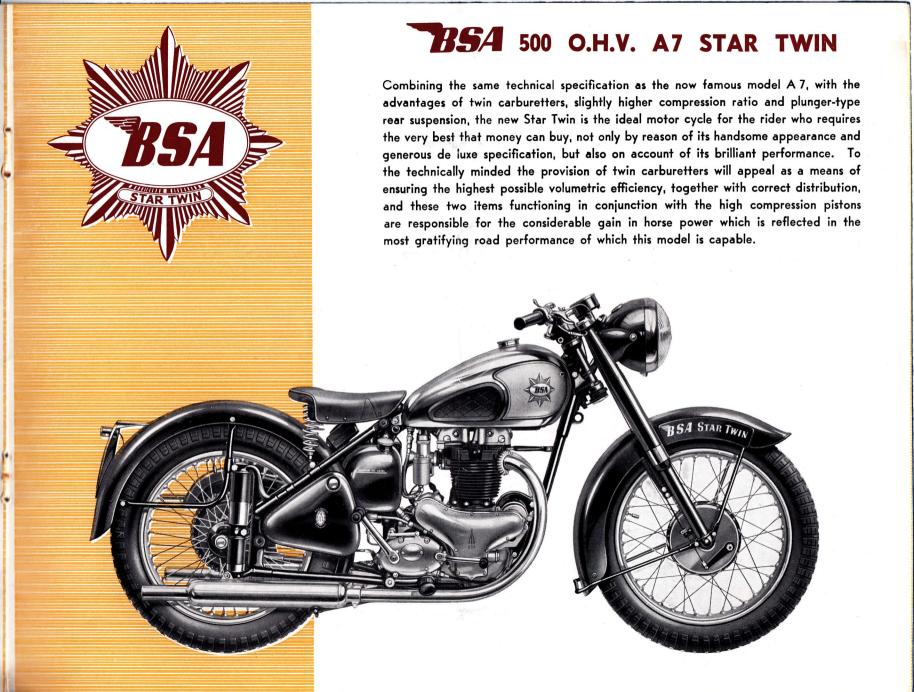


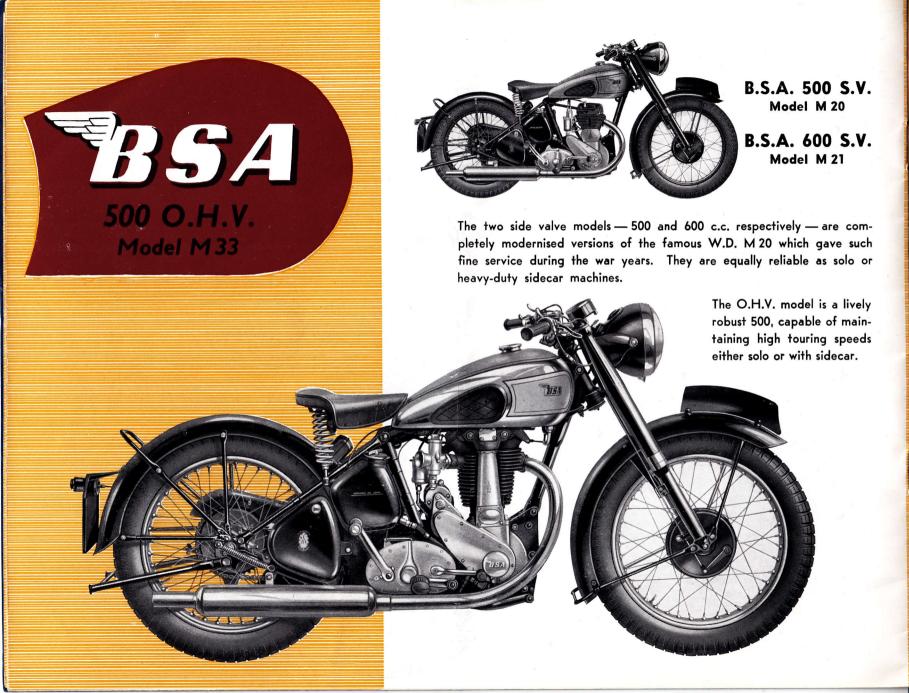
The low-expansion alloy piston with duplex oil control grooves, and slightly concave crown for most efficient combustion.

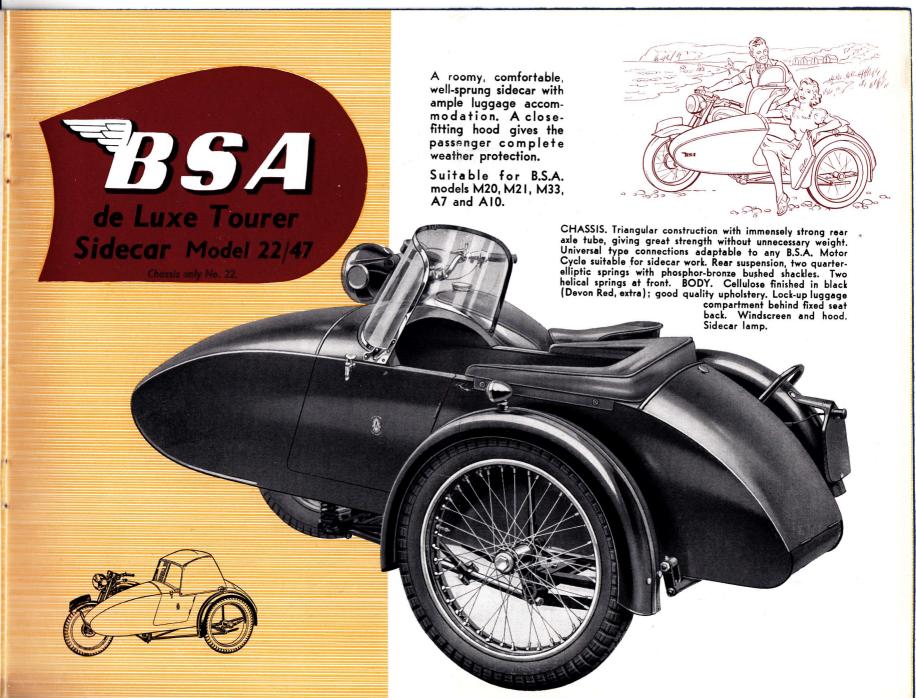


The new 8-in, front brake with superribbed shoes for smooth, efficient, straightline stops.









General Specification

ENGINE. Air cooled with cast iron cylinder barrel and head (aluminium alloy for Gold Star models and aluminium alloy head on D I and C 10); high tensile steel connecting rod. Big-end—roller bearing except on A models, which have indium-lead-bronze plain bearings. Main bearings—plain timing side on A 7 and C models; Ball and/or roller bearings on drive side on all models, and on timing side on remainder of range. Gear driven timing gear; tappets on A models operated by a single camshaft at rear of engine. Stellite-tipped valves standard on A 7 Star Twin, A 10 and Gold Star models. Amal carburetter (with built-in air cleaner on models A 7 and A 10); twin carburetters with gauze intake traps on A 7 Star Twin. Air cleaners on all other models except Gold Stars.

LUBRICATION. (Except D I). Dry sump system with separate oil tank under saddle and double gear pump. Model D I, petroil system.

IGNITION. Coil ignition with car-type distributor incorporating automatic advance on C models, Magdyno on B and M models, magneto with automatic advance on A models. Wico-Pacy flywheel magneto-generator on D I or coil ignition with Lucas A.C. generator set (extra) if specified.

TRANSMISSION. Three-speed gearbox on D and C models;

four speeds on others; all with positive stop foot gear change; oil bath primary chain drive.

FRAME. Sidecar lugs on M and A models; 8 in. front brake on Gold Star and A 10 models; Rear suspension with quickly detachable rear wheel on Gold Star models and A 7 Star Twin, extra on other B and A models; quickly detachable rear wheel on A 7 and A 10; spring-up stand (rear on M models, central on other models).

EQUIPMENT. Lucas 6-volt 60 watt lighting (except D I: see ignition) with separate dynamo on C and A models, magdyno on others; compensated voltage control; sealed beam headlamp; electric horn (extra on model D I); toolkit; tyre inflator; licence holder.

FINISH. Pastel green and chromium on D1; Black and chromium on BD1; Matt silver and chromium tank on C10 and C11; tank and wheels blue and chromium on C11 de luxe; Green and chromium on B31 and B32 Competition; Red and chromium on B33, B34 Competition and A7 (alternative black and chromium on A7); Silver and chromium on M33, Gold Star and Star Twin models. Silver tank and black wheels on M20 and M21. Black and chromium on A10 with beige and chromium as an optional extra. Chromium guards on Competition and Gold Star models.

EXTRAS

SPRING FRAME on Models D I, A 7, A 10, B 31, B 33; also B 32 and B 34 with downswept pipes only. LUCAS A.C. GENERATOR SET with electric horn on Model D I. BATTERY OPERATED ELECTRIC HORN on Wico-Pacy equipped Model D I. SPEEDOMETER on Model D I. LEGSHIELDS on Models D I, C 10 and C II. PILLION SEAT OR CARRIER on all Models except D I. FOLDING PILLION FOOTRESTS on all Models except D I. PROP STAND on all Models except D I. ALLOY ENGINE on models B 32 and B 34. COLOUR FINISH: Beige and Chromium finish on Model A 10. Matt Silver and Chromium finish on Models M 20 and M 21.

Technical Data

Model (Standard Specification)	DI	DI Comp	C10	СП	B31	B32	B32 Gold Star	В33	B34	B34 Gold Star	M20	M21	M33	A7	A7 S.T.	A10 Golden Flash
Valve Arrangement	2-stroke	2-stroke	s.v.	O.H.V.	0.H.V	O.H.V.	O.H.V.	O.H.V.	O.H.V.	O.H.V.	S.V.	S.V.	O.H.V.	O.H.V.	O.H.V.	O.H.V.
No. of Cylinders	1	1	1	l l	1	1	1	1	1	1	1	1	I	2	2	2
Bore (mm.)	52	52	63	63	71	71	71	85	85	85	82	82	85	62	62	70
Stroke (mm.)	58	58	80	80	88	88	88	88	88	88	94	112	88	82	82	84
Capacity (c.c.)	123	123	249	249	348	348	348	499	499	499	496	591	499	495	495	646
Compression Ratio	_		5-1	6.5-I	6 5-1	6.5-1	†	6.8-1	6.8-1	†	4.9-1	5-1	6.8-1	6.6-1	7.0-1	6.5-1
Gear Ratios (Solo)—								10				-				3.0
Тор	_	_	_	_	5.6	7.1	‡	5.0	5.6	‡	5.3	4.8	4.8	5.1	5.1	4.4
Third	7.0	8.65	6.6	6.6	7.4	9.3		6.6	7.4		7.0	6.3	6.3	6.2	6.2	5.4
Second	11.7	14.5	9.8	9.8	11.5	14.5		10.3	11.6		10.9	9.8	9.8	9.0	9.0	7.8
First	22.0	27.1	14.5	14.5	16.7	21.1		14.9	16.8		15.8	14.2	14.2	13.2	13.2	11.4
Gear Ratios (Sidecar)—																
Тор	-	_	_	-		_		_	_		5.9	5.9	5.6	5.4	5.4	5.2
Third	_		_	_	_	_		_			7.8	7.8	7.4	6.6	6.6	6.3
Second	_	_	_		_	_		_	_		12.2	12.2	11.5	9.5	9.5	9.1
First	_	_	_	_	_	_		_	_		17.7	17.7	16.7	14.0	14.0	13.3
Front Tyre	2.75-19	2.75-19	3.00-19	3.00-20	3.25-19	2.75-21	2.75-21	3.25-19	2.75-21	2.75-21	3.25-19	3.25-19	3.25-19	3.25-19	3.25-19	3.25-19
Rear Tyre	2.75-19	3.25-19	3.00-19	3.00-20	3.25-19	4.00-19	4.00-19	3.50-19	4.00-19	4.00-19	3.25-19	3.50-19	3.50-19	3.50-19	3.50-19	3.50-19
Front Chain (ins.)	₹ Pitch	₹ Pitch	$\frac{1}{2} \times .305$	½ x .305	½ x .305	½ x .305	$\frac{1}{2} \times .305$	$\frac{1}{2} \times .305$	½ x .305	$\frac{1}{2} \times .305$	$\frac{1}{2} \times .305$	⅓ × .305	⅓ x .305	Duplex		₹ Duplex
Rear Chain (ins.)	½ Pitch	½ Pitch	$\frac{1}{2} \times .305$	½ x .305	8 × ↓	5 × ↓	- x ↓	8 × ↓	8 × ↓	1 × 1	5 × ↓	5 × 1	* × ‡	5 × 3	1 × 1	₹×₹
Brake Diameters (ins.)	5	- 5	5½	5 <u>±</u>	7	7	F8 R7***	7	7	F8R7***	7	7	7	7	7	F8 R7
§Saddle Height (ins.)	27	29	28	28⅓	30⅓	311	311	30⅓	311	311	30½	30 ¹ / ₂	301	30	30	30
§Overall Length (ins.)	77	77	80½	80½	82	82	83½	82	82	83½	85	85	85	83	84	84
§Overall Height (ins.)	383	38¾	39	39½	40	41	41	40	41	41	39₺	39₺	39 <u>‡</u>	40½	40½	404
§Overall Width (ins.)	26⅓	26½	28	28	28	28	28	28	28	28	28	28	28	28	28	28
§Ground Clearance (ins.)	43	43	41/2	5	5	6∔	64	5	64	6₺	51/2	51/2	5 <u>+</u>	41	. 41	41
, ,	**153	**166	270	284	343	*320	*325	354	*330	335	369	370	372	369	382	375
§Petrol Tank Capacity (galls.) -	13	12	21/2	21/2	3	3	3	3	3	3	3	3	3	3	3 ½	41
§Oil Tank Capacity (pints)	_	-	4	4	4	4	5	4	4	5	5	5	5	4	4	4
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[†] Optional Compression Ratios for B32 Gold Star:—6.5, 7.5, 8.8, 12.5 to 1. B34 Gold Star:—6.8, 7.5, 8.5, 11.1 to 1.

^{*} Weights stripped for trials, etc.

# Gear Ratios:			1	B32 Gold	Star	B34 Gold Star					
				Тор	Third	Second	First	Тор	Third	Second	First
Touring -	-	-	-	5.6	7.4	11.5	16.7	5.0	6.6	10.3	14.9
Trials -	-	-	-	7.06	9.3	14.5	21.1	5.64	7.44	11.6	16.8
Scrambles -	-	-	-	7.06	9.3	12.15	17.44	6.63	8.74	11.4	16.4
Road Racing	-	-	-	5.3	5.8	6.9	9.9	4.75	5.2	6.2	8.9

A choice of engine and gearbox sprockets is available giving a wide range of overall ratios to suit requirements.

§ Figures for these are approximate.

^{**} Lucas equipment 10 lbs. extra.

^{*** 7-}in. front brake fitted for Trials and Scrambles.

Copy of B.S.A. Motor Cycle and Sidecar Guarantee

which is given by B.S.A. Cycles Ltd. to Dealers in B.S.A. Motor Cycles and Sidecars

Every motor cycle and/or sidecar which is sold by us carries the following express agreements, which take the place of and exclude all conditions, warranties, and liabilities whatsoever which exist either by Common Law, statute or otherwise. Any statement, description, condition, or representation contained in any catalogue, advertisement, leaflet, or other publication. shall not be construed as enlarging, varying or overriding these.

1. We give no guarantee as to performance, quality, or fitness for any particular purpose. Should any defect be alleged in material or workmanship within six calendar months after purchase of a motor-cycle or sidecar from us or our accredited Dealers we undertake, on the immediate return of the part which is alleged to be defective to our Works, carriage paid, within such period to examine the same, and should any fault be found by us on examination to be solely due to defective material or workman ship, we will repair the defective part or supply a new part in the place thereof free of charge. We do not undertake to bear the cost of any work involved in reinstating a repaired or inserting a new part.

2. This guarantee as to material or workmanship does not extend to (1) α second-hand motor cycle and/or sidecar, or (2) to a motor cycle and/or sidecar which has been used for "hiring-out" purposes, or any motor cycle

and/or sidecar used for any dirt track, cinder track, or grass track racing or competitions (or any competition of any kind within an enclosure for which a charge is made for admission to take part in or view the competition) or (3) a motor cycle and/or sidecar from which our trade marks or manufacturing numbers have been removed, or (4) to a motor cycle to which has been attached a sidecar by any form of attachment not provided, supplied or approved by us, or (5) to a motor cycle to which has been attached a sidecar in such a manner as to cause damage or render the cycle unsafe when ridden or (6) to a motor cycle or combination which has carried more persons or a greater weight than they are designed to bear. And this guarantee does not extend to defects caused by racing, wear and tear, dirt, neglect, misuse, or accident.

3. Our responsibility is limited to the terms of this guarantee. and we will not be answerable for any contingent or resulting liability or loss arising through any defect or from any claim for labour, material, or other expenditure incurred in remedying any defect.

- 4. When claiming under this guarantee the claimant must furnish us with the number of the machine and engine (which will be found stamped on the seat lug and crankcase respectively), the name of the Dealer from whom he purchased, and the date of the purchase.
- 5. This guarantee shall apply to parts repaired or replaced under Clause 1, and such guarantee shall run concurrently with, and shall terminate on the same date as, the guarantee given under Clause 1, all the aforesaid implied conditions, liabilities, and warranties being excluded.
- 6. When returning machine for repairs all accessories should be removed. This guarantee shall not apply to any parts of a motor cycle or sidecar which are not manufactured by us and all conditions, warranties, and liabilities whatsoever implied either by Common Law, statute or otherwise relating to such parts are hereby excluded, but we will assist the purchaser by any guarantee given to him by the manufacturer of such parts as shall not have been made by us.

PROPRIETARY INSTRUMENTS, FITTINGS AND ACCESSORIES. -- No expense is spared to secure as standard equipment the most suitable and

highest quality instruments and accessories. Nevertheless. the Company's quarantee does not cover such parts, and in the event of trouble being experienced the parts in question should be returned to and claims made direct on the actual manufacturers, who will deal with them on the terms of their respective guarantees, as follows:--Tyres: Dunlop Rubber Co. Ltd., Fort Dunlop, Birmingham. Saddles: Herbert Terry & Sons, Ltd., Redditch. Electrical Equipment: Joseph Lucas Ltd., Birmingham. Electric Horns: Joseph Lucas Ltd., Birmingham. Speedometers: Smith's Motor Accessories Ltd., Cricklewood, London, Carburettors and Twist Grips: Amal Ltd., Perry Barr, Birmingham. Grease Guns: Tecalemit Ltd., Great



SPECIAL NOTE - Prompt attention to all claims under augrantee will be ensured if your covering letter gives -- (1) Make, year and model of motor cycle; (2) Date of purchase and name of Dealer from whom

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B.S.A. CYCLES LTD., BIRMINGHAM, 11

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