

EASTERN EDITION

get *AWAY* with

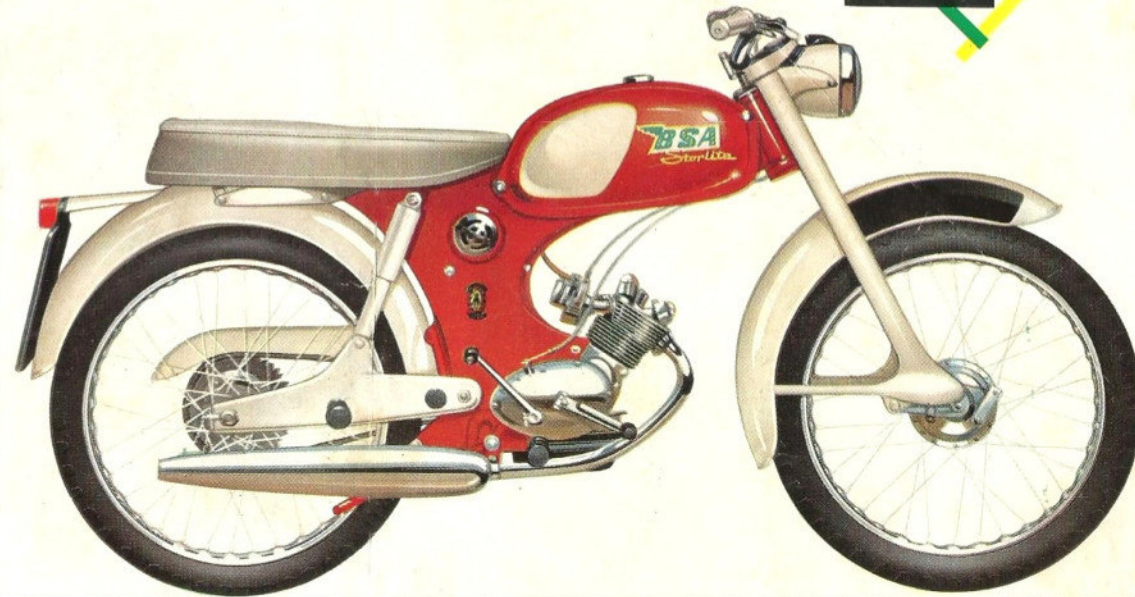
BSA



STARLITE 75

(MODEL K1)

Entirely New 75 c.c. ultra-light fun bike with overhead-valve engine



STARLITE FEATURES

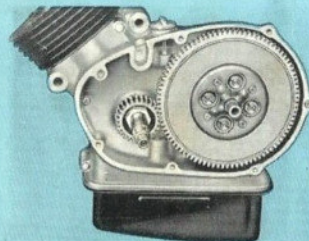
4-cycle overhead-valve engine. No mixing of oil and gas. Reliable power always!

Light, easy-starting, easy-riding, easier to ride than a bicycle!

Soft, long-action springing on both wheels. Comfortable!

Rugged 4-speed gearbox with automotive type clutch.

Low center of gravity, high-stability design.



Gear drive means no maintenance—no adjustment necessary.

SPECIFICATIONS

ENGINE Completely new high efficiency engine of 75 cc with push rod operated overhead valves. Light alloy cylinder head. The lubricating system is of the wet sump type, a plunger pump supplying oil under pressure to the big end. Amal carburetor with twist grip throttle control and air filter.

TRANSMISSION Four-speed gearbox in line with the engine, and with gear primary drive. The secondary gear teeth are formed on the periphery of the clutch plates on which the friction pads are bonded. The whole of the

DIMENSIONS Bore and stroke, 1.87 x 1.63" (47.6 x 42 mm); Capacity, 4.56 cu. in. (74.8 mm); Compression ratio, 9.5-1; Lubrication, wet sump; Gear ratios, 11-52, 15-1, 23-8, 34-4-1. Generator, 23W; Battery, dry for parking; Tire size, 2.25 x 19" (Dunlop); Fuel capacity 2 gallons; Oil capacity 1 1/2 pints; Seat height 29"; Ground clearance 7 1/2"; Weight 140 lbs.

primary drive runs in an oil bath, its level being automatically maintained from the engine.

IGNITION AND LIGHTING An engine shaft alternator provides ignition and direct lighting. Four-inch diameter headlamp, electric horn, tail lamp and reflector, speedometer.

BRAKES 4 1/2 in. diameter front and 5 in. diameter rear, both with finger adjustment.

SUSPENSION Front suspension is by leading links mounted in steel pressings which conceal the springs. Pressed steel rear swinging fork

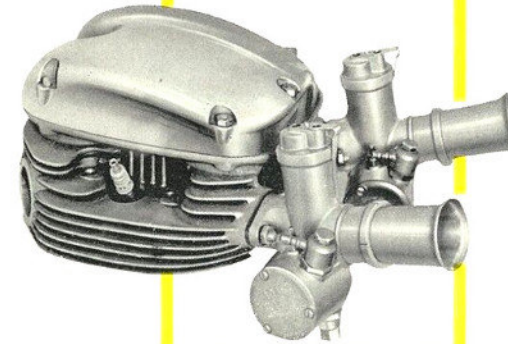
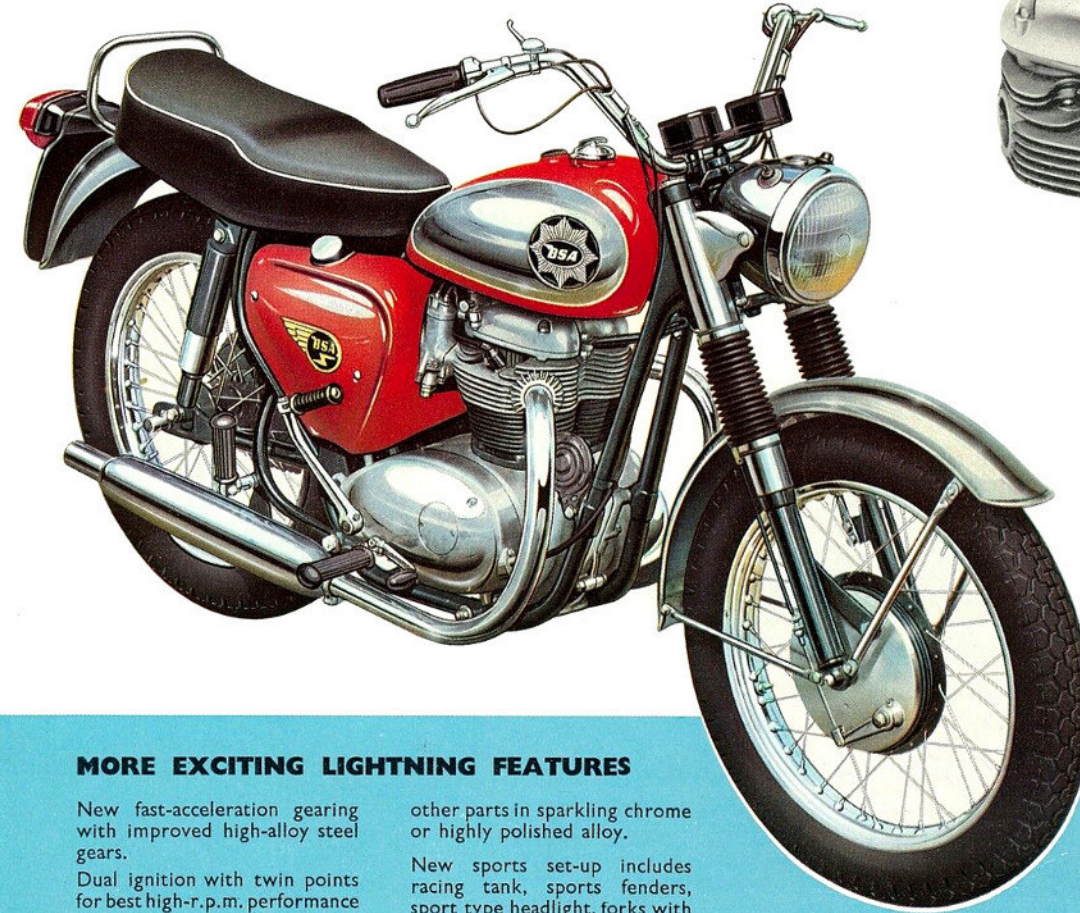
pivoted on rubber bonded bearings. Hydraulically damped suspension units.

FRAME Cantilever (or spine) type, of box section, and its design allows the engine an unobstructed air flow. It is braced internally at strategic points and carries the tools within the hollow main section. Spring-up central stand. Dual seat is standard.

FINISH Ivory with royal red. Chromium plated wheel rims. Bright parts chromium plated.

LIGHTNING Rocket (MODEL A65-2L)

NEW 40 cu. in. Speedster with double carburetor head



New twin-carburetor, high-compression cylinder head.

New full-race camshaft.

High-compression pistons, large valves, racing springs.

Heavy-base cylinder block, husky oversize bearings.

Full sports set-up with chrome fenders, 8,000 r.p.m. tachometer on twin mount with speedometer.

Extra chrome throughout.



BSA WINS

100 MILE NATIONAL CHAMPIONSHIP
Laconia, N.H. 1963

MORE EXCITING LIGHTNING FEATURES

New fast-acceleration gearing with improved high-alloy steel gears.

Dual ignition with twin points for best high-r.p.m. performance and power.

Super-Finish—New mandarin red tank and side nacelle panels, chrome fenders with many

other parts in sparkling chrome or highly polished alloy.

New sports set-up includes racing tank, sports fenders, sport type headlight, forks with dust covers, chrome chain guard, improved racing brake and many other new features. Ask your dealer for full details.

THUNDERBOLT ROCKET (MODEL A65-1T)

NEW 40 cu. in. Super-Finished Super-Chromed Twin
has **full-race** camshaft, high-performance engine

For those who prefer a single carburetor high performance model.

Full valenced fenders are heavily chrome plated.

High efficiency, single-carburetor engine has full racing type camshaft.

Sports type headlight 8,000 r.p.m. tachometer and speedometer on twin mounts.

New fast-acceleration gearing, improved high-alloy steel gears.



Crankshaft centrifugal filter on the twin cylinder engines ensures that nothing but clean oil is delivered to the big-end bearings.

THUNDERBOLT FEATURES

Super-chromed sports model, is ideal for high speed touring or sports riding.

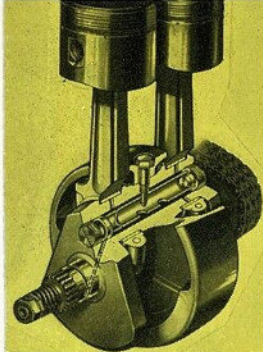
Valenced fenders for best weather protection while touring.

As in other BSA twins, has full-hydraulic-controlled forks, and adjustable-to-load rear suspension.

Super-finish features include chrome fenders chrome tank panels, many other parts in heavy chrome or polished alloy.

Metallic blue tank and side nacelles.

Full-width hubs, powerful brakes made for quick, sure, stops.



SPITFIRE HORNET (MODEL A65-2SPH)

NEW 40 cu. in. Full-Race Scrambles-Sports Model with all speed equipment built in—ready to give **you** winning performance on road or track



Twin-carburetor, high compression cylinder head.

New design full-racing camshaft, large valves, racing springs.

Special E.T. ignition system, with coils for direct lighting.

Racing tank, racing brakes, special high-acceleration gearing.

FEATURES MODEL A65-2SPH

New 2 gallon fibre-glass racing tank, central oil tank, folding footrests, bolt-on rear sprocket, straight through exhaust pipes. Engine undershield, ball-end

levers, finned racing brakes. Beautifully finished with tank in new mandarin red, chrome fenders and many other parts in sparkling chrome or polished alloy.



BSA WINS
150 MILE NATIONAL
CHAMPIONSHIP
Road Race
Meadowdale, Ill., 1963



BSA WINS
MARLBORO ROAD
RACES

Clean sweep—Novice, Amateur,
Expert Events.
May, 1963

New power and performance with famous BSA unit-construction engine now in full racing trim.





ROYAL STAR 500 c.c.

Smooth, high performing
500c.c. Road Twin.

Beautifully finished in
bright metallic blue and
lots of high quality
chrome.

All working parts
including final drive
completely enclosed,
automatically oiled.

ROYAL STAR 650 c.c.

Husky big-capacity
highway cruiser. Smooth,
quiet, extremely powerful
Finished in blazing
metallic red (candy-
apple), lots of chrome.
Has improved gearbox
with new fast-accelerating
gearing.

ROYAL STAR

650 & 500
HIGHWAY CRUISERS



1964 ROYAL STAR FEATURES

Both Royal Stars have new type pistons for better performance, improved gearbox set-up, and new handlebars giving a better riding position. Both have completely enclosed and automatically lubricated drive and famous

BSA hydraulically controlled suspension with rear springing adjustable to load.

Choose either the 500 or 650—you'll get powerful performance, flashing good looks, **dependable motorcycling!**

CYCLONE (MODEL A50—2C)

ALL NEW High-Powered 500 Twin with
dual carburetor head, full road sports equipment
(ALSO: CYCLONE COMPETITION MODEL—see back cover)



New, high-compression twin-port head and super-sports camshaft.

High-compression 9 to 1 pistons, racing valves and springs.

Direct lighting—no battery required, powerful E.T. ignition.

Chrome sports fenders, racing gas tank, sports headlight.

Extremely zestful performance for road or competition.

NEW CYCLONE 500 TWIN FEATURES

This entirely new BSA Sports 500 is based on the rugged unit construction power plant and is specially equipped with factory designed and factory installed speed parts—tested to assure top performance on the road or under fierce competition conditions.

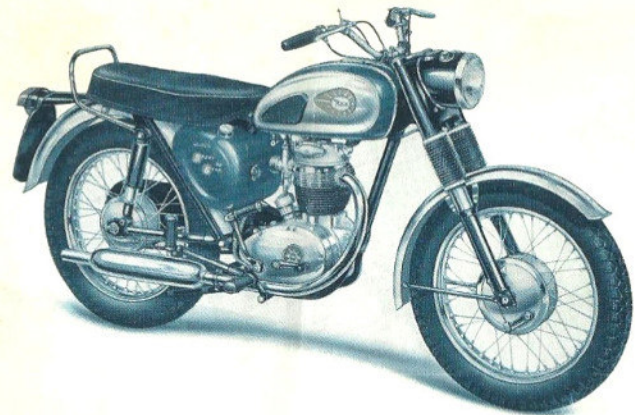
In keeping with its super-sports performance, the Cyclone is equipped with racing type fenders, racing tank with large Gold Star badges and quick-fill cap, improved high-efficiency mufflers, and Gold Star type racing brakes. It's a beauty, it's a **winner!**

BSA super-finish: beautiful mandarin red tank and side-nacelle panels, bright chrome, and highly polished alloy.



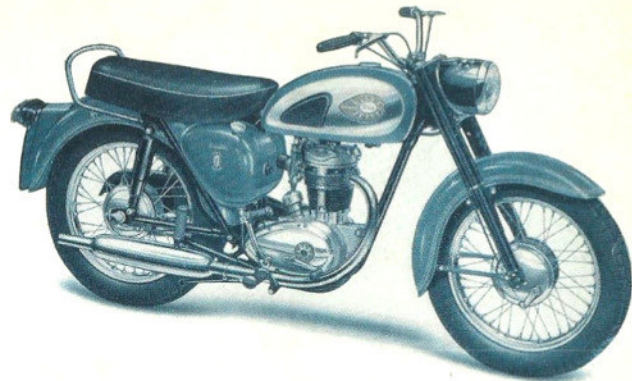
BSA WINS

**8 MILE NATIONAL
CHAMPIONSHIP**
Ascot Speedway, Cal., 1963



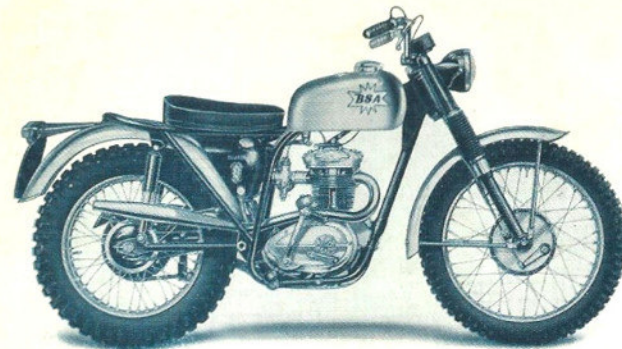
B40 350 c.c. SPORTSMAN

Fast 350. Light, easy to handle, has extremely zestful performance, and speeds to 90 m.p.h. Equipment includes high compression piston, competition-type camshaft large-bore carburetor, and new heavy-duty connecting rod with rugged new Hoffman roller bearings. Starts quickly, easily with battery ignition, cruises powerfully at any legal speed. Finished in bright metallic blue with many parts in brilliant chrome or highly polished alloy.



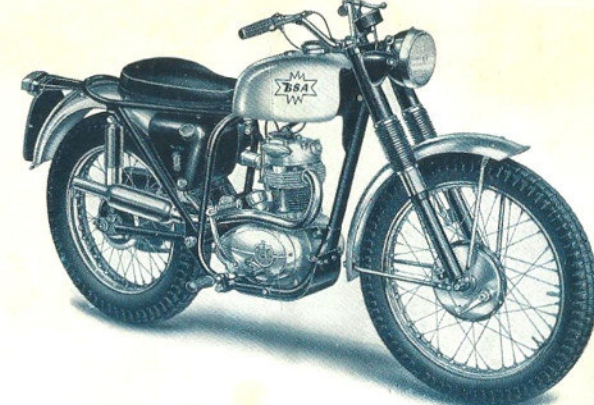
250 c.c. STAR

Lowest priced 250 in the BSA line, and has complete equipment, bright finish. Quick-start battery ignition, hydraulically controlled suspension front and rear, is supplied with dual seat and passenger footrests. Finished in sapphire blue with lots of chrome. A good looking, dependable motorcycle.



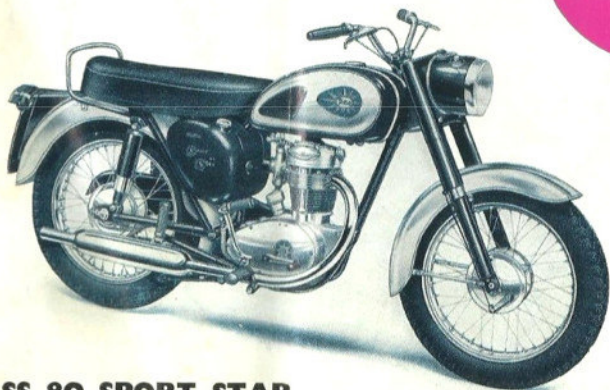
STARFIRE SCRAMBLER (MODEL C15-S)

A full-power equipped 250 scrambles model, has 10 to 1 piston, racing camshaft, racing megaphone type exhaust, heavy-duty roller bearing big-end with steel flywheels. Finish: Alloy racing tank, chrome fenders, black frame, full direct lighting. Ready with winning performance for you.



STARFIRE ROADSTER (MODEL C15-SR)

Has same power equipment as Starfire Scrambler, and is equipped for the road with road muffler, road tires, and road gearing. Has full direct lighting. Can easily be changed to scrambles trim by change of sprocket. A special model for the rider who wants a many-purpose machine. Finish: Alloy tank, chrome fenders, black frame.

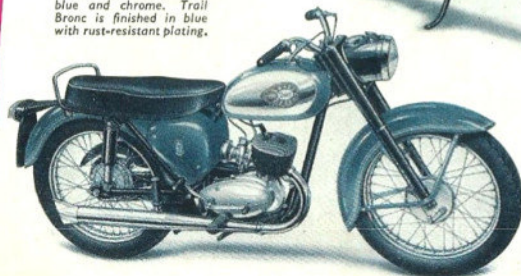


SS 80 SPORT STAR

Light and lively 250 road sportster. Has high-powered engine with competition camshaft, high-compression piston, and like the 350 Sportsman, a new, more rugged connecting rod and roller bearing big end. Has quick-start battery ignition. Brightly finished in metallic red with lots of chrome and polished alloy. Lots of zip, lots of go in this smart lightweight!



New Trail Bronc, a stripped-down, go-anywhere trail machine. (Send for special Trail Bronc literature). Famous BSA Super Bantam, rugged, reliable 175 cc two stroke has been sold in hundreds of thousands all over the world; finished in blue and chrome. Trail Bronc is finished in blue with rust-resistant plating.

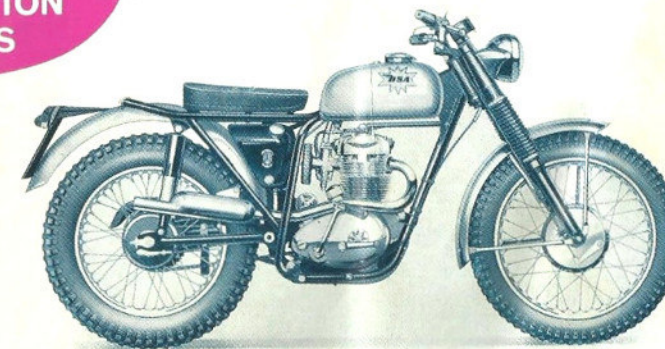


TRAIL BRONC AND SUPER BANTAM



STARFIRE TRIALS-CAT (MODEL C15-T)

Specially set up 250 c.c. engine, wide ratio gearbox for trials, enduro, cross-country. Low compression piston and trials cams make for cool running under difficult conditions. Has special extra-low gearing for off-road running. Easily converts to road riding trim by quick change of sprockets. Has full direct lighting. Finish: Alloy tank, chrome fenders, black frame.



ENDURO STAR (MODEL B40-ES)

1963 Jack Pine Lightweight Champion! Designed and built to go anywhere! Special endurance run, cross-country model has 350 engine with low compression piston, trials cams, wide-ratio gearbox, full direct lighting, high ground clearance, many other features. Send for special literature. Finish: Alloy tank, chrome fenders, black frame.

BSA
LIGHTWEIGHT
MODELS

BSA
LIGHTWEIGHT
COMPETITION
MODELS

SPECIFICATIONS ON

1964 BSA MOTORCYCLES

CAPACITY ►	650 c.c.				500 c.c.			350 c.c.		250 c.c.					175 c.c.		
MODEL ►	Spitfire Rocket A65-2 SPH	Lightning Rocket A65-2 L	Thunderbolt Rocket A65-1 T	Royal Star 500 A65	Cyclone ASO-2 C	Cyclone Comp. ASO-2 CC	Royal Star 500 ASO	350 Sports B40	Enduro Star B40 T	Starfire Scrambler C15 S	Starfire Roadster C15 SR	Starfire Trail-Cot C15 T	Sport Star S580	250 Star C15	Super Bantam D7 DIR	Super Bantam D7 BAT	Trail Branc D7 TB
Bore (mm.)	75	75	75	75	65.5	65.5	65.5	79	79	67	67	67	67	67	61.5	61.5	61.5
Stroke (mm.)	74	74	74	74	74	74	74	70	70	70	70	70	70	70	58	58	58
Cam design	Full Race	Full Race	Full Race	Touring	Sports	Full Race	Touring	Scrambles	Trials	Scrambles	Scrambles	Trials	Scrambles	Scrambles	—	—	—
Compression ratio	9 to 1	9 to 1	9 to 1	9 to 1	9 to 1	10½ to 1	9 to 1	9 to 1	7 to 1	10 to 1	10 to 1	8 to 1	10 to 1	8 to 1	7.4 to 1	7.4 to 1	7.4 to 1
Carburetor size	(2) 1½	(2) 1½	1½	1½	(2) 1 1/16	(2) 1 1/16	1	1½	1 1/16	1 1/16	1 1/16	1	1 1/16	1	1	1	1
Ignition type	Energy Transfer	Twin Coil	Twin Coil	Twin Coil	Energy Transfer	Energy Transfer	Twin Coil	Coil	Energy Transfer	Energy Transfer	Energy Transfer	Energy Transfer	Coil	Coil	Magneto	Magneto	Magneto
Full battery lighting equipment	No	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No	No	Yes	Yes	No	Yes	No
Full direct lighting equipment	No	No	No	No	Yes	No	No	No	Yes	Yes	Yes	Yes	No	No	Yes	No	No
Lighting coils only, no other equipment	Yes	No	No	No	No	Yes	No	No	No	No	No	No	No	No	No	No	Yes
Exhaust type	Upswept	Down- swept	Down- swept	Down- swept	Down- swept	Upswept	Down- swept	Down- swept	Upswept	Upswept	Upswept	Upswept	Down- swept	Down- swept	Down- swept	Down- swept	Semi- Upswept
Silencer or megaphone	None	Silencer	Silencer	Silencer	Silencer	None	Silencer	Silencer	Silencer	Megaphone	Silencer	Silencer	Silencer	Silencer	Silencer	Silencer	Silencer
Gearbox type, internally	Close Ratio	Touring	Touring	Touring	Standard	Close Ratio	Touring	Touring	Trials	Scrambles	Scrambles	Trials	Touring	Touring	Touring	Touring	Touring
Top gear (1)	4.93	4.36	4.36	4.36	4.93	4.93	5.12	5.48	5.88	9	6.33	9	6.36	6.36	6.58	6.58	7.5
3rd gear	5.60	4.98	4.98	4.98	5.63	5.60	5.84	6.58	9.58	10.8	7.60	14.67	8.14	8.14	—	—	—
2nd gear	6.10	6.96	6.96	6.96	7.89	6.10	8.19	9.00	14.40	14.94	10.51	22.05	11.19	11.19	11.0	11.0	12.60
1st gear	10.00	10.92	10.92	10.92	12.37	10.00	12.85	11.56	18.58	19.0	13.36	28.53	16.98	16.98	20.6	20.6	23.47
Engine sprocket	28	28	28	28	28	28	28	23	23	23	23	23	23	23	17	17	17
Clutch sprocket	58	58	58	58	58	58	58	52	52	52	52	52	52	52	38	38	38
Gearbox sprocket	21	20	20	20	21	21	17	19	20	15	20	15	16	16	16	16	14
Rear sprocket	50	42	42	42	50	50	42	46	52	60	56	60	45	45	47	47	47/80
Bolt on rear sprocket	Yes	No	No	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	No	No	No	Yes
Footrests	Folding	Fixed	Fixed	Fixed	Folding	Folding	Fixed	Fixed	Folding	Folding	Folding	Folding	Fixed	Fixed	Fixed	Fixed	Folding
Centre stand	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	Yes	No
Skid plate	Yes	No	No	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	No	No	No	No	No

CAPACITY ►	650 c.c.				500 c.c.			350 c.c.		250 c.c.				175 c.c.			
MODEL ►	Spitfire Rocket A65-2 SPH	Lightning Rocket A65-2 L	Thunderbolt Rocket A65-1 T	Royal Star 500 A65	Cyclone ASO-2 C	Cyclone Comp. ASO-2 CC	Royal Star 500 ASO	350 Sports B40	Enduro Star B40 T	Starfire Scrambler C15 S	Starfire Roadster C15 SR	Starfire Trials-Cat C15 T	Sport Star S580	250 Star C15	Super Bantam D7 DIR	Super Bantam D7 BAT	Trail Branc D7 TB
Handlebar type	Western	Western	Western	Western	Western	Flat Scrambles	Western	Western	Trials	Western	Western	Western	Western	Western	Western	Western	Western
Front tire	350/19 Trials	325/19 Gold Seal	325/18 Gold Seal	325/18 Gold Seal	325/19 Trials	325/19 Trials	325/18 Gold Seal	325/18 Gold Seal	325/19 Trials	325/19 Trials	325/19 Trials	325/19 Trials	325/17 Gold Seal	325/17 Gold Seal	300/18 Gold Seal	300/18 Gold Seal	300/19 Sports
Rear tire	400/18 Trials	350/19 Gold Seal	350/18 Gold Seal	350/18 Gold Seal	400/18 Trials	400/18 Trials	350/18 Gold Seal	350/18 Gold Seal	400/18 Trials	400/18 Trials	400/18 Trials	350/18 Trials	400/18 Trials	325/17 Gold Seal	325/17 Gold Seal	300/18 Gold Seal	300/19 Sports
Front hub	Gold Star	Gold Star	Full width	Full width	Gold Star	Gold Star	Full width	Full width	Com- petition	Com- petition	Com- petition	Com- petition	Full width	Full width	Standard	Standard	Standard
Rear hub	Single Bolt Q/D	Single Bolt Q/D	Full width	Full width	Single Bolt Q/D	Single Bolt Q/D	Full width	Full width	Single Bolt Q/D	Single Bolt Q/D	Single Bolt Q/D	Single Bolt Q/D	Full width	Full width	Standard	Standard	Standard
Front brake (ins.)	8	8	8	8	8	8	7	7	7	7	7	7	6	6	5.5	5.5	5.5
Rear brake (ins.)	7	7	7	7	7	7	7	6	6	6	6	6	6	6	5.5	5.5	5.5
Petrol tank	2 Gal. Fibre Glass	3 Gal. Sports	3 or 4 Gal.	3 or 4 Gal.	3 Gal. Sports	3 Gal. Sports	3 or 4 Gal.	3.6 Gal. Sports	2.6 Gal. Alloy	2.6 Gal. Alloy	2.6 Gal. Alloy	2.6 Gal. Alloy	3.6 Gal. Sports	3.6 Gal. Sports	2.6 Gal.	2.6 Gal.	2.6 Gal.
Tank finish	Red	Red	Blue	Red	Red	Red	Blue	Blue	Polished	Polished	Polished	Polished	Red	Blue	Blue	Blue	Blue
Mudguards	Sports Chrome	Sports Chrome	Valenced Chrome	Valenced Painted	Sports Chrome	Sports Chrome	Valenced Painted	Sports Chrome	Sports Chrome	Sports Chrome	Sports Chrome	Sports Chrome	Valenced Chrome	Valenced Painted	Valenced Painted	Valenced Painted	Rear Only
Chainguard	Top Run	Top Run	Fully Enclosed	Fully Enclosed	Top Run	Top Run	Fully Enclosed	Top Run	Top Run	Top Run	Top Run	Top Run	Top Run	Top Run	Top Run	Top Run	None
Speedometer	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
Tachometer	No	Yes	Yes	No	No	No	No	No	No	No	No	No	No	No	No	No	No
Dual seat type	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Standard	Sports	Sports	Sports	Sports	Standard	Standard	Standard	Standard	Standard
Chrome handrail	No	No	No	No	No	No	No	Yes	No	No	No	No	Yes	Yes	No	No	No
Pillion footrests	No	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No	No	Yes	Yes	Yes	Yes	Yes
Wheelbase (ins.)	56	56	54	54	56	56	54	54	52	52	52	52	51	51	51	51	51
Ground clearance	8	8	7	7	8	8	7	7	8	8	8	8	5	5	5	5	6
Weight (lbs.)	370	390	390	390	385	365	385	299	290	264	264	264	280	280	224	224	198

GENERAL SPECIFICATIONS

ALL MODELS

4-STROKE

500-650 TWINS

250-350 SINGLES

175 SINGLES

Common to all models are Amal carburetors with twist grip controls, Dunlop tires, Lucas electrical systems (except D7 models), Smiths instruments (where supplied), new max. O.V. pistons, multiplate clutches, positive stop four changes, unit power plant/gearbox construction, swinging arm frame, telescopic forks, heavy triple chrome on appropriate plated parts, side stands, folding starter pedals (except D7 and D7 TB), toolkits (except D7 TB), air cleaners.

Common to all 4-stroke models are dry-sump lubrication with double gear oil pump, alloy cylinder heads with cast-in valve seats, hi-duty variable rate valve springs, enclosed valve gear, heavy duty ball bearings on driveside, heavy duty bi-metal on timing side, cushion drive on clutch, 4-speed transmission.

Common to all twin cylinder models is full pressure lubrication to oversize, heavy duty crankshaft, light alloy connecting rods with micro-babbit, steel-backed big-end bearings.

250/350 c.c. singles have new maximum service roller bearings in big end, except C15 Star which employs full pressure lubrication to copper alloy big end. C15 Sport Series all with oversize valves.

175 c.c. Series are all 2-stroke engines with petrol lubrication, roller bearing big end, needle bearing piston pin, ball bearing main and timing side bearings, Wico-Pacy electrical systems, 3-speed transmission.

All weights, dimensions, clearances, etc., are approximate. All specifications subject to change without notice.

CYCLONE

competition model
A50-2 C.C.

FEATURES

Maximum power engine with full racing camshaft, twin - carburetor high compression head, 10½-1 racing type pistons, racing valve springs, and racing exhaust system.

Racing type brakes, 8" front, 7" rear, quick-detachable rear wheel. Bolt on sprocket.

Special energy-transfer ignition system with high-output coil, twin contact points.

Supplied without lights, but has lighting coils built in for later fitting of lights if required.

Ask your dealer for further information on this model.



BSA

BSA MOTOR CYCLES LTD., BIRMINGHAM 11, ENGLAND

WARRANTY

All BSA motorcycles are warranted for a period of 90 days from date of purchase or 4,000 miles of operation, whichever occurs first. We undertake, on the immediate return of the part which is alleged to be defective, 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 workmanship, 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. 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 for any claim for labor, material or other expenditure incurred in remedying any defect. Warranty is confined to items of BSA manufacture. Proprietary items such as tires, saddles, instruments and electrical equipment are warranted by their respective manufacturers. Competition models and standard machines used for competition and/or racing purposes are excluded from the terms of warranty or guarantee.

EASTERN USA FACTORY BRANCH:

B.S.A. INCORPORATED

639 Passaic Ave. Nutley
New Jersey

