

AMERICAN EDITION

get *AWAY* with

**BSA**





# STARLITE 75

(MODEL K1)

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



## STARLITE FEATURES

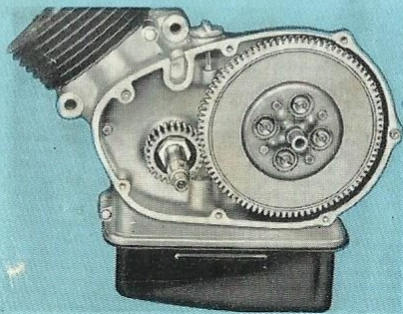
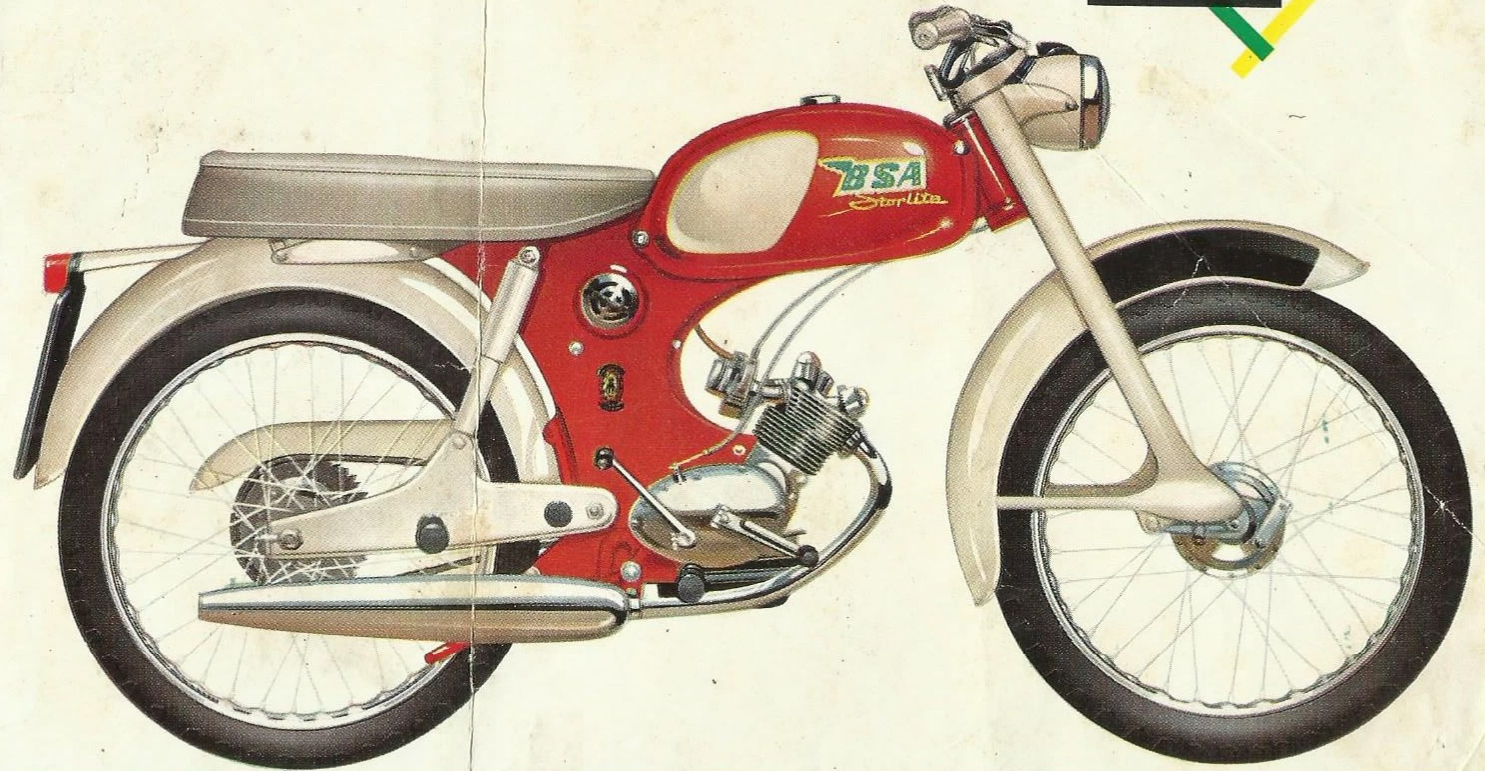
4-cycle overhead-valve engine. No mixing of oil and gas. Reliable power always!

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 unit 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 1½ pints; Seat height 29"; Ground clearance 7½"; 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** 4½ 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.

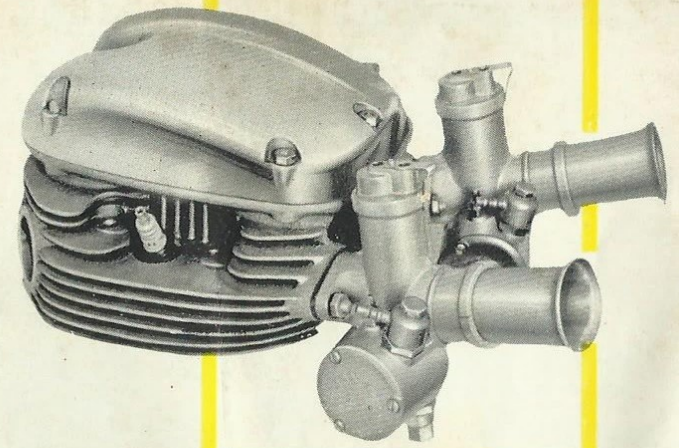
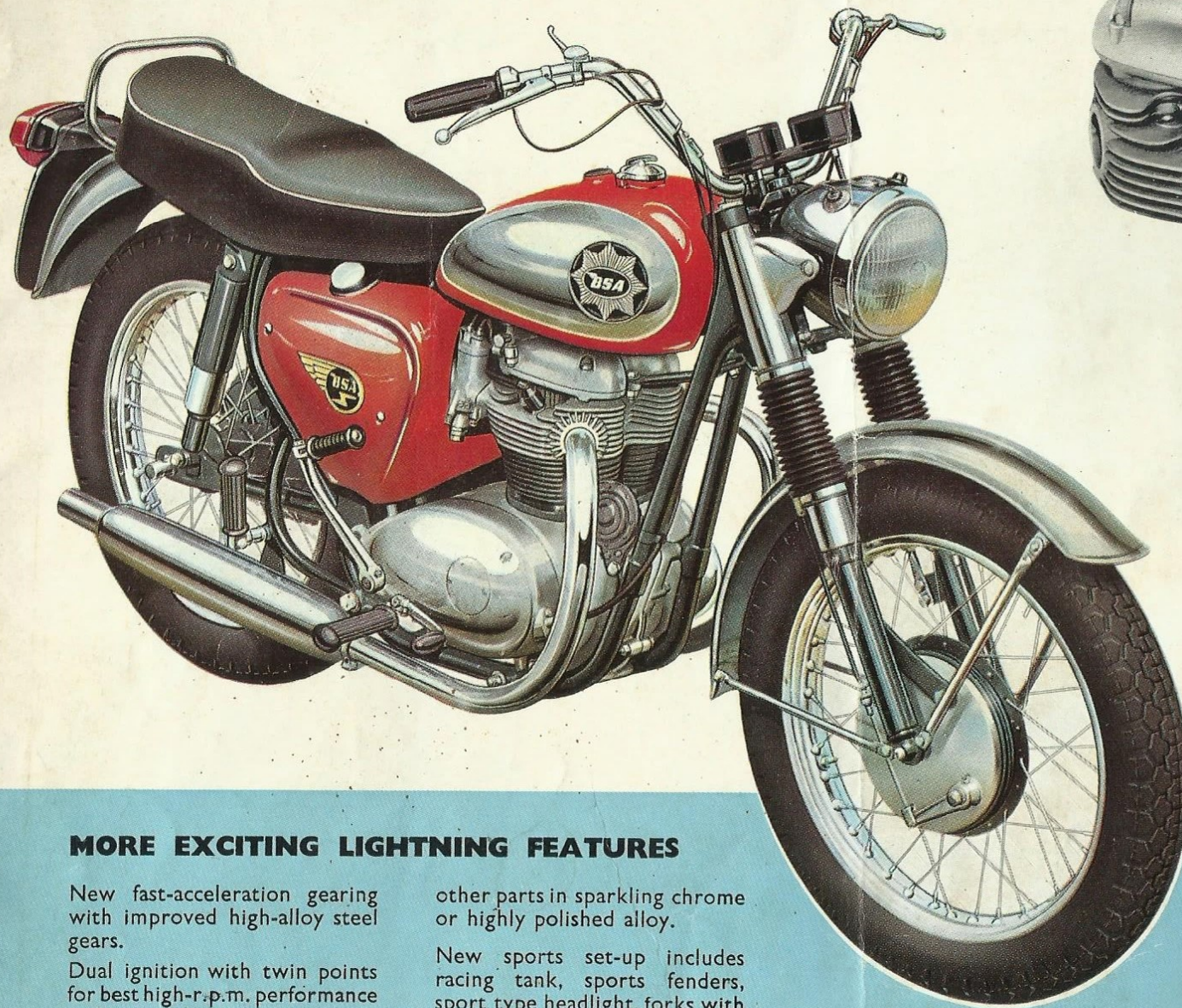
**FRAME** Cantilever (or spine) type, of box section, and its design allows the engine an unobstructed air flow. It is braced internally at strategic points and carries the tools within the hollow main section. Spring-up central stand. Dual seat is standard.

**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.

## 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.



## BSA WINS

**100 MILE NATIONAL  
CHAMPIONSHIP  
Laconia, N.H. 1963**



# 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 valanced** 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.



## BSA WINS

### MARLBORO ROAD RACES

Clean sweep—Novice, Amateur, Expert Events.

May, 1963

## THUNDERBOLT FEATURES

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

Valanced 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



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



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**





## ROYAL STAR 500 c.c.

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

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

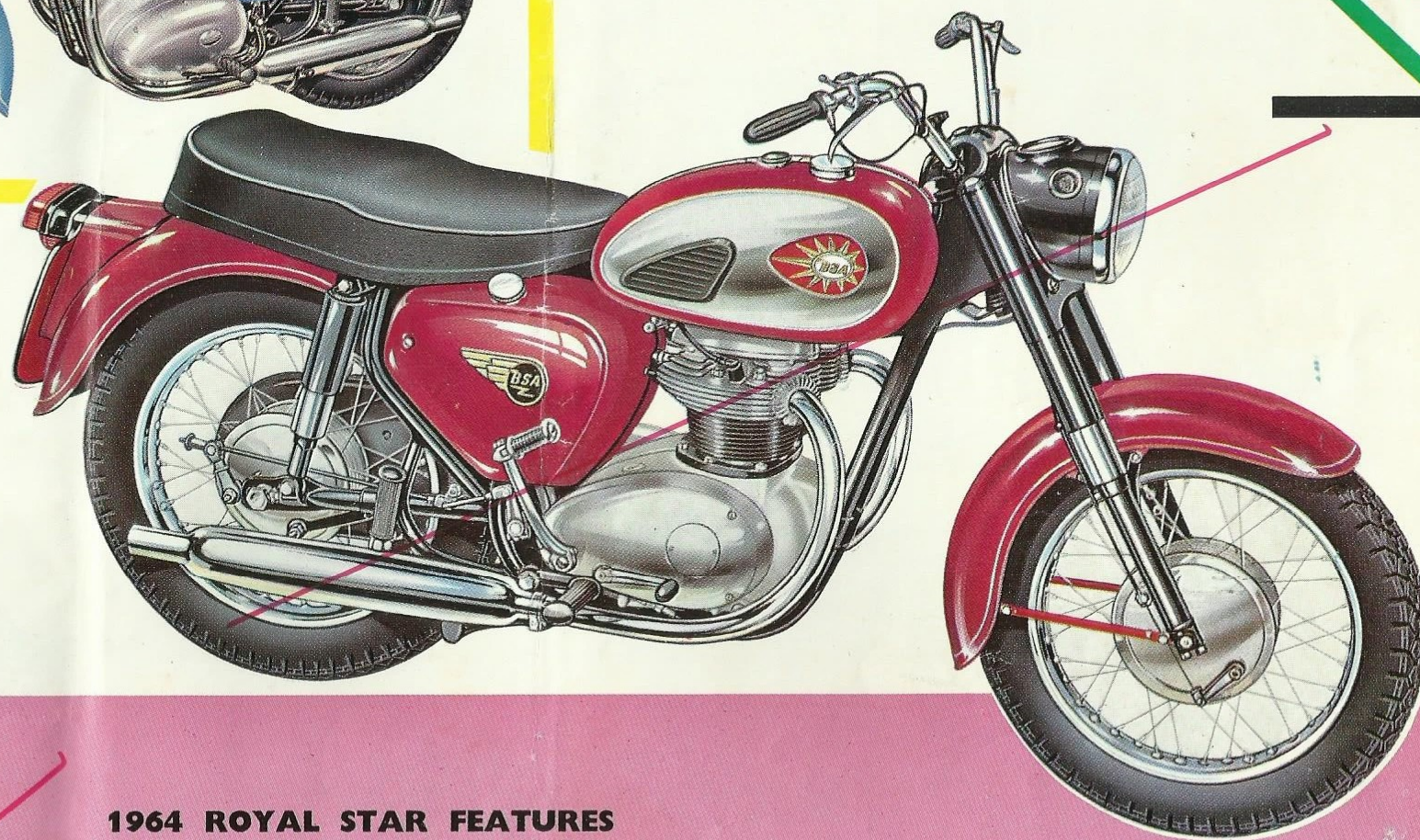
**All** working parts  
including final drive  
completely enclosed,  
automatically oiled.

## 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 (enclosure optional at extra cost), 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.

Chromesports fenders, racing gas tank, sports headlight.

Extremely zestful performance for road or competition.



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

## 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!**

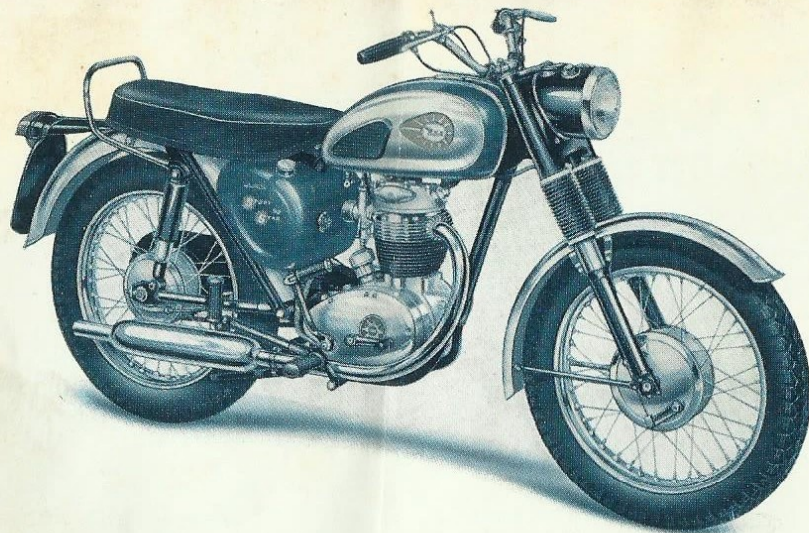


### BSA WINS

**8 MILE NATIONAL  
CHAMPIONSHIP**

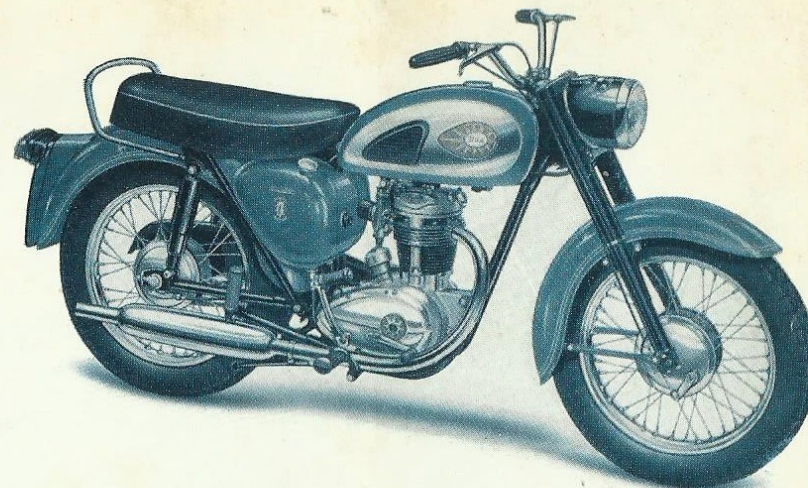
**Ascot Speedway, Cal., 1963**





### **B40 350 c.c. SPORTSMAN**

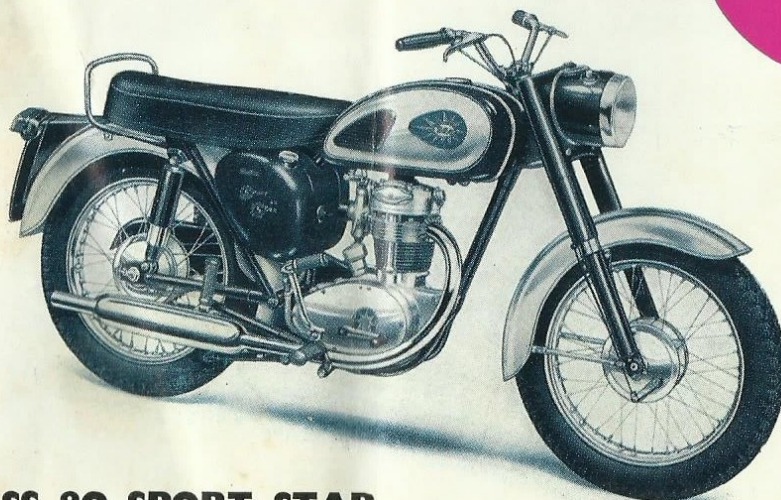
*Fast 350. Light, easy to handle, has extremely zestful performance, and speeds to 90 m.p.h. Equipment includes high compression piston, competition-type camshaft large-bore carburetor, and new heavy-duty connecting rod with rugged new Hoffman roller bearings. Starts quickly, easily with battery ignition, 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.*

## **BSA LIGHTWEIGHT MODELS**

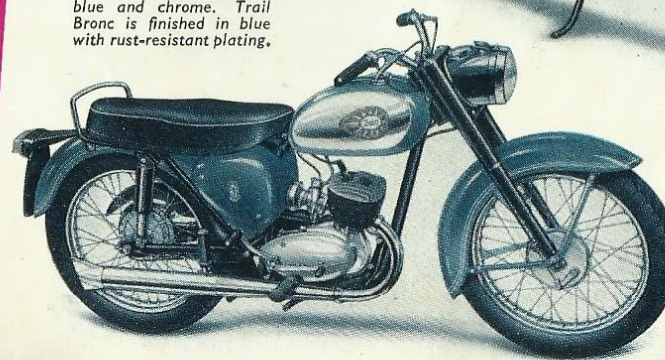


### **SS 80 SPORT STAR**

*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!*

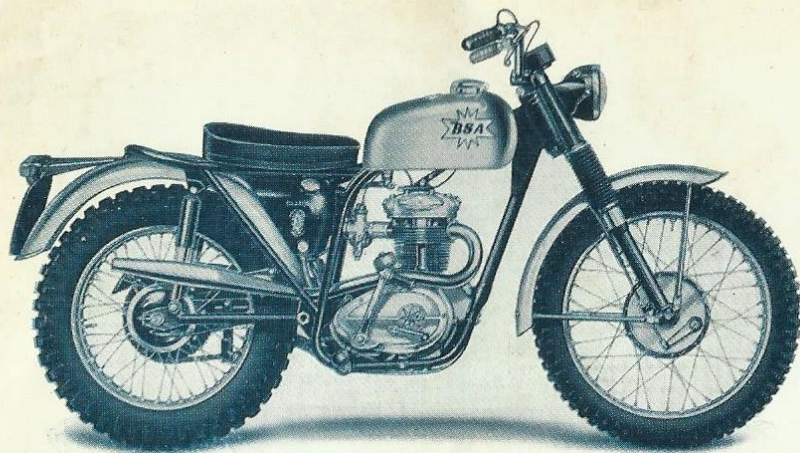


*New Trail Bronc, a stripped-down, go-anywhere trail machine. (Send for special Trail Bronc literature). Famous BSA Super Bantam, rugged, reliable 175 cc two stroke has been sold in hundreds of thousands all over the world; finished in blue and chrome. Trail Bronc is finished in blue with rust-resistant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



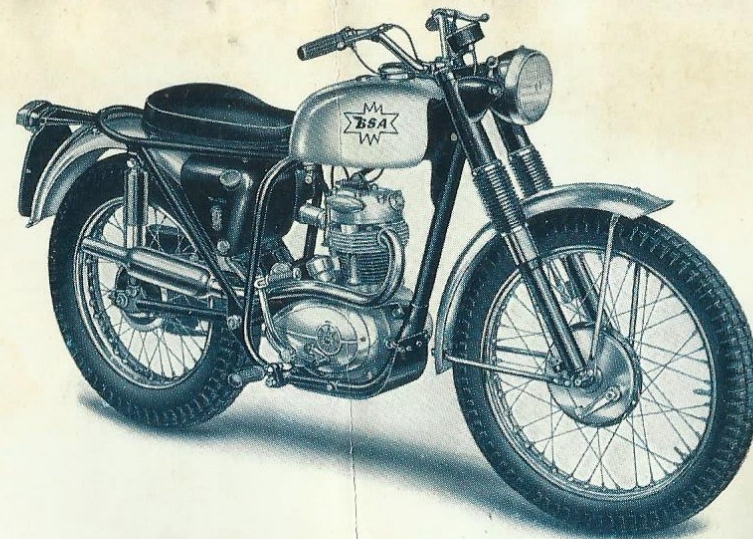
### **TRAIL BRONC AND SUPER BANTAM**





### STARFIRE SCRAMBLER (MODEL CI5-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 CI5-SR)

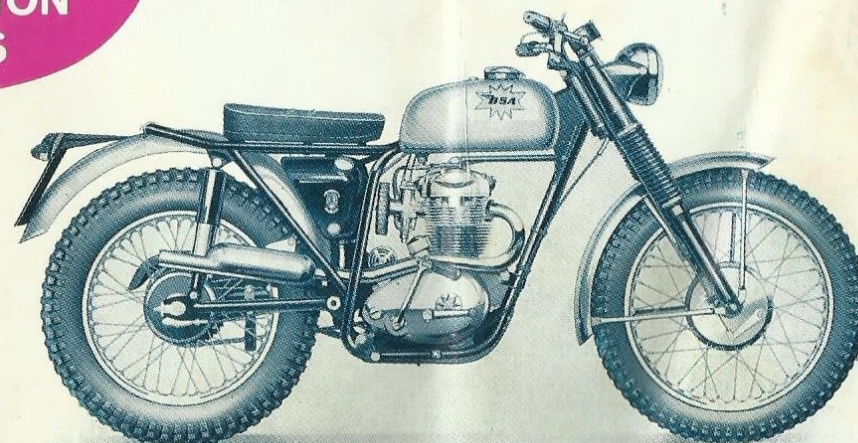
Has same power equipment as Starfire Scrambler, and is equipped for the road with road muffler, road tires, and road gearing. Has full direct lighting. Can easily be changed to scrambles trim by change of sprocket. A special model for the rider who wants a many-purpose machine. Finish: Alloy tank, chrome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

**BSA**  
LIGHTWEIGHT  
COMPETITION  
MODELS



### STARFIRE TRIALS-CAT (MODEL CI5-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.



CAPACITY ►	650c.c.				500 c.c.			350 c.c.		250 c.c.					175 c.c.		
MODEL ►	Spitfire Hornet A65-2 SPH	Lightning Rocket A65-2 L	Thunderbolt Rocket A65-1T	Royal Star 650 A65	Cyclone A50-2 C	Cyclone Comp. A50-2 CC	Royal Star 500 A50	350 Sports B40	Enduro Star B40 T	Starfire Scrambler C15 S	Starfire Roadster C15 SR	Starfire Trails-Cat C15 T	Sport Star SS80	250 Star C15	Super Bantam D7 DIR	Super Bantam D7 BAT	Trail Bronc 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) 1½	(2) 1½	1	1½	1½	1½	1½	¾	1½	1	¾	¾	¾
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