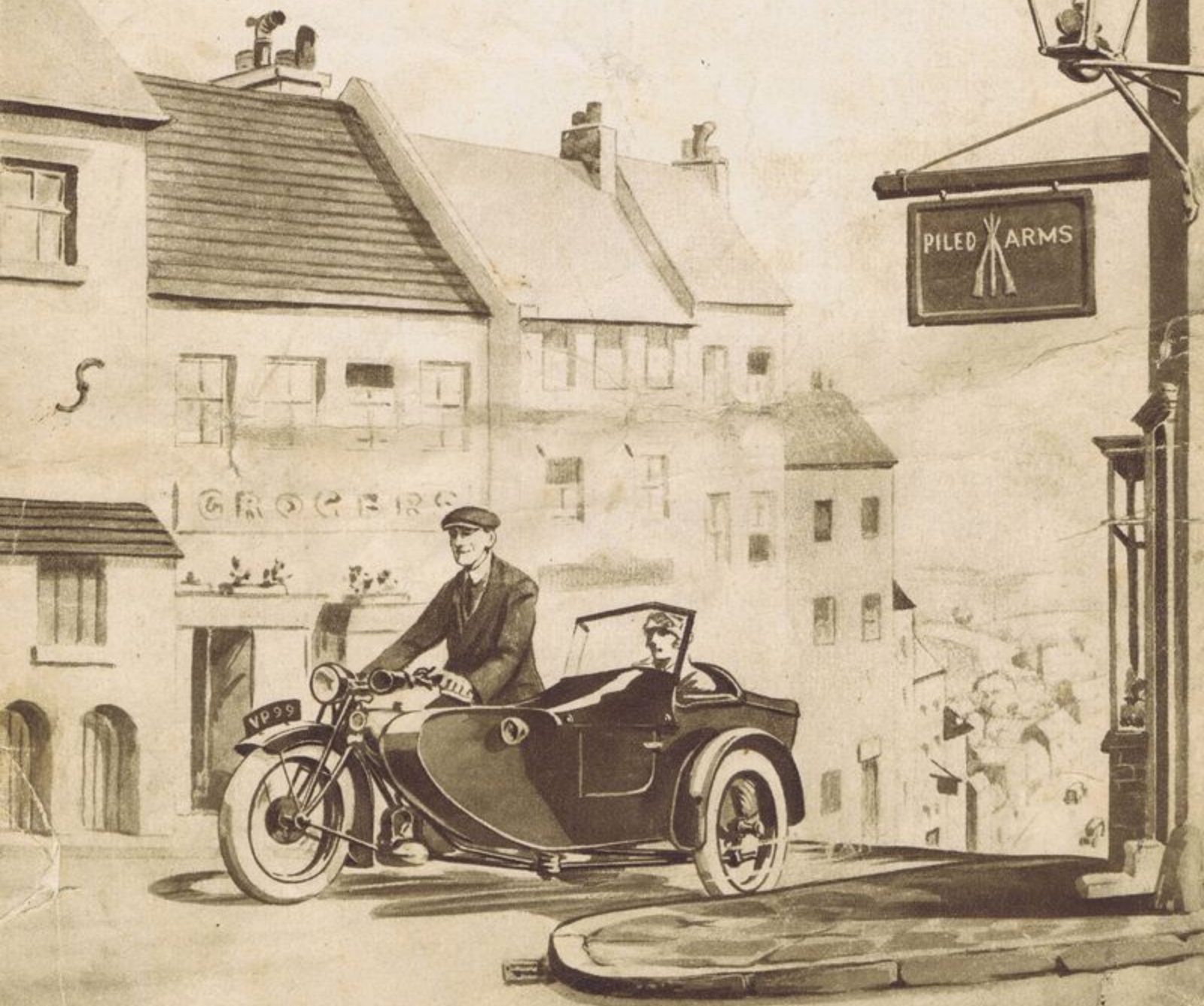


EXPORT LIST

B.S.A MOTOR CYCLES



barnstormers.co.nz
POWER with SILENCE

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 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.
2. This guarantee as to material or workmanship does not extend to (1) a 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 (2a) 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 not of our make, 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 for 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 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.

Conditions of Sale

1. We do not appoint agents for the sale of our Motor Cycles or other goods. We assign to Motor Cycle Dealers who carry on business on their own account, areas in which they have the exclusive or other right to sell goods purchased from us. A Dealer purchasing from us, or a Sub-dealer purchasing from him, may, on our behalf (as our agent for this purpose only) give the guarantee printed above. Any such Dealer is not authorised to advertise, incur any debts, or transact any business whatsoever on our account, nor is he authorised, so as to bind us, to give any warranty or make any representation on our behalf, or to sell subject to or with any conditions other than those contained in such guarantee.
2. B.S.A. Cycles Limited point out that they cannot hold themselves responsible for delivery.
3. B.S.A. Cycles Limited reserve the right to alter the designs or any constructional details of their manufactures at any time without giving notice.

B.S.A. CYCLES LTD.

Small Heath, Birmingham

(Proprietors: THE BIRMINGHAM SMALL ARMS COMPANY LIMITED)

Directors: SIR EDWARD MANVILLE, P. MARTIN (U.S.A.), A. EADIE,
COM. G. HERBERT, D.S.O. (Managing).

Telephone No. Central 6440 (9 lines).

Telegrams: SELCYO, Birmingham.



B.S.A.

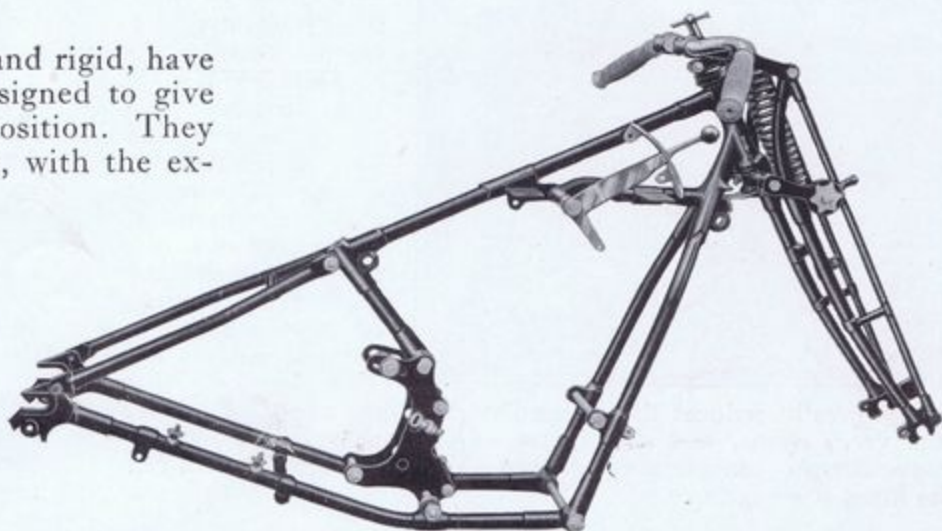
These

Trade marks
your
safeguard.

Features of B.S.A. Motor Cycles

Frames

All B.S.A. frames are strong and rigid, have steel lugs, and have been designed to give a low and comfortable riding position. They are arranged for saddle tanks, with the exception of the 7.70 h.p. de luxe and 9.86 h.p. models. Frames of all models have been developed through strenuous tests on a special B.S.A. frame-testing machine, and as a result will stand up to the most severe conditions.



This is the B.S.A. duplex cradle frame fitted to the five models with inclined engines.



Headlugs

All B.S.A. Headlugs are machined from high tensile steel. On the 1.74 h.p. models the duplex top and front down tubes are bolted to this, while on the other models a brazed construction is employed. A very strong frame front is secured by using continuous headlugs to which all the frame members are attached at the front. Sockets are formed on the lugs into which are brazed the top tube, tank rail, and single or duplex down tube. An extension on the headlug carries the upper front sidecar connection on 3.49 h.p. and larger models.

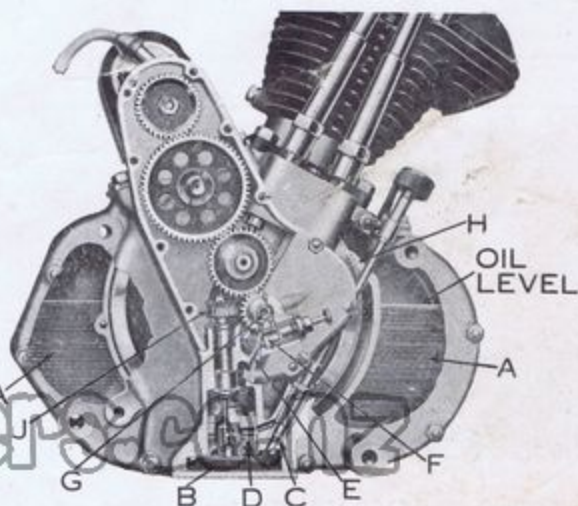
Sump Lubrication *on the five models with inclined engines.*

This system is designed on racing car lubrication principles, and is a vast improvement over the old type of mechanical oil pump. It cuts out all external oil pipes, which are liable to break or become stopped up, and ensures greater efficiency in the lubrication of the most vital part of the engine—the big-end bearing. The big-end bearings of B.S.A. models equipped with sump lubrication receive 250 times as much oil as the big-ends in engines fitted with the ordinary system. Yet the oil consumption is remarkably economical.

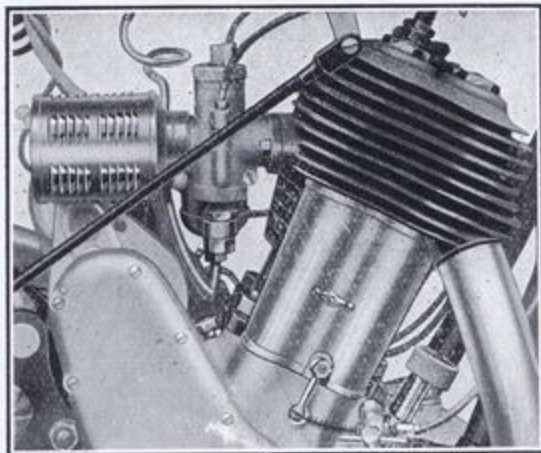
The oil is contained in the double sump "A," passes through the reservoir "B," past the adjustable valve control "C" to the pump "D." It is driven up the passage "E" into the tell-tale chamber "F," forces out the tell-tale plunger, enters the hollow crankshaft "G," and so through holes drilled in the flywheel and crankshaft to the big-end bearing.

After cooling and lubricating this bearing, the oil is thrown on to the cylinder walls and the underside of the piston. It returns to the crankcase and is picked up and carried round by the flywheels. The scraper "H" returns it to the sump.

The pump is driven by worm gear "J" from the main shaft, and being submerged, is always full of oil and cannot fail to operate. Once the correct setting for the control knob is obtained you need never touch it again. So long as you replenish the sump every few hundred miles the pump will faithfully provide perfect lubrication.



Features of B.S.A. Motor Cycles



Enclosed Side Valve Mechanism

On the 4.93 h.p. de luxe and 5.57 h.p. de luxe models the valves are protected by a detachable cover. The design allows a current of air to pass over the springs when the machine is in motion, so that cooling is not affected.

The use of this

cover greatly reduces the accumulation of dust and road grit on the valve stems, and wear between the tappet heads and the valve stems is considerably lessened. The air cleaner shown can be fitted at an extra charge.

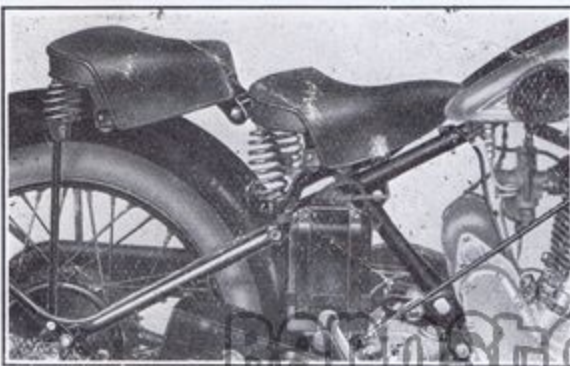
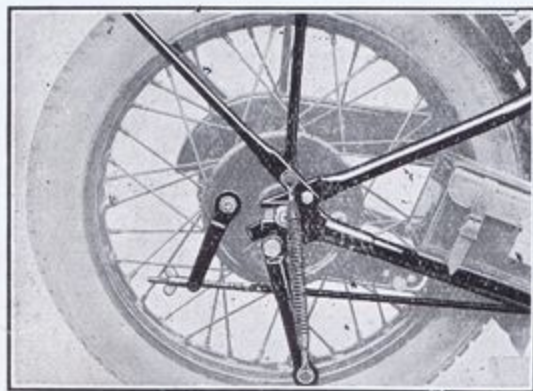
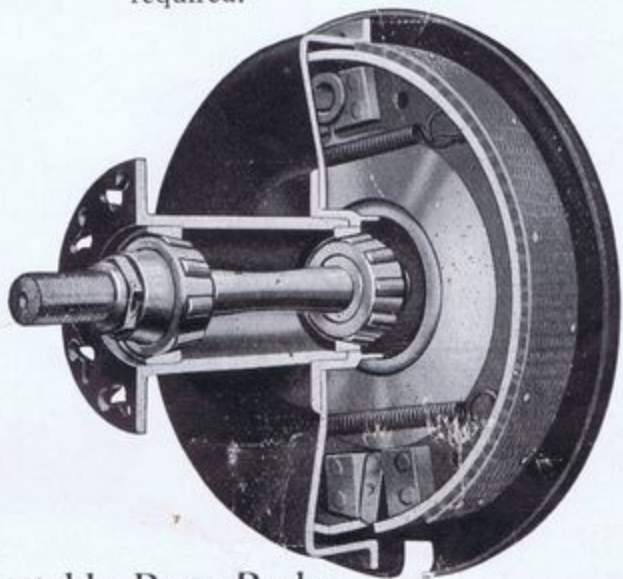
Front Hub and Brake

The use of taper rollers for the wheel bearings ensures that heavy loads may be carried over rough roads for prolonged periods with the minimum of wear.

Adjustment is easily carried out, but owing to the substantial nature of the bearings, it is only necessary at long intervals. The large diameter high-grade steel spindle is of ample strength to withstand the most strenuous conditions. All B.S.A. brakes are internal expanding type. The brake shoes are steel pressings, light and yet sufficiently strong to resist heavy stresses without distortion. The generous width of the linings gives a large contact area, so that a powerful retarding effect is obtained with medium brake shoe pressure. A large range of adjustment is provided for the shoes.

The brake cover plate is specially formed to extend over the brake drum to render the whole weatherproof. Grease and oil from the wheel bearings are excluded from the linings by means of pen steel and felt washers.

The illustration shows a section of the hub fitted to 3.49 h.p. to 5.57 h.p. models



Quickly Adjustable Rear Brake

A simple and efficient form of quick adjustment is now provided for the rear brake control. A wing nut is fitted to the end of the brake rod and bears on a swivelling stop attached to the brake lever, being held firmly against it by means of a spring. The face of the wing nut is cut so that it engages with the circular section of the stop, slacking back of the nut thus being prevented.

Spring-up Rear Stand

The 3.49 h.p. Two-port O.H.V., 4.93 h.p. de Luxe, O.H.V., Light Two-port O.H.V., Two-port O.H.V., and 5.57 h.p. de Luxe models are equipped with a spring-up stand. When the stand is in use the spring pressure holds it firmly in position. As soon as the machine is pushed forward off the stand it immediately springs up.

The spring is sufficiently strong to prevent swinging of the stand on rough roads, and yet light enough to pull the stand into position without undue shock.

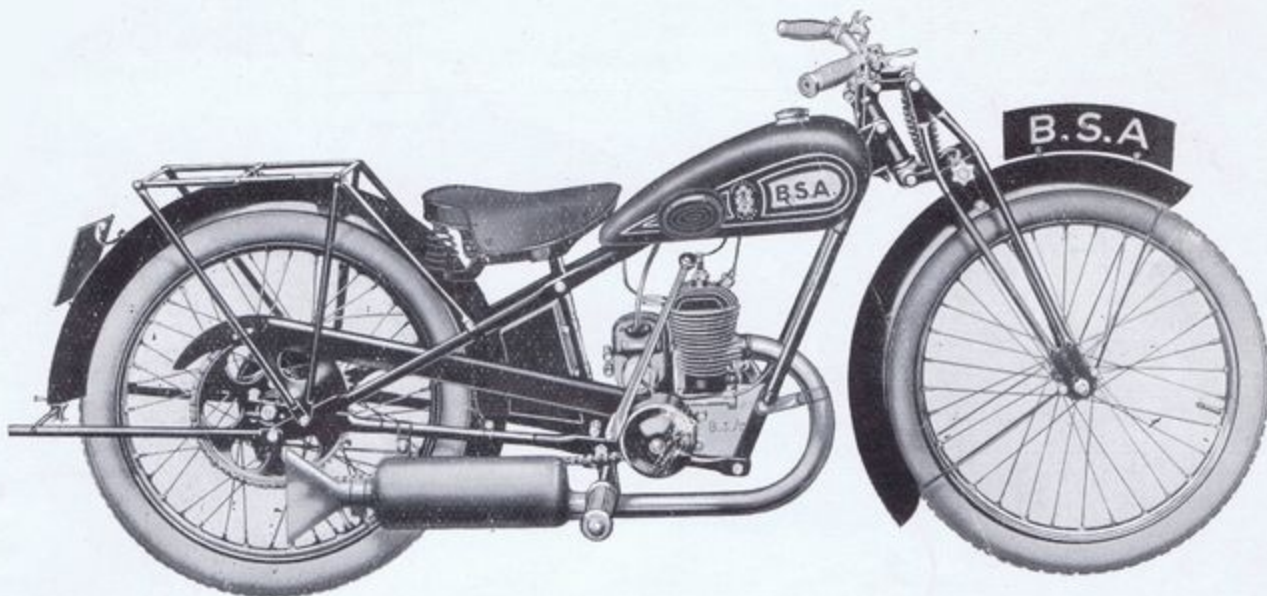
B.S.A. Pillion Saddle

This saddle has been designed specially for B.S.A. machines and embodies exclusive features covered by B.S.A. patent, and the well-known Terry Spring Seat. This device brings the weight of the passenger as low and as far forward as possible, thus giving a degree of stability not approached by any other fully sprung pillion seat; when no passenger is being carried, the springing of the front saddle is not affected by the presence of the rear saddle, as they are hinged, not fixed, together.

The pillion saddle is quickly detachable by undoing three nuts, and can then be replaced, if required, by the B.S.A. quickly detachable carrier.

This pillion saddle, together with the special front saddle, can be supplied on the 3.49 h.p. Two-port O.H.V., 4.93 h.p. O.H.V.

and Two-port O.H.V.'s (both types), the 4.93 h.p. de Luxe and 5.57 h.p. de Luxe models at an extra charge.



B.S.A. 1.74 h.p. model A29

This is a B.S.A. Motor Cycle for every member of the family, from 14 years of age, including the ladies. It is everybody's motor cycle.

It is a machine that anyone can learn to ride in a few minutes, and ride with confidence, because it is so light, comfortable, and easy to handle. The two-stroke engine is easy to start, and very economical to run. This machine is fully capable of doing long distance journeys at a good average speed, and it is backed by the B.S.A. reputation for consistent reliability.

ENGINE. Single Cylinder, 1.74 h.p., two stroke; 60 × 61.5 m/m bore and stroke. Aluminium alloy piston. Roller big end bearing. Engine mainshaft mounted on two ball bearings. Well cooled cylinder. Large exhaust pipe and silencer, with fish-tail, mounted on chain-stay. Petroil lubrication. Kickstarter engaging direct with engine shaft. Fly wheel cover extra.

CARBURETTOR. Amal, two lever type, fitted with air cleaner.

IGNITION. High tension magneto. Gear driven from engine and mounted behind cylinder.

TRANSMISSION. Enclosed gear drive from engine to layshaft, running in oil. Final drive by roller chain $\frac{1}{2}$ in. pitch × .305 in.; protected by an efficient guard.

CLUTCH. Mounted on layshaft. Floating dry plate type, controlled by lever on left of handlebar, with large diameter cable.

GEARBOX. Two speed, in unit construction with engine. Gears constantly in mesh, the gear change being effected by dog clutches. Layshaft mounted on two ball bearings. Change speed lever at right side of machine.

FRAME. Duplex type, designed to give a low riding position and low centre of gravity. Built up of steel tubes reinforced, trapped and bolted at ends to eliminate brazed joints. Rear stand of kick-up type. Grease gun lubrication to hubs and frame parts. Strong carrier.

SPRING FORK. B.S.A. type, with tension spring and shock absorbers.

HANDLEBAR. Touring, of adjustable type.

TANK. Improved shape saddle tank with knee-grips. Capacity $1\frac{1}{4}$ galls.

WHEELS. Heavy gauge rims, 19 in. × 2 $\frac{1}{2}$ in., enamelled.

TYRES. 25 in. × 2.75 in. Dunlop Cord, wired on.

BRAKES. Two independently operated brakes acting in the same drum mounted on rear wheel. One operated by lever on right of handlebar, the other by heel pedal on left side of machine.

SADDLE. Spring seat.

MUDGUARDS. Strong and wide, of plain section. Leg-shields extra.

FOOTBOARDS. Pressed steel, black enamelled, with rubber mats, extra.

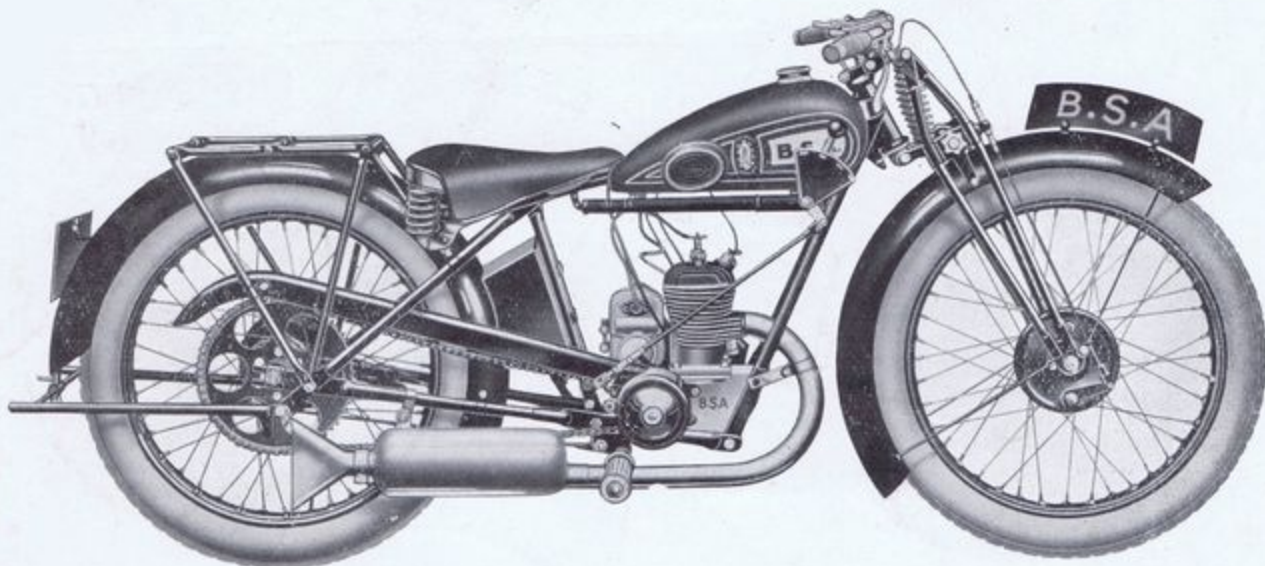
TOOL BOX. Metal case fixed to frame underneath saddle. Complete set of tools in neat leather roll. Inflator.

GROUND CLEARANCE 4 $\frac{1}{2}$ in. Height of Saddle 27 in.

Lucas Acetylene Lamps, or Lucas Electric Generator Set, complete with Head and Tail Lamps and Dry Battery, can be fitted, if specified, at an extra charge.

BARNSTORMERS.CO.NZ

CONSISTENT RELIABILITY



B.S.A. 1.74 h.p. model A29 de luxe

This machine is of handsome appearance and generous specification, but retains the simplicity and ease of control of the two-speed model. The inclusion of three-speed gear, spring seat saddle and front wheel brake make it a machine capable of a high standard of performance under all road conditions.

ENGINE. Single Cylinder 1.74 h.p., two stroke: 60 × 61.5 m/m bore and stroke. Aluminium alloy piston. Roller big end bearing. Engine mainshaft mounted on two ball bearings. Well cooled cylinder. Large exhaust pipe and silencer, with fish-tail, mounted on chainstay. Petroil lubrication. Kickstarter engaging direct with engine shaft. Flywheel cover.

CARBURETTER. Amal, two lever type, fitted with air cleaner.

IGNITION. High tension magneto. Gear driven from engine and mounted behind cylinder.

TRANSMISSION. Enclosed gear drive from engine to layshaft, running in oil. Final drive by roller chain $\frac{1}{2}$ in. pitch × .305 in.; protected by an efficient guard.

CLUTCH. Mounted on layshaft. Floating dry plate type, controlled by lever on left of handlebar, with large diameter cable.

GEARBOX. Three speed in unit construction with engine. Gears constantly in mesh, the gear change being effected by dog clutches. Layshaft mounted on two ball-bearings. Change speed lever with gate on right side of tank.

FRAME. Duplex type, designed to give a low riding position and low centre of gravity. Built up of steel tubes reinforced, trapped and bolted at ends to eliminate brazed joints. Rear stand of kick-up type. Grease gun lubrication to hubs and frame parts. Strong carrier.

SPRING FORK. B.S.A. type, with tension spring and shock absorbers.

HANDLEBAR. Touring, of adjustable type.

TANK. Improved shape saddle type tank, with knee-grips. Capacity $1\frac{1}{4}$ galls.

WHEELS. Heavy gauge rims, 19 in. × 2 $\frac{1}{2}$ in., enamelled.

TYRES. 25 in. × 2.75 in. Dunlop Cord, wired on.

BRAKES. Both internal expanding type, 5 $\frac{1}{2}$ in. diameter. Front operated by lever on handlebar. Rear by heel pedal on left side of machine. Quick adjustment provided to rear brake.

SADDLE. Spring seat with fore and aft adjustment.

MUDGUARDS. Strong and wide, of plain section. Leg-shields extra.

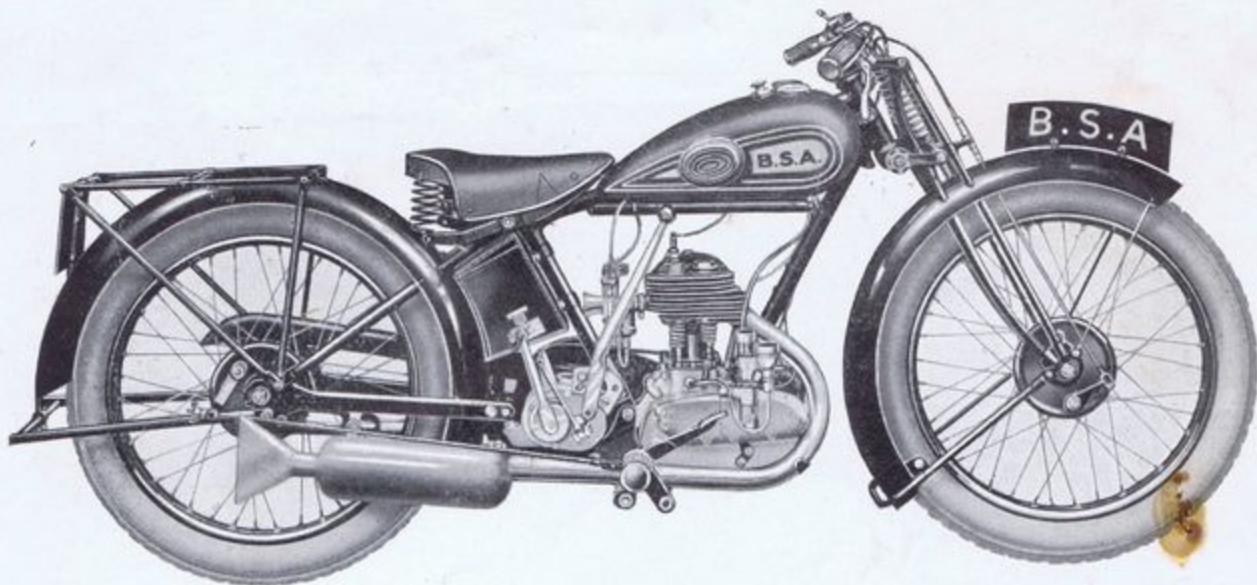
FOOTBOARDS. Pressed steel footboards, black enamelled, with rubber mats, extra.

TOOL BOX. Metal case fixed to frame underneath saddle. Complete set of tools in neat leather roll. Inflator.

GROUND CLEARANCE 4 $\frac{1}{2}$ in. Height of Saddle 27 in.

Lucas Acetylene Lamps, or Lucas Electric Generator Set, complete with Head and Tail Lamps and Dry Battery, can be fitted, if specified, at an extra charge.

CONSISTENT RELIABILITY



B.S.A. 2.49 h.p. model B29 de luxe

This machine is one of the most popular in the B.S.A. range for solo (and pillion) riding on account of its excellent road performance and very low running costs. It is easy to handle, has a good road speed, and its four-stroke engine develops ample power to take the machine easily up any hill. Large tyres, spring seat saddle, and low riding position make the machine very comfortable to ride.

ENGINE. Single Cylinder 2.49 h.p., 63 × 80 m/m bore and stroke (249 c.c.). Aluminium alloy piston. Roller big end bearing. Engine mainshaft driving side mounted on ball bearing, plain bearing on gear side. Large special alloy steel valves. Silent timing gear, large bright plated exhaust pipe and silencer, with fish-tail.

CARBURETTER. Amal. Special carburetter fitted with Air Cleaner extra.

IGNITION. High-tension magneto, driven by gears enclosed in oil-tight aluminium case.

LUBRICATION. Gravity feed to mechanical pump then to sight feed on timing case, and feeding to crank case. Hand pump is also fitted for emergency use. Oil supplied to primary chain by depressing spring bye-pass valve on sight feed. Grease gun lubrication to fork links, hubs, etc.

TRANSMISSION. $\frac{1}{2}$ in. pitch roller chain throughout: front drive enclosed in chain case and rear drive protected by an efficient guard. Cam-faced cush drive fitted to engine shaft.

CLUTCH. Contained in large chain wheel, floating dry plate type. Controlled by lever on left handlebar, with large diameter cable.

GEAR BOX. B.S.A. Three-speed. All gears constantly in mesh. Kick-starter mechanism enclosed in gear box. Change speed lever on right hand side of machine, with selector quadrant fixed on gear box so that position of lever can be readily seen. Screw adjustment of box position for accurately setting chain tension. For gear ratios see page 17.

FRAME. Re-designed to give lower riding position. Pressed steel chainstays. Weldless steel tubing and forged steel lugs throughout. Strong carrier fitted.

SPRING FORK. B.S.A. type, fitted with barrel shaped compression spring and shock absorbers.

HANDLEBAR. Semi-sporting. Touring if specified. Both types adjustable.

TANK. Saddle type, with knee-grips. Filler caps, unbreakable, secured with bayonet joint and chain. Capacity: Petrol $1\frac{1}{2}$ gallons. Oil $2\frac{1}{2}$ pints.

WHEELS. Heavy gauge rims 19 in. × 2 $\frac{1}{2}$ in., enamelled.

TYRES. 25 in. × 3 in. Dunlop cord, wired on.

BRAKES. Both internal expanding type, 5 $\frac{1}{2}$ in. diameter. Front operated by lever on handlebar. Rear by toe pedal on independent fulcrum on right side of machine and provided with quick adjustment. Grease gun nipples fitted to cam spindles.

SADDLE. Spring seat. Special fixing giving low position, and fore and aft adjustment.

MUDGUARDS. Strong and wide, of plain section. Leg shields extra.

FOOTRESTS. Adjustable, fitted with patent cushioned rubbers. Footboards with rubber mats, extra.

STANDS. Back kick-up. Front stand rigidly secured to guard.

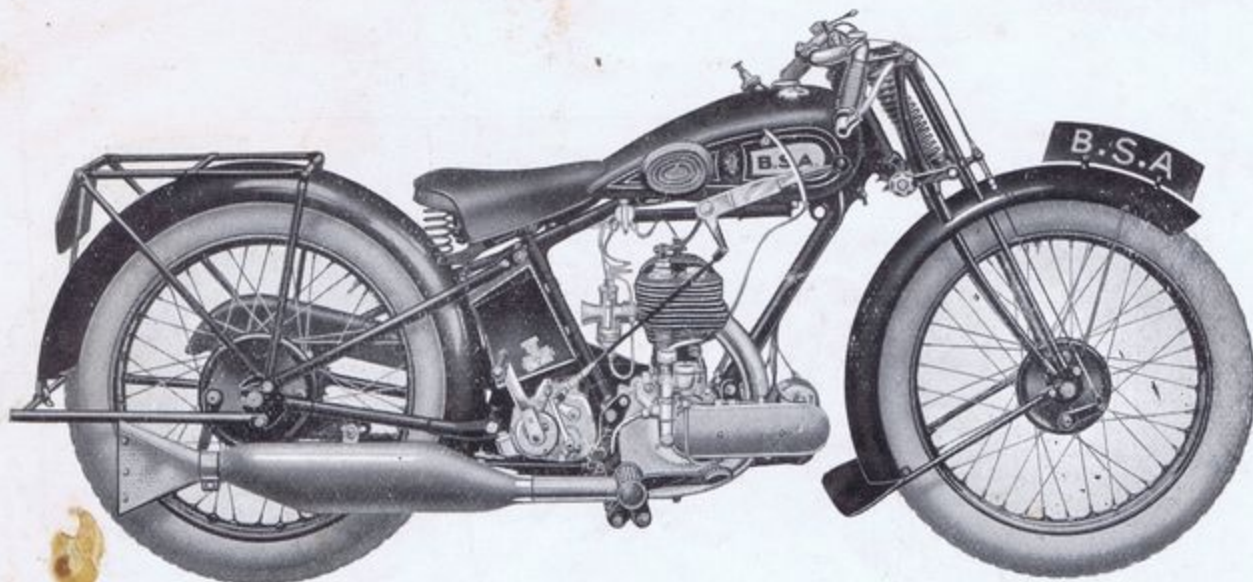
TOOL BOX. Metal case. Complete set of tools in neat leather roll, and grease gun. Inflator, under tank.

FINISH. Tank in usual B.S.A. colours. Black enamel, and bright parts heavily plated.

GROUND CLEARANCE 4 $\frac{1}{2}$ in. Height of Saddle 27 in.

Lucas Acetylene Lamps. Lucas Electric Generator Set complete, or Lucas Magdyno Set and Lucas Bulb Horn, can be fitted, if specified, at an extra charge.

CONSISTENT RELIABILITY



B.S.A. 3.49 h.p. model L29

A reliable "go anywhere" solo mount that holds the road and steers wonderfully well. When fitted with a B.S.A. No. 9, 9c or 14 Sidecar, for which purpose the frame has special lugs, it makes a light and economical combination outfit. This model should appeal to the rider who prefers the simplicity of the side-valve engine.

ENGINE. Single Cylinder 3.49 h.p., 72 × 85½ m/m bore and stroke (349 c.c.). Roller big end bearing. Engine mainshaft, driving side, mounted on ball bearing, plain bearing on gear side. Aluminium alloy piston, silent timing gear. Highly polished silencer of large capacity, with fish-tail.

CARBURETTOR. Amal. Special carburettor fitted with Air Cleaner extra.

IGNITION. Magneto driven by adjustable chain in aluminium dust-proof case.

LUBRICATION. Gravity feed to mechanical pump, then to sight feed on timing case, feeding to crank case. Improved type hand pump is also fitted for emergency use. Oil is supplied to primary chain by depressing spring bye-pass valve on sight feed. Hubs, forks, links etc., fitted with grease gun nipples.

TRANSMISSION. Front chain ¼ in. × 305 in. Rear chain ½ in. × ¼ in. Front drive enclosed in two-part chain case, and rear drive protected by an efficient guard. Cam-faced cush drive fitted to engine shaft.

CLUTCH. Contained in large chain wheel, floating dry plate type, indestructible. Lever on left of handlebar, with large diameter cable.

GEAR BOX. B.S.A. Three-speed. All gears constantly in mesh. Kick-starter mechanism enclosed in gear box. Inclined change speed lever on right side of tank. Screw adjustment of box position for accurately setting chain tension. For gear ratios see page 17.

FRAME. Re-designed to give lower riding position. Weldless steel tubing and forged steel lugs throughout. Longer headlug of continuous type giving great strength. Fitted with special lugs to take B.S.A. Sidecars. Strong carrier fitted.

SPRING FORK. New B.S.A. type, fitted with barrel compression spring and shock absorbers.

HANDLEBAR. Adjustable, mounted behind steering head, Reversible for Sidecar use. Long rubber grips.

TANK. Saddle type, fitted with adjustable knee-grips. Combined priming and petrol tap. Capacity: Petrol 2 gallons. Oil 3¼ pints.

WHEELS. Heavy gauge rims 19 in. × 2½ in., enamelled. Taper roller bearings to both hubs.

TYRES. 26 in. × 3.25 in., Dunlop cord, wired on.

BRAKES. Both internal expanding type. Front, 5½ in. diameter operated by lever on right handlebar. Rear, 7 in. diameter, quickly adjustable, operated by toe pedal on independent fulcrum on right side of machine. Grease gun nipples fitted to cam spindles.

SADDLE. Spring seat, with nose fitting neatly into cut away at rear of tank.

MUDGUARDS. Rear 6 in. wide of plain section. Front, wide car type. Leg shields extra.

FOOTRESTS. Adjustable, cushioned rubber type. Foot-boards, extra.

STANDS. Back kick-up. Front stand rigidly secured to guard.

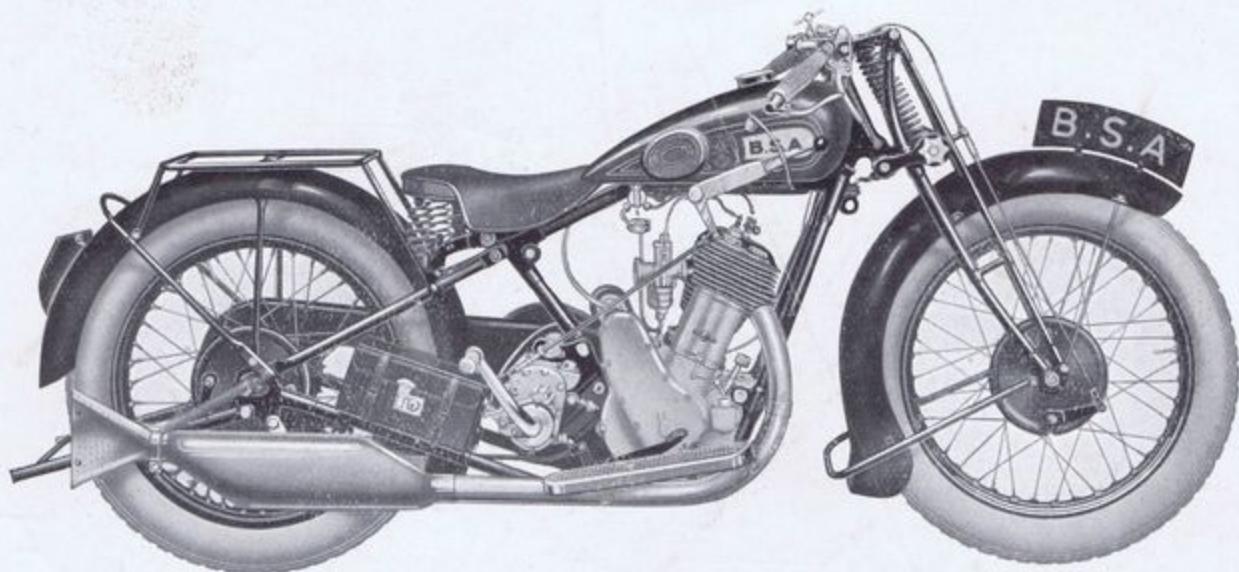
TOOL BOX. Metal case, fixed to frame tube underneath saddle. Complete set of tools in neat roll, and grease gun. Inflator.

FINISH. Tank in usual B.S.A. colours. Black enamel, and bright parts heavily plated.

GROUND CLEARANCE 4½ in. Height of Saddle 27 in.

Lucas Acetylene Lamps or Lucas Magdyno Set, and Lucas Bulb Horn can be fitted, if specified, at an extra charge.

CONSISTENT RELIABILITY



B.S.A. 5.57 h.p. model H29 de luxe

An ideal single cylinder machine for heavy sidecar work. Possessing a good turn of speed, the engine will pull evenly on full load down to the lowest speeds in top gear. The sturdy forks, duplex cradle frame and low centre of gravity create a new standard in sidecar steering.

ENGINE. Single Cylinder 5.57 h.p., 85 × 98 m/m bore and stroke, with oil sump. Enclosed side valves, inclined cylinder giving efficiently cooled head.

Silent timing gear embodying flat base tappets and cams with wide working faces, driven separately from crank shaft.

Steel flywheels with built-in shafts running on generous ball and roller bearings. Double row roller big end bearing fed with oil direct from pump through holes drilled in mainshaft and flywheels.

SILENCER. Large capacity with fish-tail.

CARBURETTOR. Amal. Special carburettor fitted with Air Cleaner extra.

IGNITION. Special magneto, gear driven and mounted behind cylinder on crank case.

LUBRICATION. Oil sump integral with crank case, capacity 3 pints. Submerged gear pump driven by skew gear from mainshaft, with output controllable from saddle by valve on suction side. Oil supplied direct to big end bearing through special oilways. Visible tell-tale fitted to output side of pump. Surplus oil in crank case returned to sump by fixed scraper acting on flywheels. Oil level indicator of dipper type provided in filler elbow. Special system of primary chain lubrication. Hubs, fork links, etc., fitted with grease gun nipples.

TRANSMISSION. Front chain $\frac{1}{2}$ in. × .305 in., totally enclosed in case. Rear chain $\frac{1}{2}$ in. × $\frac{1}{2}$ in. protected by an efficient guard. Cam-faced cush drive fitted to engine shaft.

CLUTCH. Of large size, contained in large chain wheel. Floating dry plate type, indestructible. Controlled by lever on left of handlebar, with large diameter cable.

GEAR BOX. B.S.A. three-speed, with special pivot mounting for chain adjustment. All gears constantly in mesh. Kick-starter mechanism enclosed in gear box. Inclined change speed lever on right side of tank. A special wide ratio gear box for sidecar work can be fitted if specified. For gear ratios see page 17.

FRAME. Duplex cradle frame of great strength and rigidity, built from steel lugs and weldless tubing. Exceptionally low riding position (minimum obtainable 25 in.). Fitted with special lugs to take B.S.A. Sidecars. Head fitted with B.S.A. steering damper. Quickly detachable luggage carrier.

SPRING FORK. Special B.S.A. type with barrel spring and large shock absorbers.

HANDLEBAR. Semi sporting type mounted behind steering head, with rubber grips. Touring bar if specified.

TANK. Saddle type tank for fuel only, with large diameter filling orifice, supported by brackets brazed to frame. Capacity: 2½ gallons. Adjustable rubber knee-grips fixed to tank.

WHEELS. Heavy gauge rims 19 in. × 2½ in., enamelled. Taper roller bearings to both hubs.

TYRES. Dunlop cord 26 in. × 3.25 in., wired on. 27 in. × 4 in. wired on Balloon Tyres, with special front mudguard, can be fitted at an extra charge.

BRAKES. Both internal expanding type, 7 in. diameter. Front operated by lever on right handlebar, rear by toe pedal on right of machine. Grease gun nipples fitted to cam spindles.

SADDLE. Spring seat.

MUDGUARDS. Rear 6 in. wide, of plain section; front with side wings. Legshields affixed to footboards or frame down tubes, extra.

FOOTBOARDS. Pressed steel footboards, black enamelled, with rubber mats.

STANDS. Back spring-up. Front stand rigidly secured to guard.

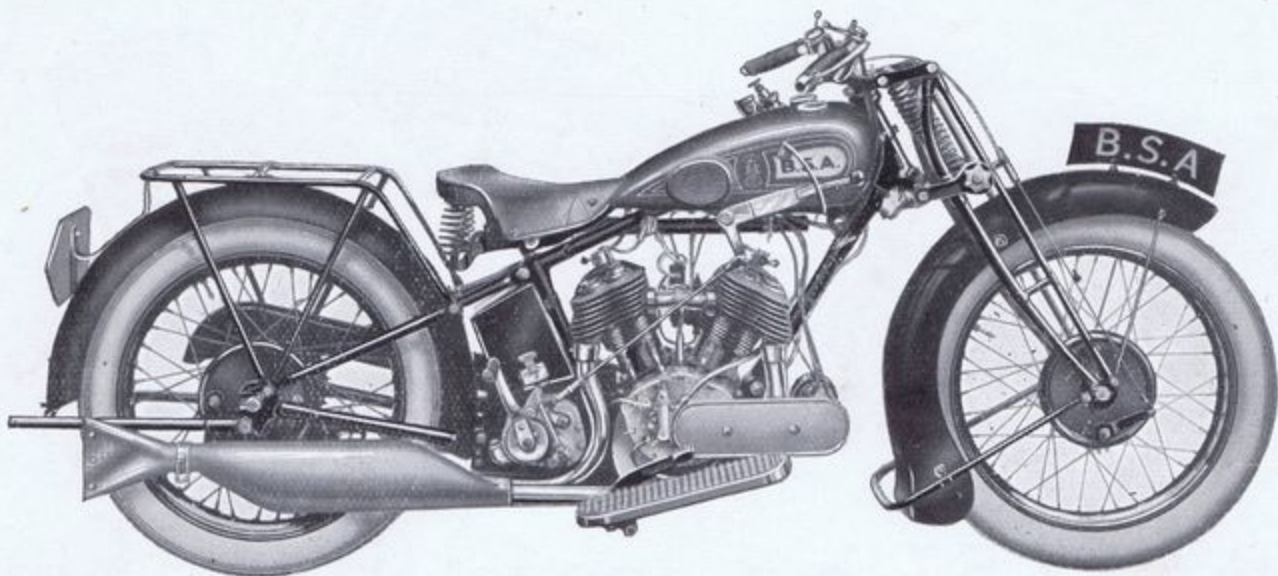
TOOL BOX. Large metal case, leather lined; mounted on offside chain-stay. Complete set of tools. Inflator.

FINISH. Tank in usual B.S.A. colours. Best black enamel, and bright parts heavily plated.

GROUND CLEARANCE 5 in. Height of Saddle 27 in.

Lucas Acetylene Lamps or Lucas Magdyno Set, and Lucas Bulb Horn can be fitted, if specified, at an extra charge.

BARNSTORMERS.CO.NZ
CONSISTENT RELIABILITY



B.S.A. 7.70 h.p. model E29

This machine has been re-designed as a dual purpose mount of attractive appearance. Riders will find a fascination in the big reserve of power and feeling of road supremacy coupled with the smooth running that can only be obtained from machines of the twin type. It is perfectly adapted for use with a full touring outfit which may be required to take heavy loads and yet maintain a high average speed.

ENGINE. Twin Cylinder 7.70 h.p. (770 c.c.) 76 × 85 m/m bore and stroke. Main shaft mounted on ball bearings. Aluminium alloy pistons. Big end bearings fitted with rollers.

SILENCER. Large capacity, with fish-tail, mounted on chain-stay.

CARBURETTOR. Amal. Special carburettor fitted with Air Cleaner extra.

IGNITION. Magneto driven by adjustable chain in dust-proof case.

LUBRICATION. Gravity feed to mechanical pump, then to sight feed on tank, and feeding to crank case. Hand pump is also fitted for emergency use. Oil supplied to front chain by depressing spring bye-pass valve on timing case. Hubs, fork links etc., fitted with grease gun nipples.

TRANSMISSION. Front chain $\frac{1}{2}$ in. × .305 in. Rear chain $\frac{1}{2}$ in. × $\frac{1}{2}$ in. Front drive totally enclosed in chain case, and rear drive protected by an efficient guard. Cam-faced cush drive fitted to engine shaft.

CLUTCH. Contained in large chain wheel. Floating dry plate type, indestructible. Controlled by lever on left handlebar, with large diameter cable.

GEAR BOX. B.S.A. Three-speed. Kick-starter mechanism enclosed in gear box. Screw adjustment of box position for accurately setting chain tension. Change speed lever on right side of tank. For gear ratios see page 17.

FRAME. Re-designed to give lower riding position. Suitable for solo or sidecar work, with integral sidecar lugs. Head fitted with B.S.A. steering damper. Weldless steel tubing and forged steel lugs throughout. Headlug of continuous type giving great strength. Strong carrier fitted.

SPRING FORK. B.S.A. type, fitted with barrel spring and shock absorbers.

HANDLEBAR. Adjustable, mounted behind steering head. Long rubber grips.

TANK. Saddle type, with knee grips. Combined priming cock and petrol tap. Capacity: Petrol 2 gallons. Oil $3\frac{1}{4}$ pints.

WHEELS. Heavy gauge rims 19 in. × $2\frac{1}{2}$ in., enamelled. Taper roller bearings to both hubs.

TYRES. Dunlop cord 26 in. × 3.25 in. wired on. 27 in. × 4 in. wired on balloon tyres with special front mud-guard can be fitted at an extra charge.

BRAKES. Both internal expanding type 7 in. diameter. Front operated by lever on right handlebar, rear by toe pedal on independent fulcrum on right side of machine. Rear brake quickly adjustable. Grease gun nipples fitted to cam spindles.

SADDLE. Spring seat.

MUDGUARDS. Rear, 7 in. wide, of plain section. Front fitted with side wings of ample dimensions. Leg shields extra.

FOOTBOARDS. Pressed steel footboards, black enamelled, with rubber mats; or footrests if specified.

STANDS. Back kick-up. Front stand rigidly secured to guard.

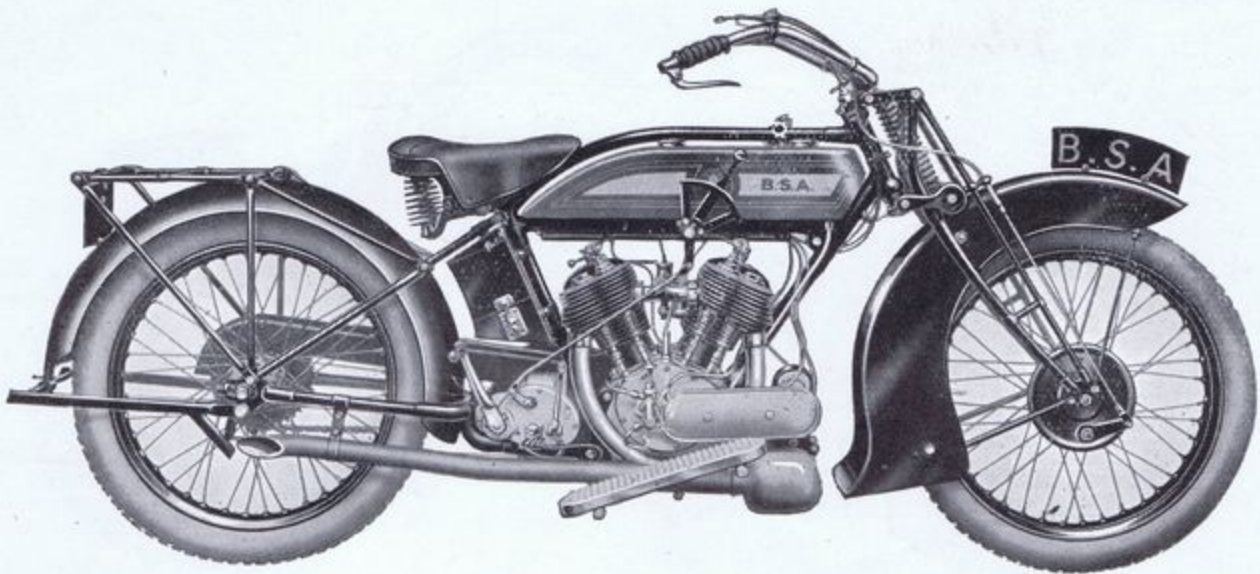
TOOL BOX. Metal case. Complete set of tools in neat roll, and grease gun. Inflator.

FINISH. Tank in usual B.S.A. colours. Black enamel, and bright parts heavily plated.

GROUND CLEARANCE $4\frac{1}{2}$ in. Height of Saddle 27 in.

Lucas Acetylene Lamps or Lucas Magdyno Set, and Lucas Bulb Horn can be fitted, if specified, at an extra charge.

CONSISTENT RELIABILITY



B.S.A. 7.70 h.p. model E29 de luxe

The 7.70 h.p. de Luxe and 9.86 h.p. de Luxe machines have been expressly designed for sidecar work with heavy loads. For high speeds or in difficult country the extra power given by the larger engine adds materially to the average road performance. Flexibility, economical upkeep and the small space required for garaging, are features which are overwhelmingly in their favour when compared with the light car.

ENGINE. Twin Cylinder 7.70 h.p. (770 c.c.) 76×85 m/m. bore and stroke. Mainshaft mounted on ball bearings. Aluminium alloy pistons.

SILENCER. Large capacity of efficient design, with outlet pipe carried well to the rear.

CARBURETTOR. Amal. Special carburettor fitted with Air Cleaner extra.

IGNITION. Magneto driven by adjustable chain in dust-proof case.

LUBRICATION. Gravity feed to mechanical pump, then to sight feed on tank, and feeding to crank case. Hand pump is also fitted for emergency use. Oil supplied to front chain by depressing spring bye-pass valve on timing case. Hubs, fork links, etc., fitted with grease gun nipples.

TRANSMISSION. $\frac{5}{8}$ in. × $\frac{1}{2}$ in. roller chains front and rear. Front drive completely enclosed in chain case, rear drive protected by an efficient guard. Cast aluminium chain cases extra. Cam-faced cush drive fitted to engine shaft.

CLUTCH. Contained in large chain wheel. Floating dry plate type, indestructible. Controlled by lever on left of handlebar with large diameter cable.

GEAR BOX. B.S.A. Three-speed. All gears constantly in mesh. Kick-starter mechanism enclosed in gear box. Screw adjustment of box position for accurately setting chain tension. Change speed lever on right side of tank. For gear ratios see page 17.

FRAME. Specially designed for sidecar work, with integral sidecar lugs. Head fitted with B.S.A. steering damper. Weldless steel tubing and forged steel lugs throughout. Headlug of continuous type giving great strength. Strong carrier fitted.

SPRING FORK. B.S.A. wide type fitted with barrel spring and shock absorbers.

HANDLEBAR. Touring or sporting pattern, both types adjustable.

TANK. Supported by brackets brazed on to the frame. Filler caps, unbreakable, secured with bayonet joint and chain. Combined priming cock and petrol tap. Capacity: Petrol 2½ gallons. Oil 3 pints.

WHEELS. Heavy gauge rims 19 in. × 3 in., enamelled. Quickly detachable and interchangeable. Taper roller bearings to hubs.

TYRES. Dunlop cord 26 in. × 3.25 in., wired on. 27 in. × 4 in. wired on balloon tyres can be fitted at an extra charge.

BRAKES. Both internal expanding type 7 in. diameter. Front operated by lever on right handlebar, rear by heel pedal on right side of machine. Rear brake quickly adjustable. Grease gun nipples fitted to cam spindles.

SADDLE. Spring seat, de luxe type.

MUDGUARDS. Rear, strong and 7 in. wide, of plain section. Front mudguard of ample dimensions. Leg shields extra.

FOOTBOARDS. Pyramid rubber covered, set at a comfortable angle.

STANDS. Back kick-up. Front stand rigidly secured to guard.

TOOL BOX. Metal case. Complete set of tools in neat roll, and grease gun. Inflator.

FINISH. Tank in usual B.S.A. colours. Black enamel, and bright parts heavily plated.

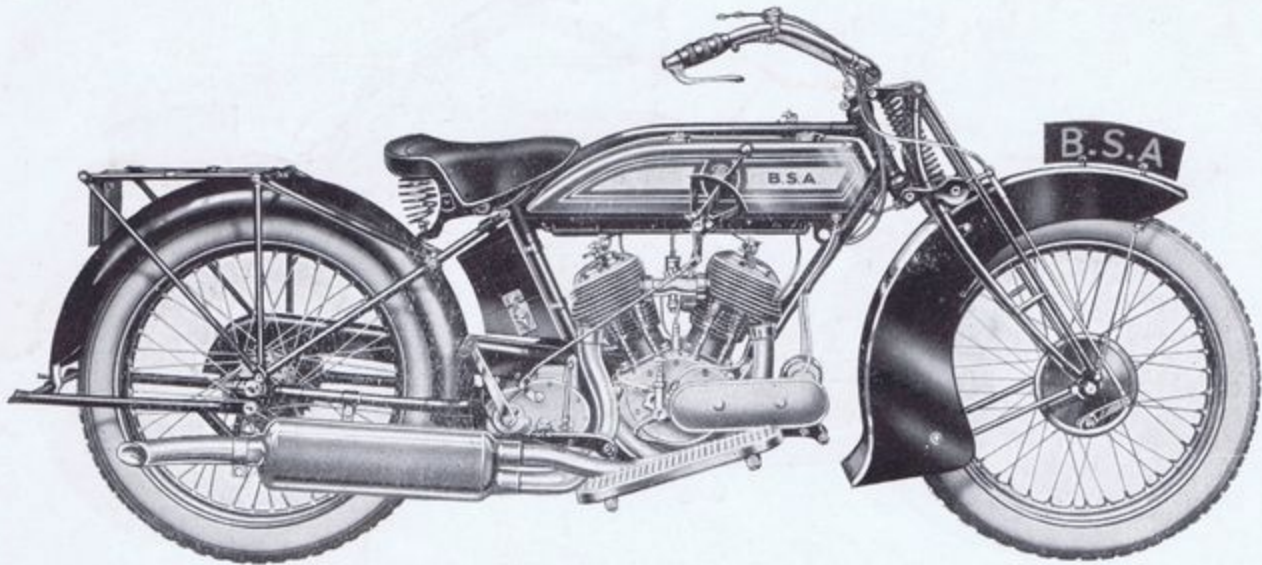
GROUND CLEARANCE 3½ in. Height of Saddle 30 in.

B.S.A. 9.86 h.p. model G29 de luxe

is exactly similar to above but is fitted with 9.86 h.p. engine (80/98 m/m bore and stroke).

Lucas Acetylene Lamps, or Lucas Magdyno Set and Lucas Bulb Horn can be fitted, if specified, at an extra charge.

CONSISTENT RELIABILITY



B.S.A. 9.86 h.p. model G29 W.T.

WORLD TOUR

A machine specially designed to stand up to the bad road conditions encountered in most countries overseas. It has ample ground clearance and plenty of power and strength for heavy sidecar work.

Two of these machines, fitted with large box carriers, have successfully completed the B.S.A. World Tour of 50,000 miles through 25 countries.

ENGINE. Twin Cylinder 9.86 h.p. (986 c.c.), 80 × 98 m/m bore and stroke. Mainshaft mounted on ball bearings, aluminium alloy pistons.

SILENCER. Large capacity of efficient design, mounted on right chain-stay, giving ample ground clearance.

CARBURETTOR. Amal. Special carburettor fitted with Air Cleaner extra.

IGNITION. Magneto driven by adjustable chain in dust-proof case.

LUBRICATION. Gravity feed to mechanical pump, then to sight feed on tank, and feeding to crank case. Hand pump is also fitted for emergency use. Oil supplied to front chain by depressing spring bye-pass valve on timing case. Hubs, fork links, etc., fitted with grease gun nipples.

TRANSMISSION. $\frac{3}{4}$ in. × $\frac{3}{4}$ in. roller chains, front chain effectively enclosed in case, rear chain protected by an efficient guard. Cam-faced cush drive fitted to engine shaft.

CLUTCH. Contained in large chain wheel. Floating dry plate type, indestructible. Controlled by lever on left handlebar with large diameter cable.

GEAR BOX. B.S.A. Three-speed. All gears constantly in mesh. Kick-starter mechanism enclosed in gear box. Screw adjustment of box position for accurately setting chain tension. Change speed lever on right side of tank. For gear ratios see page 17.

FRAME. Exceptionally strong and designed to give large ground clearance (minimum 5 $\frac{1}{4}$ in.). Head fitted with B.S.A. steering damper. Weldless steel tubing and forged steel lugs fitted throughout. Headlug of continuous type, giving great strength. Special lugs for B.S.A. Sidecars. Strong carrier fitted.

SPRING FORK. B.S.A. wide type, fitted with barrel spring and shock absorbers.

HANDLEBAR. Touring or sporting pattern. Both types adjustable.

TANK. Supported by brackets brazed on to the frame. Filler caps, unbreakable, fitted with bayonet joints and secured by chains. Combined priming cock and petrol tap. Priming tap fitted for front cylinder. Capacity: Petrol 2 $\frac{1}{2}$ gallons. Oil 3 pints.

WHEELS. Quickly detachable and interchangeable. Extra strong 21 in. × 3 in. rims. Taper roller bearings to hubs.

TYRES. 28 in. × 3.5 in. Dunlop cord, wired on. 27 in. × 4 in. wired on balloon tyres can be fitted, but ground clearance will be reduced.

BRAKES. Both internal expanding type, 7 in. diameter. Front operated by lever on right handlebar, rear by heel pedal on right side of machine. Rear brake quickly adjustable. Grease gun nipples fitted to cam spindles.

SADDLE. Spring seat, de luxe type.

MUDGUARDS. Rear, strong and 7 in. wide, of plain section. Front mudguard of ample dimensions. Leg shields extra.

FOOTBOARDS. Pyramid rubber covered, set at a comfortable angle.

STANDS. Back kick-up. Front stand rigidly secured to guard.

TOOL BOX. Metal case. Complete set of tools in neat roll, and grease gun. Inflator.

FINISH. Tank in usual B.S.A. colours. Black enamel, and bright parts heavily plated.

GROUND CLEARANCE 5 $\frac{1}{4}$ in. Height of Saddle 31 in.

Lucas Acetylene Lamps or Lucas Magdyno Set, and Lucas Bulb Horn can be fitted, if specified, at an extra charge.

BARNSTORMERS.CO.NZ

CONSISTENT RELIABILITY

Gear Ratios of B.S.A. Motor Cycles

MODEL	SOLO MODELS			SIDECAR MODELS				
	Teeth on Engine Sprocket	High	Middle	Low	Teeth on Engine Sprocket	High	Middle	Low
A29	16	6.8	—	14	—	—	—	—
A29 de luxe	16	6.8	10.3	14	—	—	—	—
B29 de luxe	16	6.6	9.8	14.5	—	—	—	—
L29	20	6.0	8.2	14.3	19	6.3	8.6	15.1
L29 O.H.V.	21	5.7	7.8	13.5	20	6.0	8.2	14.3
L29 O.H.V. 2-port*	21	5.7	7.8	13.5	20	6.0	8.2	14.3
S29	23	5.2	7.1	12.3	21	5.7	7.8	13.5
S29 de luxe†	21	5.0	6.9	11.9	18	5.9	8.0	13.9
S29 O.H.V.	20	5.3	7.2	12.6	19	5.6	7.6	13.2
S29 O.H.V. 2-port* and light 2-port	21	5.0	6.9	11.9	19	5.6	7.6	13.2
H29	25	4.8	6.5	11.3	21	5.7	7.8	13.5
H29 de luxe†	21	5.0	6.9	11.9	18	5.9	8.0	13.9
E29	24	4.4	6.0	10.4	23	4.6	6.3	10.9
E29 de luxe	20	4.5	7.1	11.4	17	5.2	8.4	13.5
G29 de luxe	20	4.5	7.1	11.4	18	4.9	7.9	12.7
G29 W.T.	20	4.5	7.1	11.4	18	4.9	7.9	12.7

* A special close or wide ratio gearbox can be fitted if specified. The close ratio box gives gears of 5.7, 7.8 and 10.6 on the 3.49 h.p. and 5.0, 6.9 and 9.4 on the 4.93 h.p. model. The wide ratio box is for competition work with a sidecar and gives gears of 6.0, 9.7 and 16.8 on the 3.49 h.p. and 5.6, 9 and 15.5 on the 4.93 h.p. model.

† A special wide ratio gearbox can be fitted if specified for sidecar work with heavy loads or in difficult country. This gives ratios of 5.9, 9.5 and 16.3 on both models.

B.S.A. Leg Shields

(Finished in black enamel. Can be fitted at an extra charge.)



Leg shields fitted to A29 models with footrests. The bottom curve of the shield, as illustrated, adequately protects the rider's feet and legs.

Leg shields fitted to A29 models with footboards. They protect the rider's legs, while not being too bulky or causing too much wind resistance.

This illustration shows the leg shields fitted to the B29 de Luxe model, with footrests or footboards. The design permits easy access to the oil pump while riding.

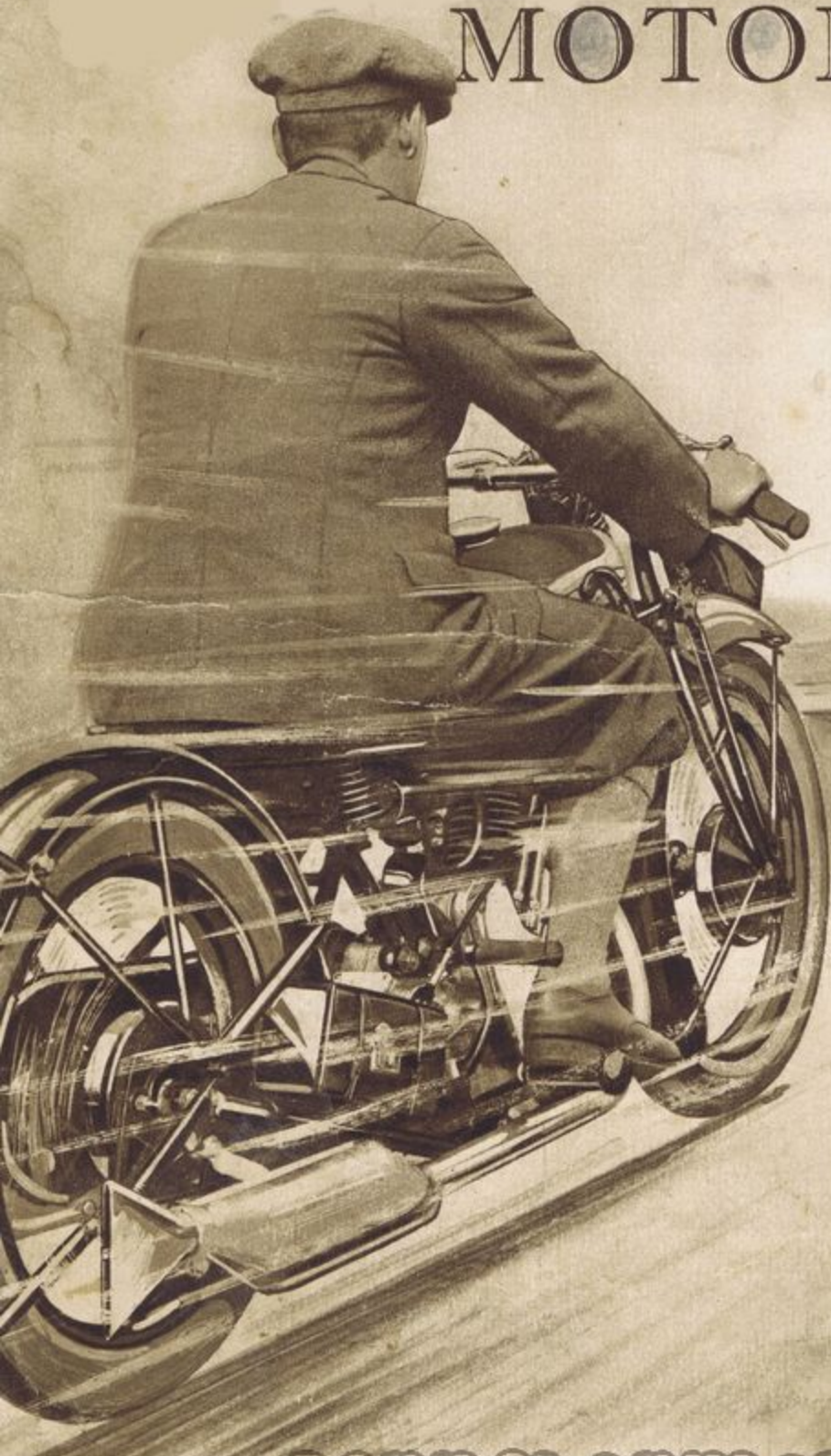
A similar shield to that fitted to the B29 de Luxe, but larger, is fitted to L29, S29, H29 and E29 models with footrests only.

This leg shield is fitted to L29, S29, H29 de Luxe and E29 models with footboards only.

This leg shield is fitted to the frame down tube of the L29 Two-port O.H.V., S29 de Luxe, S29 O.H.V. and S29 Two-port O.H.V. models with footrests only.

Spring clip shields, instantly removable to facilitate engine adjustments, are fitted to E29 de Luxe and G29 models. These shields are very deeply valanced.

B.S.A
MOTOR CYCLES



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SPEED with SAFETY