

BL Motorcycles Ltd

Professional Workshop Manual - English Translation

BSA - BSA_D10_instruction_manual

Model D10

175 c.c. Bantam Supreme.

175 c.c. Silver Bantam.

175 c.c. Bantam Sports.

175 c.c. Bushman.

INSTRUCTION MANUAL

MODEL D10.

175 c.c. BANTAM Supreme.

175 c.c. Silver BANTAM.

175 c.c. BANTAM Sports.

175 c.c. BUSHMAN.

B.S.A. MOTOR CYCLES LTD., ARMOURY ROAD,

BIRMINGHAM, 11

ENGLAND

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I N S T R U C T I O N M A N U A L

This Instruction manual is intended to acquaint
the B.S.A. owner with details of the controls,
general maintenance and technical data which
may be required for normal operation of the
machine.

It does not contain the information necessary
to carry out complete stripping for major
overhauls, but if any owner feels competent to
carry out this type of work, a service manual and
an illustrated spares catalogue for this machine
can be obtained from his B.S.A. spares stockist
or local dealer.

Owners in the British Isles can obtain these
publications direct from B.S.A. Motor Cycles
Ltd., Service Department, Armoury Road,
Birmingham 11. Always quote full engine and
frame numbers when ordering these
publications.

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The controls for the Bantam Sports. Those for the Bushman (battery lighting) are similar, differing in detail only. Note : Bushman models without battery are not fitted with an ignition switch, main beam warning light, or parking light.

Fig. 1. The Controls

The lower illustration shows the controls for the Bantam Supreme. Those for the Silver Bantam are similar, differing in detail only.

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TECHNICAL DATA

Engine Number on top of crankcase below cylinder.

Frame Number at top of steering head tube.

Engine:

Capacity

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Cylinder bore 61.5 mm.
Stroke 58 mm.
Compression ratio 8.65/1
Piston ring gap minimum .009 in.
maximum .013 in.
Sparkling plug N4
Plug points gap minimum .020 in.
maximum .025 in.
Contact breaker points gap012 in.
Ignition timing (fixed) 19 degrees
(before T.D.C.)
Gear ratios top 6.58 top 6.58
second 9.26 third 8.55
first 17.4 second 12.04
first 18.68
Clutchfriction plates 4 4
Chain size and pitch
front \times .250 in. 50 pitches 50 pitches
rear $\frac{1}{2}$ \times .335 in. roller 120 pitches 128 pitches
(122, Bushman)
Teeth on: engine sprocket 17 17
gearbox sprocket 16 16
clutch sprocket 38 38
rear chainwheel 47 58
Capacities:
Fuel tank 1 gallons
Petrol mixture See pages 12 and 22
Gearbox $\frac{3}{4}$ pint
Front forks pint each leg
(1 pint. 4 sp.)
Supreme Silver Bushman and Sports Bushman (Gen. Exp.) 8.1 10.5 14.8 23.0

5 Transmission:

TECHNICAL DATA

Tyre size 3.0018 3.0018 3.0019
Tyre pressure 16 p.s.i. 16 p.s.i.
22 p.s.i. 22 p.s.i.
Brake size front 5 $\frac{1}{2}$ in. 5 $\frac{1}{2}$ in.
rear 1 in. 1 in.
Carburation: Amal
Bore 26 mm.
Main jet 150
Pilot jet 25
Throttle valve 3

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Needle position	2
Needle jet	105
Overall length	77½ in. 77½ in. 78 in.
Wheelbase	50 in. 50 in. 50 in.
Ground clearance (at crankcase) . . .	6¾ in. 6¾ in. 10 in.
Seat height	31 in. 30¼ in. 30½ in.
Overall height	36½ in. 36½ in. 40½ in.
Handlebar width	27¾ in. 23 in. 27¾ in.
Supreme Silver Sports Bushman	3-0019

The recommended tyre pressures are based on a rider's weight of 154 lbs. If the rider is heavier, increase the pressures as follows:

Front tyre: Add one lb. per sq. in. for every 28 lb. increase above 154 lb.

Rear tyre: Add one lb. per sq. in. for every 14 lb. increase above 154 lb.

If additional load is carried in the form of a pillion passenger or luggage, the actual load bearing upon each tyre should be determined and the pressures increased in accordance with the Dunlop Load and Pressure Schedule

6 Wheels:

General Details:

TAKING OVER THE MACHINE

Before running the machine make sure that the fuel tank contains the correct mixture of oil and petrol, that the gearbox is properly topped up with oil and that the battery is filled and charged. (See appropriate chapters for filling instructions).

Normally these preparations will be carried out by the dealer who is selling the machine and the new owner has only to arrange the controls to his liking and the machine is ready for the road.

The Controls

The new rider should make sure that he is quite familiar with all the controls before attempting to ride the machine. Most of the controls are adjustable and should be positioned so that they can be reached without moving the hands from the grips or the feet from the footrests. Handlebars should be adjusted so that a comfortable and natural riding position is achieved. Make sure that the bolts retaining the handlebar clamps are tight after completing any adjustment. Badly positioned controls cause poor control of the machine and will bring discomfort on long journeys.

Handlebar Controls

Twist Grip. Mounted on the right handlebar it controls the throttle opening and consequently the engine speed. To open the throttle (i.e. to increase the engine speed) turn the grip so that the top moves towards the rider. Excess slackness in the cable can be removed by means of an adjuster incorporated in the cable at the carburettor end.

The rotary stiffness of the twist grip can be varied by means of the adjuster screw and locknut. It is set for average requirements when leaving the factory, but can be readjusted to suit individual preference.

Front Brake. Lever mounted on the right handlebar in front of the throttle control. Grip the lever gently to operate the brake.

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Clutch. The lever is mounted on the left handlebar. Grip the lever to free the clutch, i.e. to disengage the drive between the engine and the rear wheel.

Horn. The horn button is mounted on the left handlebar and is incorporated in the headlight dipper switch.

Headlight Dipper Switch. Controls the switching from main to dipped headlight beams and is mounted on the left handlebar.

Cut-out Button. On Bushman models without battery lighting, an ignition cut-out button is provided on the left handlebar and is mounted on the same body as the horn button and headlight dipper switch.

Headlight Warning Light. On Silver and Supreme mode is for U.S.A. only, a red warning light on the headlight body indicates when the main beam is in use. On models fitted with a battery and having the headlamp as a separate unit, the warning light is a standard item.

Other Hand Controls

Carburettor Air Control. Situated on the right handlebar, adjoining the front brake lever. When closed (moved away from the rider) a rich mixture is provided for starting purposes. For normal running, the lever should be turned clockwise as far as possible. Cable adjustment is at the carburettor.

Petrol Tap. Under the rear end of the tank. To turn on the petrol, pull out the serrated button and lock in position by turning anti-clockwise. To turn off the petrol, reverse this procedure.

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Headlight Switch. This is operated by a switch on the headlamp, and has three positions OFF, LOW (L), and HEAD (H) respectively. The low position is for use when the machine is stationary and applies only to models with battery lighting.

Ignition Switch. (Models with battery) This is mounted on the top of the headlamp and has three positions. With the pointer straight ahead, the ignition is switched off, and the switch should always be retained in this position when the engine is stationary, otherwise after several hours (say, overnight) the battery may become discharged. For normal starting, rotate the switch until the position marked I is straight ahead. For emergency starting with a discharged battery, rotate the switch until position E is straight ahead. (Important See Electrical Equipment).

Carburettor Tickler. This is a small plunger above the float cha