

## 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

Telephone: Birmingham, VICToria 2381

Telegrams and Cables: SELMOTO, Birmingham.

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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.

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 . . . . . 173 c.c.

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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.  
Sparking plug . . . . . N4  
Plug points gap . . . . . minimum .020 in.  
maximum .025 in.  
Contact breaker points gap . . . . . .012 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 x .250 in. . . . . 50 pitches 50 pitches  
rear ½ x .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 . . . . . ¾ 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 5½ in. 5½ 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.

**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 models 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 chamber