# BSA - BSA_D7_instruction_manual

175 c.c. Silver Bantam.
175 c.c. Bantam de luxe.
Model D7. INSTRUCTION MANUAL

175 c.c. SILVER BANTAM. Model D7.
175 c.c. BANTAM de luxe. Model D7.
B.S.A. MOTOR CYCLES LTD., ARMOURY ROAD,
BIRMINGHAM, 11
Telephone: Birmingham, VICtoria 2381
Telegrams and Cables: SELMOTO, Birmingham.

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INSTRUCTION MANUAL
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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Fig. 1. The Controls (Bantam de luxe )
(Silver Bantam similar except in detail )
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CONTENTS

4 pages
TECHNICAL DATA
Engine Numberon top of crankcase below cylinder.
Frame Numberat top of steering head tube.
Engine:
Capacity . . . . . 174 c.c.
Cylinder bore . . . . . 61·5 mm.
Stroke . . . . . 58 mm.
Compression ratio . . . . . 7·41
Piston ring gap . . . . . minimum ·009 in.
maximum ·013 in.
Sparking plug . . . . . L7
Plug points gap . . . . . minimum ·020 in.
maximum ·025 in.
Contact breaker points gap . . . . . ·015 in.

Transmission:
Gear ratios . . . . . top 6·58
second 9·26
first 17·4

Clutchfriction plates . . . . . 3
Chain size and pitch
front × ·250 in. . . . . 50 pitches
rear ½ × ·335 in. roller . . . . . 120 pitches
Teeth on: engine sprocket . . . . . 17
gearbox sprocket . . . . . 16
clutch sprocket. . . . . 38
rear chainwheel . . . . . 47

Capacities:
Fuel tank . . . . . 2 gallons
Petroil mixture . . . . . See pages 12 and 20
Gearbox . . . . . ¾ pint
Front forks . . . . . pint each
leg

Wheels:
Tyre size . . . . . front 3·0018
rear 3·0018
Tyre pressure . . . . . front 17 p.s.i.
rear 22 p.s.i.
Brake size . . . . . dia. 5½ in.
wide 1 in.
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TECHNICAL DATA
Carburation: Amal
Bore . . . . . in.
Main jet . . . . . 140
Pilot jet . . . . . 25
Throttle valve . . . . . 375/3½
Needle position . . . . . 2
Needle jet . . . . . ·1055

General Details:
Overall length . . . . . 79 in.
Wheelbase . . . . . 51 in.
Ground clearance . . . . . 5½ in.
Seat height . . . . . 31 in.
Overall height . . . . . 36 in.
Handlebar width . . . . . 27¾ in.

The recommended tyre pressures are based on a riders weight of 140 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 140 lb.

Rear tyre: Add one lb. Per sq. in. for every 14 lb. Increase above
140 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.
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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 carburetter 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.

Other Hand Controls
Air Control (Carburetter ).This is operated by the spring loaded plunger above

the carburetter. Depress to give a rich mixture for starting purposes, raising immediately afterwards.(Important see carburetter air control, page 19).
Petrol Taps. 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. Both taps communicate with the main supply in the tank but if one tap is used, a reserve supply is left which can be fed to the carburetter only when the second tap is turned on. One tap only is fitted to the Silver Bantam.
Headlight Switch. This is operated by a switch on the headlamp, and has three positionsOFF, LOW (L), and HEAD (H) respectively. The low position is for use when the machine is stationary.
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Ignition Switch. 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, over-night) 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).
Carburetter Tickler. This is a small plunger in the top of the carburetter float chamber on the left hand side. Pressing it down pushes down the float and frees the needle valve thus permitting the carburetter to receive excess petrol.
Steering Lock. Provision is made for locking the steering. Turn the forks to the left, when the hole in a special frame lug will coincide with the corresponding hole in the bottom yoke lug. Locking the two lugs together by means of a padlock, prevents the machine from being driven or wheeled away.

Foot Controls
Rear Brake. On the left-hand side of the machine controls the rear brake only.
Gear-change Pedal. On the right-hand side of the engine there are two pedals one of which projects forward, this being the gearchange pedal. It affects the change from one gear to another. The lever is of the positive stop type and returns to the central position after each change. Upward movement of the lever selects the next higher gear, downward a lower gear. Neutral is between first and second gear.
Starter Pedal. This is the other pedal on the right-hand side of the engine. Depression of the pedal rotates the engine.

Instruments
Speedometer. This is mounted centrall