

# BSA SERVICE SHEET No. 212D

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"A" AND "B" GROUP MODELS  
(with Welded Type Frame)

## ADJUSTMENT, DISMANTLING AND RE-ASSEMBLY OF REAR HUB AND BRAKE

### Wheel Removal

Removal of the wheel does not affect the chain or brake adjustment. Remove the spindle (B) Fig. A31d, it has a normal right-hand thread and therefore unscrews in an anticlockwise direction. The distance bush (E) falls clear when the spindle is removed and the wheel can then be pulled away from the brake drum and withdrawn from the machine.

When detaching the rear wheel it is quite unnecessary to touch the hexagon nut (A) on the left-hand side.

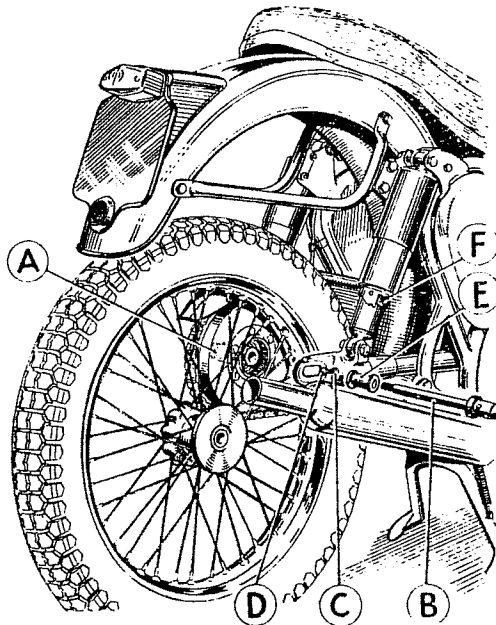


Fig. A31d. Rear wheel removal.

driven from the hub shell with the aid of a soft drift. During reassembly ensure that this bearing is fully home and that the locking ring (C) is quite tight.

### Removal and Dismantling of the Brake Drum

After removal of the rear wheel the brake drum is held in position by the nut (J) and by the nut securing the brake anchor strap. To remove the drum, first disconnect the rear chain and brake rod, then remove the nut (J) and the nut retaining the torque arm to the brake plate. The brake drum can then be pulled away from the brake plate and removed

### Hub Dismantling and Reassembly

The hub is fitted with two ballraces which are a light press-fit on the hollow spindle and in the hub shell. Remove the dust cap (A) Fig. A32d, and felt washer (B). Unscrew the ballrace retaining ring (C). This ring has a left-hand thread and therefore unscrews in a clockwise direction.

With the aid of a suitable soft drift applied to the brake drum end of the hollow spindle (D), drive out the spindle and ballrace (E). Then tap the spindle from the bearing, as the spindle comes away the distance bush (F) will be released. The only parts remaining in the hub are the ballrace (G) and the spacing washer (H), and these need not be disturbed unless the ballrace is suspected of being faulty. Wash it thoroughly in paraffin to remove all trace of grease when any play will be immediately detected. If it is decided to replace the race it can be

from the machine. Pivot the brake plate support strap on the cam lever boss so that the brake plate is free to be withdrawn from the fork leg.

To remove the brake shoes lay the brake plate on a bench (shoes uppermost) and lever the shoes upwards. They can then be drawn over and free of the cam and fulcrum pin. The operating cam and fulcrum pin should be inspected but it is unlikely that more than greasing will be necessary. If the cam pads on the brake shoes show excessive wear then new shoes should be fitted. To replace the shoes, attach the springs and push the shoes over the cam and pivot by reversing the dismantling procedure.

If examination of the brake drum shows that the teeth have become worn and the braking surface scored, a new drum must be fitted. The drum must not be machined to produce a new braking surface. To do so is only a temporary cure and further attention would be required later.

The brake drum ballrace, which is totally enclosed in the drum, should not normally require attention. The ballrace is held in position in its housing by a dished washer and a spring circlip (κ), which can be removed with the aid of a screwdriver. The replacement ballrace should be well greased before fitting the dished washer which prevents the entry of grease into the brake drum.

### Brake Shoe Relining

After removal of the brake shoes (see "Dismantling of Brake Drum") the old lining can be removed as described in Service Sheet No. 612.

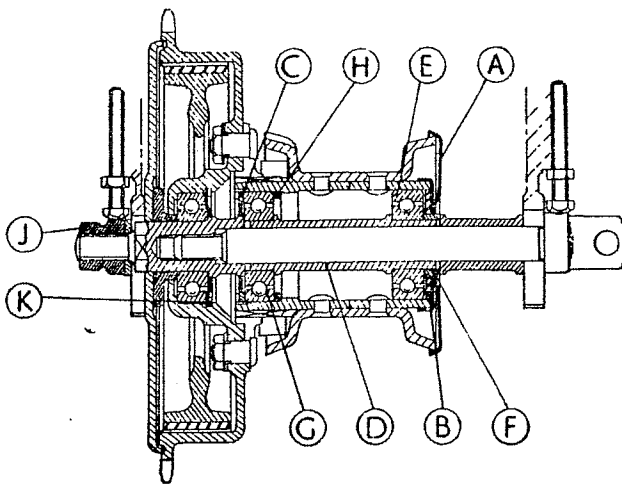


Fig. A32d. Section through the rear hub.

### Wheel Reassembly

Wheel reassembly involves no difficulty and should be carried out in the reverse order to dismantling.

### Rear Chain Adjustment

First put the machine on its centre stand. Whenever the rear wheel is adjusted, the nut securing the torque to the brake plate must be slackened slightly so that the plate may pivot freely. Undo the spindle (B) Fig. A31d, on the right-hand side of the machine, a few turns, and slacken nut (A) just sufficiently to allow the wheel to move.

Slacken the locknuts (C) and screw out the adjusters (D) to tighten the chain. With the wheel in its lowest position there should be a total up and down movement of  $1\frac{1}{4}$  in. in the centre of the chain at its tightest point. Ensure that the wheel spindle is against the adjusters and that the wheels are in line. Check the alignment by means of a taut piece of string which should be equidistant from the front and rear of each wheel.

Tighten the nut (A), the spindle (B) and the nut securing the torque arm to the brake plate. Re-check the chain adjustment and the wheel alignment.