

BSA SERVICE SHEET No. 212C

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A, B and M Group Models

(With Plunger Type Rear Suspension)

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

Rear Wheel Removal and Replacement

Remove the smaller outer nut *C* (Fig. A.31(c)) on the left hand side of the rear wheel spindle, and withdraw the spindle *A*, from the right hand side of the machine.

The distance bush *B* will normally fall clear when the spindle is removed. The wheel should then be pulled towards the right hand side of the machine until it is free from the spline engaging it with the brake drum. When the hub is free from the drum the wheel can be dropped out. To replace the wheel the operations are carried out in the reverse order. When detaching the rear wheel, it is quite unnecessary to touch the larger of the two hexagonal nuts on the left hand side of the spindle.

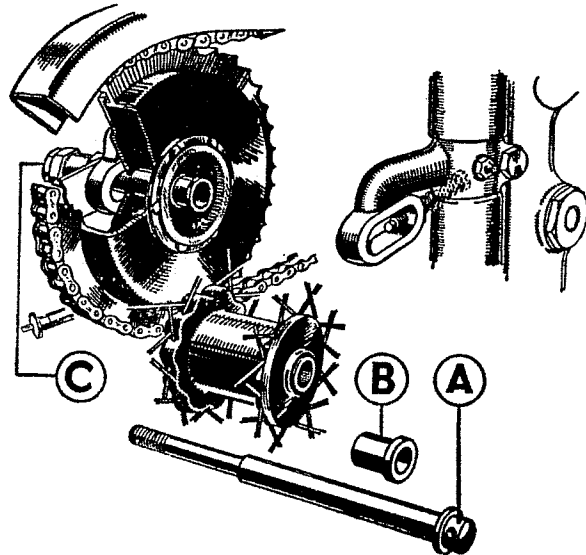


Fig. A31(c) Rear Wheel Removal (Spring Frame)

Dismantling and Re-assembly of the Rear Hub

The hub is fitted with two ballraces which are a light press fit in the hub shell. Remove the dust cap *A* (Fig. 32(c)). Unscrew and remove the two screwed rings *C* and *M*. These rings are left hand threaded, and therefore unscrew clockwise. Remove distance piece *F*.

Place the wheel spindle through the hub from the offside. Using a hide mallet tap the head of the spindle so as to drive the offside ballrace toward the centre of the hub shell. By this means the brake drum side race will be driven out, after which the distance pieces *D* and *H* can be removed.

The only part now remaining in the shell will be the offside ballrace which can be driven out with a soft drift.

Removal and Dismantling of the Brake Drum

After removal of the rear wheel the brake drum is held in position in the wheel by nut *J* (see Fig. A32(c)). To remove the drum disconnect the chain and rear brake rod, remove nut *J* and withdraw the drum.

With the brake drum removed from the frame, the brake drum cover plate, to which are attached the brake shoes, can be withdrawn, together with their fulcrum pin and operating arm.

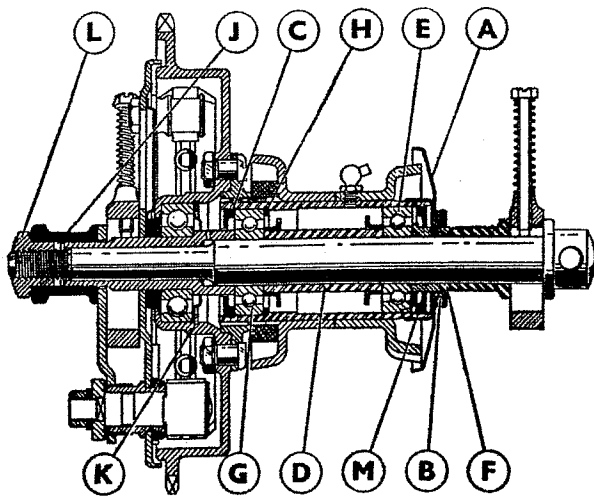


Fig. A32(c). Section through the Rear Hub

The brake drum ballrace is held in position in its housing by means of a spring circlip *K*, which can be removed with the aid of a screwdriver. The replacement ballrace should be well greased before fitting the washer in place to prevent grease entering the brake drum.

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 re-

quired later. The spline bolted to the brake drum should be replaced if there is any play between it and the spline on the wheel hub.

Brake Relining

To remove the brake shoes lay the drum cover plate flat on a bench, and lever the shoes upwards. They can then be drawn over, and free of the cam and fulcrum pin. If the cam pads show excessive wear the brake shoes should be renewed. When the brake shoes are removed the linings can be replaced as described in Service Sheet 612.

Rear Chain Adjustment

Put the machine on its stand. The rear wheel must be at its lowest point in the suspension unit when the adjustment is made. Undo nut *A* (Fig. A33(c)) several turns and slacken nut *B* just sufficiently to allow the wheel to move.

Screw in the adjusters *D* to tighten the chain. There should be a total up and down movement of half an inch at the centre of the chain span. See that the wheel spindle is up 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 large hexagon nut *B* very firmly, followed by the smaller nut *A*. Readjust the rear brake.

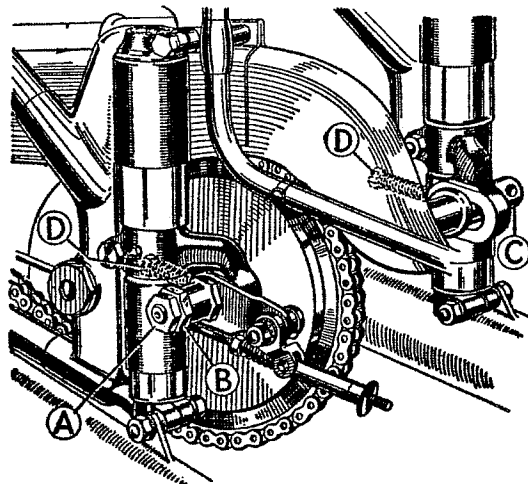


Fig. A33(c). Rear Chain Adjustment