BSA SERVICE SHEET No. 310

May 1954
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A and B Group Models

(With Welded Type Frame)

(Except those with Engine prefix letters GB)

PRIMARY TRANSMISSION

Clutch Adjustment

Two adjustments are provided for the clutch control arm on the gearbox outer cover. The first of these is at the clutch push rod and is exposed when the inspection plate is removed. It consists of a grub screw *H* (Fig. B22) and locknut *G*. Between the inner end of the screw and the clutch push rod a steel ball is inserted, and the grub screw must be adjusted so that there is just a little clearance between the ball and push rod.

To carry out this adjustment loosen the locknut and with the aid of a screwdriver adjust the grub screw. Then retighten the locknut.

The other adjustment is provided by the cable adjuster on top of the gearbox. Remember that some free movement in the control arm is necessary as, if the adjustment is too tight, there will be constant pressure on the clutch with consequent wear and loss of efficiency. The control arm pivot should be greased occasionally by means of the grease nipple *F*.

Primary Chain Adjustment

Adjustment of the front chain is achieved by pivoting the gearbox backwards and forwards on the bottom support bolt. To adjust the chain, remove the knurled inspection cover on the primary chaincase and slacken the nuts *A* and *B* (Fig. B22) which clamp the top and bottom gearbox lugs in the rear engine plates. An adjuster is attached to the right hand side of the top gearbox bolt. Slacken the locknut *C* and screw the

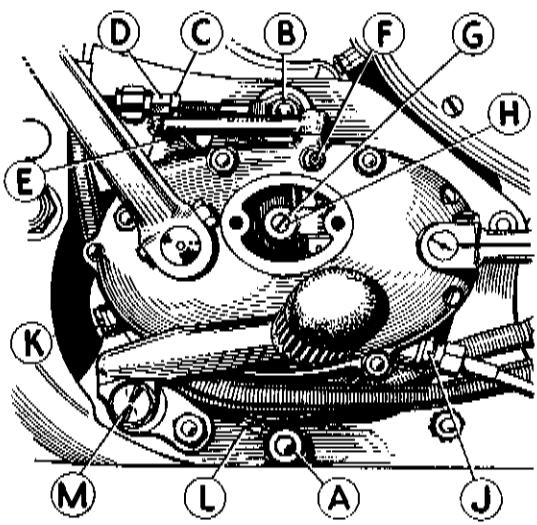

Fig. B22

adjuster *D* backwards or forwards until the chain tension is correct. This is when the maximum up and down movement of the chain at the tightest point is ½ in. Tighten the gearbox bolt nuts *A* and *B*, also the adjuster locknut, and re-check the adjustment. Note that after re-adjusting the primary chain, the rear chain will be in need of adjustment.

Chaincase Removal

Drain off the oil in the case by removing the drain screw in the lower edge of the primary chaincase. Two of the screws retaining the primary chaincase outer cover have red painted heads. The front one of these is the chaincase oil level screw, and the rear one the drain screw. Remove the left hand footrest. This may be rather tight, but a few light blows on the front of the footrest should free it. Undo the small screws round the rim of the chaincase and pull off the outer half.

To dismantle the cush drive assembly, bend back the cush drive nut locking washer by inserting a small screwdriver through the coils of the spring, and remove the nut. Withdraw the locking washer, the spring and the cush drive sliding sleeve. If any difficulty is experienced in unscrewing the cush drive nut due to the engine rotating, place the machine in gear and apply the back brake.

Remove the clutch in the manner described in Service Sheet 308.

Remove the engine sprocket and pull the cush drive bearing off the mainshaft. Unscrew the bolts which hold the inner half of the chaincase to the crankcase, after breaking the locking wire which passes through the heads of the bolts. There now remains only one bolt which secures the rear of the chaincase to the frame, and its removal will allow the chaincase to be detached.

Re-assembly of the primary transmission and chaincase should be carried out in the reverse order to dismantling.

Before replacing the cush drive nut ensure that the lock washer is correctly located in the splines on the mainshaft.

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