

# BSA SERVICE SHEET No. 308

Revised Nov., 1959

## M Group, C 10, C 11, A Group (S.A.), and B Group (Except those with engine prefix letters G.B.) DISMANTLING AND RE-ASSEMBLING THE CLUTCH

Take off the nearside footrest and then undo all the screws round the rim of the chaincase. As the outer half of the chaincase cover is taken off, careful note should be made of the positioning of the washers, etc., for replacement purposes. The joint washer should be carefully preserved.

Remove the six adjusting nuts, the springs and spring cups, and take off the clutch pressure plate so exposing the mainshaft nut which holds the clutch body in position.

The mainshaft nut is prevented from undoing by a locking washer which is turned over a flat on the nut. Flatten out the turned over edge of the washer and remove the nut. The clutch centre can now be withdrawn from the taper on the mainshaft using an extractor (Part No. 61-3362). Take care that the mainshaft key is not mislaid.

When the clutch is removed from the mainshaft it can be completely dismantled and the various components examined for wear. Special attention should be paid to the slots in which the clutch plates slide and any grooves should be removed with the aid of a fine file. If the grooves are very deep their removal will mean that the plates have excessive clearance and rapid wear will ensue. If the sprocket teeth are worn to a hook shape the sprocket must be replaced, otherwise rapid chain wear will result.

The steel plates should be smooth and if badly scored they should be replaced, while the fabric and cork inserts will require a thorough washing in petrol if there is any trace of oil on them. If the inserts are glazed or saturated in oil they should be replaced.

Finally, examine the balls, ball cages and tracks. If wear on the chainwheel bush or on the bearing boss of the clutch centre exceeds .0015in. the bush or centre should be replaced (see Service Sheet No. 702 for correct dimensions).

**Note:** When fitted to certain models this clutch is provided with additional plates, thus necessitating the use of a wider chain wheel and clutch centre, but the method of dismantling and re-assembly is unaltered. C10 and C11 Models have less plates than shown in the diagram but dismantling and assembly remain the same.

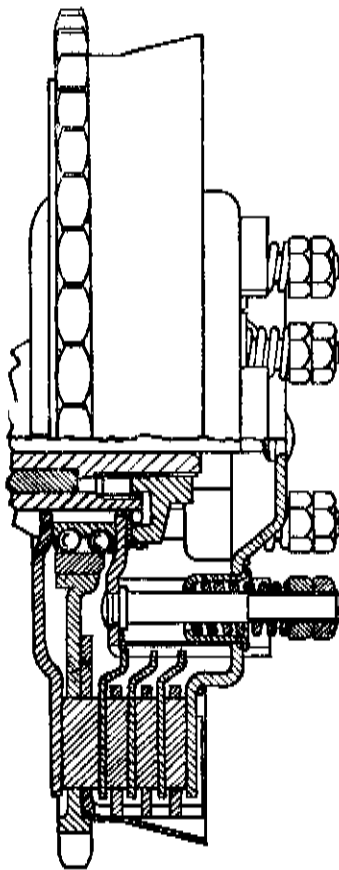


Fig. B18. Section Through Clutch.

### Re-Assembly of the Clutch

The clutch is of straightforward construction and a study of Fig. B18 will show how the parts are assembled. Do not forget the mainshaft key when replacing the clutch centre.

The plates must be fitted in their proper order as follows: Drive plate (tongues on inner diameter), fabric insert plate, drive plate, etc. Before re-fitting the pressure plate it is advisable to smear a small quantity of grease on the centre button at the point of contact with the clutch push rod.

The clutch springs should be replaced if they have shortened appreciably. The spring retaining nuts should be tightened initially until the outer nut 'A' (Fig. B19) is just fully engaged on its thread.

It is most important that the clutch spring pressure is evenly distributed, and this should be checked by ensuring that the clutch pressure plate does not tilt when the clutch is withdrawn. If the plate does tilt the nuts should be adjusted until the spring pressure is even. Unequal spring pressure may cause clutch drag and noisy gear change. When the adjustment is complete tighten the locknuts firmly.

### Clutch Re-Adjustment

After a considerable mileage has been covered it may be necessary to screw the spring retaining nuts in further to allow for wear on the clutch inserts. Release the locknuts 'A', and tighten the nuts 'B' by a few turns. After the adjustment has been carried out check that the clutch lifts evenly and then tighten the locknuts.

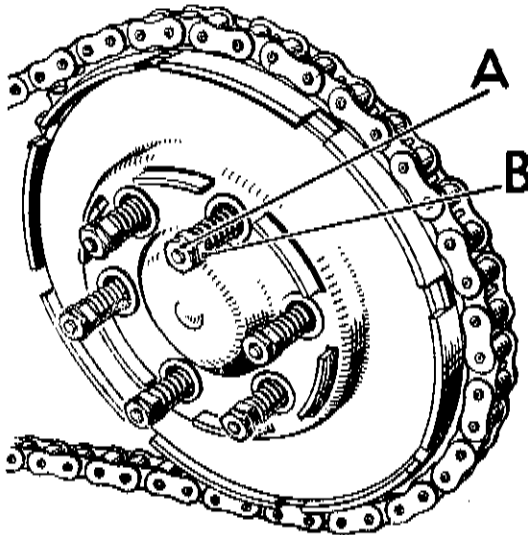


Fig. B19. Clutch spring adjustment.