BSA SERVICE SHEET No. 411

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C10L, C11G and C12 MODELS

CLUTCH

Dismantling

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

Remove the three spring retaining nuts and withdraw the springs, spring cups and distance pieces. The spring pressure plate and other clutch plates can then be removed, and if only attention to these items is required the clutch need not be dismantled further. The steel plates should be smooth, and if badly scored must be replaced, while the cork inserts will require washing in petrol if there is any trace of oil on them. If the inserts are burnt or glazed they should be replaced.

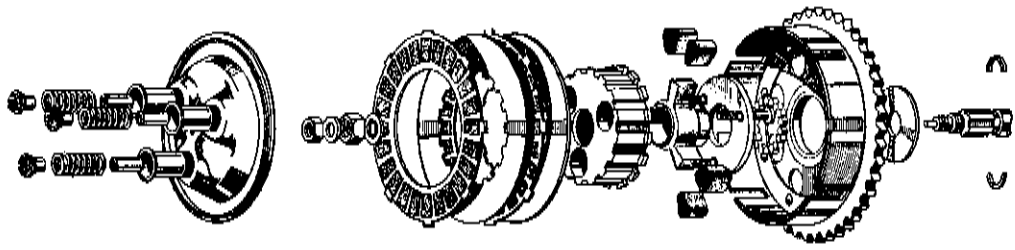

Fig. C31. Exploded View of Clutch.

To dismantle the remainder of the clutch, remove the outer mainshaft nut, which has a left-hand thread. Remove the washer and unscrew the inner nut, which has a right-hand thread. The complete clutch can then be withdrawn from the mainshaft, making sure that the rollers do not fall out from between the clutch centre and the chainwheel. The clutch thrust washer and its split circlip will probably remain in position on the mainshaft, but can easily be withdrawn.

Lift the chainwheel from the clutch centre and remove the 18 rollers. The three bolts and the cover plate from the clutch centre can also be removed to expose the vane and shock absorber rubbers. If the rubbers require attention, the vane must be pushed out with the aid of a suitable drift.

Re-assembly

Before commencing re-assembly examine the roller tracks on the chainwheel bush and clutch centre, and if the wear on either of these components exceeds .0015 in. it should be replaced.

If the chainwheel teeth are worn to a hook shape, the chainwheel must be replaced or rapid wear on the chain will result.

To re-assemble the vane into the clutch centre, first replace the vane and the three thicker rubbers which should be on the left-hand side of each vane arm. (A, Fig. C32). Hold an old gearbox mainshaft in a vice and position the vane centre on it to prevent it rotating.

Rotate the clutch centre so as to compress the rubbers and slip the remaining three rubbers into position. The clutch centre can best be gripped with the aid of a plain clutch plate. Replace the clutch centre cover plate B and the three bolts.

The remainder of the clutch assembly is quite straightforward. Ensure that the split circlip is properly located on the mainshaft before the clutch thrust washer is positioned against it. A dab of grease will serve to hold them in place. Position the 18 rollers carefully on the clutch centre before sliding the chainwheel over them. Re-position the remainder of the clutch on the shaft and replace the two nuts and washers, noting that the inner nut has a right-hand thread and the outer a left-hand. Make sure that the inner nut is fully tightened before the outer is replaced.

Replace the clutch plates ensuring that the thick plain back plate is put in first. When the spring assemblies have been replaced the retaining nuts should be tightened down firmly on to the distance pieces.

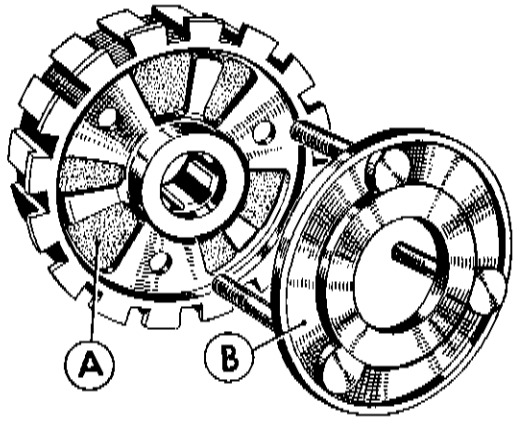

Fig. C32. Vane Assembly.

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