BS4 SERVICE SHEET No. 610

"M" Group Models

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DISMANTLING AND RE-ASSEMBLING THE CLUTCH

NOTE:—The clutch described in this sheet is fitted to all "M" group models up to Engine No. YM 101

For later models see Service Sheet No. 308.

Take off the left footrest and then undo all the screws round the rim of the chaincase. The nuts off these screws are welded to the other half of the case, and so cannot get lost. As the outer chaincase cover is taken off, careful note should

REMOVE SLEEVE NUT
BEFORE INSERTING
EXTRACTOR

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Fig. M36. Clutch extractor tool No. 4.

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be made of the positioning of the washers, etc., for replacement purposes (see Fig. M25). The joint washer should be carefully preserved.

The clutch cover is next to be removed exposing the clutch pressure plate, which in turn can be taken off after removal of the six nuts. By unscrewing the central ring nut all the clutch plates, both steel and fabric, will be released. Take care that the spring does not fly off as the nut is removed:

The clutch hub is held to the gearbox mainshaft by means of a sleeve nut through which the clutch push rod will be seen to protrude. Unscrew this nut and apply the extractor as shown in Fig. M36, thus drawing the remainder of the clutch off the mainshaft.

The various parts may now be examined for wear. Special attention should be paid to the slots in which the steel plates slide and if any grooves worn in them are not too deep the sides of the slots can be filed smooth. If the sprocket teeth are worn to a hook shape the sprocket must be replaced, otherwise rapid chain wear will result,

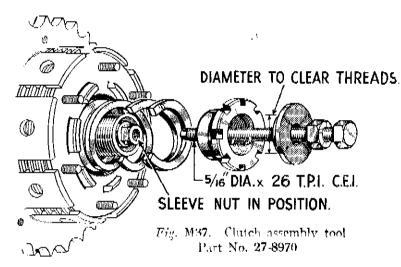
The steel plates should be smooth and if they are badly scored should be replaced, while the fabric rings will require a thorough washing in petrol if there is any trace of oil on them. Finally, examine the rollers and tracks and verify that the cork washer is intact.

B.S.A. Service Sheet No. 610 (continued)

RE-ASSEMBLY OF THE CLUTCH.

The clutch is of straight-forward construction, and a study of Fig. M38 will show how the parts are assembled. It is important to note that the

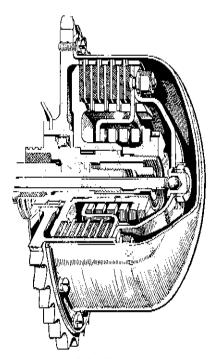
sliding plate (in rear half of chaincase) with gearbox mainshaft, refit clutch assembly to mainshaft after cork washer and key have been placed in position. Screw home and well tighten sleeve nut.



cork washer must not be omitted as this is for the purpose of preventing oil reaching the clutch. The plates must be fitted in their proper order, as follows: Fabric disc, driven plate (tongues on outer diameter), fabric disc, driving plate (tongues on inner diameter), etc., starting and finishing with a fabric disc of which there are eight.

Difficulty may be experienced in compressing the spring before the central ring nut can be started on its threads, and a suitable bolt and washer used as illustrated in Fig. M37 will enable the spring to be compressed sufficiently for the ring nut to be screwed home.

No adjustment is provided for altering the tension of the spring and the ring nut must be screwed up tight. After carefully centralising



Iiig, M38. Section through clutch.

Refit clutch actuating cap (first smearing small quantity of grease on ball in centre) and finally replace clutch cover. When replacing the clutch cover verify that the paper washer is in position and it should be lightly smeared with jointing compound before assembly, to ensure an oil tight joint.