BSA SERVICE SHEET No. 409

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C Group Models

PRIMARY TRANSMISSION

Clutch Adjustment, C10, C11, C10L 1954/5 & C11G.

Removal of the knurled filler plug from the gearbox outer cover will expose the clutch adjusting screw 'A' and locknut 'B' (Fig. C24). Loosen the locknut and turn the screw with a screwdriver until the angle between the operating lever and the cable is slightly less than a right-angle when the clutch is fully withdrawn. It will probably be necessary to alter the length of the cable by means of the adjuster 'C', to obtain the correct position for the lever. Re-tighten the locknut, and replace the filler plug.

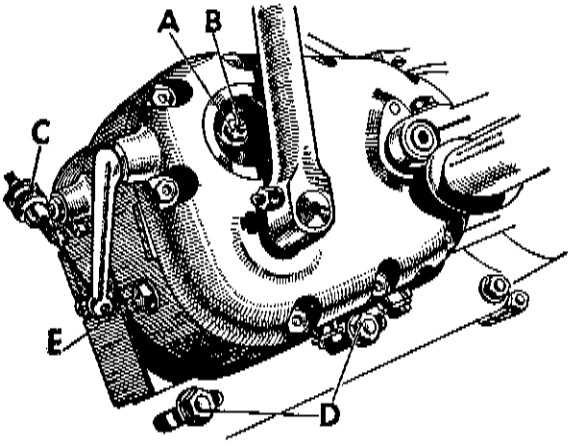

Fig. C24 Clutch and front chain adjustment.

When the clutch is engaged, it is essential that the cable has approximately $\frac{1}{8}$" free play to avoid a constant pressure on the clutch push rod, with consequent wear and loss of efficiency.

On four-speed models, the positioning of the components is slightly different and the inspection cover is retained by two screws, but the adjustments are identical.

Clutch Adjustment, C10L & C12 (1956 onwards)

The main clutch adjustment consists of a screwed pin C and locknut D, Fig. C24*a*, on the outside of the gearbox cover. Remove the large round screwed cap to expose the end of the clutch operating lever, There should be approximately $\frac{3}{16}$ inch play between the back of the clutch lever and the inside of the cover when the clutch is released. If the clearance varies appreciably from this, the locknut must be undone and the central pin screwed in or out until the adjustment is correct. The pin is the pivot on which the operating lever rotates and, therefore, screwing the pin in reduces the clearance. Tighten the locknut and re-check the adjustment.

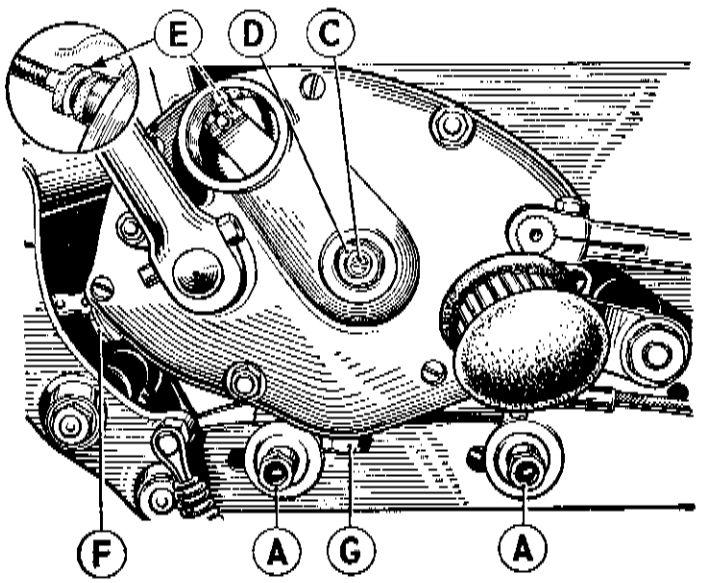

Fig. C24*a*. Clutch and Front Chain Adjustment.

When the adjustment has been completed the cable should be adjusted by means of the screw adjuster at the back of the gearbox inner cover E (Fig. C24*a*) until there is approximately $\frac{1}{8}$ inch free play at the handlebar end.

Front Chain Adjustment

The adjustment of the chain can be checked by removing the inspection cover from the chaincase. Turn the engine over slowly, and find the position in which the chain is tightest There should be a total up and down movement of $\frac{1}{2}$" at this point.

To adjust, slacken the two nuts ('D' Fig. C24 or 'A' Fig. C24*a*) and move the gearbox backwards or forwards as necessary, until the adjustment is correct. Then tighten the nuts and re-check the adjustment.

Note that, if the position of the gearbox has been altered, the rear chain will need adjusting also.

Chaincase Removal

Remove the drain plug from the rear of the case, and drain off the oil. Take off the left-hand footrest and undo the screws round the rim of the case, together with the two screws which secure it to the gearbox shield (when fitted). The nuts for these screws are welded on and cannot be lost. The chaincase outer cover can then be removed, taking careful note of the positions of the washers and distance pieces.

On C10 and C11 models, the engine drive shaft assembly is removed by prising back the tab of the lock washer with a screwdriver inserted between the coils of the shock absorber spring, and unscrewing the large nut on the end of the shaft. If the nut is very tight, engage top gear and apply the rear brake to prevent the engine turning. The spring and cam sleeve can then be withdrawn.

Rotate the clutch until the spring connecting link in the chain is on the top run, and in line with the recess in the back of the chaincase. Remove the spring link, followed by the chain and engine sprocket.

Take off the clutch, as described in Service Sheet No. 308, and withdraw the rear part of the chaincase after unscrewing the bolts which secure it to the crankcase.

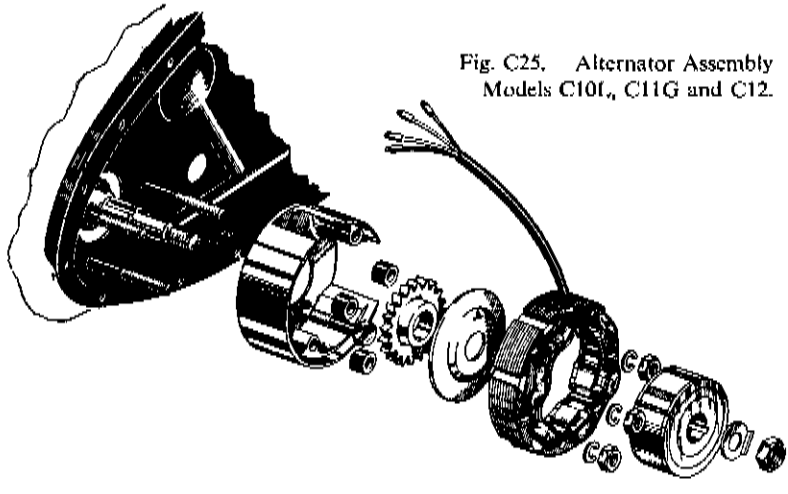

Fig. C25. Alternator Assembly Models C10L, C11G and C12.

The alternator assembly on C10L, C11G, and C12 models is dismantled by prising back the tab on the lock washer and unscrewing the large nut on the end of the engine shaft. If the nut is very tight, engage top gear and apply the rear brake to prevent the engine turning. Next take off the three nuts (four on some early models) which retain the coil assembly. Lift this off the studs and withdraw the rotor, which is keyed to the shaft, also the dished aluminium washer. Should the coil assembly prove difficult to remove, it may be gently prised off with a screwdriver, taking great care not to damage the windings.

A limited number of machines was produced employing a brass shield behind the rotor, in conjunction with a plain steel washer on the shaft, in place of the dished aluminium washer. The four stud fixing for the coil assembly was used with this arrangement.

Rotate the clutch until the spring connecting link is on the top run, and in line with the recess in the back of the chaincase. Remove the spring link, followed by the chain and engine sprocket.

The alternator housing can now be withdrawn, after removing the retaining bolt and the three distance pieces from the studs. On models having four studs, the housing is retained by two nuts.

Take off the clutch, as described in Service Sheet No. 411, disconnect the wires from the alternator at the push-in connectors, and withdraw the rear part of the chaincase.

Chaincase Re-assembly

Reassembly of the front chaincase is carried out in the reverse order to dismantling.

Ensure that the alternator (when fitted) is correctly assembled (see Fig. C25), and that the washer between the rotor and the engine sprocket has not been omitted. The wires from the alternator must be positioned so that they cannot foul the chain.

New lock washers should be used for the large nut on the engine shaft, and the nut must be fully tightened before the tab is bent over.

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