

chains and then drains to the sump.

A small circular magnet is fitted over the fixing stud inside the oil filter for the purpose of collecting any ferrous particles which may be suspended in the oil.

16. Breather

The engine is ventilated to atmosphere by a long, large diameter plastic pipe extending to the rear of the machine and connected to a union screwed into the top of the crankcase.

17. Gearbox

The gearbox is bolted on to the back of the crankcase and has four speeds, which are foot controlled, and a patented neutral finder. All

gears are in constant mesh, changes being affected by robust dog clutches. (See Subsection 64).

The standard gear ratios with 20T gearbox sprocket are as follows:—

Bottom Gear	.....	.....	.....	12.40
Second Gear	.....	.....	.....	8.19
Third Gear	.....	.....	.....	6.05
Top Gear	.....	.....	.....	4.44

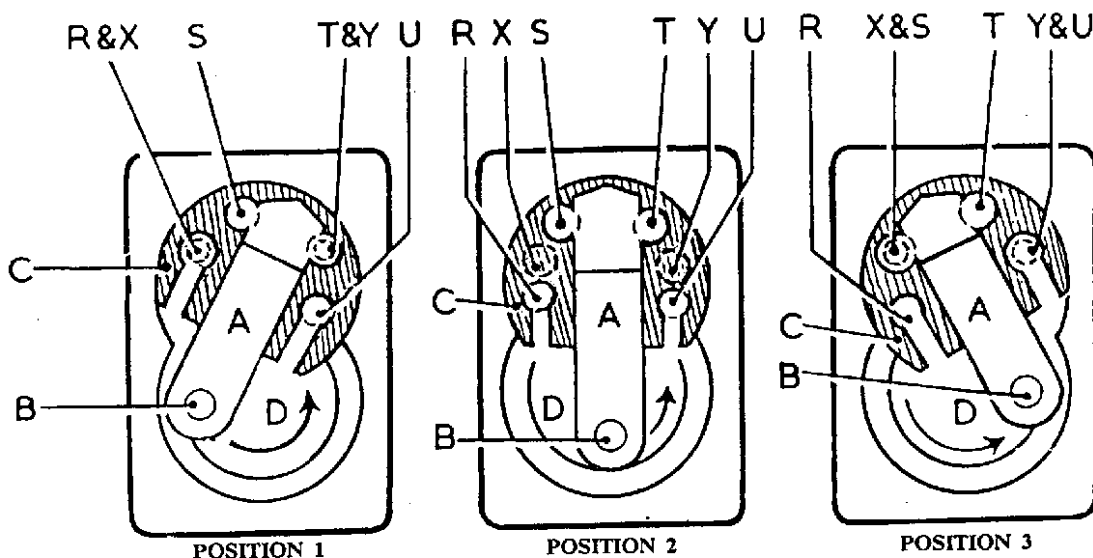
18. Clutch

The clutch has six pressure plates and five friction plates, including the sprocket which is lined on both sides with a bonded cork based friction material.

A description of the operating mechanism is given in Subsection 63.

Oil Pump Diagram

Fig. 3



The ports in the housing are connected as follows:—
X — delivery to big ends. Y — suction from oil tank.

Position 1. The plunger A is being drawn out of the cylinder hole in the disc C by the action of the peg B on the shaft D. The port T in the disc C registers with the suction port Y in the housing, so that oil is drawn into the cylinder from the oil tank. At the same time port R in the disc registers with the delivery port X in the housing and oil below the disc is forced through X to the big ends.

Position 2. The disc is in the central position where the individual ports can be clearly seen.

Position 3. The plunger A is being pushed into the cylinder hole in the disc C. The port S in the disc now registers with the delivery port X in the housing, so that oil is forced out of the cylinder to the big ends. At the same time the suction port U in the disc registers with the suction port Y in the housing and oil is drawn into the housing below the disc from the oil tank.