

Fig. 20. Oil sump and flywheel cover gauze

REASON FOR LOW OIL PRESSURE

If the warning light comes on, or the oil pressure gauge (if fitted) shows a reduced oil pressure the reason may be:

Low oil level in sump.

Pressure relief valve not working properly.

Choked oil filter.

Worn main and big end bearings.

Worn oil pump.

Choked oil pump intake filter.

OIL SUMP—To remove and refit (See Fig. 20)

Drain sump.

Remove gauze guard over bottom of flywheel and the $24 \frac{7}{16}$ in. A.F. nuts and spring washers holding sump to the cylinder block.

Remove sump and sump joint.

When replacing sump a new joint should be fitted.

OIL PUMP

Information on service replacement oil pumps is given on page 41.

Operation

A four-lobe rotor pinned to the pump spindle, drives a ring which has five internal lobes. The outer diameter of the ring rotates in the circular bore of the oil pump body; this bore is offset to the spindle axis. These parts are shown in Fig. 22.

The lobes run at a very close clearance. Their rotary movement creates constant suction to draw oil through the pump intake filter and delivers oil at a high pressure to the outlet gallery feeding to the oil filter.

The oil pump output, above a very fast idling speed, is greater than the rate at which oil can pass through the engine bearings. This causes a build up of oil pressure which is controlled by the oil pressure relief valve situated in the oil filter body.

Oil pump intake filter—To clean (See Fig. 21)

Whenever the sump is removed the opportunity should be taken to inspect this wire gauze filter.

Provided the recommended lubricating oil is used, and the external full flow oil filter element changed at the recommended intervals, the intake filter does not normally need cleaning.

If cleaning is needed the oil pump base must be removed. NO ATTEMPT MUST BE MADE TO REMOVE THE FILTER PIPE FROM THE OIL PUMP BASE.

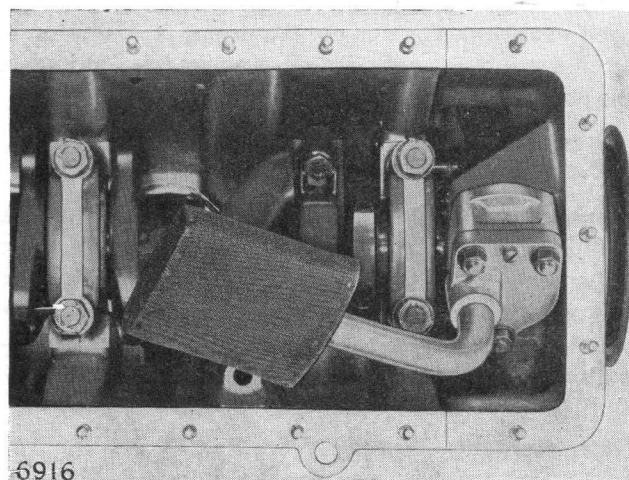


Fig. 21. Oil pump intake filter