

## General Description

The engine lubricating oil is taken from the oil pan through a screened intake pipe up to the oil pump, where it is discharged into a gallery running lengthwise in the left hand side of the crankcase casting. From this gallery, drilled holes lead off to the valve tappets, camshaft and crankshaft main bearings.

Drillings in the crankshaft convey oil from the main bearings to each connecting rod bearing. Oil thrown from the connecting rods and main bearings lubricates the pistons, piston pins, and cylinder walls.

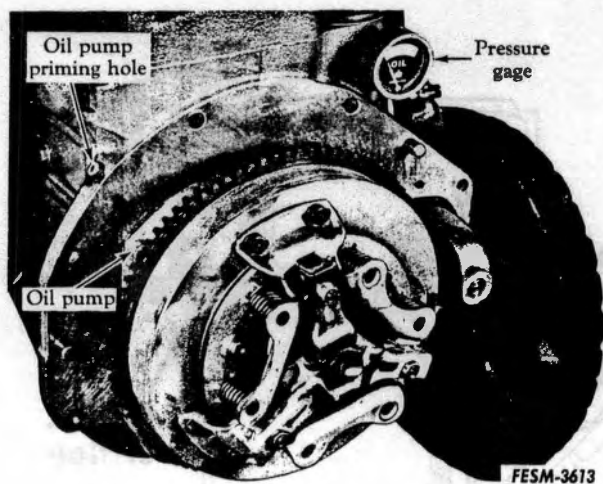
Another drilled hole from the main gallery supplies oil to the timing idler gear stud, and the pressure regulator

valve. The pressure regulator valve and spring is retained by a hex-head plug on the right side of the crankcase near the timing gear end. Oil bypassed by the regulator valve is returned to the oil pan.

A drilled hole from the main gallery also delivers oil to the oil filter. Flow of oil through the filter element is metered by the outlet orifice in the cover retaining bolt. Cleaned and filtered oil is returned to the oil pan from the drilled retaining stud.

The timing gears and governor are lubricated by oil thrown from the front bearings of the camshaft and crankshaft, and from the idler gear stud.

## Oil Pump



The gear type oil pump is located at the rear end of the camshaft outside the crankcase behind the flywheel. The pump draws oil through a drilling in the crankcase and the intake pipe from the oil in-

take screen. Clean this screen each time the oil pan is removed. The connection between the oil intake pipe and the crankcase must be air tight.

A 1/8-inch pipe plug, located at the rear left side of the crankcase near the top of the flywheel housing, gives access to the pump for priming. This priming should only be necessary when the pump has been assembled dry or after long periods of storage, where the pump may have drained completely.

The oil pressure indicator shows whether the oil pump is working, when the system is correctly filled. At idle speed or above the indicator needle should register. If the needle does not register stop the engine and determine the reason.