

## Removing and Installing Oil Pressure Control Valves

Special Tools: P 74 Socket attachment

15 EN

### General

The pressure relief valve is located in the crankcase and regulates engine oil pressure.

In case of oil failure, and always in case of oil cooler leaks check the operation of the pressure relief valve. The by-pass valve is located in the timing case cover and insures immediate lubrication to the engine bearings when starting.

### By-pass valve function:

The by-pass valve in the timing case cover insures immediate oil flow to the lubrication points, by-passing the oil cooler which is normally included in the main oil flow.

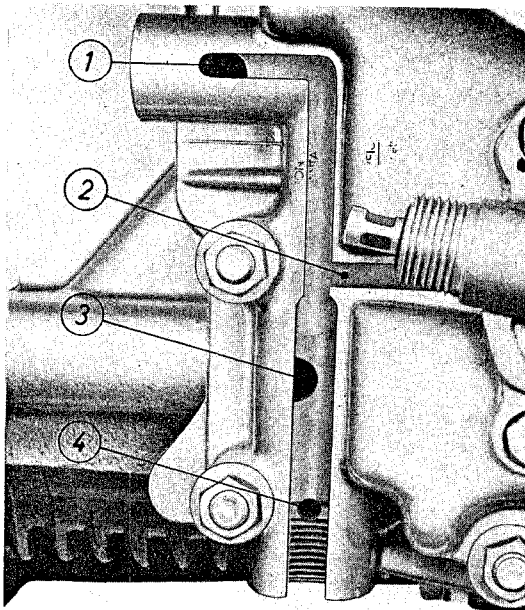


Fig. 111

- ① Oil passage to oil cooler
- ② Oil passage from oil pump
- ③ Oil passage direct to the lubrication points by-passing the oil cooler
- ④ Oil passage from back pressure line

With the engine not running the piston is in the closed position blocking oil passage (3) to the lubrication point. As soon as the engine is started, oil is drawn from the sump and forced into the by-pass valve chamber pushing the piston downward. The oil passage which passes directly to the lubrication points is then opened (Fig. 112).

As soon as the oil has filled all the passages pressure increases and returns through the back pressure line

to the bottom of the by-pass valve piston. The piston is moved to the closed position by the spring and feed

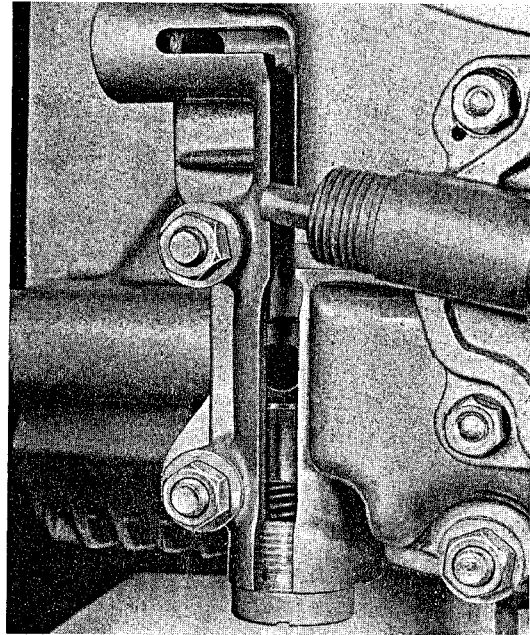


Fig. 112

back oil pressure. The oil must now pass through the oil cooler before lubricating the engine (Fig. 113).

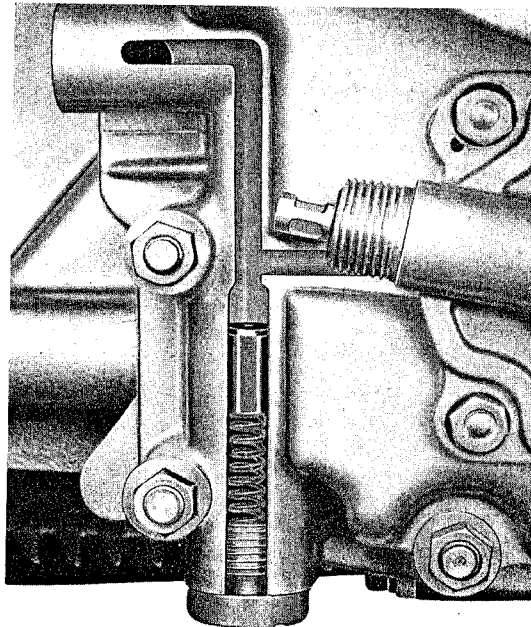


Fig. 113