

Removal and Installation of Oil Filter

Job No.
18-7

A. OM 636

The characteristic feature of the oil filters on the engines of the different types is the horizontal or vertical arrangement of the designs (see the following table and Figure 18-7/1 and 18-7/3).

Table of the installed Oil Filters

Part No.	Type Designation of the Engines				
vertically arranged oil filter 636 180 05 10 or 000 184 48 01 optional	636.	$\left\{ \begin{array}{l} 930 \\ 935 \\ 917-022 \text{ and/or } 917/28 \\ 917-023 \text{ and/or } 917/33 \\ 917-040 \text{ and/or } 917/5 \\ 917-340 \text{ —} \end{array} \right.$			
vertically arranged oil filter 636 180 06 10 or 000 184 55 01 optional	636.	$\left\{ \begin{array}{l} 919 \\ 934 \end{array} \right.$			
horizontally arranged oil filter 636 180 03 10	636.	$\left\{ \begin{array}{l} 912 \\ 914 \\ 915 \\ 916 \\ 918 \\ 931 \\ 932 \\ 933 \\ 917/0 \\ 917/2 \\ 917/3 \\ 917/4 \\ 917/6 \\ 917/9 \\ 917/10 \\ 917/11 \\ 917/12 \\ 917/13 \end{array} \right.$	636.917/	$\left\{ \begin{array}{l} 14 \\ 15 \\ 16 \\ 17 \\ 18 \\ 19 \\ 20 \\ 21 \\ 22 \\ 23 \\ 24 \\ 25 \\ 26 \\ 27 \\ 29 \\ 30 \\ 31 \\ 32 \end{array} \right.$	
			636.917-	$\left\{ \begin{array}{l} 00 \\ 021 \\ 050 \\ 090 \\ 120 \\ 180 \\ 190 \\ 221 \\ 222 \\ 223 \\ 240 \\ 251 \\ 252 \\ 253 \end{array} \right.$	
				636.917-	$\left\{ \begin{array}{l} 260 \\ 270 \\ 271 \\ 272 \\ 280 \\ 290 \\ 300 \\ 310 \\ 320 \\ 330 \\ 350 \\ 360 \\ 370 \end{array} \right.$

Both filters are arranged in the main oilway and function similarly (also see Job No. 18-1, Section A). The removal and installation of the two design versions is only insignificantly different.

Disassemble and clean oil filter (see Job No. 18-9, Section A).

Removal:

1. Disconnect the oil pressure gauge line at the adapter (4) (see Figure 18-7/1) and/or at the connector (8) (see Figure 18-7/3) of the oil filter.
2. Disconnect the oil line from cylinder block to oil filter.

Note: On the engines with centrifugal governor the shape of the oil line and the connector on the cylinder block had to be changed due to lack of space (see Figure 18-7/2).

This oil line has to be disconnected at the connecting joint (2) for the removal of the oil filter (see Figure 18-7/2).

During the removal of the oil line counterhold the line section connected to the cylinder block with a spanner. The line section attached to the cylinder block remains there, because disconnecting is not possible while the injection pump is installed.

3. Unscrew the hexagon screw and the adapter fixing the oil filter to the cylinder block and remove oil filter with gasket.

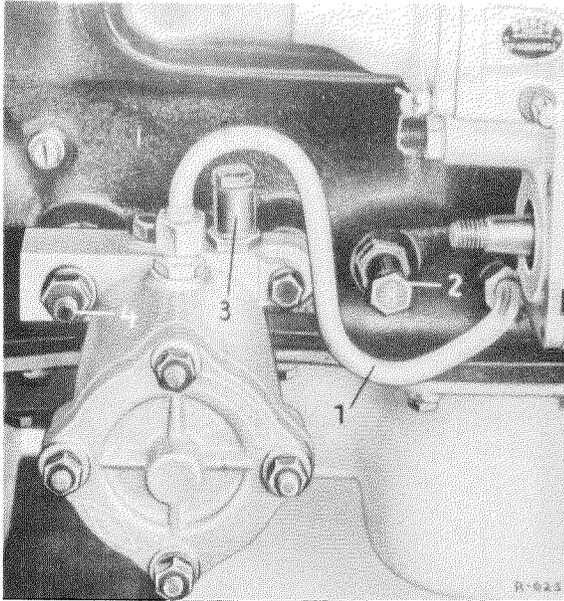


Figure 18-7/1

- 1 Oil line from cylinder block to oil filter
- 2 Oil relief valve in main oilway
- 3 Oil relief valve in oil filter
- 4 Connector for oil pressure gauge line and adapter for the oil passage from filter to main oilway

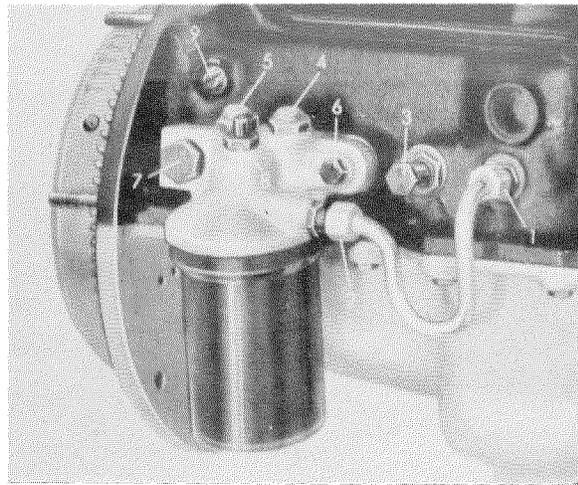


Figure 18-7/3

- 5 Oil relief valve in oil filter
- 6 Fixing screw
- 7 Adapter
- 8 Connector for the oil pressure gauge line
- 9 Locating screw of camshaft bearing

Installation:

The contact surfaces on the flange joints of the cylinder block and the oil filter must be level and clean.

- 4. Put the oil filter housing with new gasket on the connecting flange, screw in and tighten the fixing screw and adapter.
- 5. Connect the oil line from cylinder block to oil filter and tighten.

Note: On engines with centrifugal governor counterhold the line section attached to the cylinder block with a spanner.

- 6. Connect the oil pressure gauge line to the adapter (4) (see Figure 18-7/1) and/or the connector (8) (see Figure 18-7/3) of the oil filter.
- 7. Run the engine, check filter and connections for leaks (oil loss).

Refill approx. 0.5 lit. if no oil change is made.

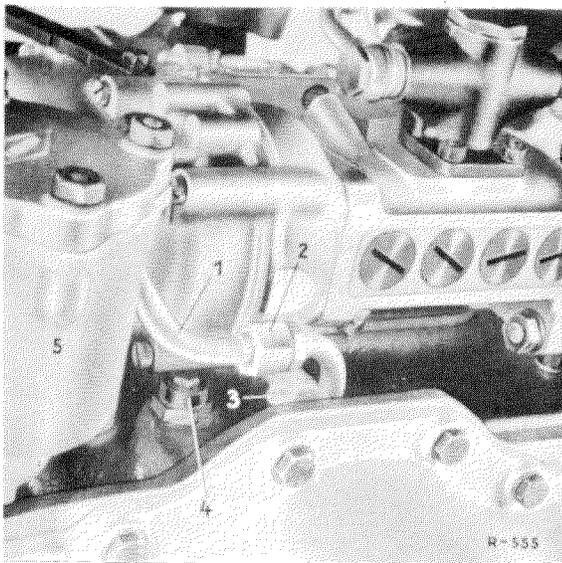


Figure 18-7/2

- 1 Oil line from cylinder block to oil filter
- 2 Connecting joint of oil line
- 3 Flat connector of oil line
- 4 Oil relief valve in main oilway
- 5 Oil filter