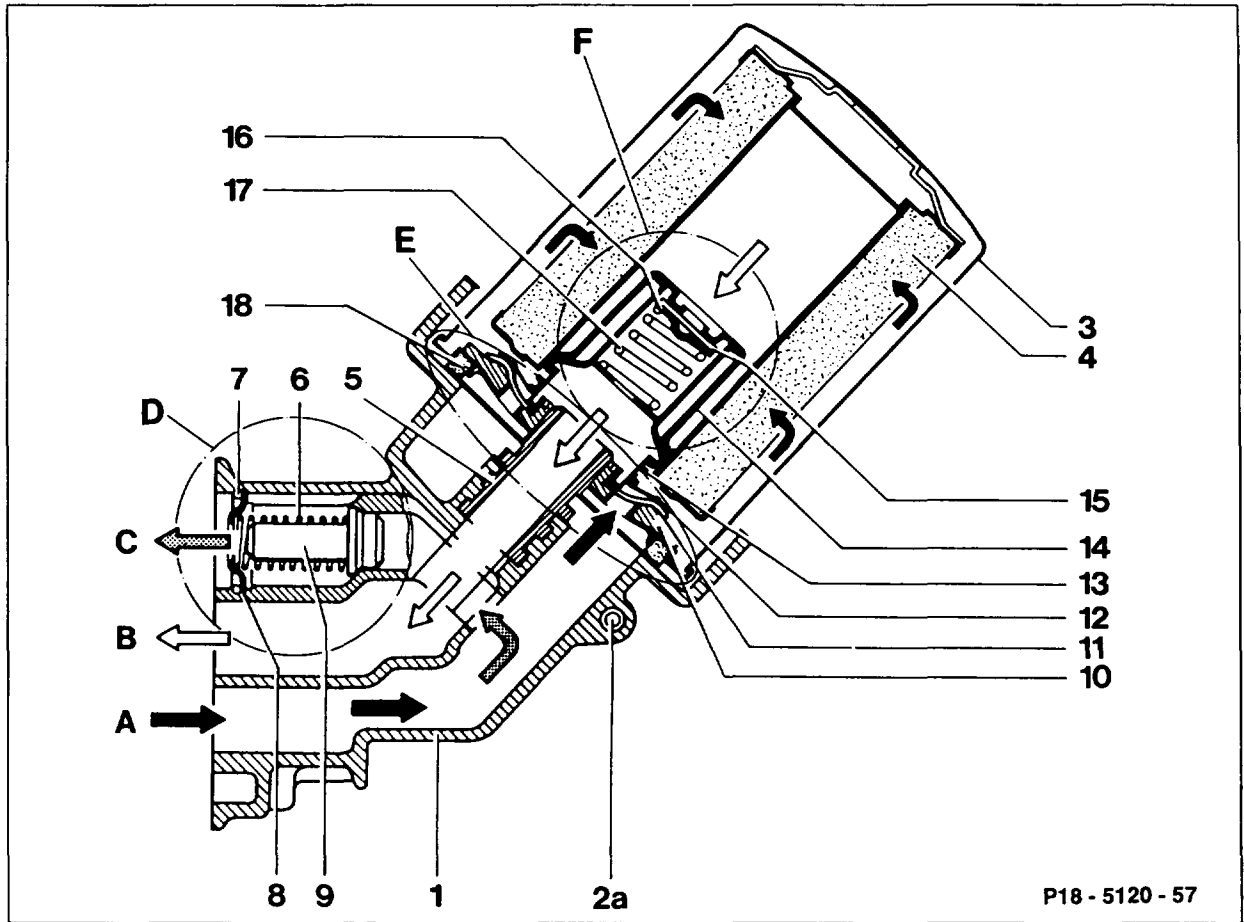


18-1000 Operation of oil filter



- | | | | |
|----|--------------------------------|----|------------------------------------|
| 1 | Oil filter | 11 | Rubber diaphragm |
| 2a | Bottom part of oil filter | 12 | Spring plate |
| 3 | Oil pressure sensor connection | 13 | Compression spring |
| 4 | Replacable cartridge | F | Return flow shut-off valve |
| 5 | Filter element | 14 | Valve holder |
| D | Oil filter bypass valve | 15 | Valve plate |
| 6 | Connection fitting | 16 | Valve plate carrier |
| 7 | Compression spring | 17 | Compression spring |
| 8 | Circlip | 18 | Seal |
| 9 | Oil filter bypass valve | A | Feed from oil pump |
| 10 | Oil drain lock | B | Filtered oil to main oil gallery |
| 11 | Pressure plate | C | Unfiltered oil to main oil gallery |

The full-flow oil filter consists of the bottom part (1) and the replaceable cartridge (disposable filter) (3). The rubber seal (18) is attached as a captive seal to the replaceable cartridge.

D Oil filter bypass valve

The bypass valve opens as soon as the flow resistance in the replaceable cartridge rises above $2 + 0.3$ bar. Unfiltered engine oil then flows into the oil circuit.

E Oil drain lock

The spring-tensioned rubber diaphragm in the replaceable cartridge prevents dirty oil flowing out of the replaceable cartridge when the engine is switched off or when replacing the filter.

F Return flow shut-off valve

The return flow shut-off valve (F) in the replaceable cartridge prevents clean oil flowing out of the replaceable cartridge at the bearing points when the engine is switched off.