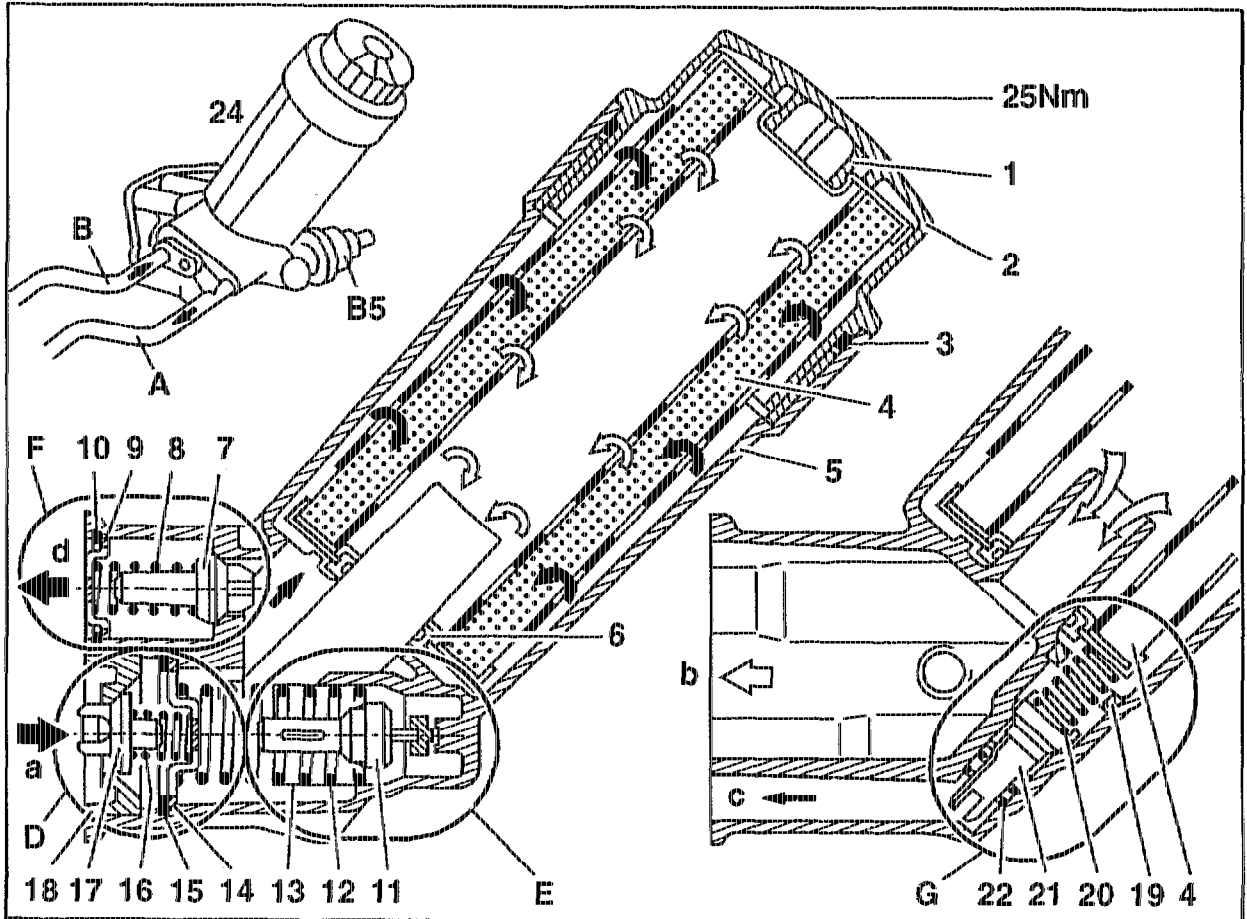


Engines with air-to-oil cooling



P18-5258-57

- |    |                           |    |                                      |
|----|---------------------------|----|--------------------------------------|
| 1  | Oil filter                | E  | Oil cooler feed thermostatic element |
| 2  | Oil filter element holder | 11 | Thermostatic element                 |
| 3  | Screw cap                 | 12 | Compression spring                   |
| 4  | Seal                      | 13 | Sliding sleeve                       |
| 5  | Oil filter element        | F  | Oil filter bypass valve              |
| 6  | Oil filter housing        | 7  | Valve cone                           |
|    | Gasket                    | 8  | Compression spring                   |
| D  | Non-return valve          | 9  | Spring disc                          |
| 14 | Spring disc               | 10 | Circlip                              |
| 15 | Circlip                   |    |                                      |
| 16 | Compression spring        |    |                                      |
| 17 | Valve cone                |    |                                      |
| 18 | Valve seat (locking ring) |    |                                      |

G	Oil drain valve
19	Circlip interference-fit
20	Compression spring
21	Valve cone
22	Compression spring
24	Oil filter view
B5	Oil pressure sensor models 124, 129, 140

A	Unfiltered oil to air-to-oil cooler
B	Unfiltered oil from air-to-oil cooler
a	from oil pump
b	to bearing points
c	Oil return to sump when changing filter
d	Unfiltered oil to bearing points

#### **D Non-return valve**

The non-return valve prevents the oil filter running dry when the engine is switched off. Opening pressure 0.2 bar.

#### **E Oil cooler feed thermostat element**

The thermostat element opens from an oil temperature of 106 °C and feeds the engine oil through the air-to-oil cooler into the filter chamber of the oil filter.

#### **F Oil filter bypass valve**

The bypass valve opens when the oil flow is 1 l/min. and  $3 \pm 0.4$  bar and unfiltered engine oil flows into the oil circuit.

#### **G Oil drain valve**

When the oil filter element (4) is raised, the oil drain valve opens and the engine oil flows out of the filter chamber of the oil filter into the sump.