

Issue No.: 3/2012 – Installation note for MAHLE OC 593/4 and OC 593/3 spin-on oil filters (available from the end of 2012).

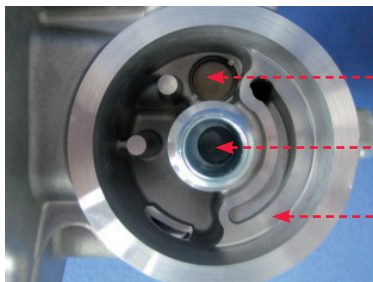
This oil filter with integrated anti-drain back mechanism is being fitted in various models and brands of the VW Group (1.2 L and 1.4 L TSI gasoline engines). It is located on the generator bracket and is screwed on to the flange upside down.



OC 593/4

Figure 1: Installation position: view of the engine from above

The inlet port for the pump (dirty side), the threaded bolt (clean side), and the anti-drain back plate are located in this flange.



Inlet port
(dirty side)
Threaded bolt
(clean side)
Anti-drain
back plate

Figure 2: View of the flange from above

The anti-drain back mechanism on the flange contains a gasket, which is pushed onto the anti-drain back plate in the flange by means of spring force and provides a seal when screwed on.



Recesses
Anti-drain back
mechanism

Figure 3: MAHLE OC 593/4

When removing the used filter, the recesses on the side of the anti-drain back mechanism ensure that the residual oil in the filter and flange flow back into the oil sump via the anti-drain back plate.

Important: in order to ensure that the remaining residual oil on the clean side flows back completely, you should always wait for a short period of time. If you proceed too quickly with this work step, the residual oil will spill over the flange and cause soiling.

After changing the oil, tighten the filter. The anti-drain back plate, which protrudes from the housing disc, is thus axially sealed. (Please note: to counteract the spring force of the anti-drain back mechanism, a slightly higher tightening torque than for conventional spin-on filters is required.) During operation, the unfiltered oil flows via the inlet port into the filter; once filtered, it escapes via the threaded bolt.

WHAT ELSE YOU SHOULD KNOW ABOUT THE GASKET:

The gasket on the anti-drain back mechanism is the interface to the engine flange—a most important function, which can only be performed properly if it is positioned correctly.

When removing the used oil filter, please ensure that the old gasket is removed too. Experience has shown that there have been instances where the old gasket remained on the flange unnoticed and two gaskets were fitted on top of each other when the new oil filter was fitted. The consequences: the valve no longer opens fully or the filter leaks.



Gasket on the anti-drain back mechanism, slightly raised from the retainer by way of illustration

Figure 4: MAHLE OC 593/4