MAHLE

TECHNICAL MESSENGER

Issue no. 04/2019:

Installation note on oil filter inserts with nonreturn mechanism

The MAHLE oil filter inserts OX 982 D (Mercedes M260/264, M270/274) and OX 560 D (BMW M57, N57) are fitted with a nonreturn mechanism on the lower section of the filter element. This mechanism, in the form of a sealing disc, seals the oil infeed as soon as there is no more oil pressure—i.e., immediately after turning off the engine.

Using this nonreturn mechanism prevents oil from running off and the filter housing being drained when the engine is not in operation. When the engine is restarted and the oil pressure rises again, the sealing disc opens once more, ensuring an immediate supply of oil and lubrication to the engine.

When changing the oil filter insert, however, the nonreturn mechanism may become disengaged from the filter and remain in the filter housing (on the vehicle). If this goes undetected, it could cause serious damage to the engine.





Figure 3: Installation position of the oil filter in the engine compartment of a Mercedes C200, engine M264

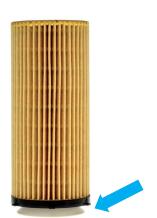


Figure 1: OX 560 D with attached nonreturn mechanism



Figure 2: 0X 982 D with detached nonreturn mechanism

→ IMPORTANT! When changing an oil filter insert with a nonreturn mechanism, it is crucial to check that the old filter is complete! The sealing rings need to be replaced and coated with clean engine oil prior to assembly, along with the fleece end cap, in order to prevent damage during installation!

>> See also Issue no. 03/2015: MAHLE OX filter with fleece end cap

