

Issue No.: 4/2012 – OX 171/2 D Eco and OX 171/16 D Eco: Critical design differences between MAHLE and the competition

For years, MAHLE has been supplying the OX 171/2 D Eco and the OX 171/16 D Eco—which is new to the aftermarket—for series production. These oil filter inserts are used in numerous models with 1.4 L and 1.6 L diesel engines (OX 171/2) from manufacturers including Citroën, Peugeot, Mazda, and Volvo, as well as in the Fiat 500 Twin Air (OX 171/16). They are equipped with the pin patented by MAHLE and are cut exactly to match the geometry of the oil filter housing.



Figure 1: MAHLE OX 171/2 D Eco



Figure 2: Competitor's replica

Important when replacing the filter inserts: you must fit either an OX 171/2 D Eco or OX 171/16 D Eco from MAHLE Original or Knecht, because only these will satisfy the high demands of original equipment (pin and exact fit).

When using competitors' products, you run the risk of fitting difficulties and/or damage to the bypass valve, which is situated in a functional support in the oil filter housing. This may even be exacerbated when closing the oil filter housing, i.e. when the lid is screwed on. The bypass valve is responsible for ensuring the supply of oil to the engine—in case of doubt, the oil supply has priority over oil filtration, e.g. when the oil is very viscous directly after starting the engine in very low temperatures. Consequently, a faulty bypass element can trigger considerable consequential damage to the engine.

To prevent such damage, it is imperative that an OX 171/2 D Eco or OX 171/16 D Eco with patented pin from MAHLE is used when replacing the filter insert.

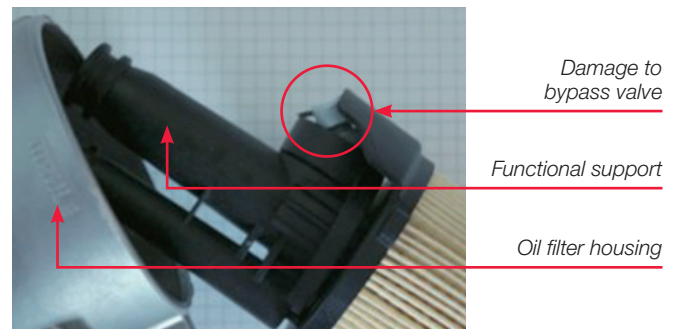


Figure 3: Damage to bypass valve after fitting a competitor's replica filter