

## Issue no. 02/2016: Comparison of MAHLE oil filter inserts OX 404 and OX 813/1

The oil filter inserts OX 404 and OX 813/1 have a closure plug on the front end, usually called pin at MAHLE. When the insert is removed, this pin reveals a return bore in the filter housing, so that all of the oil from the module can drain into the oil sump. The pin in the new insert in turn seals this return bore, so that the oil circuit is again intact after assembly.

What doesn't show on the two filter inserts is a design difference in the way the pin fits into the return bore during installation.

The previous design allows the pin on the OX 404 to slide up to the return bore in the oil filter housing by means of a helical guide rail (called the ramp). In the new design, the pin on the OX 813/1 is fitted in the proper position by means of a locating tab on the inside of the filter.

We have depicted these two processes for you in an animation. Simply follow the link below to our Youtube channel:



<https://www.youtube.com/watch?v=qvsfj8v-FYQ>

**CAUTION!** If an attempt is mistakenly made to fit the OX 813/1 in a housing intended for the OX 404, this will be blocked by the locating tab on the inside of the filter. In the opposite case, however, no blockage occurs; the mechanic can therefore not detect the difference and is able to fully fit the insert in the module.

If this error goes unnoticed, the oil pump will be unable to build up oil pressure, resulting in severe engine damage.

**IMPORTANT!** Prior to installation, please check whether you have the correct oil filter insert and ensure where appropriate that a locating tab is visible inside the insert (see figure 2).



Figure 1: Almost identical oil filter inserts: OX404 on the left and OX813/1 on the right

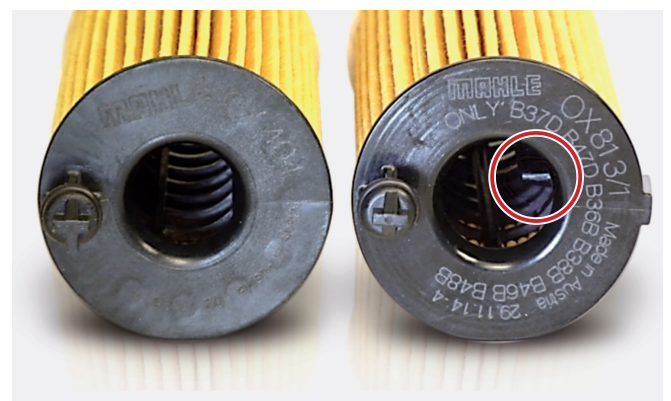


Figure 2: The locating tab is clearly visible: OX404 on the left (without) and OX813/1 on the right (with)