

# Keep your hydraulic system clean

Drivers' tips 4 explains the importance of keeping the oil in the hydraulic system in top condition. Part of this is replacing the hydraulic filter in time. Knapen Trailers advises you to do this every year. It is a cheap and relatively easy way to avoid high repair costs! However, from our own experience, we know that hydraulic filters are not always replaced in time, which causes contaminated or defective filters. But this is a hidden problem you will hardly notice: the hydraulic system continues to function thanks to a relief valve in the filter housing. This valve opens automatically when the filter is heavily soiled. This can allow contaminated oil to enter the system, resulting in serious damage. And then a costly repair is needed to rectify the problem!



## Tip 1

So even though the filter might seem clean, we still advise you to replace it. Blocked pores in the filter - which are invisible to the naked eye - can still restrict the flow of oil. And, due to its fine mesh, an oil filter cannot be cleaned.

On top of this, inspecting the filter involves the same amount of work as replacing it. And a new filter element is so inexpensive that the labour costs for the extra inspection of the filter are probably higher than the cost of the filter itself! So, it is always better to replace the filter. After all, a small investment in the short term can save you the costs of an expensive repair in the long term!



*Soiled filter*



## Replacing the filter

Replacing the filter annually is a cheap and relatively easy job that you can do yourself. For some time now, Knapen Trailers has mounted the hydraulic system with the filter housing facing outside, so it is easily accessible and you can simply replace the filter housing yourself.

Follow the steps below to replace the hydraulic filter:



- 1 Disconnect the hydraulic hoses between the truck and the trailer.
- 2 Place a drip tray under the filter housing to catch any possible oil leaks.
- 3 Loosen the filter housing with wrench 24.
- 4 Remove the filter housing and remove the filter.
- 5 Check the filter for contamination and any damage. In case of damage, contact your dealer or service partner.
- 6 Remove the O-ring from the filter housing and check it.
- 7 Is the O-ring damaged or does it feel brittle? In that case, replace it with a new O-ring.
- 8 Place the new filter.
- 9 Coat the threads of the filter housing with copper anti-seize grease.
- 10 Coat the O-ring with oil using your finger and place it on the filter housing.
- 11 Tighten the filter with wrench 24. Do not over-tighten!
- 12 Connect the hydraulic hoses and operate the floor.
- 13 Check the filter housing for leaks



## Tip 2

If you wait too long to replace the filter, or use none or not enough copper anti-seize grease to lubricate the screw thread, corrosion can cause the filter housing to stick, making it difficult or even impossible to loosen. Is the filter housing stuck and wrench 24 fails to loosen it? Strike the filter housing with two hammers at once. The hard impact should allow you to loosen it. No luck? Contact your Knapen dealer or service partner. In the worst case, there will unfortunately be no alternative but to replace the complete filter housing.





### Tip 3

Have the hydraulic hoses been connected incorrectly? In this case, we always advise you to not only connect the hoses correctly, but also to physically check the filter. There is a risk that the filter has exploded, causing filter material to enter the hydraulic system. As a result, the hose system may become blocked or certain functions can fail.



The filter housing in the photos above has exploded.



Residues of filter material in the hydraulic system



### Tip 4

Make sure you have the right parts before you start the job. There are several filters available. The filter suitable for your trailer depends on the year of manufacture. Contact your Knapen dealer or service partner to identify the correct parts. Make sure you have noted the chassis number of your trailer and the serial number of the system.



## SPARE PARTS

To order spare parts, please contact your [dealer](#) or [service partner](#).

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April 2004 - August 2020



**60101774**  
Filter element



**BDIC008140**  
Filter element



**SC01116**  
Seal set  
hydraulic filter CF500



**60101775**  
Filter element



**BDIC008141**  
Filter element

**Tip: Print out these tips and hang them up in the company canteen for your colleagues to read.**

Are you a driver on a moving floor trailer and do you have a useful tip for your colleagues? Then send your tip to [marketing@knapen-trailers.nl](mailto:marketing@knapen-trailers.nl) and maybe your tip will be published in the next newsletter.

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