## Oil Filters

Mike and Bev Bayliss CS 30 *Luana* (with notes by Carsten Nachtigahl - CS 36T *Polaris*)

On two separate occasions over the past 24 months, we have encountered a potentially dangerous problem with one of the simplest parts aboard our boat - the oil filter. On one occasion, while transiting a series of rapids under power, we found engine oil filling the (separate) engine bilge. After much diagnosing, we were able to determine that our filter had a tiny dent on the underside which had opened into a small crack. Under pressure, the oil was spewing everywhere!

The second time, the filter developed a small pinhole leak due to salt water corrosion after I had replaced one of the engine zincs. This was a 2-month-old filter! All it took was a very small bit of salt water to corrode entirely through a new filter.

In both cases, neither the idiot light nor the audible alarm sounded. If we had not discovered litres of oil in the engine bilge soon enough, we would have been searching for a new engine! Three things we learned from this:

- 1) Inspect all parts of your engine regularly, ESPECIALLY underway.
- 2) Don't rely on engine panel signals (audible or visual).
- 3) Carry ample spares of parts and fluids. Note: In both cases, we were able to completely contain the spilled oil (the CS 30 has a self-contained engine bilge) and had enough absorbent oil pads etc. to do an efficient cleanup. The spilled oil was discarded at approved recycling facilities.

## **Note by Captain Carsten**

## To all Westerbeke W33 owners.

After my engine rebuild, the oil pressure increased to 90 psi. High oil pressure and a poor fitting filter caused an oil leak at the filter. Thoroughly annoyed, I investigated the problem.

First I measured the oil pump surfaces where the filter attaches. The inner diameter is 2 1/8" and the outer diameter is 2 11/16". Any oil filter with a seal that will fit within these dimensions is OK, providing the center thread is the same. Some filters have a pressure relief valve which is not really necessary since the W33 has a built in pressure relief valve.

Here are 6 oil filters that will fit the W33 in order of my preference:

- Purelator #14459 c/w pressure by-pass
- Pennzoil #PZI-33 c/wprv
- Westerbeke #36918
- Fram #Ph 3593 A
- Motomaster #17-1723-6
- Quaker State #QS-3593 A

The big Westerbeke #35823 is NOT a good fit but is sold by Westerbeke for the W33. The Purelator has 20% more filter material. The Pennzoil is identical except for the amount of filter material. It is sold by Costco at 3 for \$12 c/w a pressure relief valve at no extra cost, while all the others have a price range of \$4.50 to \$5.50. The Fram, Motomaster and Quaker State all appear identical.