

HOW TO...

INSTALL A WAVESTREAM FILTER

A step-by-step guide to fitting a Wavestream bilge filter.

Boaters are increasingly aware of pollution in the seas and waterways, and most are keen to help prevent this. But just one drop of oil or fuel getting into the water creates a visible blue water sheen which can spread for up to six metres. And if you can see oil in the water, this equates to around 25ppm of oil to water. Consider that MARPOL's legal limit is set at 15ppm, reducing to just 5ppm in specially protected areas, and it is easy to understand the extent of pollution created all the time in marinas, at docking stations and even out at sea when dirty bilge water is automatically pumped overboard.

In addition to pollution you can see, there are also microfibres and microplastics from our clothes, ropes and even the onboard bedding, all getting washed down into the bilges.

To avoid pumping pollutants overboard boaters can easily fit a compact, low cost Wavestream bilge filter.

Here is how to do it on a Colvic Victor 34 (it took less than an hour to fit) owned by marine biologist and TV presenter Monty Halls. Passionate about protecting and preserving the natural environment, Monty has set up Generation Sea Change (generationseachange.co.uk) which highlights and promotes the inspiring stories of coastal communities, companies and individuals that are tackling challenges around marine conservation.

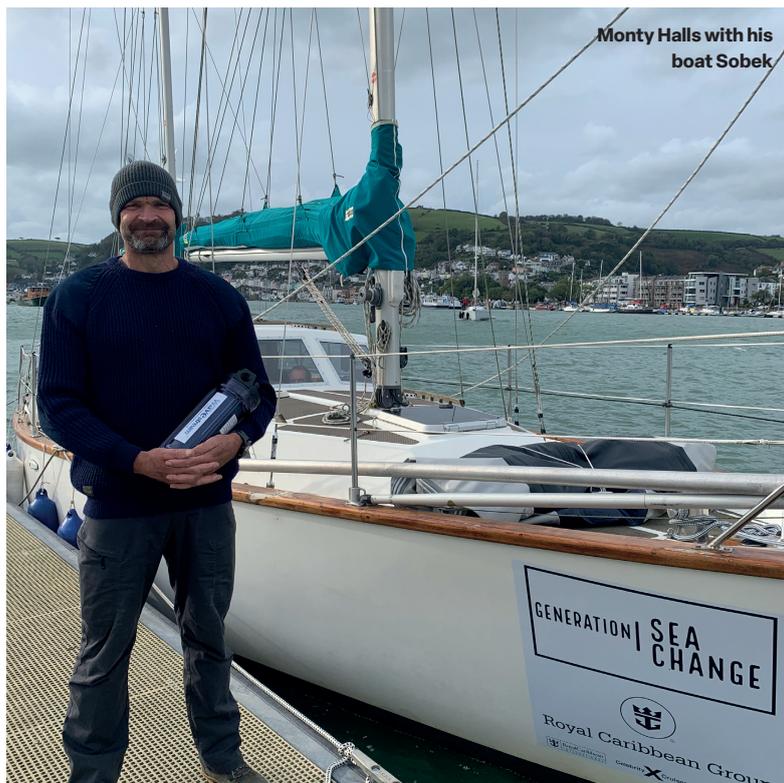
Fitting a Wavestream bilge filter:

■ The Wavestream needs to be fitted vertically, inline between the bilge pump and the bilge outlet. Before you buy, decide where you will fit it and note your pump output. The smaller Wavestream System 1 measuring 315 x 130mm copes with a flow rate of 1-40 litres per minute (lpm) and costs £144, and the larger System 2 (350 x 180mm) will take up to 265lpm and costs £280.

■ Measure the diameter of your bilge pipe. The Wavestream 1 has connections measuring 3/4" BSP / 19mm or 1 1/2" BSP / 38mm for the System 2. Purchase the correct size and shaped connectors considering how the bilge pipe will run in and out of the Wavestream, ideally with the least number of bends. In this case, we needed one vertical connector and one horizontal. Also ensure you have two jubilee clips and thread tape or thread sealing compound.

■ The Wavestream comes complete with mounting bracket and screws. Additional tools needed include a screwdriver, drill, spanner, hacksaw or sharp knife. It is also handy to have a torch, pencil, cable ties, kitchen towel, tape measure and silicone grease/Vaseline.

■ To start, screw the fitting bracket onto the top of the Wavestream (you will take this off again in a minute) so you can double check and mark the



Monty Halls with his boat Sobek

Providing handy practical advice to boaters from projects to maintenance tasks.



All the equipment you need



Contents of the box, plus connectors and jubilee clips

best location for it to fit vertically, allowing space below to unscrew the filter housing. Note, as water may spill when you change the filter check what is underneath.

■ Remove the Wavestream from the bracket. Mark the position for the bracket screw holes with a pencil and drill the holes. Screw the bracket securely in place.

■ Noting the direction arrows on top of the Wavestream, which indicate the in and out flow of water, screw in the connectors. Use sealing compound or thread tape, and gently turn with a spanner to ensure these are secure and watertight. Using screws fix the top of the Wavestream onto the fitting bracket.

■ Mark where to cut the bilge pipe ensuring both ends of the bilge pipe

can be easily connected onto the Wavestream. Cut to length and then slide over the connectors and secure with the jubilee clips.

■ The Wavestream is now fitted and connected. To bleed out the air, operate the bilge pump and you will see the water level rising in the Wavestream. Press the green button on the top and when no more air comes out from the button, it has all been removed.

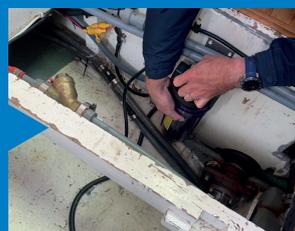
■ To check that the filter is working, look at the outlet from the boat to see filtered clean water being emitted overboard.

■ Finally, check around the engine, clean and replace any drip trays, and make a note of engine hours – it is suggested you change the Wavestream filter every time you do an oil change, engine service or annually.

STEP BY STEP GUIDE



1. Attaching the mounting bracket



2. Checking the Wavestream fits in the space



3. Remove the Wavestream from the bracket



4. Mark the position for the bracket



5. Marking holes to fit the bracket



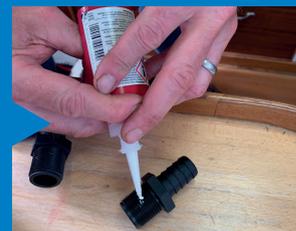
6. Drilling holes for mounting the bracket



7. Fitting the bracket



8. Showing the pipe from the bilge to connect into the Wavestream



9. Using sealing compound



10. Fitting the connectors



11. Ensure a tight fit for the connectors using a spanner



12. The Wavestream with connectors fitted



13. Cutting the bilge pipe to length



14. Fitting the outlet pipe



15. Fitting the o-ring



16. Placing the Wavestream into position



17. Bleeding air from the Wavestream



18. The Wavestream fitted



19. Clean water over the side!