TECHNICAL ARTICLE
Raw Water Intake System

The raw water intake system plays a major part for the engine cooling system. It is made up of a seacock, intake hose, strainer and raw water pump.

The Seacock

There are many different types of seacock assemblies available and we always recommend using the best quality materials available as any corrosion in this area could result in a major problem, which could cause the boat to sink.

A common choice are the Perko and Blakes seacocks, however, many people like to make up their own seacock by using a through hull fitting, an isolation valve and a hose tail. This set up gives you a lot more choice as you are able to adapt the set up to perfectly suit your application.

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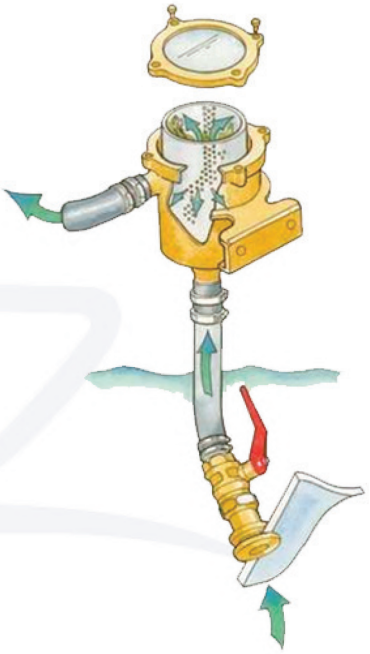

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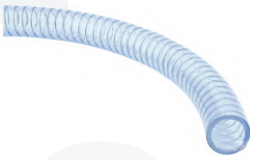
= Seacock assembly

Intake hose

Connects the seacock to the strainer and then to the raw water pump. For general applications, the most popular choice is the 4126** clear reinforced intake hose. It's ideal for the application as the hose is reinforced, which will prevent the hose collapsing under suction of the pump. The hose is see through, which gives you visual aid and helps with spotting potential problems such as blockages.

For commercial applications, we recommend using the 4123** series of hose. This is an ideal replacement for those who have been using exhaust or fuel hose for their intake system as it is fire retardant, has wire reinforcement and complies to ISO 13363.



4126**

4123**

Strainer

Prevents waterborne debris from entering the cooling system to help ensure the main components in the cooling system continue to work without suffering from blockages. We recommend using strainers with large baskets as these will hold the most debris without blocking. It's also a good tip to fit the strainer above the water line and directly above the seacock as you are then able to rod out blockages in the seacock.

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Raw Water Pump

A raw water pump is an essential part of any engine cooling system. On a heat exchanger cooled engine, the flexible impeller pump provides external water (sea or river water) to the heat exchangers to cool the engine. The pump can be pulley driven, foot mounted, gear driven, flange mounted or crankshaft mounted. The engine coolant is distributed by the engine's integral circulating pump.

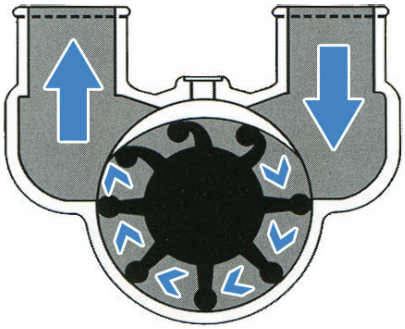
For keel cooled engines, the internal engine circulation pump pumps the water to the keel coolers or skin tank. A flexible impeller pump is not generally used unless the engine has a wet exhaust system in which case a small flexible impeller pump may be used to cool the wet exhaust tube and components.

At ASAP Supplies, we offer a huge range of pumps & spares to meet your every requirement. However, we also offer advice on how to maintain your current pump.

Please note: The below information is for heat exchanger cooled engines.

Did you know...

- You should always keep details of your pump. This includes the serial number and the model, which are usually found on the end cover. This will help if you need to find spares or replace the pump
- It is a good idea to keep the inlet pipe to the strainer as straight as possible so you can then rod out any potential blockages
- Always use reinforced hose on the inlet side of the raw water pump to prevent the hose from collapsing and ensure fire retardant hose is used to comply with certain regulations
- It is good practice to regularly check your impeller for any signs of damage or wear, including checking on the wear plate, cam plate and end-cover as these are wearing parts
- Your strainer should also be routinely inspected, so why not do this at the same time as your impeller?



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