

CIRCULATION & FILTRATION

Circulation

The circulation system distributes water evenly throughout a spa. The purpose of circulation is to pass all the spa water through a filter in an acceptably short period of time, and provide thorough sanitation. One helpful image of the circulation system is the human body's circulation system, where the heart keeps blood moving through blood vessels. In a spa, the pump keeps the water constantly in motion. Water is pumped through pipes and other equipment like heaters where it is filtered and heated prior to being re-circulated into the spa. Spas either have a circulation pump which runs 24/7 or they have a 2 speed pump which regularly switches on automatically at low speed to circulate the water. Various valves, gauges and meters direct and regulate this system.

Filtration

Filter debris can be categorised into two main groups:

- Oils and greases (i.e. suntan lotions, body fats and oils, cosmetics, pollutants, etc.) - These coat the filter making it incapable of filtering effectively.
- Scale deposits and scum (i.e. calcification, rust, hair, lint, etc.) - These can harden and reduce the overall filter area.



The combination of high bather load, elevated temperatures, aeration and the narrow tolerance on chemical dosing puts considerable demands upon a spa filter. As the filter ages, it accumulates debris which is not easily or effectively removed through normal cleaning procedures. This culminates in a loss of filter efficiency, eventually to the point where the only solution is replacement of the filter cartridge.



Cleaning filters

This is an important part of the spa maintenance process. Simply draining and refilling a spa without cleaning the filters may well re-infect the new water with the same "old" germs. Cleaning involves weekly hosing out and every 3 months use of a specialist filter cleaner such as Filter Brite (a solution that you soak the filter in) or Filter Renew (a spray). These products clean oil and grease from all types of filters and also removes scale and rust deposits.

Instructions for use of the solution are:

- Remove filter elements and remove excess debris with garden hose.
- Immerse filter elements completely in a plastic bucket of clean water containing one bag of Filter Brite.
- Light brushing may be required for heavy oil accumulation.
- Allow to soak at least 6 hours and preferably overnight.
- Rinse the elements thoroughly with maximum garden hose pressure and reassemble.
- If scale, crust or discolouration remains, use rubber gloves and briefly brush or soak elements in a diluted acid solution. To make acid solution, dilute 1 bottle of Aquality in 10 - 15 litres of water.
- Thoroughly flush the acid solution from filter elements with a garden hose.
- Reassemble filter and resume normal operation.
- Spa and hot tub filters should be cleaned using Filter Brite every time the spa is refilled.



Replacing filters

With appropriate care, filters generally last about 2 years. Since there are so many types of filter size on the market, when replacing, please bring your old filter(s) into us so we can ensure we replace with the correct size.

Maintenance

Every time a spa is drained, prior to draining, filters should be removed, air jets turned off and 250 ml of Swirl Away added. Swirl Away is a specially formulated cleaner for removing waste and scale build-up in spa plumbing.



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