

SAND FILTERS



In a sand filter water passes through the pump housing and enters the sand filter through the multiport valve head, which controls the directional flow of the water. As water passes through a bed of filter sand (silica quartz) dirt is trapped in the sand bed and clean, filtered water is returned to the pool. Sand filters should run a minimum of 10 hours a day, ideally 24 hours a day. When the filter becomes dirty- pressure builds in the sand filter and the water flow returning to your pool decreases. When you initially start your sand filter you will want to make a mental note of the “normal” or “starting pressure”, when your pressure gauge increases 10 psi from that point you should clean the sand by backwashing the filter.



Backwashing involves reversing water flow through the filter and sending dirt through a waste line. A valve on the filter tank will direct the water to control backwashing and other functions. When using a rotary multiport valve on a sand filter be sure to shut off the pump and motor before changing valve positions. The o-ring inside of the valve, tank and pump and motor should be lubricated at least once each season with an o-ring lubricant. DO NOT use Vaseline® as the petroleum can breakdown the rubber material.

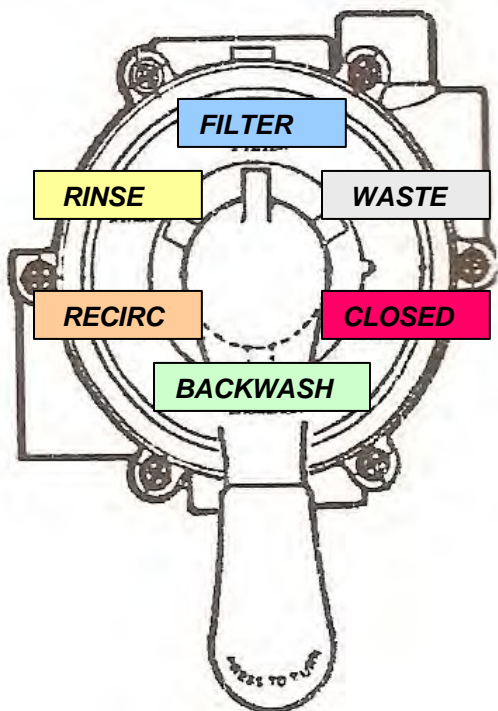
Before attempting to start the filter system for the first time be certain that the water level is at the proper level, a minimum of 1/2 way on the skimmer opening, and that the pump is primed; *see pump and motor* for details on priming your pump. New filter sand has a fine dust that should be backwashed and rinsed prior to running on normal filtration. The following are GENERAL guidelines for operating your sand filter. Detailed instructions on the operation of your sand filter can be found in your filter operating manual on the following pages.

START UP

1. Set up the system on its base.
2. After removing the valve, fill the tank approximately halfway with water.
3. Cover the center standpipe and slowly add the specified amount of sand *see owners instructions. DO NOT use play sand- use only swimming pool filter silica sand.
4. Replace valve and seal tank.
5. Connect the hoses from pool and inlet to valve head, use screw clamps to tighten.
6. Turn valve handle to backwash and turn on pump and motor for 30 seconds to one minute. This will flush out system prior to circulating.
7. Stop motor and set valve to rinse turn on pump and motor for an additional 30 seconds.
8. Stop motor and set valve to filter. You are now in normal operation.
9. Open air relief bleeder valve and start pump and motor. When water sprays from air relief you can hand tighten.
10. Note the reading on your filter's pressure gauge. This is your normal starting pressure.
*you will reference this number when you need to backwash your filter.

Your sand filter is equipped with a 4 position or 6 position multiport valve. The 4 position valve has Filter, Backwash, Recirculate and Waste positions. The 6 position includes these positions and also offers a Rinse and Closed setting- see details on each setting, below. Each multiport valve is equipped with an external air bleeder device. **Always** open this air bleeder and stand clear of filter and valve before starting the system pump and leave open until a steady stream of water is expelled. **CAUTION: To prevent equipment damage and possible injury, always turn pump off before changing valve position.** The valve has a closed position. The pump should never be on when the valve is in the closed position. If the pump is operated with the valve closed, the air relief system becomes inoperative and an explosive situation could exist. Additionally, running the system with no flow will seriously damage the equipment.

VALVE OPERATION



1. **FILTER POSITION-** This is the process by which the water from the pool passes through the filter tank and the sand. As the water trickles down through the sand, the dirt and debris are trapped by the sand, thus filtering the water. The filter should be operated a minimum of 8 hours a day.
2. **BACKWASH POSITION-** This process is used to clean the debris that has accumulated, out of the sand. The water is essentially moving in a reverse fashion. This should not be done for more than one minute at a time, and should be done when the flow of water back to the pool has slowed considerably and the pressure gauge has doubled the original normal starting pressure.
3. **RINSE POSITION -** This is done after backwashing to settle the sand and cloudy water inside the tank caused by backwashing, so sediment will not pass back into the pool.
4. **RECIRCULATE POSITION-** Water is passed from the skimmer to the pump and then up to the valve; however, instead of passing through the sand, it passes through the valve head and then back into the pool. Re-circulate is used to circulate chemicals without filtering; this will simply circulate the water throughout the pool.
5. **WASTE POSITION-** this function is used when one desires to draw water or vacuum debris from the pool directly onto the ground (bypassing the tank). For example, if there is a lot of debris accumulated on the floor of the pool, one would use this process to vacuum it from the pool onto the ground; bypassing the filter tank.
6. **CLOSED POSITION-** this position is used when one wishes to shut off water flow through the valve. The valve is left in this position for winter closeup, since it shuts off all of the passageways through the valve.

REMEMBER NEVER CHANGE VALVE POSITIONS WHEN PUMP & MOTOR IS RUNNING

BACKWASHING

When the return flow diminishes and your filter pressure gauge reads 10 psi higher to double the normal starting pressure it is time to backwash. The actual time between backwashing will vary depending on the amount of dirt in the pool and clarity of the water; on average you may expect to backwash every 10 days to 2 weeks.



When it comes to backwashing, more is NOT better. As dirt accumulates inside of the filter tank it is actually able to filter smaller particles. Backwashing too frequently will decrease your filter's efficiency.

STEPS TO BACKWASH

1. Turn off pump and motor.
2. Turn valve handle to backwash position.
3. Open backwash gate valve (optional)
4. Turn on pump and motor for one minute.
5. Turn off pump and motor
6. Turn multiport valve to rinse position
7. Turn on pump and motor for an additional 30 seconds.
8. Turn off pump and motor.
9. Turn multiport valve to filter position.
10. Open air relief bleeder valve.
11. Close backwash gate valve (optional)
12. Turn on pump and motor.
13. Close air relief bleeder valve.



Sand should be replaced every 1 to 2 seasons. When replacing sand use only swimming pool filter quartz referred to as #20 silica sand. DO NOT use play sand. When replacing sand be careful of the bottom laterals (slotted tubes) at the bottom of the filter tank. Check laterals for cracks and replace if necessary.

**For an owner's manual or complete parts breakdown of your filter
click on your filter model listed below:**

[Pentair Sand Dollar Filter](#)

[Pentair Tagelus Filter](#)

[SPARCO Sand Filter](#)

