Advantage SFP1/75

High Rate Sand Filter



READ AND FOLLOW ALL SAFETY INSTRUCTIONS!



This is the safety-alert symbol. When you see this symbol in this manual, look for one of the following signal words and be alert to the potential for personal injury.

Carefully read and follow all safety instructions in this manual and on filter.

Keep safety labels in good condition. Replace missing or damaged safety labels.

GENERAL INFORMATION

The Advantage 75lb Sand Filter uses special filter sand to remove dirt particles from the water. Filter sand is loaded into the filter tank and functions as the permanent dirt removing media. The pool water, which contains suspended dirt particles, is pumped through your piping system and is automatically directed by the patented filter control valve to the top of the filter tank. As the pool water is pumped through the filter sand, dirt particles are trapped by the sand bed, and filtered out. The cleaned pool water is returned from the bottom of the filter tank, through the control valve and back to the pool through the piping system. This entire sequence is continuous and automatic and provides for total recirculation of pool water through your filter and piping system.

After a period of time, the accumulated dirt in the filter causes a resistance to flow, and the flow diminishes. This means it is time to clean (backwash) your filter. With the control valve in the backwash position, the water flow is automatically reversed through the filter so that it is directed to the bottom of the tank, up through the sand, flushing the previously trapped dirt and debris out the waste line. Once the filter is backwashed (cleaned) of dirt, the control valve is manually resequenced to Rinse, and then Filter, to resume normal filtering.

Recommended Sand Grades:

Use only: #20 Silica Sand, Size Range .40-. 55mm, Uniformity Coefficient less than 1.75.



Use of other sands will reduce filter performance, may damage pump, and will void warranty.

INSTALLATION

Installation of filter should be done by qualified, licensed personnel only.

Filter mount must:

- Provide weather and freezing protection.
- Provide space and lighting for easy maintenance.
- Be on a reasonably level surface and provide adequate drainage.
- Be as close to pool as possible to reduce line loss from pipe friction.

Piping:

- Piping must conform to local/state plumbing and sanitary code.
- Use pipe joint sealing compound or Teflon tape on all male connections of metal pipe and fittings (except unions). Use Teflon tape or Plasto-Joint Stik on all male connections of plastic pipe and fittings. DO NOT use sealant or tape on unions – assemble them dry and hand tight.
- Do not damage union sealing surfaces and O-Rings.
- Support pipe independently to prevent strains on filter or valve.
- Use 2" pipe to reduce pressure losses as much as possible.
 NOTICE: Filter may be located away from pool, but for adequate flow larger pipe may be needed.
 For more information about hydraulic design, call Advantage Manufacturing, Inc.
- Fittings restrict flow; for best efficiency use fewest possible fittings.
- Keep piping tight and free of leaks: pump suction line leaks may cause trapped air in filter tank or loss of prime at pump; pump discharge line leaks may show up as dampness or jets of water.
- NOTICE: Over-tightening can crack filter ports.

Valves:

- A check valve installed ahead of filter inlet will prevent contaminants from draining back into the pool.
- A check valve installed between filter and heater will prevent hot water from backing up into filter and deforming internal components.
- Filter ports and valve ports are furnished with union connections.
 DO NOT use pipe sealants on union collar (nut).
- Use care before assembly not to damage union sealing surfaces or O-ring.

Wastewater:

Be sure all provisions for wastewater disposal meet applicable local, state or national codes. 100
gallons (379 liters) or more of pool water will be discharged during filter backwashing. Do not
discharge where water will cause flooding or damage.

FILTER ASSEMBLY/DISASSEMBLY



To avoid equipment damage and personal injury, never change handle position on control valve while pump is running.

Before Disassembling Filter:

- 1. STOP PUMP
- 2. OPEN air release valve and drain fitting.
- 3. Wait until all pressure is released and water drained from filter tank and system before loosening clamp knobs.

Disassembly:

- 1. Backwash filter according to instructions under "Backwash Filter Procedure", (when first filling a new filter, omit this step).
- 2. Stop pump.
- 3. Open air release valve on top of filter tank to release all air pressure from inside of tank and system.
- 4. Remove filter drain plug on top of filter tank to release all air pressure from inside of tank and system.
- 5. Remove filter drain plug and drain all water from tank. Hold drain fitting securely in filter body to avoid losing sand.
- 6. Slowly remove valve clamp to free valve from tank.
- 7. Being careful not to damage Cord Ring, lift valve out from tank shell.

Filling Filter with Sand:

- See 'GENERAL INSTRUCTIONS' for correct sand grade.
 Before pouring sand into filter, look inside and check internal assembly for broken or loose laterals caused by shipping damage. Replace if necessary.
- 3. To eliminate stress on laterals fill tank half-full of water before loading sand.
- 4. When full, top of sand bed should be about 12-1/2" (31.75 cm) below top of distributor (about 1-1/2" (3.8 cm) below tank flange).
- 5. Wash all sand and dirt away from cord ring sealing area.
- 6. Assemble filter according to instructions below.

Assembly:

- 1. Remove cord ring slowly to avoid stretching or tearing it.
- 2. Inspect cord ring for cuts, nicks, etc. if cord ring is damaged, deformed, or has lost its resiliency, replace with a new one.
- 3. Clean cord ring area of tank shell and cord ring.
- 4. Carefully install cord ring and tank valve.
 - NOTICE: Do not lubricate cord ring. Lubricants attract dirt and grit and may (especially when petroleum based) damage cord ring and void warranty.
- 5. Install valve clamp.
- 6. Install air relief valve and gauge assembly on tank.

Startup:

- 1. With pump OFF, set valve to 'Backwash' position.
- 2. Open air release valve
- 3. Start pump, circulating water backwards through filter to waste.
 4. Close air release valve when a steady stream of water is expelled Close air release valve when a steady stream of water is expelled.
- Run pump five minutes or until wastewater is clear (this purges excess fine particles from system). 5.
- Stop pump: set valve handle to 'RINSE' position.
- Start pump; run pump for 15 to 30 seconds.
- 8. Stop pump; set valve to 'FILTER' position. Follow instructions under 'Regular Operation' (below) to place filter in service.

REGULAR OPERATION



Do not operate this filter at more than 50 PSI (345kPa) under any circumstances!

6 Valve Positions:

- Rinse Used to flush the filter media after backwashing
- Filter Normal position for filtering the water
- Waste Filter by-pass that takes the water from the pool, spa or jetted tub and sends it out the
 waste port (backwash port). Also used for lowering the water level and may be used to vacuum
 heavy debris.
- Closed Shuts off all flow from the pump to the filter.
- Backwash Cleans the sand and sends the debris out the waste (backwash) port.
- Recirculate Water is recirculated through the valve by-passing the filter media.

Run Filter:

- 1. With pump OFF, set valve to 'FILTER' position.
- 2. Fill trap on pump with water.
- 3. Open the air release valve on top of filter assembly; start pump.
- 4. When steady stream of water comes from air release valve, close the valve.
- 5. With filter operating, record pressure gauge reading in owner's manual. When reading is 10 PSI (70kPa) above initial reading, backwash filter.

Backwash Filter:



To prevent equipment damage and possible injury, turn pump OFF before changing valve position.

- 1. With pump OFF, set valve to 'BACKWASH' position.
- 2. Open air release valve.
- 3. Start pump, circulating water backwards through filter to waste.
- 4. Close air release valve when a steady stream of water is expelled.
- 5. Backwash until water runs clear.
- 6. Stop pump; set valve to 'RINSE' position.
- 7. Start pump; run pump for one minute.
- 8. Stop pump; set valve to 'FILTER' position.
- 9. Filter is now ready for service.
- 10. Open air release valve and release ALL pressure from system.
- 11. Follow 'Run Filter' procedure to restart system.

MAINTENANCE

General:

- Wash outside of filter with a mild detergent and water. Rinse off with hose. NOTICE: DO NOT use solvents to clean filter; solvents may damage plastic components in system.
- Inspect sand bed at least once a year to remove foreign material which has not been backwashed out of system.
 - Follow instructions on how to disassemble and assemble filter.
 - When the sand bed gets hard and crusty on top, remove all the old sand and replace it with new sand.
 - Open air bleed valve and bleed all air from filter each time pump is stopped and restarted.

Weekly Pool Equipment Inspection:

- 1. Check pressure during operation. When pressure is 10 PSI (70kPa) higher than initial operating pressure, backwash filter.
- 2. Skimmer basket remove debris.
- 3. Stop pump, release all pressure from system. Remove trap cover and basket, remove debris.
- 4. Bleed air from filter each time system is started.
- 5. Check pump for leaks.
- 6. Check pump strainer lid for tightness. Do not over tighten!

Replace Internal Assembly:

- Disassemble filter according to instructions in "Filter Disassembly".
 WARNING: Hazardous Pressure! To avoid sever injury and major property damage, follow instructions when disassembling and assembling filter.
- 2. Remove sand from filter.
- 3. Remove union adapters and tank fittings.
- 4. Lift old internal assembly out of tank.
- 5. Twist lock new laterals into hub on new internal assembly.
- 6. Remove old O-Rings on tank fittings and install new O-Rings provided. Be sure sealing area is clean.
- 7. Drop new internal assembly into tank and secure with tank fittings.
- 8. To refill, reassemble, and restart filter, follow 'REGULAR OPERATION' instructions.

Winterizing

- 1. Open air release valve; open all system valve. Position multiport valve between port positions to allow air passage to all ports.
- 2. Remove drain plugs from trap, pump, valve and filter.
- 3. Drain system piping.
- 4. Cover with plastic or tarpaulin to protect from weather.
- 5. Protect from freezing.

LIMITED WARRANTY

Advantage Manufacturing warrants its new products to be free of workmanship and/or materials for a period of 1 year from the date of installation or 18 months from the manufacturing date, whichever comes first, when the product is used in a standard pool spa or jetted tub environment.

Advantage Manufacturing also provides additional limited warranties as follows:

2 years from manufacturing date on the filter canister.

2 years from the date of purchase on the Lint pot canister and skid pack base.

This warranty excludes damage caused by freezing, misuse, acts of God or negligence and does not include lids, connectors or O-rings.

The warranty does not cover:

- Items manufactured by other companies and installed on the Advantage Manufacturing pump/filter systems.
- Problems resulting from but not limited to the following;
- Failure to comply with installation and operating instructions.
- Abuse, misuse, negligence, accident or damages that were beyond the control of Advantage Manufacturing, Inc.
- Any and all alterations or modification to the product.
- Damage caused by improper chemical treatment or corrosion.
- Damage caused by Acts of God or nature.
- Employment of the product for other than its intended use.
- Motor damage caused by improper electrical connections and/or the use of non-approved extensions.

Obligations:

Advantage Manufacturing will, at its option, repair or replace the defective item at its own cost and expense. Advantage Manufacturing is not responsible for any cost of shipping or transportation to or from our service facility. Advantage Manufacturing is also not liable for any loss of time, inconvenience, incidental expenses, labor and/or material charges incurred in connection with the removal or replacement of the equipment, or any other incidental or consequential damages.

In order to obtain the benefits provided by this warranty, the original retail purchaser must contact:

Advantage Manufacturing, Inc. 624B South B Street Tustin, CA 92780

as soon as possible after the discovery of a defect, but in no event, later than the expiration date of the warranty periods defined.

You may call our toll free message line 1-800-636-8866, and a representative will return your call as soon as possible. For your convenience our FAX number is 714-505-1166.

Upon receipt of your claim, Advantage Manufacturing will promptly notify you of the disposition of the claim. If approved, you may be required to ship the defective item, freight prepaid, to Advantage Manufacturing or an approved service center, together with a letter stating the model number, serial number (if applicable), and date of purchase (proof of purchase may be required) of the item found to be defective. You will also need to include your name, shipping address, phone number and a brief description of the problem.

This warranty gives the original retail purchaser specific legal rights. You may also have other rights, which may vary state to state.