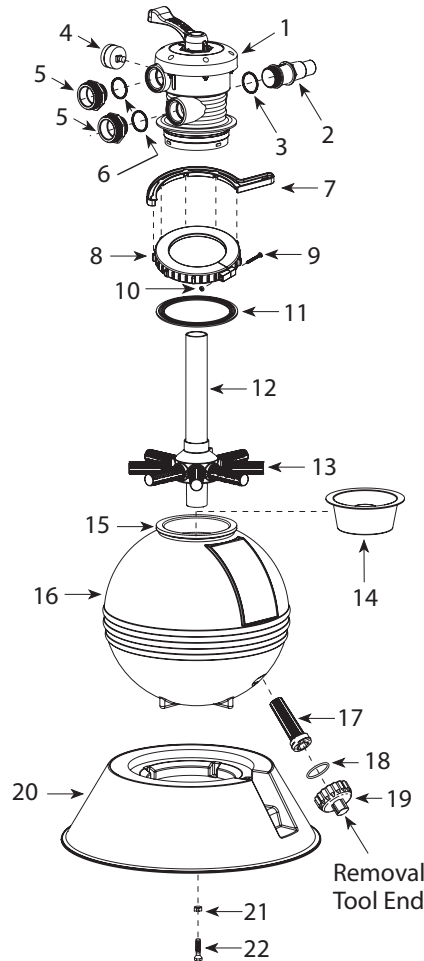


# ClearWater™

## HIGH RATE SAND FILTER

### SAND FILTER PARTS LIST

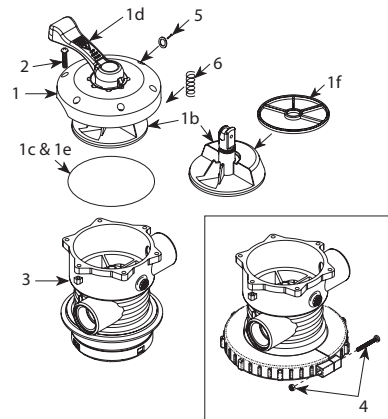
Item	Part No.	Description
1	<b>WVS003</b>	Multi-Port Valve Assembly
2	<b>425-1928</b>	Waste Adapter Fitting
3	<b>805-0224</b>	O-Ring
4	<b>830-3000</b>	PSI Gauge
5	<b>417-4161</b>	1 1/2" Buttress x 1 1/2" MPT Fitting (2)
6	<b>805-0224</b>	1 1/2" Buttress x 1 1/2" MPT Fitting O-Ring (2)
7	<b>505-1970</b>	Collar Wrench
8	<b>718-1960</b>	Split Nut – Sand Filter
9	<b>819-0015</b>	Screw – 1/4"-20 PPH x 2"
10	<b>820-0013</b>	Hex Nut – Serrated 1/4"-20
11	<b>805-0435</b>	O-Ring
12	<b>505-2040</b>	Lateral – Manifold Assembly for 16" Filter
	<b>505-2050</b>	Lateral – Manifold Assembly for 19" Filter
	<b>505-2060</b>	Lateral – Manifold Assembly for 22" Filter
	<b>505-2080</b>	Lateral – Manifold Assembly for 26" Filter
13	<b>505-1930</b>	Lateral
14	<b>502-2011</b>	Sand Fill Guide
15	<b>505-1960</b>	Threaded Sleeve for Split Nut
16	<b>515-1601</b>	16" Sand Filter Body
	<b>515-1901</b>	19" Sand Filter Body
	<b>515-2001</b>	22" Sand Filter Body
	<b>515-2061</b>	26" Sand Filter Body
17	<b>602-5311</b>	Self-threading Drain Screen
18	<b>805-0224</b>	O-Ring
19	<b>602-5301</b>	Drain Cap & Removal Tool
20	<b>672-7211</b>	Filter Base
21	<b>820-0017</b>	Washer 3/8" Flat
22	<b>819-0016</b>	Bolt - 22" or 26" Sand Filter 3/8" - 16 x 2" Hex
	<b>819-0019</b>	Bolt - 19" Sand Filter 3/8" - 16 x 1 1/2" Hex
	<b>819-0020</b>	Bolt - 16" Sand Filter 3/8" - 16 x 1 1/4" Hex
--	<b>810-0118</b>	Instruction Sheet



Clearwater Sand Filters are the latest in pool filter technology. The spherical tank design evenly distributes the pressure resulting in greater strength and longer life.

### MULTI-PORT VALVE ASSEMBLY PARTS LIST

Item	Parts No.	Description
1	<b>600-9600</b>	Multi-Port Lid Assembly
1b	<b>600-9500</b>	Diverter Valve Assembly with Gasket
1c	<b>805-0254</b>	Lid O-Ring (2001 & Before)
1d	<b>602-1931</b>	Lid Handle Only
1e	<b>805-0254</b>	Lid O-Ring (2003)
1f	<b>711-1910B</b>	Diverter Gasket (Spider)
(NOTE: We recommend purchasing gasket glued into diverter by the factory)		
2	<b>819-0010</b>	Lid Screw
3	<b>820-0013</b>	Hex Nut
4	<b>800-0100</b>	Split-Nut Bolt & Nut
5	<b>800-0150</b>	O-Ring Kit with Pin & Washer
6	<b>827-0002</b>	Spring



## INSTALLATION INSTRUCTIONS

1. Open box and remove Filter and Multi-Port Valve Assembly.
2. **IMPORTANT:** To prevent damage to internal filter lateral components, fill filter tank full with water prior to adding sand. With Sand Fill Guide, #14 (502-2011), positioned in filter tank opening, add only recommended #20 grade silica sand (see Fill Chart). Remove Sand Fill Guide. **IMPORTANT: Clean and remove all debris from filter tank flange after adding sand.**
3. Assure that O-Ring, #11 (805-0435), is positioned onto Multi-Port throat.
4. Install Multi-Port Valve with inlet and outlet ports facing pool. Top of internal sand pipe seats directly into Multi-Port Valve. Push Multi-Port Valve evenly onto tank flange.  
**Note: Make sure tank flange is clear of any sand debris.**
5. Install Split-Nut, #8 (718-1960) and #9 (819-0015), by threading collar clockwise until hand tight. Then use collar wrench to tighten further.
6. To use collar wrench, #7 (505-1970), place on collar assembly and use both hands to turn wrench  $\frac{1}{2}$  to  $\frac{3}{4}$  of a turn to secure Multi-Port Valve to filter body.

## WINTERIZATION

1. **Backwash** filter system completely (follow cleaning instructions).
2. Run a filter cleaning chemical through filter system.
3. **Turn pump off.** Disconnect hoses from skimmer and return fitting.
4. To drain water, remove drain cap #19 from bottom of filter tank. **DO NOT** remove drain screen, #17. To flush sand from tank, remove Self-Threading Drain Screen #17, by turning the Drain Cap #19, around and using as a removal tool.
5. Unscrew drain plugs located at bottom of pump trap and front of pump housing. Let water drain completely.
6. Disconnect filter to pump connection. Loosen union connection on discharge of pump and remove from pump. **DO NOT** lose 2" union gasket. Lift and remove pump and pump base from filter base. Store inside.

 **WARNING: NEVER CHANGE VALVE POSITION WITH PUMP RUNNING!**

## CLEANING INSTRUCTIONS

**NOTE:** When pressure gauge reading is 5 PSI or higher than original starting pressure, the filter needs to be cleaned. The ClearWater Sand Filter System features our exclusive 7-Position Multi-Port Valve, which ensures safe and simple filter maintenance.

 **Pressurized vessel. Never attempt to loosen or open Split-Nut Assembly, #8, 718-1960 and #9 (819-0015), while system is running. It could cause severe injury or harm to user.**

1. Turn off pump.
2. Attach **Backwash** hose (optional) to waste port adapter.
3. Rotate Multi-Port Valve handle to **Backwash** position. **Turn pump on** and run for 90 second intervals or until discharge water is clear. **Turn pump off.**
4. Rotate Multi-Port Valve handle to **Rinse** position. **Turn pump on** for 30 seconds.
5. Repeat steps 3 & 4 until all discharge water is clear while pump is turned on.
6. **Turn pump off.** Rotate Multi-Port Valve handle to **Filter** position. **Turn pump on.** Valve is now in normal operating position.

## TROUBLESHOOTING

### INADEQUATE FILTERING:

- Sand Level Too Low
- Inadequately Cleaned System
- Excessive Dirt Load
- Chemical Imbalance
- Inadequate System Pressure

### NO WATER FLOW:

- Obstruction of Suction or Return Line
- Clogged Impeller
- Suction System Air Leaks
- Slice Valve Closed
- Clogged Hose Fitting
- Clogged Basket
- Dirty Sand

### Sand Fill Chart:

- 16" Model - 50 lbs.
- 19" Model - 100 lbs.
- 22" Model - 150 lbs.
- 26" Model - 200 lbs.

## LIMITED WARRANTY

Waterway Plastics manufactures its products and equipment in accordance with very high standards of workmanship. We use the best materials available and maintain the highest quality procedures practical in the industry. In accordance, Waterway warrants its products as follows:

All thermoplastic molded filter bodies and rotational molded sand filter bodies have a warranty of ten years, warranted on a pro-rata life basis. If a defect becomes apparent during the first year, the body will be exchanged for a new body if the defects are determined by Waterway to be the responsibility of Waterway Plastics. If a defect becomes apparent after the first year from the date of manufacture which, in the opinion of Waterway, will require replacement, the body will be exchanged for a new tank on an adjusted service pro-rata life basis. Charges to the owner, on the pro-rata life basis, will be determined by the actual number of months installed.

Products that fail or become defective during the warranty period, except as a result of improper installation, bad water chemistry, accidents or negligence on behalf of the owner, freezing,

earthquakes, fire, floods, or other acts of nature, shall be repaired or replaced at Waterway's option without charge to the owner. This process will be completed within 90 days of receipt of the defective product barring delays caused by the acquisition of component parts not manufactured at our facility.

To obtain warranty replacements or repair, defective products should be returned (transportation paid) to the place of purchase. It should include a description of the defect and the circumstances surrounding the incident or problem. Warranty applies only to OEM's and distributors of Waterway.

Warranty begins on the date of purchase. Waterway shall not be responsible for cartage, removal and/or reinstallation labor, or any other such costs incurred in obtaining warranty replacements. This warranty gives you specific legal rights. You may also have other rights which vary from state to state.

Be Sure it's  
Genuine



# Waterway™

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# ASSEMBLY INSTRUCTIONS FOR SAND FILTER SYSTEM



13. Apply Teflon tape to threads of pressure gauge (4 wraps ideal) and thread into valve. Install waste adapter by pushing O-ring over threads of clear adapter and threading into waste port.



14. Install 6 ft. corrugated hoses by loosening hose clamps and sliding over hose ends. Install hose onto pump basket hose fitting by pushing on and tightening clamp. Install other end of hose onto skimmer and tighten clamp.



15. Install hose onto smooth hose adapter in valve by loosening hose clamp and sliding over adapter end. Install other end onto return fitting of pool and tighten clamps.

**NOTE:** After starting system, if there is leaking at connections including the valve, shut off system and retighten slightly and restart system. Repeat if necessary. If leaking does not stop, it may be necessary to remove fittings or valve to check for missing O-rings and/or gaskets. *When reapplying Teflon tape do not reuse old tape, remove old tape before adding new tape.*

## REQUIRED AMOUNT OF #20 GRADE SILICA SAND

- 16" Filter - 50 lbs.
- 19" Filter - 100 lbs.
- 22" Filter - 150 lbs.
- 26" Filter - 200 lbs.



1. Attach filter base to filter body by turning body upside down. Align drain on filter with clearance slot on base. Slip washer over bolt and thread bolt into filter body. **DO NOT OVER-TIGHTEN.**



2. Turn filter over. Place next to pool between skimmer and return opening on pool. Place sand filter with clearance slot on base. *Add approximately 3 inches of water before adding sand.* Add required #20 grade silica sand: See sand chart on back page. Remove sand fill guide and save.



3. By using a Phillips screwdriver, loosen bolt on split-nut on valve a couple of turns.



4. Place valve over threads on sand filter. Make sure dual outlets face pool and that top of filter is clear of any debris.



5. Tighten nut using wrench. Use one hand to turn wrench and the other hand to hold wrench in place.



6. Split-nut is fully installed when threads on body are not exposed. Retighten bolt on split-nut.



Made in U.S.A.



7. Install trap base to pump by removing gasket from inside trap. Remove clear trap lid, and place gasket in trap nut. Thread onto pump, **DO NOT OVER-TIGHTEN**. Place pump with trap onto pump base. Remember to replace trap lid.



9. Apply Teflon tape to smooth 90° hose adapter threads (4 wraps) and thread into valve pump port.



9A. Repeat for straight smooth hose adapter.



10. Install pump hose labeled "TO VALVE PUMP PORT" by sliding hose with metal clamp over smooth 90° adapter and tighten clamp.



8. Install anchors into slots of pump into holes in pump base. Push pins into anchors to secure.



11. Put 2" gasket into nut on hose labeled "TO VALVE PUMP PORT" **DO NOT OVER-TIGHTEN.**



12. Put O-ring over thread on 1 1/2" smooth straight hose adapter and thread into front of pump basket.