

HYDROTOOLS™ *Swimline*®



71610 / 71915 / 72220 / 72420
FULLY INTEGRATED SAND FILTER, PUMP,
PRESSURE VALVE & STAND
INSTRUCTIONS

ILP/HYDROTOOLS

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SAFETY INFORMATION:

1. Sand filters are designed to work with water temperatures between 33.8°F and 113°F (1°C - 45°C). The filter should never be operated outside of these temperatures or damage may occur.
2. The installation should be carried out in accordance with the safety requirements of the swimming pool industry and the specific requirements for each application.
3. The user should make sure that the installation is carried out by qualified authorized persons and that these persons have first carefully read the following instructions. Incorrectly installed equipment may fail, causing severe injury or property damage.
4. The operating safety of the filter is only guaranteed if the installation and operation instructions are correctly followed.
5. To reduce the risk of injury, do not permit children to use this product.
6. Chemical spills and fumes can weaken Swimming Pool/ Spa components. Corrosion can cause filters and other equipment to fail, resulting in severe injury or property damage.
Do not store pool chemicals near your equipment.
7. Any modification of the filter or use of unauthorized parts will void your warranty. The supplier assumes no liability for the damage and injuries caused by unauthorized replacement parts and accessories.
8. In the event of defective operation or faulty components, contact the supplier or its nearest authorized service agent

SAND FILTRATION WORKING PRINCIPLE:

Incoming water from the piping system is automatically directed by the Multiport Valve to the top of the filter bed. As the water is pumped through the filter sand, dirt and debris are trapped by the filter bed, and filtered out. The filtered water is returned from the bottom of the filter tank, through the Multiport Valve and back through the piping system.

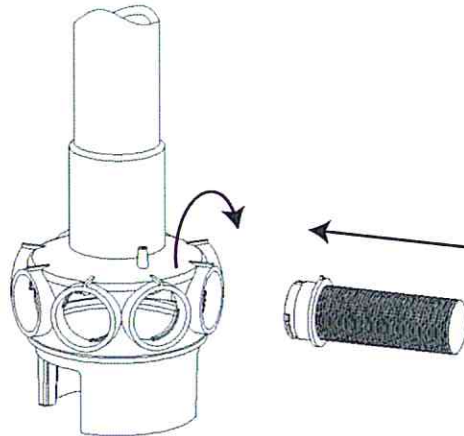
PREPARATION BEFORE INSTALLATION:

1. Position the filter as close to the Swimming Pool/ Spa as possible.
2. The filter should be placed on a level concrete slab, very firm ground, or equivalent. Ensure that the ground will not give way or erode, thus preventing any strain to the attached plumbing.
3. Position the filter under consideration of the piping connections, so that it is convenient for operating and servicing.
4. Ensure that the compliance label is facing the front to allow for easy identification of pertinent information, in the event of service requirement.

HOW TO INSTALL THE FILTER TANK:

1. Put the filter tank on the base, turn right to lock in place. Position the outlet drain plug facing outward for ease of access.
2. Before filling the filter media into the filter vessel, do a visual check of the laterals. Replace broken or loose laterals if necessary. Install the laterals, aligning the raised point of the laterals to the raised indicator point on the umbrella style lateral holder.

Insert the laterals and turn 90° clockwise. After hearing the locking sound, the lateral is well installed. Please refer to the following picture.



3. Check that the air release hose is fixed well on the body of lateral holder, and that the other end of the air release hose is out of the sand. **DO NOT** embed the air release hose in the sand.
4. To eliminate stress on the laterals, fill the filter vessel with enough water to provide a cushioning effect when the filter sand is poured in.
5. Use the clear clamshell cover to protect the filter top mount and make sure the central stem pipe is fully covered and protected from entry of sand.
6. Carefully pour the sand into the filter vessel and make sure to prevent sand from entering the stem pipe. And meantime do not damage the filter top mount or it will cause leakage. Please pour the quantity of sand according to the filter tank label.
7. Insuring that the filter top mount is free of sand residue, put the O-ring on the top valve mount and then installs the valve on the filter vessel. Make sure that the stem pipe had fixed well with the top valve mount , and tighten the flange clamp to affix the valve. **NOTE: The flange clamp should be well affixed. A poorly affixed clamp can cause injuries!**
8. Using screws from the pump hardware pack, affix the pump to the base. Please reference the pump installation instructions to operate the pump.
9. Adjust the valve position, using the white pressure hose to connect the pump output and input of the top valve ("TO PUMP" are curve on the valve of input end).
10. Their are two other connection ends on the valve. One is the connection to swimming pool (marked "TO POOL") and the other one is connected to drain outlet hose.

INSTALLATION NOTES:

1. Make sure the filter is operating under normal working pressure. Use a pressure control valve when the system pump is operating.
2. If the pump position is higher than the water level, it requires installing a back water control valve.
3. If the pump position is lower than the water level, it requires installing an isolation valve. Incorrect filter position can interfere or stop water return.
4. For maximum water flow, use as few hose connections as possible & keep hose bending to a minimum.

5. Ensure solvents are not excessively applied to fittings as this could run into O-ring and create sealing problems.
6. Do not over tighten fittings or adapters.

HOW TO USE:

1. Inspect all that connections have been made correctly and are secure.
2. Depress top mount valve handle and rotate to BACKWASH position.
3. Prime and start pump according to pump instructions.
NOTE: ALL SUCTION AND DISCHARGE VALVES MUST BE OPEN WHEN STARTING THE SYSTEM. FAILURE TO DO SO COULD CAUSE SEVERE PERSONAL INJURY. MAKE SURE THE FILTER VESSEL IS FILLED WITH WATER BEFORE STARTING UP THE PUMP OR IT WILL CAUSE THE DAMAGE TO THE PUMP.
4. Once water flow is steady out the waste line, run the pump for at least 2 minutes. The initial back-washing of the filter is recommended to remove any impurities or fine sand particles in the sand media.
5. Turn pump off and set valve to RINSE position. Start pump and operate until water in sight glass is clear. . . about 1/2 to 1 minute. Turn pump off, set valve to FILTER position and restart pump. Your filter is now operating in the normal filter mode, filtering particles from the pool water.

NOTES:

1. Note the initial pressure gauge reading when the filter is clean. (It will vary from pool depending upon the pump and general piping system). As the filter removes dirt and impurities from the pool water, the accumulation in the filter will cause the pressure to rise and flow to diminish. When the pressure gauge reading is 8-10 PSI (0.55-0.69 BAR) higher than the initial "clean" pressure you noted, it is time to backwash (clean) the filter.
2. **IMPORTANT:** To prevent unnecessary strain on piping system and valves, always shut off pump before switching filter control valve position.
3. To prevent damage to the pump and filter and for proper operation of the system, clean pump strainer and skimmer baskets regularly.

FILTER CONTROL VALVE FUNCTIONS:

Filter-

Set valve to FILTER for normal filtering. Also use for regular vacuuming.

Backwash-

For cleaning filter. When filter pressure gauge rises 8-10 PSI (0.55-0.69 BAR) above start-up (clean pressure): Stop the pump, set valve to BACKWASH. Start pump and backwash until water in sight glass is clear. Approximately 2 minutes or less; depending on dirt accumulation. Proceed to RINSE.

Rinse -

After backwashing, with pump off, set valve to RINSE. Start pump and operate for about 1/2 to 1 minute. This ensures that all dirty water from backwashing is rinsed out of the filter to waste, preventing possible return to the pool. Stop pump, set valve to FILTER and start pump for normal filtering.

Waste-

To bypass filter for draining or lowering water level and for vacuuming heavy debris directly to waste.

Re circulate-

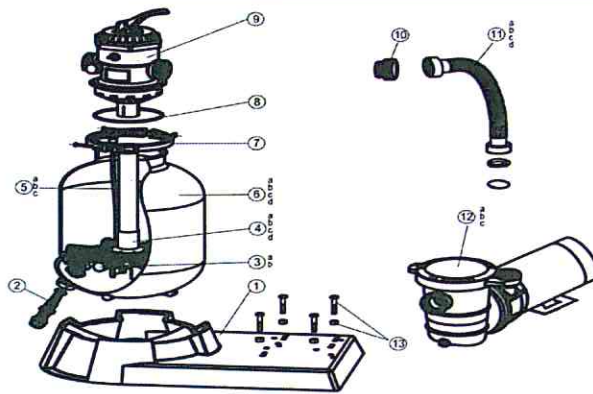
Water is re-circulated through the pool system; bypassing the filter.

Closed-

Shuts off flow from pump to filter.

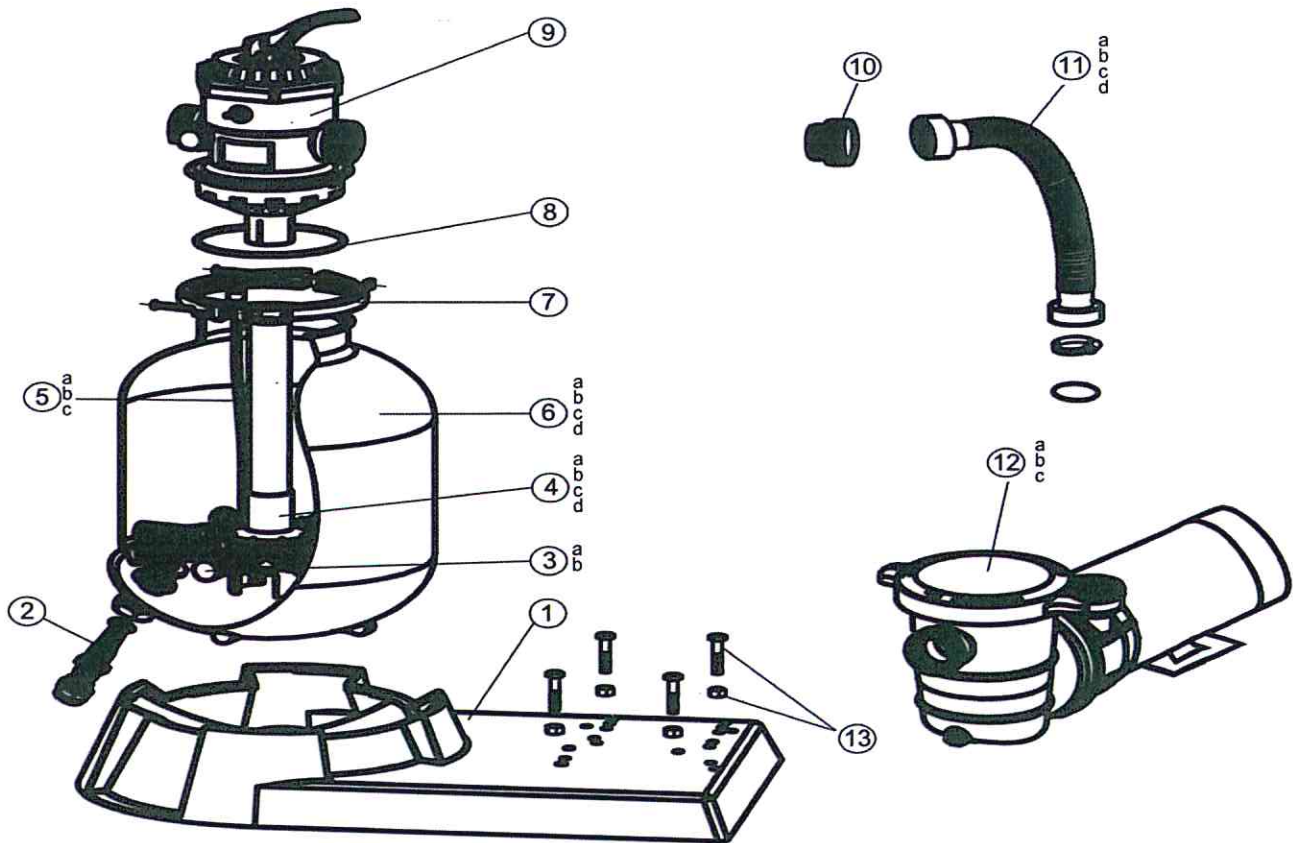
SPECIFICATIONS:

MODEL NO:	FLOW RATE		MAX PRESSURE		FILTER AREA		MEDIA REQUIRED		
	GPM	M ³ /H	PSI	BAR	ft ²	m ²	TYPE	AMOUNT	
							Filter Sand*	LBS	KG
71610, 72228	35	7.9	50	3.5	1.25	0.12	0.018-0.022 in.	100	45
71915, 72229	40	9	50	3.5	2.0	0.19	0.45-0.56 mm	175	79
72220, 72268	45	10	50	3.5	2.6	0.24	0.018-0.022 in.	285	130
72420, 72230	50	11	50	3.5	3	0.28	0.45-0.56 mm	300	136



Ref.No.	Part No.	Description	Qty.
1	71622,647202701	Sand Filter Support for 71610,71915,72220,72420	1
2	71604,647304073	Drain plug for 71610,71915,72220,72420	1
3a	71608,647304017	Lateral for 71610,71915,72220	8
3b	72408,647306016	Lateral for 72420	1
4a	71603,64734079	Center Pipe for 71610	1
4b	71903,647305071	Center Pipe for 71915	1
4c	647305471	Center Pipe for 72220	1
4d	72203,647306072	Center Pipe for 72420	1
5a	71624,647304172	Air Release assembly for 71610	1
5b	71924,647305173	Air Release assembly for 71915,72220	1
5c	71224,647306173	Air Release assembly for 72420	1
6a	71623,647304008	Filter Tank for 71610	1
6b	71923,647305008	Filter Tank for 71915	1
6c	72220,647305408	Filter Tank for 72220	1
6d	72420,647306008	Filter Tank for 72420	1
7/8	71602,647304702 65431012080	Flange Clamp&O-Ring for 71610,71915,72220,72420	1
8	71625,651012080	O-Ring for 71610,71915,72220,72420	1
9	71601,647304071	6-Way Valve for 71610,71915,72220,72420	1
10	71626,647202702	Adaptor for 71610,71915,72220,72420	1
11a	71607,647202772	PVC Hose for 71610	1
11b	71907,647202871	PVC Hose for 71915	1
11c	72207,647202971	PVC Hose for 72420	1
11d	647223471	PVC Hose for 72220	1
12a	71606,72728	Pump for 71610	1
12b	71906,72729	Pump for 71915	1
12c	72206,72730	Pump for 72220,72420	1
13	71609,65862025000	Screw M8x35 and Nut M8 for 71610/71915/72220/72420	4

PARTS FOR 71610/71915/72220/72420



Ref.No.	Part No.	Description	Qty.
1	71622	Sand Filter Support for 71610,71915,72220,72420	1
2	71604	Drain plug for 71610,71915,72220 ,72420	1
3a	71608	Lateral for 71610,71915,72220	8
3b	72408	Lateral for 72420	1
4a	71603	Center Pipe for 71610	1
4b	71903	Center Pipe for 71915	1
4c	72203	Center Pipe for 72220	1
4d	72203	Center Pipe for 72420	1
5a	71624	Air Release assembly for 71610	1
5b	71924	Air Release assembly for 71915,72220	1
5c	71224	Air Release assembly for 72420	1
6a	71623	Filter Tank for 71610	1
6b	71923	Filter Tank for 71915	1
6c	72220	Filter Tank for 72220	1
6d	72420	Filter Tank for 72420	1
7/8	71602	Flange Clamp&O-Ring for 71610,71915,72220,72420	1
8	71625	O-Ring for 71610,71915,72220,72420	1
9	71601	6-Way Valve for 71610,71915,72220,72420	1
10	71626	Adaptor for 71610,71915,72220,72420	1
11a	71607	PVC Hose for 71610	1
11b	71907	PVC Hose for 71915	1
11c	72207	PVC Hose for 72420	1
11d	72207	PVC Hose for 72220	1
12a	71606	Pump for 71610	1
12b	71906	Pump for 71915	1
12c	72206	Pump for 72220,72420	1
13	71609	Screw M8x35 and Nut M8 for 71610/71915/72220/72420	4