

Sand Filtration System

Owner's Manual

Installation, Operation, and Parts





SAVE THIS INSTRUCTION MANUAL


Note: Use only High Rate Sand No. 20 Silica Sand (.45mm - .55) specifically manufactured for sand filters

SAFETY INFORMATION. Please read carefully.


Basic safety precautions should always be followed, including the following: Failure to follow instructions can cause severe injury and/or death.


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


 **WARNING** warns about hazards that **could** cause serious personal injury, death or major property damage and if ignored presents a potential hazard.


 **CAUTION** warns about hazards that **will** or **can** cause minor or moderate personal injury and/or property damage and if ignored presents a potential hazard. It can also make consumers aware of actions that are unpredictable and unsafe.


The **NOTICE** label indicates special instructions that are important but not related to hazards.


 **CAUTION** Sand filters are designed to work with water temperatures greater than 32 degrees F and less than 113 degrees F. The filter should never be operated outside of these temperatures or damage may occur.


 **WARNING** The installation should be carried out in accordance with all applicable safety instructions of swimming pools. Read all instructions carefully before proceeding on the installation. Incorrectly installed equipment may fail, causing severe injury or property damage.


 **CAUTION** All electrical wiring **MUST** be performed by a qualified professional, and must conform to local codes and regulations.


 **CAUTION** The operating safety of the filter is only guaranteed if the installation and operation instructions are correctly followed.

 **CAUTION** To reduce the risk of injury, do not permit children to access or use this product.

 **CAUTION** Chemical spills and fumes can weaken Swimming Pool/ Spa. Corrosion can cause filters and other equipment to fail, resulting in severe injury or property damage. Do not store pool chemicals near your equipment.

 **WARNING** Never operate or test the circulation system at more than 40 PSI.

 **WARNING** Never change the filter control valve while the pump is running

 **CAUTION** Any modification of the filter requires the prior consent from the supplier’s original replacement parts and accessories authorized by the manufacturer ensure a high level of safety. The supplier assumes no liability for the damage and injuries caused by unauthorized replacement parts and accessories.

How It Works

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

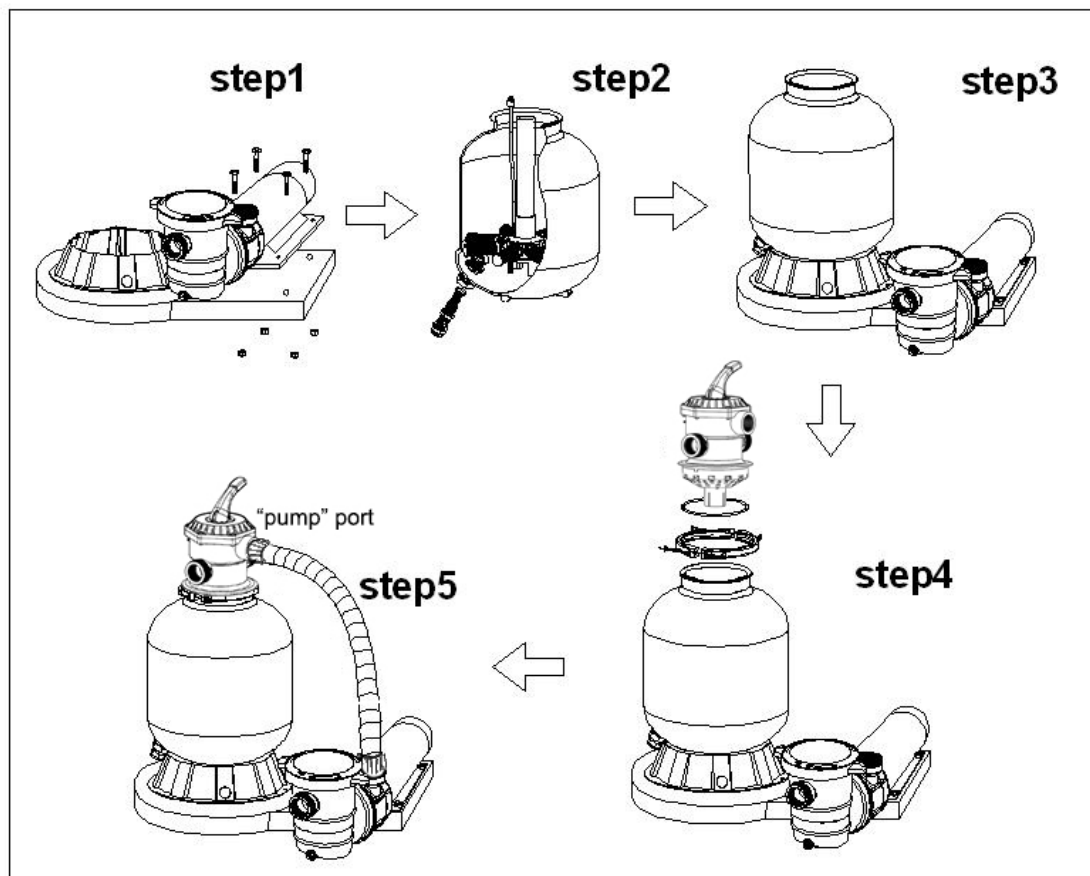
1. The filter system should be installed, not more than 6 feet above pool water level, on a concrete slab, very firm ground, or equivalent, as recommended by your pool dealer. Position the filter so that the piping connections, control valve and winter drain are convenient and accessible for operation, service, and winterizing.
2. Ensure that the compliance label is facing the front to allow easy identification in the case of service difficulties.
3. The following tools will be needed for the installation of your filtration system; screwdriver, wrenches, Pipe sealant will also be needed for plastic adapters.

How to install the filter tank

1. Assemble the pump to mounting base.
2. Install laterals and center pipe in filter tank
3. Place filter tank onto mounting base
4. Cover opening in internal pipe to prevent sand from entering. Be certain that pipe is securely in place
5. Fill filter tank approximately $\frac{1}{2}$ way with water to cushion the filter sand as it is poured into the filter tank

NOTE: Prior to filling filter with sand, check to insure that laterals are in the down position

6. Carefully pour in the correct amount of sand. (make certain that the center pipe remains centered). The top of the sand should come within 6" of the top of the filter tank.
7. Assemble filter control valve to top of filter tank.
Loosely pre-assemble both halves of the clamp with one screw and nut, turning nut 2-3 turns. Do not tighten.
8. Insert filter control valve (with flange clamp and O-ring in place) onto the tank neck. Make certain that the center pipe slips into the hole in the bottom of the valve. Install clamp around tank and valve flange and assemble second screw and nut Tighten just enough so that the valve can be rotated on the tank for final positioning.
9. Wrap Teflon tape on the pressure gauge threads and insert into the tapped hole on the valve body. Do not over tighten.
10. Connect pump to control valve opening marked PUMP. After connections are made, tighten valve flange clamp with screwdriver.
11. Make return to pool pipe connection to control valve opening marked RETURN and complete other necessary plumbing connections, suction lines to pump, waste, etc.
12. Make electrical connections to pump



Initial Start-Up of Filtration System

1. Inspect all the connections have been made correct and are secure.
2. Depress top mount valve handle and rotate to BACKWASH position.
3. Prime and start pump according to pump instructions allowing the filter tank to fill with water.

NOTE: ALL SUCTION AND DISCHARGE VALVES MUST BE OPENING WHEN STARTING THE SYSTEM. FAILURE TO DO SO COULD CAUSE SEVERE PERSONAL INJURY.

Once the 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 of fine sand particles in the sand media.

4. 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.
5. Adjust pool suction and return valves to achieve desired flow. Check system and filter for leaks and tighten connections if required.

NOTES:

1. Note the initial pressure gauge reading when the filter is clean. (It will vary from pool to 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 the time to backwash (clean) the filter.

2. **IMPORTANT:** To prevent unnecessary strain on piping system and valve, 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 used for regular vacuuming.

BACKWASH – For cleaning filter. When filter pressure gauge rises 8-10 PSI (0.55-0.69 BAR) above the initial start-up 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 the 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.

RECIRCULATE: Water is recirculated through the pool system, bypassing the filter.

CLOSED – Shuts off flow from pump to filter.

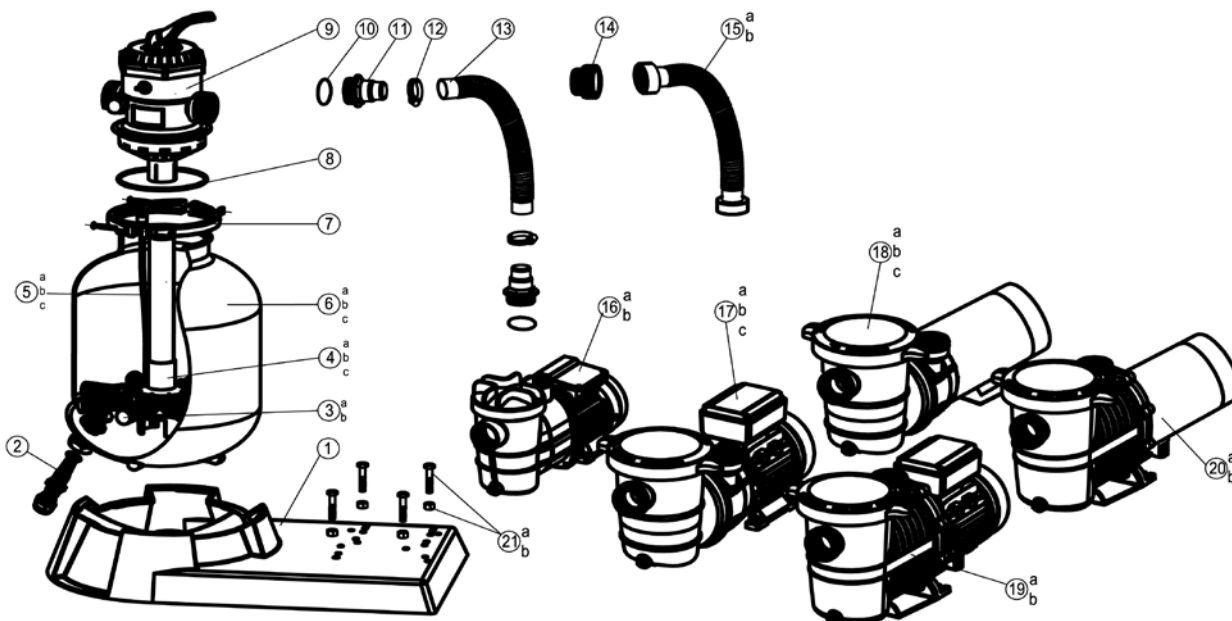
Vacuuming – Vacuuming can be performed directly into the filter. When vacuuming heavy debris, set valve to WASTE position to bypass the filter and vacuum directly out to waste.

WINTERIZING

1. Completely drain tank by unscrewing drain cap at the base of the filter tank. Leave cap off during winter.
2. Depress control valve handle and rotate to set pointer on valve top between any two positions. This will allow water to drain from the valve. Leave valve in this “inactive” position.
3. Drain and winterize pump according to pump instructions.

SPECIFICATIONS

Model No.:	Flow rate		MAX. PRESURE		FILTER AREA		MEDIA REQUIRED		
	GPM	M ³ /H	PSI	BAR	ft ²	m ²	TYPE		
							FILTERSAND*	LBS	KG
F116T7205	35	7.9	50	3.5	1.25	0.12	0.45-0.56mm (0.018-0.022in)	100	45
F119T7207	40	9	50	3.5	2.0	0.19		175	75
F124T7210	49	11	50	3.5	2.8	0.26		300	135
F116T1407	40	9	50	3.5	1.25	0.12		100	45
F119T1410	49	11	50	3.5	2.0	0.19		175	75
F124T1415	50	11.4	50	3.5	2.8	0.26		300	135
F116T7103	30	6.8	50	3.5	1.25	0.12		100	45
F119T6007	40	9	50	3.5	2.0	0.19		175	75
F124T6010	49	11	50	3.5	2.8	0.26		300	135
F116T1103	30	6.8	50	3.5	1.25	0.12		100	45
F119T2007	40	9	50	3.5	2.0	0.19		175	75
F124T2010	49	11	50	3.5	2.8	0.26		300	135
F218T7103	30	6.8	50	3.5	1.8	0.16		110	50
F218T7207	44	10	50	3.5	1.8	0.16		110	50
F222T7210	44	10	50	3.5	2.5	0.23		220	100
F226T7215	53	12	50	3.5	3.6	0.34		350	160
F218T1103	30	6.8	50	3.5	1.8	0.16		110	50
F218T1407	44	10	50	3.5	1.8	0.16		110	50
F222T1410	44	10	50	3.5	2.5	0.23		220	100
F226T1415	53	12	50	3.5	3.6	0.34		350	160
F218T6007	44	10	50	3.5	1.8	0.16		110	50
F222T6010	44	10	50	3.5	2.5	0.23		220	100
F226T6015	53	12	50	3.5	3.6	0.34		350	160
F218T2007	44	10	50	3.5	1.8	0.16		110	50
F222T2007	44	10	50	3.5	2.5	0.23		220	100
F226T2015	53	12	50	3.5	3.6	0.34		350	160
F116T1607	40	9	50	3.5	1.25	0.12		100	45
F119T1610	49	11	50	3.5	2.0	0.19		175	75
F124T1615	50	11.4	50	3.5	2.8	0.26		300	135
F119T1707	40	9	50	3.5	1.25	0.12		100	45
F124T1710	49	11	50	3.5	2.0	0.19		175	75
F218T1607	44	10	50	3.5	1.8	0.16		110	50
F222T1610	44	10	50	3.5	2.5	0.23		220	100
F226T1615	53	12	50	3.5	3.6	0.34	350	160	
F222T1707	44	10	50	3.5	1.8	0.16	110	50	
F226T1710	44	10	50	3.5	2.5	0.23	220	100	

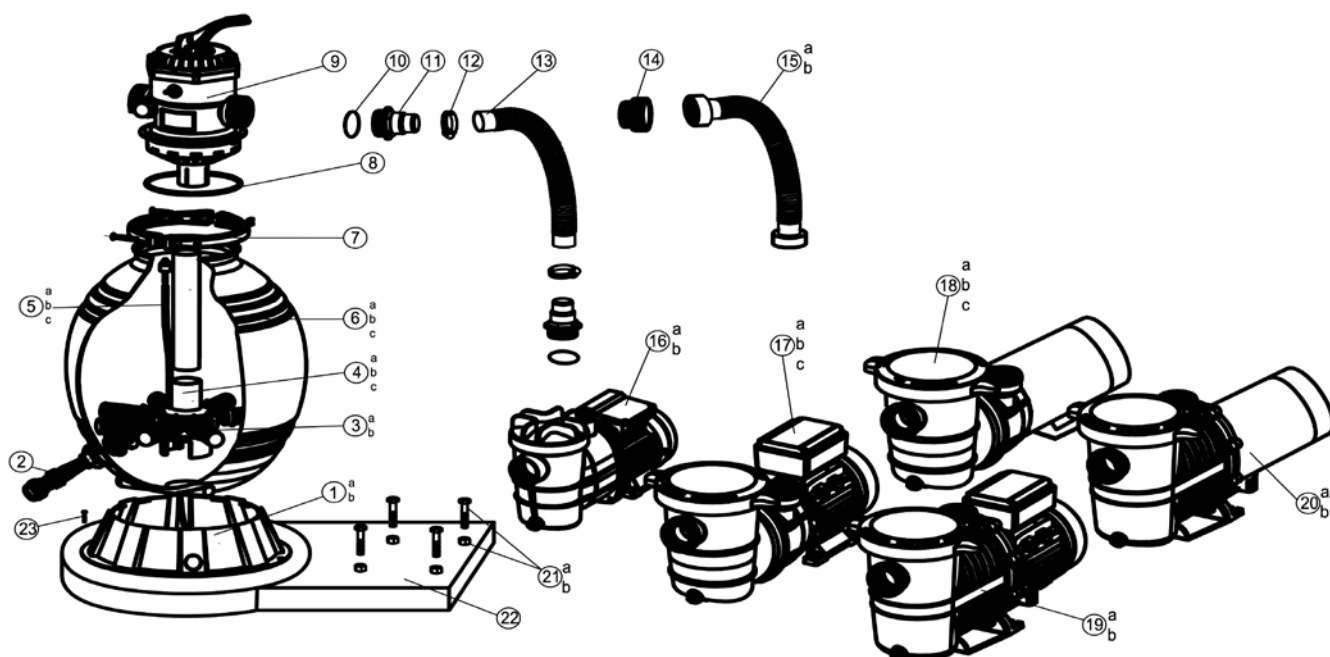


Parts Listing:

**F116T7205/F119T7207/F124T7210/F116T1207/F119T1210/F124T1215/F116T7103/
F116T1103/F119T6007/F124T6010/F119T2007/F124T2010**

Ref.No.	Part No.	Description	QTY
1	647201801080	Sand filter support for S116T/S119T/S124T	1
2	647304073	Drain plug	1
3a	647304017	Lateral for S116T/S119T	8
3b	647306016	Lateral for S124T	8
4a	647304079	center pipe for S116T	1
4b	647305071	center pipe for S119T	1
4c	647306072	center pipe for S124T	1
5a	647304172	Air release assembly for S116T	1
5b	647305173	Air release assembly for S119T	1
5c	647306173	Air release assembly for S124T	1
6a	647304008	Filter tank for S116T	1
6b	647305008	Filter tank for S119T	1
6c	647306008	Filter tank for S124T	1
7	647304072	Flange clamp	1
8	65431012080	O-ring	1
9	647304071	6-way valve	1
10	65431021080	O-ring	3
11	647303014	Hose adaptor	3
12	65021005000	Hose clamp	2
13	65749002011	1 1/2"(38mm)hose for F116T7103/F116T1103	1
14	647201802001	Adaptor for F116T7205/F119T7207/F124T7210/F116T1407/F119T1410/F124T1415/ F119T6007/F124T6010/F119T2007/F124T2010	1
15a	647202772	PVC hose for F116T7205/F116T1207	1
	647202871	PVC hose for F119T7207/F119T1210	1

	647202971	PVC hose for F124T7210/F124T1415	1
15b	647204271	PVC hose for F119T6007/F119T2007	1
	647204371	PVC hose for F124T6010/F124T2010	1
16a	P7103	0.35HP Pump (230V-50HZ) for F116T7103	1
16b	P1103	0.35HP Pump (115V-60HZ) for F116T1103	1
17a	P7205	0.5HP Pump (230V-50HZ) for F116T7205	1
17b	P7207	0.75HP Pump (230V-50HZ) for F119T7207	1
17c	P7210	1.0HP Pump (230V-50HZ) for F124T7210	1
18a	P1207	0.75HP SPL Pump (115V-60HZ) for F116T1407	1
18b	P1210	1.0HP SPL Pump (115V-60HZ) for F119T1410	1
18c	P1215	1.5HP SPL Pump (115V-60HZ) for F124T1415	1
19a	P6007	0.75HP Pump (230V-50HZ) for F119T6007	1
19b	P6010	1.0HP Pump (230V-50HZ) for F124T6010	1
20a	P2007	0.75HP Pump (115V-60HZ) for F119T2007	1
20b	P2010	1.0HP Pump (115V-60HZ) for F124T2010	1
21a	647201273	Screw M6X25 and Nut M6 for F116T7103/F116T1103	4
21b	65862026000	Screw M8X35 and Nut M8 for F116T7205/F119T7207/F124T7210/F116T1407/F119T1410/F124T1415	4
		Screw M8X35 and Nut M8 for f119T6007/F124T6010/F119T2007/F124T2010	2



Parts Listing:

**F218T7103/F218T1103/F218T7207/F222T7210/F226T7215/F218T1407/F222T1410/
F226T1415/F218T6007/F222T6010/F226T6015/F218T2007/F222T2007/F226T2015**

Ref. No.	Part No.	Description	QTY
1a	647304009	Sand filter support for S218T	
1b	647305009	Sand filter support for S222T/S226T	1
2	647304073	Drain plug	1
3a	647304017	Lateral for S218T/S222T	8

3b	647306016	Lateral for S226T	8
4a	647304571	Center pipe for S218T	1
4b	647305571	Center pipe for S222T	1
4c	647306571	Center pipe for S226T	1
5a	647304172	Air release assembly for S218T	1
5b	647305173	Air release assembly for S222T	1
5c	647306173	Air release assembly for S226T	1
6a	647304501	Filter tank for S218T	1
6b	647305501	Filter tank for S222T	1
6c	647306501	Filter tank for S226T	1
7	647304072	Flange clamp	1
8	65431012080	O-ring	1
9	647304071	6-Way valve	1
10	65431021080	O-ring	3
11	647303014	Hose adaptor	3
12	65021005000	Hose clamp	2
13	65749002011	1 1/2”(38mm)hose for F218T7103/F218T1103	1
14	647201802001	Adaptor for F218T7207/F222T7210/F226T7215/F218T1407/F222T1410/F226T1415/ F218T6007/F222T6010/F226T6015/F218T2007/F222T2007/F226T2015	1
15a	647205871	PVC hose for F116T7205/F116T1407	1
	647205971	PVC hose for F119T7207/F119T1410	1
	647202971	PVC hose for F124T7210/F124T1415	1
15b	647206371	PVC hose for F119T6007/F119T2007	1
	647204371	PVC hose for F124T6010/F124T2010	1
16a	P7103	0.35HP Pump (230V-50HZ) for F116T7103	1
16b	P1103	0.35HP Pump (115V-60HZ) for F116T1103	1
17a	P7205	0.5HP Pump (230V-50HZ) for F116T7205	1
17b	P7207	0.75HP Pump (230V-50HZ) for F119T7207	1
17c	P7210	1.0HP Pump (230V-50HZ) for F124T7210	1
18a	P1207	0.75HP SPL Pump (115V-60HZ) for F116T1407	1
18b	P1210	1.0HP SPL Pump (115V-60HZ) for F119T1410	1
18c	P1215	1.5HP SPL Pump (115V-60HZ) for F124T1415	1
19a	P6007	0.75HP Pump (230V-50HZ) for F119T6007	1
19b	P6010	1.0HP Pump (230V-50HZ) for F124T6010	1
20a	P2007	0.75HP Pump (115V-60HZ) for F119T2007	1
20b	P2010	1.0HP Pump (115V-60HZ) for F124T2010	1
21a	647201273	Screw M6X25 and Nut M6 for F116T7103/F116T1103	4
21b	65862026000	Screw M8X35 and Nut M8 for F116T7205/F119T7207/F124T7210/F116T1407/F119T1410/F124T1415	4
		Screw M8X35 and Nut M8 for F119T6007/F124T6010/F119T2007/F124T2010	2
22	647204801080	Sand filter support for S218T/S222T/S226T	1
23	6512012000	Screw ST4.8X20	4

Thank you for
choosing our products!