TROUBLE SHOOTING

MOTOR DOES NOT START:	Make sure motor is plugged in. Circuit breaker in OFF position. Thermal Overload in tripped position. Wiring installation incorrect. Incorrect line voltage. Defective wiring.	Excessive Pump Noise:	Worn Bearings. Suction Line Clogged. Pump incorrectly mounted. Hose Fitting partially closed. Slice Valve partially closed. Clogged Trap Basket.
THERMAL OVERLOAD TRIPS:	Low Voltage. Wiring installation incorrect. Dual voltage pumps mis-wired. Inadequate ventilation.	INADEQUATE FILTERING:	Sand level too low. Inadequately cleaned system. Excessive dirt load. Chemical imbalance.
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.		Inadequate system pressure. SAND FILL CHART: Model FS016 - 50 lbs Model FS019 - 100 lbs Model FS022 - 150 lbs Model FS026 - 200 lbs

WARNING: NEVER CHANGE VALVE POSITION WITH PUMP RUNNING!

AWARNINGS! READ AND FOLLOW ALL INSTRUCTIONS! SAVE THESE INSTRUCTIONS!

CHLORINATOR/BROMINATOR USE

WARNING! To reduce the risk of injury and product damage:

Feeders are designed to use only Chlorine (Trichloro-s-triazinetrione) or Bromine (Bromochloro -5, 5 Dimethylhydantoin) tablets, slow dissolving type. UNDER NO CIRCUMSTANCES MIX Trichlor OR Bromine with Calcium Hypochlorite, with other forms of concentrated chlorine or with other chemicals FIRE AND/OR EXPLOSION MAY RESULT. NEVER use oils or grease to lubricate Oring. Oil in contact with Trichlor OR Bromine may result in FIRE. Caution should be used when removing feeder cap. Do not inhale fumes. If shock treatments or Algaecides containing chemicals other than sanitizer tablets in feeder must be used, then turn off feeder OR remove tablets until the shock or Algae treatment is complete and all granules have dissolved. Failure to do so may result in granules mixing in feeder causing FIRE AND/OR EXPLOSION. The shock or algae treatment dissolved in water is safe with tablets. ALWAYS WEAR PROTECTION for eyes, skin and clothing when working with chemicals. Do not smoke and avoid sparks and open flames. Turn off pump and control valve before opening chlorinator. Use of bulk chemicals may result in damage to pool. Chemicals will dissolve very quickly and may cause bleaching to liner due to over-chlorinating, possibly causing unsafe pool conditions. Settings in excess of the recommended control setting levels for the chlorinator can result in excess chlorine being discharged in your pool. This can result in bleaching or discoloration of areas around the pool inlet or in some cases bleaching of the entire pool liner or paint. (CHECK CHEMICAL RESIDUALS REGULARLY.)

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: Warranty only applies to OEM's and Distributor's of Waterway.

All plastics parts such as jets, valves, skimmers, manifolds, suctions, lights and other plastic components manufactured by Waterway will be replaced or repaired of the defects as determined by Waterway to be the responsibility of Waterway Plastics for a period of THREE YEARS from the date of installation The warranty does not cover filter cartridges, DE grids, O-rings, Pressure gauges, Pump seals, Light bulbs, or any parts not manufactured by Waterway.

WATERWAY PLASTICS 2200 EAST STURGIS RD. OXNARD, CA 93030





HIGH RATE SAND FILTER

OWNER'S MANUAL

SAVE THESE INSTRUCTIONS

Read all instructions prior to installation

IMPORTANT: Follow all national and local building and safety codes.

Your Sparco Sand Filter System is shipped complete with all needed components ready for assembly and installation.

SAFETY

Warning: A GFCI is required. System will require a 110 Volt / 20 Amp service. DO NOT use extension cords. Use will void warranty on pump motor. The pool equipment should be located between the pool skimmer and return line. The filtration system should not be installed less than 2 ft, and no more than 5 ft, from the pool. The Sparco Sand Filter System needs to be on a completely flat / level surface. (patio block, cement slab, etc.). Assemble filter system only after above ground pool is installed. Fill pool with water. Important: Do Not raise water level above pool return line or skimmer throat until installation is complete. Note: Open shipping carton in an upright position, checking contents, as follows:

- 1. One-piece mounting base. 5. One fittings bag.
- 2. One pump. 6. One Collar Wrench.
- 7. Trap assemblies. 3. One filter.
- 4. Two corrugated hoses. 8. Pump to filter hose.

INSTALLATION

- 1. Place filter with filter base on a level, secure surface. There is no need to disassemble filter or pump assemblies. Position Sand Filter Body securely onto Filter Base. Align drain with drain clearance on base. Secure Sand Filter Body to base using bolt, #17, and washer, #16, P/N 820-0017 as shown. Do Not over tighten.
- 3 Secure pump to pump base using pin and anchor assemblies, #20, 429-7300. Detail 1.
- 4 Remove collar assembly from filter tank. Do Not lose screws. Important: To prevent damage to internal filter lateral components, fill filter tank full with water prior to adding sand. The Sand Fill Guide, #10, P/N 502-2011, will be 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.
- Assure that O-Ring, #9, P/N 805-0435, is positioned onto Multiport throat. 5.
- Install Multiport Valve with inlet and outlet ports facing pool. Top of internal stand pipe seats directly into Multiport Valve. Push 6. Multiport Valve evenly onto tank flange. Note: Make sure tank flange is clear of any sand debris.
- 7. Install filter tank collar assembly, #6, P/N 718-1960 and #7, P/N 819-0015, by threading collar clockwise until hand tight. Then use collar wrench to tighten further. Detail 3
- 8. To use collar wrench, #5, P/N 505-1970, place on collar assembly use both hands to turn wrench 1/2 to 3/4 of a turn to secure multiport valve to filter body. **Detail 4**
- Position and hand tighten Pump Hose Assembly, #29, to top inlet port. Position gasket, #21, P/N 711-4010, and hand tighten onto pump. 9 Do Not over-tighten. Detail 6.
- 10. Hand tighten Return Sweep Assembly, #32, P/N 550-1841, to bottom outlet port. Do Not over-tighten.
- 11. Position o-Ring, #2, P/N 805-0224 onto 11/2" Gate Valve with Steps, #28, P/N 600-2310. Hand tighten onto suction side of pump trap. Detail 7.
- 12. Apply Teflon tape (4 wraps ideal) to Pressure Gauge, #3, P/N 830-2000. Thread into Multiport Valve.
- 13. Remove 4 hose clamps, #27, P/N 872-0011 and position over end of corrugated hoses, #28, P/N 872-9002. Install corrugated hose between the Return Sweep Assembly on Multiport Valve and to pool return fitting. Tighten hose clamps. Install the other corrugated hose between the 11/2" Hose Fitting with 3/8" Barb, #26, P/N 425-1801 and to pool skimmer fitting. Tighten hose clamps. Note: Soften hose ends with warm water to ease installation onto fittings (if necessary).
- 14. Install Waste Adapter Fitting, #1, P/N 425-1928 with O-Ring, #2, P/N 805-0224. Detail 5.

SYSTEM START-UP

- Fill pool until water is halfway up length of skimmer throat. 1.
- 2. Make sure pump trap is full of water. Slightly loosen trap lid to relieve pressure and allow water to fill trap. Re-tighten lid.
- 3 Make sure Multiport Valve handle is in Filter position.
- 4. Plug pump into GFCI outlet and turn pump on. Turn two (2) speed pumps to high.
- Make note of start-up pressure on gauge. 5.
- Checks for leaks. 6

CLEANING INSTRUCTIONS

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

Pressurized vessel. Never attempt to loosen or open Collar Assembly, #6, P/N 718-1960 and #7, P/N 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 Multiport 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 Multiport 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. Rotate Multiport Valve handle to Filter position. Turn pump on. Valve is now in normal operating position.

WINTERIZATION

- 1. Backwash filter system completely. See Cleaning Instructions.
- 2. Run a filter cleaning chemical through filter system as per cleaner instructions.
- 3. Turn pump off. Disconnect hoses from skimmer and return fitting.
- 4. Remove drain plug cap from bottom of filter tank. Do Not remove hex drain assembly, #14. (To remove Item, #14, P/N 602-5311, Self Theading Drain Screen. Remove item, #15, 602-5301, Drain Cap and use as tool to remove.)
- 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.

REPLACEMENT PARTS

ILLI					
Item	Part No.	Description			
1	425-1928	Waste Adapter Fitting			
2	805-0224	O-Ring			
3	830-2000	0-30 PSI Gauge			
4	WVS003-SC	Multiport Valve Assembly			
5	505-1970	Collar Wrench			
6	718-1960	Split Nut, Sand Filter Assembly			
7	819-0015	Screw, ¹ / ₄ "-20 PPH x 2"			
8	820-0013	Hex Nut, Serrated ¹ / ₄ "-20			
9	805-0435	O-Ring			
10	502-2011	Sand Fill Guide			
10	505-2040	16" Lateral & Manifold Assembly			
11	505-2050	19" Lateral & Manifold Assembly			
	505-2060	22" Lateral & Manifold Assembly			
	505-2080	26" Lateral & Manifold Assembly			
12	505-3000	Threaded Sleeve for Split Nut			
12	515-1607	16" Sand Filter Body			
15	515-1907	19" Sand Filter Body			
	515-2007	22" Sand Filter Body			
	515-2067	26" Sand Filter Body			
14	602-5311	Self Threading Drain Screen			
14	602-5301	Drain Cap			
16	820-0017	Washer ³ / ₈ " Flat			
17	819-0016	Bolt $22''/26''$ Sand Filter $\frac{3}{8}''-16$ x			
17	819-0019	Bolt 22 / 20 Sand Ther $\frac{1}{8}$ -10 x Bolt 19" Sand Filter $\frac{3}{8}$ "-16 x $\frac{1}{2}$ "			
	819-0020	Bolt 19" Sand Filter $\frac{3}{8}$ " - 16 x $\frac{1}{4}$			
18	672-7211	Filter Base			
19	PH1100	1 HP, 1 SPD Hi-Flo Pump			
17	PH1150	$1\frac{1}{2}$ HP, 1 SPD Hi-Flo Pump			
	PH1200	2 HP, 1 SPD Hi-Flo Pump			
	PH2100	1 HP, 2 SPD Hi-Flo Pump			
	PH2150	$1\frac{1}{2}$ HP, 2 SPD Hi-Flo Pump			
	PH2200	2 HP, 2 SPD Hi-Flo Pump			
20	429-7300	Pin & Anchor Assembly			
20	711-4010	2" Gasket			
22	319-3230	6" Basket Assembly (Not Shown)			
22	319-2170	6" Pump Trap Body			
23	805-0436	O-Ring			
25.	319-3260	6" Pump Trap Lid			
23. 26	425-1801	$1\frac{1}{2}$ " Hose Fitting with $\frac{3}{8}$ " Barb			
20	872-0011	Hose Clamp, Stainless Steel			
28	872-9002	Corrugated hose, Black			
28	550-1801	16" Sand Filter Hose Assembly			
29	550-1811	19" Sand Filter Hose Assembly			
	550-1821	22" Sand Filter Hose Assembly			
	550-1821	26" Sand Filter Hose Assembly			
30	711-4000	$1^{1/2}$ " Gasket			
30	417-4161	$1\frac{1}{2}$ Gasket $1\frac{1}{2}$ " Buttress x $1\frac{1}{2}$ " MPT			
32					
32 33	550-1841 CABASE	Return Sweep Assembly			
33 34	CABASE 672-7201	Accessory Base Pump Base			
54	0/2-/201	r ump Dasc			
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810-0069-SPR Instruction Sheet

