



# **DELUXE SYSTEM OWNER'S MANUAL**

## **CAREFREE DELUXE SAND FILTER SYSTEM OWNER'S MANUAL**



WARNING: A GFCI is required. Follow national and local building and safety codes.

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

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 5ft. from the pool. The Carefree Deluxe 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 no 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
- 2. One pump
- 3. One filter
- 4. Two corrugated hoses
- 5. One fittings bag 6. One collar wrench
- 7. Trap assemblies
- 8. Sand filter hose assembly

## INSTALLATION INSTRUCTIONS



#### WARNING! READ ALL INSTRUCTIONS AND WARNING LABELS BEFORE OPERATING FILTER!

- 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 (#19). Align drain with drain clearance on base. Secure sand filter body to base using bolt (#20) and washer (#21) as shown. **DO NOT** over tighten.
- 2. Open box and remove pump and trap. Place pump base (#22) on left side of filter. Pump base mounting tab fits directly into filter base slot.
- 3. Secure pump to pump base using pin and anchor assemblies (#24) (Detail 1).
- 4. **IMPORTANT**: To prevent damage to internal filter lateral components, fill filter tank full with water prior to adding sand. With sand fill guide (#8) 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.
- 5. Assure that o-ring (#5) is positioned onto multi-port throat.
- 6. Install multi-port valve with inlet and outlet ports facing pool. Top of internal stand 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.
- 7. Install filter tank split-nut assembly (#7, 7a & 7b) by threading split-nut clockwise

#### SYSTEM START UP

- 1. Fill pool until water is halfway up length of skimmer throat.
- 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 multi-port valve handle is in Filter position.
- 4. Plug pump into GFCI outlet and turn pump on. Turn two-speed pumps to high.
- 5. Make note of start-up pressure on gauge.
- 6. Check for leaks.

#### 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 cap from bottom of filter tank (#18). **DO NOT** remove self-threading drain assembly (#17).
- 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 (#24). Lift and remove pump and pump base from filter base. Store inside.

until hand tight. Then use split-nut wrench (#6) to tighten further (Detail 3).

- To use split-nut wrench (#6), place on split-nut assembly, use both hands to turn wrench <sup>1</sup>/<sub>2</sub> to <sup>3</sup>/<sub>4</sub> of a turn to secure multi-port valve to filter body (Detail 2).
- 9. Position and hand tighten smaller end of sand filter hose assembly (#15) to top inlet port of multi-port valve (#4) by positioning gasket (#11) and hand tighten onto already installed buttress (#10). Position and hand tighten other end of sand filter hose assembly by positioning gasket (#25) and hand tighten onto volute on pump (Detail 5). **DO NOT** over tighten.
- 10. Thread gate valve (#33) and 1 ½" gasket (#11) onto suction side of pump trap and hand tighten (Detail 4a).
- 11. Apply Teflon tape (4 wraps ideal) to pressure gauge (#3). Thread into multi-port valve.
- 12. Remove 4 hose clamps (#14) and position over end of corrugated hoses (#13). Install corrugated hose (#13) onto return sweep assembly (#12), on multi-port valve and to pool return fitting. Tighten hose clamps. Install the other corrugated hose between gate valve (#33) and pool skimmer fitting. Tighten hose clamps. **NOTE**: Soften hose ends with warm water to ease installation onto fittings (if necessary).
- 13. Install waste adapter fitting (#1) with o-ring (#2) (Detail 4).

## **CLEANING INSTRUCTIONS**

**NOTE**: When pressure gauge reading is 5 PSI or higher than original starting pressure, the filter needs to be cleaned. The Carefree Deluxe 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 (#7, 7a & 7b) while system is running. It could cause severe injury or harm to user. **NEVER CHANGE VALVE POSITION WITH PUMP RUNNING!** 

- 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. Rotate multi-port valve handle to **Filter** position. Turn pump on. Valve is now in normal operating position.

## **CAREFREE DELUXE SAND FILTER SYSTEM PARTS LIST**

		<b>a</b>			
ltem 1	Part No.	Description		For Hard Plumbing: use 500-1901 1 ½" 90° Sweep Elbow	
1	425-1928	Waste Adapter Fitting		Union x Slip See in:	structions for proper alve alignment.
2	805-0224	O-Ring		(optional/not included) v	aive alignment.
3 4	830-3000 WVS003	Pressure Gauge Multi-Port Valve Assembly		13 3->@	<b>₩</b> -1
4 5	805-0435	0-Ring			<b>C</b> ,
6	505-0455 505-1970	Wrench - Split Nut			
7	718-1960	Split-Nut - Sand Filter			
, 7a	819-0015	Screw - ¼" - 20 PPH x 1 ½"			<b>∽</b> +5
7b	820-0013	Hex Nut - Serrated 1/4"- 20	For Hard Plumbing: use 400-406 1 ½" #7 Union Assembly		
8	502-2011	Sand Fill Guide	1 ½" S Pump End (optional/not included)	14 2	6
9	505-1960	Threaded Sleeve for Split-Nut			
10	417-4161	1 ½" Buttress x 1 ½" MPT	()je	$15 \rightarrow \square \qquad 7 \rightarrow$	- <b>( )</b> - ← 7a
11	711-4000	1 ½" Gasket		7b -	
12	550-1841	Return Sweep Assembly		<b>9</b> — -	
13	872-9002	Corrugated Hose - Black	32	16a	
14	872-0010	Hose Clamp - Stainless Steel		(not shown)	
15	550-1811	16" Sand Filter Hose Assembly	31		
	550-1821	19" Sand Filter Hose Assembly		m /	
	550-1831	22" Sand Filter Hose Assembly		16→	
	550-1833	26" Sand Filter Hose Assembly		←15	
16	515-2101	16" Sand Filter Body		←29	
	515-2091	19" Sand Filter Body			
	515-2081	22" Sand Filter Body		25	
	515-2121	26" Sand Filter Body	14	24	17
16a	505-2140	16" Lateral and Manifold Assembly	28		18
	505-2150	19" Lateral and Manifold Assembly	20 27		
	505-2160	22" Lateral and Manifold Assembly	20		Removal
17	505-2180	26" Lateral and Manifold Assembly		24	Tool End
17	602-5310	Self-Threading Drain Screen		22	≢←21 19
18 10	602-5321 672 7211	Drain Cap Filter Base			l ← 20
19 20	672-7211 810 0020				
20	819-0039 810-0016	Bolt 3/8" - 22" Bolt 3/8" - 16" & 19"	24	( )←5	
21	819-0016 820-0017	Washer 3/8" Flat			€ 4
21	672-7201	Pump Base	23	6	
22	PSP1100	1 HP - 1-Speed Supreme Pump			
25	PSP1150	1 ½ HP - 1-Speed Supreme Pump			6
	PSP1200	2 HP - 1-Speed Supreme Pump	24		
	PSP2100	1 HP - 2-Speed Supreme Pump	24	9	9
	PSP2150	1 ½ HP - 2-Speed Supreme Pump	DETAIL 1		
	PSP2200	2 HP - 2-Speed Supreme Pump			
24	429-7300	Pin & Anchor Assembly		DETAIL 2	DETAIL 3
25	711-4010	2" Gasket			
26	311-1520	Faceplate - Supreme Pump			15
27	805-0330	O-Ring	~		25
28	319-1510	Supreme Pump Trap Body		24	Or I
29	319-1540	C-Clip Supreme Pump		33	24
30	319-1530	Supreme Trap Basket		11 2	3 23
31	805-0439	0-Ring	(©⊇) ← 4		
32	511-1310	Trap Lid		24	
33	WV001H	Gate Valve	DFTAIL 4	DFTAII 4a	DFTAIL 5

**DETAIL 4** 

**DETAIL** 4a

**DETAIL 5** 

#### TROUBLESHOOTING

MOTOR DOES NOT START:	Make sure motor is plugged in. Circuit breaker in OFF position. Thermal overload in tripped position.	EXCE	SSIVE PUMP NOISE:	Worn bearings. Suction line clogged. Pump incorrectly mounted. Hose fitting partially closed. Slice valve partially closed. Clogged trap basket. Sand level too low. Inadequately cleaned system. Excessive dirt load. Chemical imbalance. Inadequate system pressure.	
WIRING INSTALLATION INCORRECT	: Incorrect line voltage. Defective wiring.				
THERMAL OVERLOAD TRIPS:	Low voltage. Wiring installation incorrect. Dual voltage pumps mis-wired. Inadequate ventilation.	INAC	DEQUATE FILTERING:		
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.		Model FS01619 - 100 Model FS01922 - 150		Model FS02225- 250 lbs. Model FS02629 - 400 lbs.

## **CHLORINATOR & BROMINATOR USE WARNINGS**

READ AND FOLLOW ALL INSTRUCTIONS! SAVE THESE INSTRUCTIONS! 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 0-ring. 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. For Warranty, product must be registered at time of purchase/installation at www.waterwayplastics.com. For Warranty claims or questions, please contact point of purchase.



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