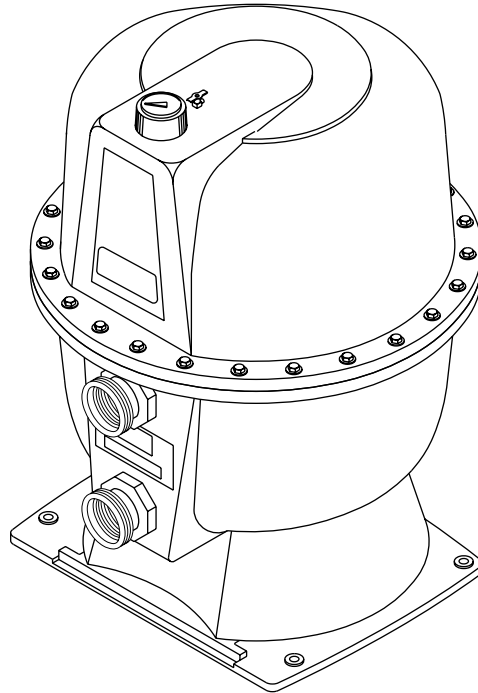


# STA-RITE®

## VERTICAL GRID DE FILTERS

O W N E R ' S M A N U A L



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### INSTALLATION, OPERATION & PARTS

#### MODELS

DEPB36-1

DEPB51-1

DEPB83-1

DEPB36-1N

DEPB51-1N

DEPB83-1N



This manual should be furnished to the end user of this filter; its use will reduce service calls and chance of injury and will lengthen filter life.

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#### Sta-Rite Pool/Spa Group

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Union City, TN • Delavan, WI • Mississauga, Ont. • Murrieta, CA

# VERTICAL GRID DE FILTERS

To avoid unneeded service calls, prevent possible injuries, and get the most out of your filter, READ THIS MANUAL CAREFULLY!

The Sta-Rite 'DEPB' Series Vertical Grid DE Filter:

- Is designed to filter water for swimming pools.
- Is an excellent performer; durable, reliable.

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## READ AND FOLLOW SAFETY INSTRUCTIONS!



 **DANGER**

 **WARNING**

 **CAUTION**

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

**DANGER** warns about hazards that **will** cause serious personal injury, death or major property damage if ignored.

**WARNING** warns about hazards that **can** cause serious personal injury, death or major property damage if ignored.

**CAUTION** warns about hazards that **will** or **can** cause minor personal injury or property damage if ignored.

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

**Carefully read and follow all safety instructions in this manual and on filter.**

Keep safety labels in good condition.  
Replace missing or damaged safety labels.

Carefully read and follow all safety instructions in this manual and on equipment. Keep safety labels in good condition; replace if missing or damaged.



**Incorrectly installed or tested equipment may fail, causing severe injury or property damage.** Read and follow instructions in owner's manual when installing and operating equipment. Have a trained pool professional perform all pressure tests.

1. Do not connect system to a high pressure or city water system.
2. Use equipment only in a pool or spa installation.
3. Trapped air in system can cause explosion. BE SURE all air is out of system before operating or testing equipment.

**Before pressure testing, make the following safety checks:**

- Check all clamps, bolts, lids, and system accessories before testing.
- Release all air in system before testing.
- Tighten Sta-Rite trap lids to 30 ft. lbs. (4.1 kg-cm) torque for testing.
- Water pressure for test must be less than 25 PSI (172 kPa).
- Water Temperature for test must be less than 104° F. (40° C).
- Limit test to 24 hours. After test, visually check system to be sure it is ready for operation. Remove trap lid and retighten hand tight only.

**NOTICE:** These parameters apply to Sta-Rite equipment only. For non-Sta-Rite equipment, consult manufacturer.

	<b>⚠ WARNING</b>	<b>BEFORE WORKING ON FILTER:</b>
	<b>Hazardous pressure. Can cause severe injury or major property damage from tank blow up.</b>	<ol style="list-style-type: none"> <li>1. Stop pump.</li> <li>2. Open air release valve.</li> <li>3. Release all pressure from system.</li> </ol>

	<b>⚠ WARNING</b>	<b>BEFORE WORKING ON PUMP OR MOTOR</b>
	<b>Filter pumps require hazardous voltage which can shock, burn, or cause death.</b>	Disconnect power to motor.

## GENERAL INFORMATION

Clean a new pool as well as possible before filling pool and operating filter. Excess dirt and large particles of foreign matter in the system can cause serious damage to the filter and pump.

With a diatomaceous earth (DE) filter system in place and operating correctly, clean water is returned to the pool faster than pool water is being contaminated. A typical pool installation will require approximately one week to obtain and maintain the sparkle that your filter is capable of giving you.

DO NOT use more than the recommended amount of DE in your filter. To do so can cause a buildup of DE and "bridging" between the elements which will plug the filter.

**⚠ If filter is improperly disassembled or assembled, it can explode under pressure! To avoid danger of severe injury or major property damage, always follow service instructions in this manual when working on filter!**

### **⚠ WARNING**

**Hazardous pressure.  
Can cause severe  
injury or major  
property damage  
from tank blow up.**

Release all pressure  
and read instructions  
before working on filter.

**⚠ NEVER operate this filter system at more than 50 pounds per square inch (50 PSI/345kPa) pressure! Be sure filter pressure gauge operates when system is operating. If pressure gauge is damaged or does not work, replace it.**

**⚠ Purge all air from system before operating system. NEVER operate filter with air trapped inside.**

On a new pool installation, we recommend:

1. Disassemble the filter after the initial cleanup.

**⚠ To prevent severe injury or major property damage, exactly follow "Filter Disassembly/Assembly Procedure" on page 8.**

2. Remove and hose down the element assembly to remove contaminants.

It is a good idea to remove the element assembly once a year and soak it in a filter cleaning solution to remove accumulated body oils, etc.; see Page 11, "Chemical Cleaning Procedure".

Cleaning interval is based on pressure differential, not on length of time filter is operated. Different water conditions will have different normal cleaning intervals. If backwashing filter is not possible, use "Manual Filter Cleaning Procedure", Page 10, at regular intervals to clean filter.

Check local codes for restrictions on backwash to waste piping, separation tank requirements and spent D.E. disposal requirements.

# INSTALLATION

Installation of filter should only be done by qualified, licensed personnel.

## Filter mount must:

Provide weather and freezing protection.

Provide space and lighting for easy access for routine maintenance. (See Figure 1 and Table II, Page 6, for space requirements.)

Be on a reasonably level surface and provide adequate drainage.

Be as close to pool as possible to reduce line loss from pipe friction.

## Piping:

Piping must conform to local/state plumbing and sanitary codes.

Use Teflon tape or Plasto-Joint Stik' on all male connections of plastic pipe and fittings. **DO NOT use pipe compounds on plastic pipe; it will cause the pipe to crack. Do not use sealant on unions—assemble them dry and hand tight.**

Support pipe independently to prevent strains on filter or valve.

Use 1-1/2" (38mm) or 2" (51mm) pipe to reduce pressure losses as much as possible.

**NOTICE:** Filter may be located away from pool, but for adequate flow larger pipe may be needed. Check local codes for remote installation.

Fittings restrict flow; for best efficiency use fewest possible fittings.

Keep piping tight and free of leaks: pump suction line leaks may cause trapped air in filter tank or loss of prime at pump; pump discharge line leaks may show up as dampness or jets of water.

**NOTICE:** Overtightening can crack filter ports.

## Valves:

A check valve installed ahead of filter inlet will prevent contaminants from draining back into pool.

A check valve installed between filter and heater will prevent hot water from backing up into filter and deforming internal components.

Install Sta-Rite Two Position Slide Valve or Multiport Selector Valve with filter. See Table I.

Filter ports and valve ports are furnished with union connections.

DO NOT use pipe sealants on union collar (nut).

Use care before assembly not to damage union sealing surfaces or O Ring.

To allow recirculation during precoat (if precoat pot is used), install a recirculation line with shut-off between pad return line and pump suction.

## Electrical

All wiring, grounding and bonding of associated equipment must meet local and/or National Electrical Code standards.

**TABLE I - Sta-Rite valves for use with DEPFB filters**

Port Size	Part Number
1-1/2" 2"	<b>Multi-port</b> WC212-143P WC212-144P
	<b>Brass Slide</b> WC212-135D WC212-136D
2"	<b>Plastic Slide</b> WC212-134P

**NOTICE:** Use of valves other than those listed above could cause reversed water flow through filters and damage to internal filter components.

<sup>1</sup> Lake Chemical Co., Chicago, IL

# SPECIFICATIONS

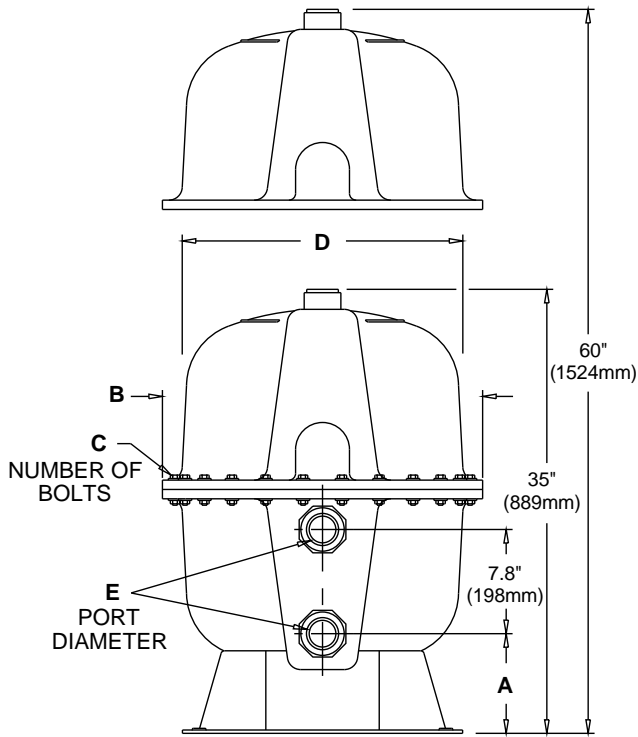


Figure 1

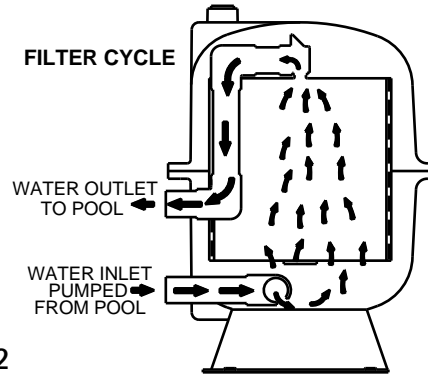


Figure 2

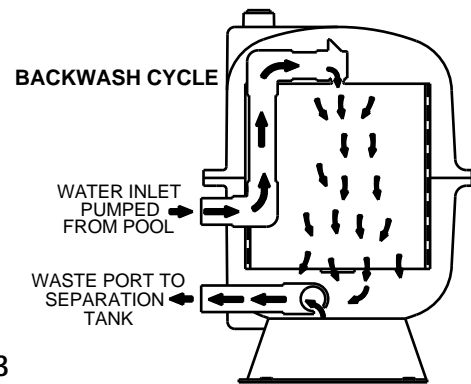


Figure 3

TABLE II - SPACE REQUIREMENTS IN INCHES (MM)

Model No.	A	B	C	D	E
DEPB36-1,DEPB36-1N	7½ (191)	24(610)	24(610)	20(508)	2" Union
DEPB51-1,DEPB51-1N	7½ (189)	28½ (724)	24(610)	24(610)	2" Union
DEPB83-1,DEPB83-1N	7½ (191)	35(889)	32(813)	30(768)	2" Union

DEPB Series Filter Performance Curves

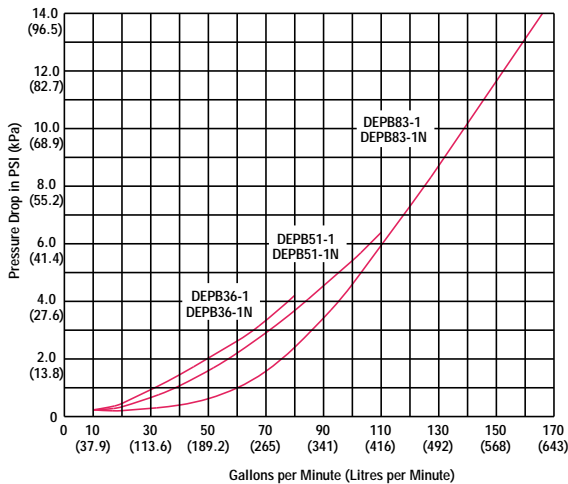


TABLE III - APPROVED DE

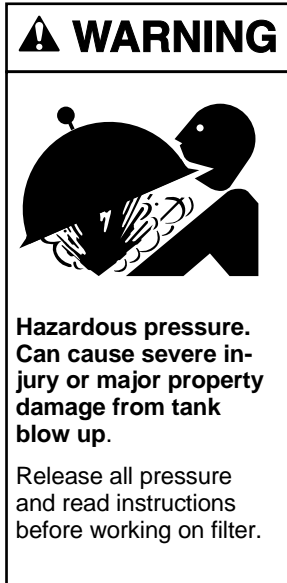
Use only the following DE or equal:

Johns Manville	Celite 545
GREFCO	Decalite 4200
Eagle Picher	Celatom

TABLE IV - FILTER SPECIFICATIONS & OPERATING INFORMATION

Filter Model:	DEPB36-1 DEPB36-1N	DEPB51-1 DEPB51-1N	DEPB83-1 DEPB83-1N
Filter Area in Sq. Ft. (mm²)	36 (3.34)	51 (4.74)	83 (7.71)
Lbs. (Kg) of D.E. Used	3.5 (1.6)	5.1 (2.3)	8.3 (3.8)
Max. Design Flow Rate in GPM(L/M)	72 (273)	102 (386)	166 (628)
Max. Operating Pressure in PSI (kPa)	50 (345)	50 (345)	50 (345)
Max. Operating Temperature	104°F (40°C)	104°F (40°C)	104°F (40°C)

**NOTICE:** 1/2 pound of DE will fill a one-pound coffee can.



## INITIAL START-UP

**⚠** Be sure pump is OFF before starting procedure.

**⚠** Do not operate these filters at more than 50 PSI (345 kPa) under any circumstances!

**CAUTION** To prevent serious damage to the element fabric, NEVER run you DE filter without a diatomaceous earth precoat!

**CAUTION** To avoid damage to internal filter components, never change handle position on control valve while pump is running.

1. Make sure tank shells are securely fastened together as described in Assembly Procedure, Page 8.
2. Set valve to 'filter' position.
3. Fill trap on pump with water (Figure 3).
4. Open air release valve on top of filter assembly (Figure 4).
5. Start pump to purge air from system.
6. When steady stream of water comes from air release valve, close the valve.
7. To prepare precoat slurry, mix diatomaceous earth (DE) and water. See Table IV or instruction decal on filter shell for amount of DE to use.
8. Empty slurry slowly into skimmer to precoat filter element with an even filtering cake.



Figure 3

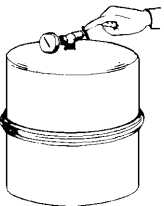


Figure 4

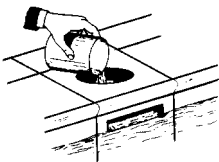


Figure 5

**⚠** Close valve before air is drawn into system.

**NOTICE:** To avoid bridging between filter grids, do not use more DE than 0.1 pound per square foot of filter area (0.49 kilos per square meter).

After filter is operating, record filter pressure gauge reading in owner's manual for future use.

**NOTICE:** When installed on a newly plastered pool, after approximately 48 hours of operation disassemble filter and clean out plaster dust (see "Manual Filter Cleaning Procedure", Page 10).

**⚠** To avoid severe injury or major property damage, exactly follow instructions under "System Disassembly/Assembly" (Page 8)!

Remove and thoroughly clean filter element assembly. use cleanser or detergent and a bottle brush to remove plaster dust (see Figures 8 and 9, Page 10).

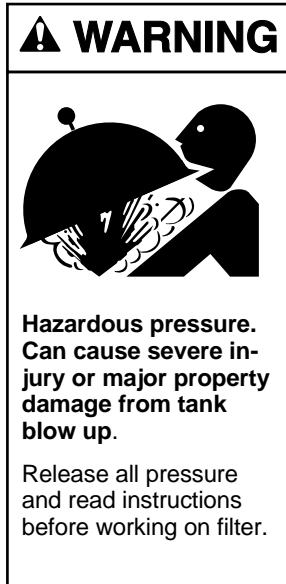
When installed on a pool with vinyl liner or painted bottom, thoroughly backwash and clean filter element after 48 hours of operation to remove construction debris (see "Filter Backwash Procedure", Page 9).

## FILTER DISASSEMBLY/ ASSEMBLY PROCEDURE

### BEFORE DISASSEMBLING FILTER:

- ⚠ 1. STOP PUMP.
- 2. OPEN air release valve and drain fitting.
- 3. WAIT until all pressure is released and water drained from filter tank and system before loosening clamp knobs.

⚠ **CAUTION** To avoid equipment damage and personal injury, never change handle position on control valve while pump is running.



### Disassembly:

1. Backwash filter according to instructions under "Filter Backwash Procedure", Page 9.
2. Stop pump.
3. Open air release valve (Key No. 2, Page 14) on top of filter tank to release all air pressure from inside of tank and system.
4. Remove filter drain plug and drain all water from tank.
5. To equalize flange stresses, loosen clamp knobs alternately (that is, on opposite sides of tank) around tank. Remove clamps.
6. Being careful not to damage O-Ring (Key No. 7, Page 14), lift upper tank shell (Key No. 3, Page 14) off lower tank shell (Key No. 9, Page 14).

### Assembly:

1. Remove O-Ring slowly to avoid stretching or tearing it.
2. Inspect O-Ring (Key No. 7, Page 14) for cuts, nicks, etc. If damaged, replace with a new one.
3. Clean O-Ring area of tank shell (both halves) and O-Ring.
4. Carefully install O-Ring and upper tank shell (Key No. 3, Page 14). Align flat vertical section of upper tank shell with inlet and outlet ports.

**NOTICE:** Be sure upper tank shell contacts O-Ring surface evenly and seal area is clean and free from dirt.

5. Install bolts, washers, and nuts. Tighten nuts evenly and alternately (on opposite sides of tank) around filter (Figure 7).

**NOTICE:** BE SURE to tighten alternate bolts on opposite sides of tank - DO NOT tighten one bolt, then the next, etc.

**NOTICE:** Torque bolts to 20 ft.-lbs. torque for 20" tanks and to 30 ft.-lbs for 24" and 30" tanks. Do not over-torque.

6. Install fill cap and air release/drain plug package and O-Rings (see exploded view, Page 14).

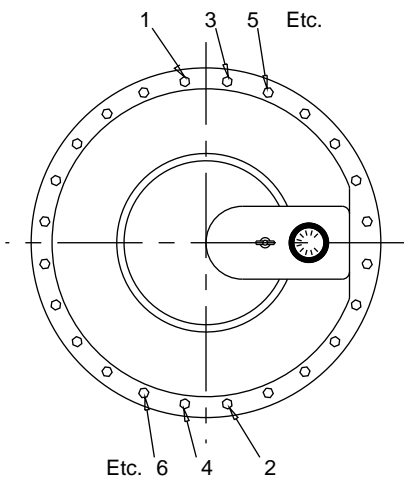


Figure 7 - Tighten bolts in sequence as shown.

# CLEANING THE FILTER

## When to Clean:

**NOTICE:** If installation does not allow backwashing, use manual cleaning procedure regularly (see Page 10).

1. With a new filter:
  - A. Record filter operating pressure at startup. When pressure reaches 15 PSI (103kPa) above startup operation pressure, stop pump for 15-30 seconds to allow filtering cake to release.
  - B. Restart pump to form new cake. Pressure should now be less than 10 PSI (69kPa) above startup operating pressure.
  - C. If pressure is still more than 10 PSI (69kPa) above startup operating pressure, backwash filter (see below).
2. Thoroughly clean air relief filter screen (Key No. 2, Page 13) on top of manifold EVERY time filter is opened. Be sure to remove all debris from screen. Replace filter screen if damaged.
3. At least twice a year, manually clean filter according to instructions, Page 10. At least once a year, follow instructions under "Chemical Filter Cleaning Procedure", page 11, as well.

## Filter Backwash Procedure:

**▲ CAUTION** To prevent equipment damage and possible injury turn pump OFF before changing valve position.

**NOTICE:** Before backwashing with a separation tank, review separation tank owner's manual for instructions.

1. Stop pump.
2. Change valve position.
  - A. If using Multi-port Valve, set to backwash position.
  - B. If using Two Position Slide Valve, raise handle to fully extended position.
3. Start pump, circulating water backwards through filter to flush cake and contaminants into separation tank or waste.
4. If system has a sight glass, backwash until water in glass runs clear.
5. If system does not have a sight glass:
  - A. Backwash one minute.
  - B. Stop pump; reset valve to 'FILTER' position.

**▲ CAUTION** Stop pump before changing valve setting!

- C. Restart pump; filter for 20 seconds.
  - D. Repeat steps A, B, C three times. Cycling is effective when cake and contaminants are difficult to break and flush out of filter.

**NOTICE:** Do not vacuum pool while backwashing filter.

6. Stop pump.
7. Open air release valve and release ALL pressure from tank and system.
8. Follow 'Initial Start-up' procedure (Page 7, steps 4, 5, 6 and 7) to restart system.
9. Compare pressure reading on gauge with reading recorded after initial startup. The two readings should be very close; if not, do "Manual Filter Cleaning Procedure", Page 10.

# MANUAL FILTER CLEANING PROCEDURE

## Before Disassembling Filter:

- ⚠ 1. STOP PUMP.
- 2. OPEN air release valve.
- 3. WAIT until all pressure is released from filter tank and system before loosening clamps.

**NOTICE:** At least twice a year, disassemble and clean filter regardless of operating pressure readings. This can be done conveniently while winterizing pool in cold climates. Use this method regularly if no means of backwashing is available.

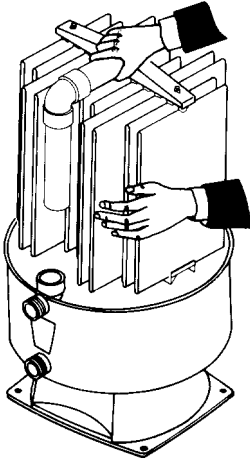


Figure 8

- 1. Backwash filter as usual, but do **not** precoat.
- 2. Disassemble filter (see Page 8).

⚠ **To avoid severe injury or major property damage, exactly follow instructions under "Disassembly" (Page 8)!**

- 3. Grasp element assembly at top manifold plate (Figure 8) and remove it.
- 4. Hose down element assembly and clean with bottle brush (Figure 9). Use detergent solution or filter cleanser available from a pool service store.

**NOTICE:** To avoid damaging fabric, **do not** allow filter element to rub on concrete or any abrasive surface during cleaning.

**NOTICE:** Do not expose element cloth to direct sun for long periods. Direct sun will cause the cloth to deteriorate.

- 5. Inspect grid cloth for tears, calcification, plugged areas, etc. If necessary, soak element in filter cleanser to remove buildup of oils, etc. If calcified, consult pool service company or factory for instructions.
- 6. Thoroughly clean air relief filter screen (Key No. 2, Page 13) on top of manifold. Be sure to remove all debris from screen.
- 7. Follow filter assembly procedure, Page 8.

⚠ **To avoid severe injury or major property damage, exactly follow instructions under "Assembly" (Page 8)!**

- 8. If unit is returning to service, see 'Initial Startup', Page 7.
- 9. If cleaning is part of seasonal shutdown, see 'Winterizing', Page 12.

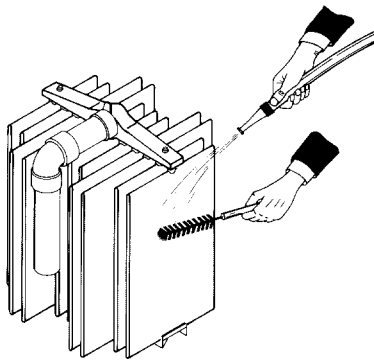
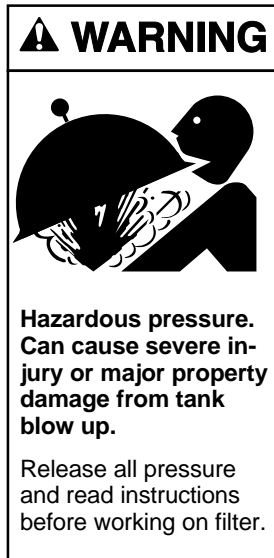


Figure 9

# CHEMICAL CLEANING PROCEDURE



## Before Disassembling Filter:

- ⚠ 1. STOP PUMP.
- 2. OPEN air release valve.
- 3. WAIT until all pressure is released from filter tank and system before loosening clamps.

**NOTICE:** Do not expose element cloth to direct sunlight for long periods. Direct sunlight will cause the cloth to deteriorate.

**NOTICE:** To avoid damaging fabric, **do not** allow filter element to rub on concrete or any abrasive surface during cleaning.

**NOTICE:** Clean filter manually before doing any chemical cleaning.

## Filter Disassembly:

⚠ **To avoid severe injury or major property damage exactly follow instructions under "Disassembly" (Page 8)!**

1. Disassemble and inspect element grid assemblies for tears and worn areas. Replace as needed.
2. Rinse each grid thoroughly with water.
3. Wash each grid with a mild soap solution or commercial filter cleaner. If necessary, soak element grids in filter cleanser to remove buildup of oils, etc.
4. Rinse thoroughly to remove all soap film.
5. If filter elements do not come clean after soaking, have your pool professional acid clean them.

**⚠ WARNING** Risk of burns, explosions, and environmental damage. Only trained professionals should attempt to acid clean filter elements.

7. Reassemble element grids.
8. Inspect inside of filter tank and remove any debris which remains after backwashing.
9. Thoroughly clean air relief filter screen (Key No.2, Page 13) on top of manifold. Be sure to remove all debris from screen. Replace filter screen if damaged.
10. Follow filter assembly procedure, Page 8.

⚠ **To avoid severe injury or major property damage, follow instructions under "Assembly" (Page 8)!**

11. If unit is returning to service, see "Initial Startup" Page 7.
12. If cleaning is part of seasonal shutdown, see "Winterizing", Page 12.

## **SYSTEM INSPECTION**

### **General:**

Wash outside of filter with a mild detergent and water. Rinse off with hose.

**NOTICE:** DO NOT use solvents to clean filter; solvents may damage plastic components in system.

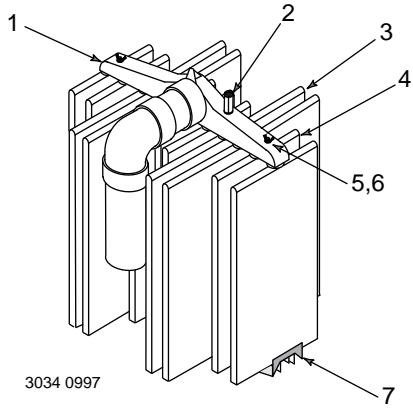
**NOTICE:** Open air bleed valve and bleed all air from filter each time pump is stopped and restarted.

### **Weekly Inspection:**

1. Skimmer basket- remove debris.
2. Stop pump, release all pressure. Remove trap cover and basket, remove debris.
3. Bleed air from filter each time system is started.
4. For systems with bypass valve, make sure separation tank is **not** under pressure.
5. Check pump for leaks. If found, see pump owner's manual.
6. Check pump strainer lid for tightness. **Do not over-tighten!**

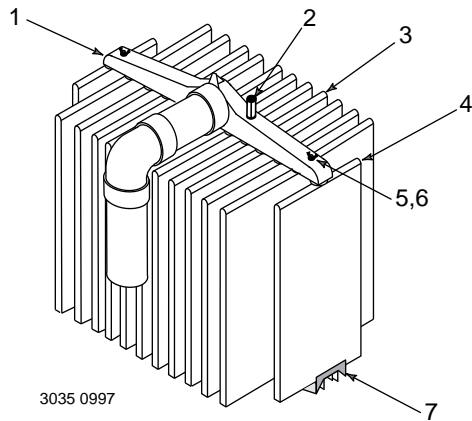
## **WINTERIZING**

1. Clean filter according to instructions, page 10, before winterizing. Do not winterize with DE precoat on grids or with residual in tank.
2. Open air release valve; open all system valves. Position multiport valve between port positions to allow passage to all ports.
3. Remove drain plugs from trap, pump, valve, filter and separation tank.
4. Drain system piping.
5. Loosen union nuts to drain water from filter internal piping and valve.
6. Cover with plastic or tarpaulin to prevent water entrance and freezing.



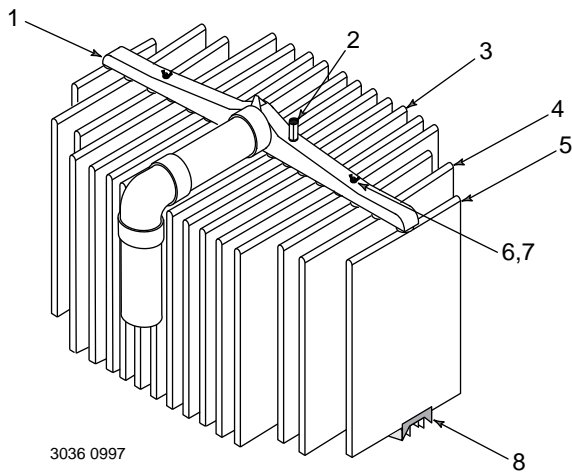
### DEPB36-1(N)

Key No.	Part No. Description	Qty.	24760-0436
1	Collection Manifold Assembly	1	24760-0257
2	Air Bleed Filter	1	WC8-126
3	Covered Element 16½"	4	23900-0033
4	Covered Element 11"	7	23900-0032
5	Rod	2	23900-0039
6	Wing Nut	2	35402-0074
7	Element Grid Support	1	23900-0019



### DEPB51-1(N)

Key No.	Part No. Description	Qty.	24761-0451
1	Collection Manifold Assembly	1	23901-0059
2	Air Bleed Filter	1	WC8-126
3	Covered Element 16½"	11	23900-0033
4	Covered Element 11"	2	23900-0032
5	Rod	2	23900-0039
6	Wing Nut	2	35402-0074
7	Element Grid Support	1	23901-0019

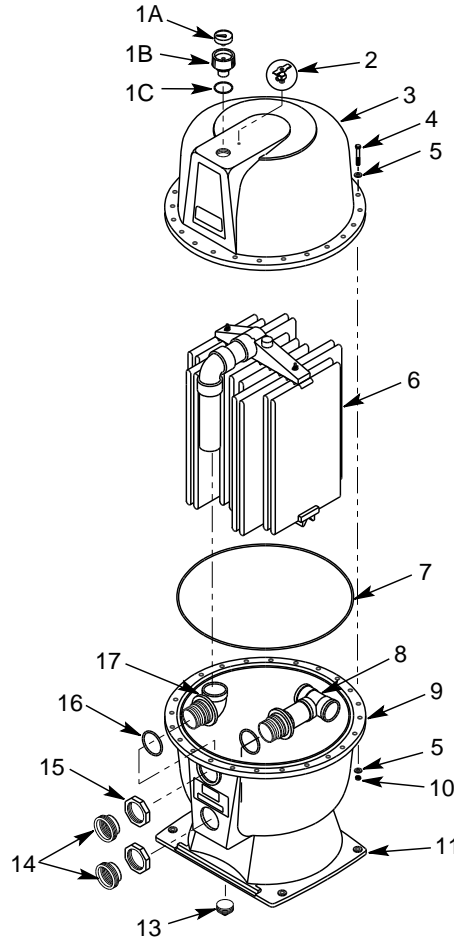


### DEPB83-1N

Key No.	Part No. Description	Qty.	24762-0490S
1	Collection Manifold Assembly	1	23902-0100
2	Air Bleed Filter	1	WC8-126
3	Covered Element 22"	8	23900-0034
4	Covered Element 16½"	4	23900-0033
5	Covered Element 11"	2	23900-0032
6	Rod	4	23900-0039
7	Wing Nut	4	35402-0074
8	Element Grid Support	1	23902-0019

# MODELS

DEPB36-1, DEPB36-1N  
 DEPB51-1, DEPB51-1N  
 DEPB83-1, DEPB83-1N



Your filter uses the following safety and operating labels:

Model and Instruction Labels:  
 WC33-86A (DEPB36-1(N))  
 WC33-86D (DEPB51-1(N))  
 WC33-86E (DEPB83-1(N))

WC27-23 "WARNING - Turn off pump and open valve"

WC27-19 "CAUTION: Do not tighten or loosen clamp..."

60000-0137 - Inlet/Outlet label

**Keep labels clean and in good condition. Replace damaged labels.**

## REPAIR PARTS LIST

Key No.	Part Description	Qty.	Model No.		
			DEPB36-1(N)	DEPB51-1(N)	DEPB83-1(N)
1A*	Pressure Gauge	1	33600-0023	33600-0023	33600-0023
1B*	Fill Cap Assembly	1	24762-0066	24762-0066	24762-0066
1C	O-Ring	1	35505-1317	35505-1317	35505-1317
2*	Air Release Valve	1	U212-252D	U212-252D	U212-252D
3	Tank - Upper	1	WC31-253P	WC31-251P	WC31-255P
4	Bolt - Hex Hd. 3/8 - 16 x 2-1/4" Lg.	24	U30-884ZP	—	—
4	Bolt - Hex Hd. 1/2 - 13 x 2-1/2" Lg.	24	—	U30-91C	—
4	Bolt - Hex Hd. 1/2 - 13 x 2-3/4" Lg.	32	—	—	U30-901ZP
5	Washer - Flat - 3/8"	48	U43-62C	—	—
5	Washer - Flat - 1/2"	48	—	U43-129ZP	—
5	Washer - Flat - 1/2"	64	—	—	U43-129ZP
6	Filter Element Assembly	1	24760-0436	24761-0451	24762-0483
7	O-Ring	1	24750-0006	24751-0006	24752-0006
8	Inlet Baffle	1	WC178-90P	24761-0080	24762-0080
9**	Tank Shell - Lower	1	WC31-252P	WC31-250P	WC31-254P
10	Hex Nut - 3/8 - 16	24	U36-38C	—	—
10	Hex Nut - 1/2 - 13	24	—	U36-39C	—
10	Hex Nut - 1/2 - 13	32	—	—	U36-39C
11	Base	1	23900-0105	23901-0005	23901-0005
•	Tape	2	37685-0006A	37685-0006A	37685-0006A
13	Plug	1	24700-0413	24700-0413	24700-0413
14	Union Adapter	2	U11-198P	U11-198P	U11-198P
15	Fitting Nut - 2"	2	24752-0049	24752-0049	24752-0049
16	O-Ring	2	35515-1296	35515-1296	35515-1296
17	Outlet Elbow	1	WC137-505P	24752-0176	24752-0176

\* Included in Air Release/Fill Cap Package, Part No. 24750-0027.

\*\* When ordering item No. 9 for service, include label #60000-0137 and tape #37685-0006.

# TROUBLESHOOTING GUIDE

## 1. Short Cycle between backwashes:

**NOTICE:** Time between backwashes will vary with each installation and between different areas of the country. The following causes and remedies are for cycle times shorter than normal for your area.

- A. Chlorine residual too low; maintain proper residual (consult pool professional for recommendation).
- B. Flow rate too high; restrict flow to rated capacity of filter (see instruction plate on filter or specifications on Page 6).
- C. Filter too small; install larger filter or additional filter.
- D. Improper/insufficient precoat; see precoat instructions (Page 7).
- E. Filter elements plugged; thoroughly clean filter (see No. 4, "Plugged Grid Cloth", below, and "Manual Filter Cleaning Procedure", Page 10).
- F. Insufficient cleaning during backwash or annual cleaning; review cleaning instructions, Pages 9-11.
- G. Too much DE; check for bridging between filter elements.
- H. Water is chemically out of balance; consult pool professional.

## 2. Low Flow/High Pressure:

- A. Elements plugged, clean filter thoroughly (see Pages 9-11).
- B. Pipe blocked downstream from filter; remove obstruction.

C. Piping too small; use larger pipe (consult dealer for sizing).

D. Filter area too small; install larger filter or auxiliary filter (consult dealer for recommendation)

## 3. Low Flow/Low Pressure:

- A. Pump too small; consult dealer for recommendations.
- B. Plugged pump or plugged hair and lint trap; clean thoroughly.

## 4. Plugged Grid Cloth:

- A. Insufficient precoat; see precoat instructions (Page 7).
- B. Insufficient cleaning; follow cleaning instructions closely and clean thoroughly (see Pages 9-11).
- C. Water is chemically out of balance; consult pool service man.
- D. Excessive air in filter; non-precoated areas may plug. Vent air from tank and check for pump suction pipe leaks. Clean air bleed filter in grid assembly.

## 5. Pool Water Not Clean:

- A. Chlorine dosage too low; maintain adequate chlorine residual (consult pool service man for recommendation).
- B. Broken filter elements passing DE into pool; replace defective grids.
- C. Insufficient or improper precoat; follow precoat instructions and use recommended amount of DE (see Page 7).
- D. Inadequate turnover rate; consult dealer to verify that equipment is properly sized for your pool.

## STA-RITE LIMITED WARRANTY

Pumps, filters, skimmers, underwater lights (except bulbs), accessories and fittings manufactured by Sta-Rite are warranted to be free of defects in material and workmanship for one (1) year from date of installation.

Product specific warranties:	Year from date of installation
<i>HRPB, DEPB and System 3</i> – Tanks .....	10 years
Internal filter components and valves .....	1 year
<i>Max-E-Therm</i> – Pool/Spa Heaters .....	2 years
Heater Enclosure only (Upper RH & LH; lower enclosure; and control board enclosure)...	10 years
<i>Automatic Pool Cleaners including Hose</i> .....	2 years
<i>Cristal-Flo filters</i> – Tanks .....	10 years pro-rated*
Valve and internal components. ....	1 year
<i>Posi-Flo II</i> – Tanks .....	10 years
Elements .....	1 year
<i>Waterford Sand</i> – Tanks .....	10 years pro-rated*
Pumps .....	1 year
Valve and Internals .....	1 year
<i>Waterford Cartridge</i> – Filter Tank .....	10 years
Pumps .....	1 year
<i>System 3 Above Ground Systems</i> – Tanks .....	10 years
Pumps .....	1 year
Platform and Internals .....	1 year
<i>Pumps</i> .....	1 year
When equipped with A.O. Smith 2-compartment motors (Does not include pumps sold as part of a systems package) .....	2 years

\* Full warranty coverage is in effect for one year after installation. The pro-rated warranty covers the *tank only* during

the 2nd through 10th year after installation. The amount covered decreases by 10% each year. (ie., 2nd year 90% covered, 3rd year 80% covered, etc.).

The foregoing warranties relate to the original consumer purchaser ("Purchaser") only. Sta-Rite shall have the option to repair or replace the defective product, at its sole discretion. Purchasers must pay all labor and shipping charges necessary to replace the product covered by this warranty. Requests for warranty service must be made through the installing dealer. This warranty shall not apply to any product that has been subject to negligence, misapplication, improper installation or maintenance, or other circumstances which are not in Sta-Rite's direct control.

This warranty sets forth Sta-Rite's sole obligation and Purchaser's exclusive remedy for defective products.

STA-RITE SHALL NOT BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL OR CONTINGENT DAMAGES WHATSOEVER.

THE FOREGOING WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, SHALL NOT EXTEND BEYOND THE DURATION OF THE APPLICABLE EXPRESS WARRANTIES PROVIDED HEREIN.

Some states do not allow the exclusion or limitation of incidental or consequential damages or limitations on how long an implied warranty lasts, so the above limitations or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Supersedes all previous publications.

**Sta-Rite Industries, Inc.**  
**293 Wright Street**  
**Delavan, WI 53115**

▲ Retain Warranty Certificate (upper portion) in a safe and convenient location for your records.

DETACH HERE: Fill out bottom portion completely and mail within 10 days of purchase/installation to:

▼ Sta-Rite, Attn: Warranty Dept., 293 Wright St., Delavan, WI 53115

**STA-RITE®**



## Warranty Registration Card

Name \_\_\_\_\_

Years pool has been in service  less than 1  1-3  3-5  5-10 \_\_\_\_\_

Address \_\_\_\_\_

Purchased from:  
Company name \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Address \_\_\_\_\_

Purchase Date \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_

Product Purchased \_\_\_\_\_

New installation  Replacement \_\_\_\_\_

Please send me more information on these other products from Sta-Rite.

Type of Pool  Inground  Vinyl  Fiberglass  Gunite \_\_\_\_\_

- Pumps  Filters  Automatic Pool Cleaners
- Maintenance Equipment  Test Strips
- Heaters

Size of Pool \_\_\_\_\_