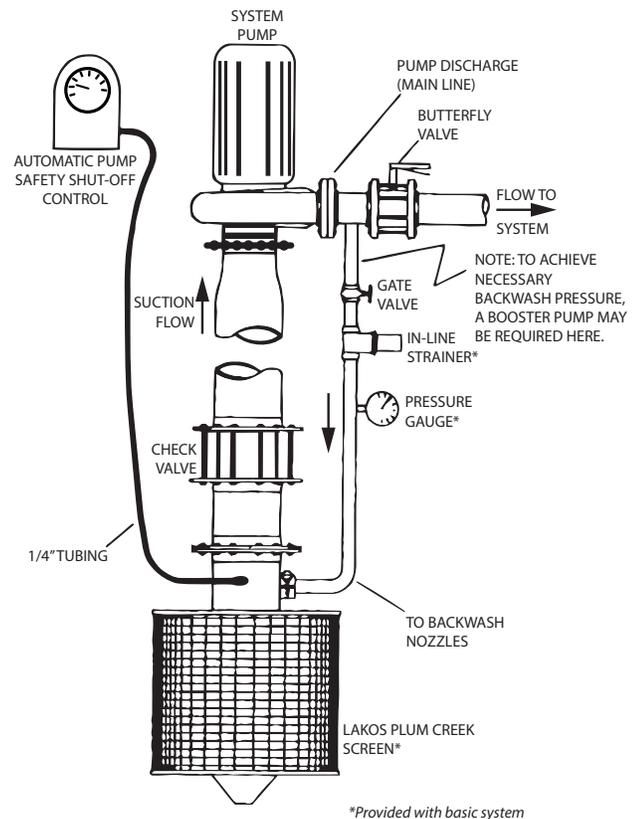


Pre-installation Check List

1. Consult the Flow Rates & Pressures on the reverse side for the pumping pressure range required on the backwash line at the PC Screen. Note: If pressure is less than the minimum required to operate the screen and backwash system, a booster pump is required
2. **IMPORTANT:** The PC Screen is a water-pressure driven and backwashed device. If the screen does not have the required pressure delivered to the return line connection at the screen, the screen will not work. Carefully measure the return line size to insure that the proper pressure is delivered to the PC Screen. Do not install a backwash line smaller than that recommended.
3. Be sure you will not be pumping at a rate in excess of your PC Screen's maximum flow range.
4. It is very important to thoroughly flush sand, pebbles, insects, glue and any other debris from the backwash line before installation start-up. Failure to do this could result in plugged spray jets inside the PC Screen.
5. Make certain the pump's suction/inlet pipe is properly supported and sufficiently elevated to allow your PC Screen to rotate freely.
6. Your PC Screen should not be installed:
 - a) Closer than 6-inches (155 mm) to any object.
 - b) In a confined area (side culvert, large pipe, etc.) with no means of transferring debris away from the screen.
 - c) In a current over 3 mph (4.83 km/hr), unless it is protected by an upstream barricade or bell-shield.



Typical installation

Installation & Operation

INSTALLATION

1. Attach the PC Screen's flanged outlet to pump's suction/inlet pipe, using an appropriate adapter, if required. Consult your LAKOS representative if you have questions.
2. Plumb one end of the backwash line into your pump's discharge pipe.
3. Thoroughly flush the backwash line of any debris.
4. The backwash line should be plumbed between the pump and a main line valve. This valve can then be partially closed to create sufficient back-pressure during start-up. Note: If pressure is inadequate for efficient backwash operation, a booster pump will be necessary.
5. Install on the backwash line:
 - a) a properly-sized gate valve (or pressure regulator if pressure exceeds 100 psi/6.9 bar);
 - b) an 8-mesh strainer (supplied); and
 - c) a pressure gauge.

OPERATION

1. Screen does not need more than 2-inches of submergence because the screen's rotation breaks up any vortex that might form.
2. Screen should rotate at a rate of at least 15 RPM.
3. Backwash jets should be pointed
 - a) downstream or toward the opposite embankment when installed in moving water,
 - b) toward the center when used in still bodies of water, and
 - c) toward the surface when screens are deeply submerged. The direction of these spray jets can be easily set by rotating the flange on the screen's outlet pipe to adjust the position of the spray bar.
4. To prevent impeded screen rotation or actual damage, the PC must be safeguarded in extremely swift currents (over 3

- mph {4.83 km/hr}) or in moving water with unusually large debris, such as logs. Either a bell-shield attached to the PC Screen flange or an upstream barricade can offer the necessary protection. If a barricade is used, it must
- a) be situated at least 6 to 8-inches (152 to 203 mm) from the screen and
 - b) provide enough clearance underneath to allow water to flow to create a depression under the screen to prevent silt build-up. (Consult factory for design assistance.)
5. Adding a Screen Retrieval System to lift your PC Screen out of the water during periods of inactivity is always recommended and can prevent algae growth on the screen's mesh covering.

LAKOS PC Screen Installation Guide

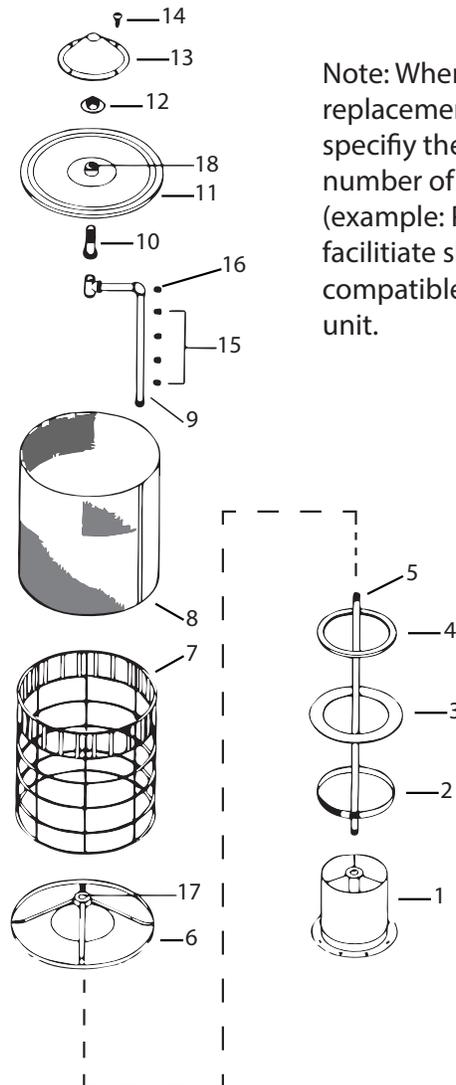
Flow Rates & Pressures

MODEL	MAXIMUM FLOW RATE				BACKWASH RETURN LINE CONNECTION (inches)	*REQUIRED BACKWASH PRESSURE		APPROXIMATE BACKWASH FLOW AT PROPER PRESSURE	
	(10 & 18 Mesh)		(30 Mesh)			psi	kPa	U.S. gpm	m3/hr
	U.S. gpm	m3/hr	U.S. gpm	m3/hr					
PC 915	350	80	250	60	1-1/4	55-80	385-560	10	2.5
PC 1415	560	130	400	90	1-1/4	60-80	420-560	15	3.5
PC 924	650	150	450	105	1-1/4	60-100	420-705	12	2.5
PC 1424	1000	230	700	160	1-1/2	65-100	455-705	18	4.0
PC 1924	1350	305	950	215	1-1/2	70-100	490-705	25	5.5
PC 2424	1700	385	1200	275	1-1/2	75-100	525-705	39	8.0
PC 2924	2050	465	1450	330	2	75-100	525-705	41	9.5
PC 3424	2400	545	1700	385	2	75-100	525-705	50	11.5

*This pressure required at the PC Screen connection. If pressure is not adequate for efficient backwash operation, a booster pump may be necessary

Parts Listing

Item #	Description
1	Screen outlet pipe assembly
2	Band clamp
3	E.P.D.M. rubber seal
4	Plastic ring
5	Axle pipe
6	Spider bushing cap assembly
7	Frame & drive vane assembly
8	Screen cover & rivet pack for frame
9	Jet pipe assembly
10	Delrin spindle
11	Bushing & end cap assembly
12	Spindle nut & washer
13	Hub cap
14	#10 stainless steel 5/8-inch screw for end caps & hub cap (package contains up to 64 screws)
15	Backwash spray nozzles (1 to 6x)
16	Drive nozzle
17	Spider bushing
18	Lid bushing



Troubleshooting

If your PC Screen fails to rotate properly or if debris passes through the screen into your water system or accumulates on the screens surface, discontinue pumping. Do not resume pumping until the difficulty has been located and corrected. Use the following chart of potentially troublesome situations as a checklist to help identify the source of your screen's particular problem.

Debris Accumulating on Screen	Debris Passing Through Screen	Insufficient Screen Rotation	Potential Problem Sources
X		X	1. Water being pumped at a rate in excess of the screen's capacity
X		X	2. Undersized screen mesh for the flow rate desired
	X		3. Oversized screen mesh for the floating debris encountered
X	X	X	4. Clogged backwash line
X	X	X	5. Undersized backwash line
	X		6. Torn screen
X	X	X	7. Plugged drive jet or backwash strainer
X		X	8. Pressure shortage at pump or screen
X		X	9. Heavy silt build-up under the screen
		X	10. Screen installed too close to another object
X		X	11. Screen located in a closed area where vegetation & other debris remain trapped
X		X	12. Unsupported, poorly supported or damaged pump suction/inlet pipe
X		X	13. Algae growth on screen (usually after pumping has been suspended for a prolonged period)
X	X	X	14. Mechanical malfunctions (worn moving parts, seals, etc.)
X		X	15. Foreign object wedged against screen
X	X	X	16. Screen located in swift current without a protective barricade or bell-shield
X		X	17. Domed screen in backwash line has not been removed

Limited Warranty

For warranty and patent information, please visit:
www.lakos.com/warranty-info

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For additional information, please visit:
<http://www.lakos.com/irr-products/pc-screen>
 and refer to brochure PC-115