OWNER'S GUIDE

SWIMPRO™

HIGH RATE SAND FILTER

MODELS: S170TEXP, S190TEXP, S230TEXP, S270TEXP, S311T2EXP

Drawing is typical design shape will vary by model.

Your SwimPro™ high rate sand filter is a high performance totally corrosion-proof filter that blends superior flow characteristics and features ease of operation. It represents the very latest in high rate sand filter technology. It is virtually foolproof in design and operation and when installed, operated and maintained according to instructions, your filter will produce clear, sparkling water with only minimal attention and care.

HOW IT WORKS

The filter uses special filter sand to remove dirt particles from pool water. A specified amount of filter sand is loaded into the filter tank and functions as the permanent dirt removing media. The pool water, which contains suspended dirt particles, is pumped through your piping system and is automatically directed by the patented water control valve to the top of the filter tank. As the pool water is pumped through the filter sand, dirt particles are trapped by the sand bed, and filtered out. The cleaned pool water is returned from the bottom of the water tank, through the control valve and back to the pool through the piping system. This entire sequence is continuous and automatic and provides for total recirculation of pool water through your filter and piping system.

After a period of time, the accumulated dirt in the filter causes a resistance to flow, and the flow diminishes. This means it is time to clean (backwash) your filter. With the control valve in the backwash position, the water flow is automatically reversed through the filter so that it is directed to the bottom of the tank, up through the filter, flushing the previously trapped dirt and debris out of the waste line. Once the filter is backwashed, the control valve is manually resequenced to Rinse, and then Filter, to resume normal filtering.

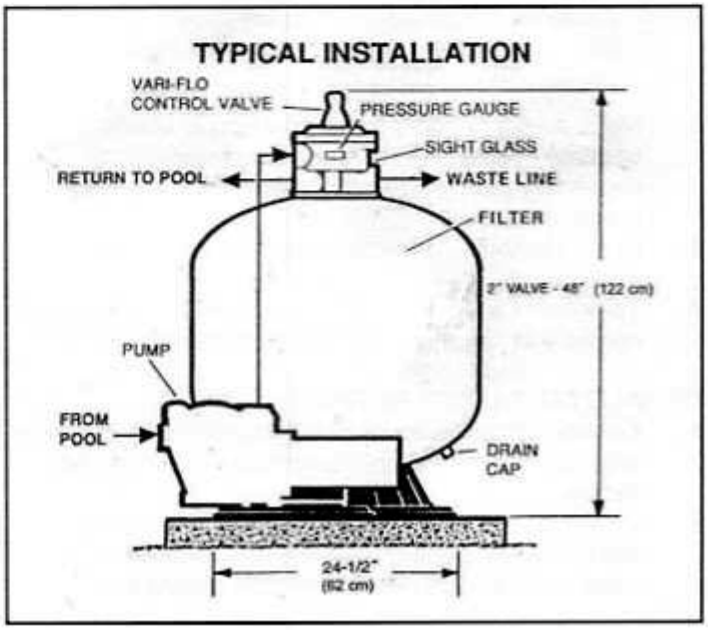
INSTALLATION

Only simple tools (screwdriver and wrenches), plus pipe sealant for plastic adapters, are required to install and/or service the filter.

1. The filter should be placed on a *level* concrete slab, 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 winterization.

2. Install pump on filter cement slab, tamped earth or other stable decking.

TYPICAL INSTALLATION



3. Loading sand media. Filter sand media is loaded through the top opening of the filter.
   a. Loosen flange clamp and remove Filter Control valve (if previously installed).
   b. Cap internal pipe with supplied cap to prevent sand from entering it. Be sure pipe is securely in place in bottom under drain hub.
   c. We recommend filling tank approximately ½ way with water to provide a cushioning effect when the filter sand is poured in. This helps protect the under drain laterals from excessive shock. (Be sure the winter drain cap is securely in place on drain pipe).

   NOTE: Check to confirm all laterals are in the down position before loading with sand.

   d. Carefully pour in correct amount and grade of filter sand, as specified on the filter label. (Be sure center pipe remains centered in opening). Sand surface should be leveled and should come to about the middle of the filter tank. Remove cap from internal pipe.
4. Assemble Filter Control Valve to filter tank.
   a. Loosely pre-assemble both halves of the clamp with one screw and one nut, turning the nut 2 or 3 turns. Do not tighten. Wipe filter flange clean.
   b. Insert Filter Control Valve (with valve/flange O-ring in place) into the tank neck, taking care 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 may be rotated on tank for final positioning.
   c. Carefully screw pressure gauge, with pipe tape, into ¼" tapped hole in valve body. Do not over tighten.
   d. Connect pump to control valve opening marked PUMP according to instructions. After connections are made, tighten valve flange clamp with screwdriver, tapping around clamp with screwdriver handle to help seat valve flange clamp.
5. Make return to pool pipe connection to control valve opening marked RETURN and complete other necessary plumbing connections, suction lines to pump, waste, etc.
6. Make electrical connections to pump per pump instructions.
7. To prevent water leakage, be sure winter drain cap is securely in place and all pipe connections are tight.

INITIAL START-UP OF FILTER

1. Be sure correct amount of filter sand media is in tank and that all connections have been made and are secure.
2. Depress Vari-Flo control valve handle and rotate to BACKWASH* position. (to prevent damage to control valve seal, always depress handle before turning.)
3. Prime and start pump according to pump instructions (be sure all suction and return lines are open), allowing the filter tank to fill with water. **CAUTION: All suction and discharge valves must be open when starting the system. Failure to do so could cause severe personal injury and/or property damage.** Once water flow is steady out the waste line, run the pump for at least 2 minutes. The initial backwashing of the filter is recommended to remove any impurities or 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 ½ to 1 minute. Turn pump off, set valve to FILTER position and restart pump. Your filter is now operating in 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 water leaks and tighten connections, bolts, nuts, as required.
6. 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" the filter (see BACKWASH under Filter Control Valve Functions.)

NOTE: During initial clean-up of the pool water it may be necessary to backwash frequently due to the unusually heavy initial dirt load in the water.

IMPORTANT: To prevent unnecessary strain on piping system and valving, always shut off pump before switching Filter Control Valve positions.

FILTER CONTROL VALVE FUNCTIONS

FILTER – Set valve to FILTER for normal filtering. Also use for regular vacuuming.

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

Stop the pump, set the 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 pump and operate for about ½ 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 loads, set valve to WASTE position to bypass the filter and vacuum directly out to waste.