Section IX

Plumbing Instructions Standard

PLUMBING CONNECTIONS AND HOOK UPS

- 1.0 The plumbing diagram, located in the rear of this section, indicated PVC pipe sizes, locations of shut-off valves supplied by SwimEx, recommended locations for additional valves, component (heater/pump/filter) placement with fitting sizes, and etc. The unit must be plumbed in accordance with the specifications shown in the diagram.
- 1.1 The plumbing of the unit and associated equipment must be performed by a licensed plumber in compliance with appropriate local codes. A licensed electrician must wire the heater and pump units in accordance to the manufacturer's instructions and electrical codes. This should also be coordinated with all other electrical work. Before planning the SwimEx site, consideration must be given to the location of the heater, pump, and filter units. Access to the units, the route of the water lines, installation of any optional equipment (such as an Ozonator), and drainage from the site must also be planned. Read the manufacturer's installation manual, and follow their installation guidelines.
- 1.2 We recommend Schedule 80 PVC piping, however, Schedule 40 is sufficient. (For more efficient pump operations, use flexible PVC.) Try to use threaded connections wherever possible. Use 45° angles in the piping wherever possible (use two 45° elbows to make a 90° angle, or for more efficient pump operation, use flexible PVC piping). Keep the heater, pump and filter units below the height of the SwimEx's water level.
 Note: Before attaching the PVC piping, check to see that all "O-rings" inside the shut-off valves (2 each valve) are properly set -- no crimps or tears. These O-rings are accessed by removing the threaded fittings on both sides of the valve.
- 1.3 The water supply line to the SwimEx (from the heater, pump, and filter units to the single eyeball inlet) is via 1-1/2" diameter PVC piping. The inlet valve is mounted on the front right side of Section U3. This line is plumbed from the opening of the heater to this inlet valve. Follow the instructions outlined in the manufacturer's manual. A shut-off valve (1-1/2" diameter) should be installed in this line immediately after the heater connector. Note: If you are installing the Ozonator option, it is to be installed at this time, and on this 1-1/2" diameter line, as close to the inlet valve as possible.

(See "Purezone" Manufacturer's Manual and the Ozonator Plumbing diagram located in the rear of this section).

PLUMBING CONNECTIONS CONT'D.:

- 1.4 The return line, (the water line bringing water from the SwimEx to the filter) is plumbed via 2" PVC piping connected from both the skimmer (1-1/2") and a return valve (1-1/2"), which is mounted on the paddlewheel motor side (rear of Section U2). This line is plumbed to the 2" opening of the pump per manufacturer's instructions. A 2" diameter shut-off valve should be installed in the 2" line just before the pump opening.
- 1.5 The main drain line, if permanently plumbed in, must conform to local sanitation and plumbing codes. A 1-1/2" diameter PVC drainage shut-off valve was provided and was installed in the "Water Test" Section 2.1. Close the valve before filling the tank.
- 1.6 The SwimEx comes with a 3/4" threaded opening to attach a water fill line. The opening is located above the water line, just behind the skimmer (See "Blueprints"). "Hard plumb" by connecting PVC piping to this opening, and run a water fill line to a conveniently located shut-off valve. This will enable the pool to be filled or "topped-off" conveniently. IMPORTANT: A "BACK-FLOW" PROTECTION DEVICE APPROVED BY YOUR LOCAL AUTHORITIES MUST BE INSTALLED IN ACCORDANCE WITH LOCAL CODES.

NOTE: For all pool models installed within the boundaries of the City of Los Angeles, a 3/4" through hole is also located on the pool directly opposite and 1" below the above-mentioned 3/4" water fill line. This extra 3/4" line is to be used as an overflow line. Plumb this line directly onto your draining system using a backflow protection device approved and listed by your local authorities, and in accordance with local codes.

- 1.7 Let the PVC pipe cement dry thoroughly before filling the SwimEx with water and opening the proper shut-off valves. Fill the SwimEx with water so the water line rises just above the front grille (1/4" for the standard 5 HP motor or 1/2" for the optional 7.5 HP). At this time, check and repair any leaks in the plumbing system.
 Note: Make sure you have familiarized yourself with the principles and operation of the heater, pump, and filter systems. For better water circulation, we recommend removing the hinged door that is attached to the skimmer basket, leaving the basket in place at all times.
- 1.8 Check to make sure that all valves are open, except the main drain. Make sure the heater, pump, and filter systems are ready to operate (See manufacturers' manuals). Turn the pump power switch to "ON". Open the bleeder valve on top of the filter tank to let the trapped air escape. (This may have to be done several times until there is no air left in the plumbing system.) While the pump is running, carefully inspect all plumbing lines, connections, etc., and re-inspect all 3 flange seams of the SwimEx unit. Set the heater thermostat per manufacturer's instructions. Note: For anyone using an Ozonator or a commercial pump, we recommend leaving the pump on 24 hours per day.

2.1 OZONATOR

The Ozonator is installed according to the Ozonator Plumbing Diagram (located at the end of this section). The Ozonator injector system is plumbed into the 1-1/2" PVC pipe between the pool and the heater. Use 1-1/2" PVC piping for all connections. Install the Ozonator injector system at least 4', but no more than 15', from the pool (Measure pipe length).

IMPORTANT NOTES ON THE INSTALLATION OF THE OZONATOR:

- 1) Make sure to install the injector (Part 5) and the check valve (Part 1) with the flow direction from the heater to the pool.
- 2) Make sure to "loop" the hose above the water level in the pool.
- **2.2** To install all other options, see the manufacturers' manuals for instructions on proper installation, use and care. The manuals can be found in the original shipping boxes.

NOTES: *Keep this manual for reference.

*Once the unit is running properly, and before you begin using your SwimEx, read and refer to the "SwimEx Owner's Manual".

