

Notes:

The pond above was constructed using 8" Schedule 40 PVC piping. All angular joints are 22 1/2 degree angles. The low point of the joint at point A represents normal pool level. When the water is below this point, no water exits the pond. The low point at point B should be at least one pipe diameter below the low point at point A. i.e. 8" pipe equals at least 8" drop. The low point of joint C should be at least 4' below the low point of point E.

The vent stack at point D should extend upwards about two feet and is made of 4" PVC. The top of the stack has a screw in vent cap. The piece F extends into the water if the water exceeds a certain level. Piece F and the extension above it are made from 2" PVC. The piece Fand its extension should be on a screw in joint so that they are removable from joint D.

Operation:

When the water is below the low point on joint A, no water runs through the system.

When the water is above the low point on joint A but below the low point of the open pipe at point F water flows normally through the pipe.

When the water is above the low point of the open pipe at point F, a vacuum forms and the system will siphon and dramatically increase the amount of flow through the pipes.

To drain the pond, remove the pipe F and its extension, screw an end cap into the T pipe at D, close the pipe at the end of point C with a plug, insert a vacuum pump at the top of point D, and pump out air until the system starts siphoning. It will then siphon until the water reaches point E.