

## Installation Manual for Stepros HFSCV Effluent Pump Vault



\*This guide is to aid in the installation of the Stepros HFSCV (High Flow Self Cleaning Vault) effluent pump vault and system. This guide is a recommended typical installation method. However, the installer should consult with the local utility or maintenance entity for local codes or preferred methods regarding these instructions.

- 1. Install HFSCV in Septic Tank
  - a. The vault is designed to suspend from tank by the flared portion in 18-20"
     popening. The vault can be modified with support pipes for larger diameter openings in the tank.
  - b. Gently lower the vault into position in the access riser careful not to let the vault fall into the tank.
    \*If the tank is full of liquid, rest the vault on top of the liquid surface and fill the vault with water from a hose. This helps sink the vault and prevents floating materials from entering the vault through the inlet holes.
  - c. To access the HFSCV filter in risers over 24" high, and extension kit can be ordered separately and installed at the top of handle.

Stepros HFSCV

Pump/flow inducer

chamber

Filter

chamber

2 Modified with support pipes



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- a. Apply Teflon tape or pipe dope to the threads of the pump discharge and screw the male adapter at the bottom of the discharge assembly into the pump discharge by hand and hand tighten.
- b. Arrange the discharge assembly so that it is accessible and fits inside the riser.
- c. Lower the pump and discharge assembly stem into the flow inducer chamber. Cut off excess "pump stem" pipe to allow for 12-18" below the lid for ease of maintenance. Check with local utility for any preferred differences or measurements.





\*position PVC and PEX so that it does not interfere w/ filter removal Pump stem w/ male ' adapter

Grommet



- STEPROS
- f. Again, loosely fit the union portion of the discharge assembly to the pump stem and rotate any parts necessary to find the correct position. Check to see if the ¼" PEX flush tube needs to be shortened. Ensure the positioning of the union assembly does not interfere with removal of the filter. Once positioning is configured, glue the elbow onto the pump stem.
- g. Check the placement of the 3/8" PEX hose between the swivel elbows. Cut off any excess PEX hose before connecting. Keep the discharge assembly from interfering with the filter chamber.



## 3. Install Float Switch Assembly

\*The HFSCV pump vault comes with 2 float collars preset. These may be adjusted or additional float collars added to accommodate local utility preferences or plan specification.

a. Remove the float switch tree by unscrewing the 3/4" union in the filter handle. Rotate the 1" tee to dislodge the locking pin and pull the tree out.









- b. Open the float collar clip and snap the float switch cords into the collar. For use with 54" and 78" vaults, Stepros recommends clipping the float cord so that 3"
- n 54" and 78" vaults, Stepros recommends clipping the float cord so that 3" of cord is left between the float collar clip and the bulb of the float. For 45" vaults, Stepros recommends:

Number of				Cord
Floats	Position	Purpose	Float Color	Length
2 float	Top collar	High water alarm	Blue/Yellow	3″
	Bottom collar	On/Off	Yellow	3″
3 float	Top collar	High water alarm	Blue/Yellow	2.25"
	Middle collar	On/Off	Yellow	3″
	Bottom collar	Low water alarm	Red	2″

- c. Reinstall the float switch tree. Make sure the float switches can move freely up and down without interference from each other, contact with the vault wall, or PVC pipe. In a 3 float system, ensure that the low water float will alarm before stopping on the top of the filter. If there is interference, carefully loosen the float collar set screw and make the necessary adjustments. Tighten the set screw when finished.
- d. Wrap or bundle excess lengths of float cords and tuck them into a position so they will not fall into the filter chamber and affect the functioning of the float switches.
- e. If the handle of the float switch tree is more than 18" below the lid, you may glue a piece of 1" PVC pipe into the tee extending upwards for easier access.



Glue 1" PVC pipe into tee for extension



## 4. Install Control Panel

\*For specific control panel instructions, see the wiring diagram. The Wiring Diagram is found on the inside of the door or on a folded-up piece of paper inside the panel. \*\*Follow all state and local codes/regulations when installing the panel. Consult with the local utility or maintenance entity for additional preferences.

- A qualified and licensed electrician should install and service the panel and ancillary wiring in compliance with all national, state, & local electrical codes. Wiring includes:
  - Incoming power to the panel. One or more circuits may be required, depending on the number of pumps and local electrical codes,
  - ii. Wiring from the control panel to the pump and floats, and
  - iii. Wiring to pump and floats.



