

## Installation Instructions for SeptiSurge® Model 3A

The SeptiSurge<sup>®</sup> Model 3A Dynamic Fluid Manifold takes gravity septic effluent distribution to a new level. The purging action of this "plug & play" distribution system not only keeps the outlet ports free from obstructive material, but also ensures that all of the outlets receive fluid even if the distribution box develops an out of level condition. The purging action of the SeptiSurge<sup>®</sup> occurs when the fluid entering the distribution box accumulates sufficiently within the tub liner to deploy or pop up the center float valve assembly. When the valve deploys the fluid within the tub liner

flows rapidly out into the field line openings. As the fluid flows out of the liner the float lowers until it resets onto the seal, thus stopping the flow for the next filling and purging cycle. The riser and surface lid allow easy access without the "hunt and dig" process. The optional insulated panel protects the system in ground freezing conditions.

Installation: Refer to illustration

Attention: It is important to keep soil out of the D-box.

• Remove the hardware components from inside D-box.



• Position the D-box with the septic inlet (the opening highest from the bottom of the D-box occupying one full face of D-box) toward the output from the septic tank.

Determine which of the up to six field line openings of model 3A are needed. From the openings not needed, remove the stainless steel clamps and the four inch rubber field line output bushings, replacing them with the supplied snap-in orange plugs. To prevent soil pressure from pushing the snap-in plug into the box, install the plug from outside of the D-box. Make sure the plug is sealed all the way around the D-box field opening and that the inner lip of the seal is visible from inside of the D-box all the way around the 4" opening.



• To prevent settling the D-box must be positioned level on non-compactable material such as pea gravel or undisturbed soil.

• Loosen the clamp around the inlet bushing of the D-box (the highest opening) and slide the 4" pipe from the septic tank into the bushing until it presses against the inner pipe stop (a depth of about 2"). Tighten the stainless steel clamp to seal the bushing to the septic pipe. • Attach each of the field lines by loosening the stainless steel clamps on the field bushing and sliding the 4" field pipe into the bushing.



**IMPORTANT**: The field line must penetrate 1/8" to 1/4" past the bushing face on the inside of the D-box. This action insures that the bushing and pipe cannot pull out of the box. Tighten the stainless steel clamp to seal the bushing to the field pipe. Tightly pack soil under field pipes several feet out from D-box to reduce pipe settling.

- Remove any soil that may have fallen into the D-box. If necessary, the liner containing the float mechanism may be removed by simply flexing the side of the liner with the seal from the inlet spacer.
- SeptiSurge® is designed for dry starts but field testing is recommended. This is done by pouring water into the inner liner until the float pops up. This may not occur until water flows over the top of the liner and into the D-box. As the water flows into the outer D-box, pressure is relieved from the float and it will pop up,



purging the field lines. Subsequent purges will occur without tub overflow. We highly recommend the use of TUF-TITE® Speed Levelers® installed inside each 4" outlet pipe and adjusted by rotating to raise or lower the port precisely to the fluid level within the D-box as observed when filled.



• <u>ATTENTION</u>: This distribution box requires surface access. Stack 6" risers as needed to bring the box lid to ground surface level. Optional insulation panel may easily be fitted into the bottom riser at any time. It is important to install the insulation panel into the riser closest to the D-box. The insulation panel is only needed in locations where ground freezing may be a problem.

Place the lid on the top riser and fasten it to the riser with 3" screws if desired.

## Retrofit application:

The SeptiSurge® can be used to repair failed septic systems in cases where the failure is due to uneven fluid distribution from the D-box. A conventional D-box is not equipped to insure that all of the field lines receive fluid. The box itself may have an out of level condition or obstructive material that may have stopped fluid flow to some of the field lines. This condition may cause an overdosing of the field line or lines receiving fluid, resulting in system failure i.e. ground surfacing of septic fluid. While many factors determine the successful operation of a septic system, even fluid flow is an essential component, one that SeptiSurge® can insure.

## Procedure for determining suitability of SeptiSurge® Model 3A in the repair of failed system:

- Remove the lid from the old distribution box.
- Open several faucets within the building serviced by the septic system to provide fluid flow into the D-box. The flow may take several minutes to arrive at the D-box.
- Observe which of the field lines receive fluid flow. Often only one or two of the lines receive flow, leaving the others unused. This condition causes the overdosing of the line or lines receiving fluid and may result in the ground surfacing of septic fluid.
- A field line or lines in the D-box that are not receiving fluid indicate a condition that the SeptiSurge® can remedy by relieving the overdosing of the failed line or lines.

## Maintenance:

Annual inspection of the SeptiSurge® is recommended. Generally action is required only if the liner contains anything other than liquid from the septic tank, such as any solids or grease. The following operation requires the use of safety glasses, protective gloves and clothing. Simply remove the liner containing the float mechanism by flexing the side of the liner with the seal from the inlet spacer. Empty the contents, gently rinse the liner and the float mechanism with a garden hose and replace.

